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The following report(s) provides findings from an FDA-initiated query using Sentinel. While Sentinel queries may be undertaken to assess potential medical product safety risks, they may also be initiated for various other reasons. Some examples include determining a rate or count of an identified health outcome of interest, examining medical product use, exploring the feasibility of future, more detailed analyses within Sentinel, and seeking to better understand Sentinel capabilities.

Data obtained through Sentinel are intended to complement other types of evidence such as preclinical studies, clinical trials, postmarket studies, and adverse event reports, all of which are used by FDA to inform regulatory decisions regarding medical product safety. The information contained in this report is provided as part of FDA's commitment to place knowledge acquired from Sentinel in the public domain as soon as possible. Any public health actions taken by FDA regarding products involved in Sentinel queries will continue to be communicated through existing channels.

FDA wants to emphasize that the fact that FDA has initiated a query involving a medical product and is reporting findings related to that query does not mean that FDA is suggesting health care practitioners should change their prescribing practices for the medical product or that patients taking the medical product should stop using it. Patients who have questions about the use of an identified medical product should contact their health care practitioners.

The following report contains a description of the request, request specifications, and results from the modular program run(s).

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Overview for Request: cder_mpl1p_wp069 (Report 1 of 3)

Request ID: cder_mpl1p_wp069_nsdp_v01

Request Description: This query includes post-hoc analyses for a prior request, cder_mpl1p_wp061_nsdp_v01, that involves further stratification by age and/or sex of the Table 1s and the addition of year stratified analyses. A composite cardiac arrhythmia covariate was also added to all Table 1s. In this report, we examined counts of individuals with evidence of a new beta blocker dispensing of interest among the pediatric population in the Sentinel Distributed Database (SDD). This is report 1 of 3. Report 2 contains counts of individuals among the pediatric population without requiring evidence that a beta blocker dispensing be new. Report 3 contains counts of individuals among the pediatric population with evidence of a new beta blocker prescription.

Sentinel Routine Querying Module: Cohort Identification and Descriptive Analysis (CIDA) module, version 11.2.3, with custom programming.

Data Source: We distributed this request to eight Sentinel Data Partners on September 27, 2022. The study period included data from January 1, 2008 through May 31, 2022. Please see Appendix A for a list of dates of available data for each Data Partner.

Study Design: We identified individuals aged 0-17 years with evidence of a new beta blocker dispensing (acebutolol, atenolol, betaxolol, bisoprolol, carvedilol, labetalol, metoprolol, nadolol, nebivolol, pindolol, propranolol, sotalol, or timolol) during the study period. A new dispensing was defined as evidence of no beta blocker dispensing in the six months prior to the dispensing of interest.

To better quantify treatment duration in the absence of disenrollment, an additional cohort was created which required 365 days of postindex enrollment.

This is a Type 2 analysis in the Query Request Package (QRP) documentation.

Exposure of Interest: We defined the exposure of interest as all valid outpatient dispensings of the following beta blockers (index) during the study period using National Drug Codes (NDCs): acebutolol, atenolol, betaxolol, bisoprolol, carvedilol, labetalol, metoprolol, nadolol, nebivolol, pindolol, propranolol, sotalol, or timolol. Please refer to Appendix B for generic names of the medical products used to define exposures and Appendix B.1 for a list of NDCs used to define exposures in this request.

Cohort Eligibility Criteria: To be included in this query, we required individuals to be continuously enrolled in health plans with medical and drug coverage for at least 183 days prior to their first valid outpatient beta blocker dispensing. For patients less than six months of age, individuals were required to have continuous medical and drug coverage since birth. Gaps in coverage of 45 days were allowed. Age groups of interest were 0-1, 2-5, 6-12, and 13-17 years. Eligible individuals had at least one qualifying new beta blocker dispensing during the study period. New use was defined as no previous beta-blocker dispensing in the 183 days prior to the index date (or no prior beta blocker dispensings since birth for patients under six months of age). We created a duplicate cohort with the additional requirement of at least 365 days of post-index medical and drug enrollment.

Follow-up Time: We created exposure episodes based on the number of days supplied per beta blocker dispensing using outpatient pharmacy dispensing data. For each cohort, we varied the allowable treatment episode gap between dispensings as 25%, 50%, or 100% of the prior dispensing's days supply. Follow-up began on the day of the index dispensing and continued until the first occurrence of any of the following: 1) disenrollment; 2) death; 3) the end of the data provided by each Data Partner; 4) the end of the query period; or 5) the end of the treatment episode.



Overview for Request: cder_mpl1p_wp069 (Report 1 of 3)

<u>Health Characteristics</u>: We assessed the following characteristics on the index date of an individual's first valid beta blocker dispensing: age, year, sex, Charlson/Elixhauser combined comorbidity score¹, diagnosis of hypoglycemia, and use of the following beta blockers: selective beta blocker, non-selective beta blocker, acebutolol, atenolol, betaxolol, bisoprolol, carvedilol, labetalol, metoprolol, nadolol, nebivolol, pindolol, propranolol, sotalol, or timolol. Please refer to Appendix C for a list of generic and brand names of medical products used to define covariates and Appendix D for a list of Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) codes used to define covariates in this request.

We also evaluated these characteristics during the following time windows:

183 days prior through index date: Diagnosis of diabetes.

90 days prior through index date: Diagnosis of hypertension, hemangioma, heart failure, congenital heart disease, atrial fibrillation, long QT syndrome, other cardiac arrhythmias, cardiac arrhythmias (composite), pulmonary hypertension, cardiomyopathy, coronary artery disease, portal hypertension, anxiety disorder, tremor, migraine, thyrotoxicosis, burns, glaucoma, autism, Marfan's syndrome, pheocoromocytoma/paraganglioma, any of the above health characteristics, and none of the above health characteristics. Hypertension, hemangioma, and long QT syndrome were further characterized with use of each beta blocker at index.

1-90 days after index date: Diagnosis of hypoglycemia. Hypoglycemia was further characterized in to include this diagnosis with diabetes, without diabetes, any propranolol dispensing, any metoprolol dispensing, atenolol dispensing, and nadolol dispensing.

91-183 days after index date: Diagnosis of hypoglycemia. Hypoglycemia was further characterized in to include this diagnosis with diabetes, without diabetes, any propranolol dispensing, any metoprolol dispensing, atenolol dispensing, and nadolol dispensing.

184-365 days after index date: Diagnosis of hypoglycemia. Hypoglycemia was further characterized in to include this diagnosis with diabetes, without diabetes, any propranolol dispensing, any metoprolol dispensing, atenolol dispensing, and nadolol dispensing.

<u>Limitations</u>: Algorithms used to define exposures and inclusion and exclusion criteria are imperfect; thus, it is possible that there may be misclassification. Therefore, data should be interpreted with these limitations in mind.

<u>Notes</u>: Please contact the Sentinel Operations Center (info@sentinelsystem.org) for questions and to provide comments/suggestions for future enhancements to this document. For more information on Sentinel's routine querying modules, please refer to the documentation (https://dev.sentinelsystem.org/projects/SENTINEL/repos/sentinel-routine-querying-tool-documentation/browse).

¹ Gagne JJ, Glynn RJ, Avorn J, Levin R, Schneeweiss S. A combined comorbidity score predicted mortality in elderly patients better than existing scores. J Clin Epidemiol. 2011;64(7):749-759



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Glossary of Terms for Analyses Using Cohort Identification and Descriptive Analysis (CIDA) Module*

Amount Supplied - number of units (pills, tablets, vials) dispensed. Net amount per NDC per dispensing. **Blackout Period** - number of days at the beginning of a treatment episode that events are to be ignored. If an event occurs during the blackout period, the episode is excluded.

Care Setting - type of medical encounter or facility where the exposure, event, or condition code was recorded. Possible care settings include: Inpatient Hospital Stay (IP), Non-Acute Institutional Stay (IS), Emergency Department (ED), Ambulatory Visit (AV), and Other Ambulatory Visit (OA). For laboratory results, possible care settings include: Emergency Department (E), Home (H), Inpatient (I), Outpatient (O), or Unknown or Missing (U). The Care Setting, along with the Principal Diagnosis Indicator (PDX), forms the Care Setting/PDX parameter.

Ambulatory Visit (AV) - includes visits at outpatient clinics, same-day surgeries, urgent care visits, and other same-day ambulatory hospital encounters, but excludes emergency department encounters.

Emergency Department (ED) - includes ED encounters that become inpatient stays (in which case inpatient stays would be a separate encounter). Excludes urgent care visits.

Inpatient Hospital Stay (IP) - includes all inpatient stays, same-day hospital discharges, hospital transfers, and acute hospital care where the discharge is after the admission date.

Non-Acute Institutional Stay (IS) - includes hospice, skilled nursing facility (SNF), rehab center, nursing home, residential, overnight non-hospital dialysis and other non-hospital stays.

Other Ambulatory Visit (OA) - includes other non overnight AV encounters such as hospice visits, home health visits, skilled nursing facility visits, other non-hospital visits, as well as telemedicine, telephone and email consultations.

Charlson/Elixhauser Combined Comorbidity Score - calculated based on comorbidities observed during a requester-defined window around the exposure episode start date (e.g., in the 183 days prior to index).

Code Days - the minimum number of times the diagnosis must be found during the evaluation period in order to fulfill the algorithm to identify the corresponding patient characteristic.

Cohort Definition (drug/exposure) - indicates how the cohort will be defined: 01: Cohort includes only the first valid treatment episode during the query period; 02: Cohort includes all valid treatment episodes during the query period; 03: Cohort includes all valid treatment episodes during the query period until an event occurs.

Computed Start Marketing Date - represents the first observed dispensing date among all valid users within a GROUP (scenario) within each Data Partner site.

Days Supplied - number of days supplied for all dispensings in qualifying treatment episodes.

Eligible Members - number of members eligible for an incident treatment episode (defined by the drug/exposure and event washout periods) with drug and medical coverage during the query period.

Enrollment Gap - number of days allowed between two consecutive enrollment periods without breaking a "continuously enrolled" sequence.

Episodes - treatment episodes; length of episode is determined by days supplied in one dispensing or consecutive dispensings bridged by the episode gap.

Episode Gap - number of days allowed between two (or more) consecutive exposures (dispensings/procedures) to be considered the same treatment episode.

Event Deduplication - specifies how events are counted by the Modular Program (MP) algorithm: 0: Counts all occurrences of a health outcome of interest (HOI) during an exposure episode; 1: de-duplicates occurrences of the same HOI code and code type on the same day; 2: de-duplicates occurrences of the same HOI group on the same day (e.g., de-duplicates at the group level). **Exposure Episode Length** - number of days after exposure initiation that is considered "exposed time."

Exposure Extension Period - number of days post treatment period in which the outcomes/events are counted for a treatment episode. Extensions are added after any episode gaps have been bridged.

Lookback Period - number of days wherein a member is required to have evidence of pre-existing condition (diagnosis/procedure/drug dispensing).

Maximum Episode Duration - truncates exposure episodes after a requester-specified number of exposed days. Applied after any gaps are bridged and extension days added to the length of the exposure episode.

Member-Years - sum of all days of enrollment with medical and drug coverage in the query period preceded by an exposure washout period all divided by 365.25.

Minimum Days Supplied - specifies a minimum number of days in length of the days supplied for the episode to be considered. Minimum Episode Duration - specifies a minimum number of days in length of the episode for it to be considered. Applied after any gaps are bridged and extension days added to the length of the exposure episode.

Monitoring Period - used to define time periods of interest for both sequential analysis and simple cohort characterization



Principal Diagnosis (PDX) - diagnosis or condition established to be chiefly responsible for admission of the patient to the hospital. 'P' = principal diagnosis, 'S' = secondary diagnosis, 'X' = unspecified diagnosis, '.' = blank. Along with the Care Setting values, forms the Caresetting/PDX parameter.

Query Period - period in which the modular program looks for exposures and outcomes of interest.

Switch Evaluation Step Value - value used to differentiate evaluation step. Each switch pattern can support up to 2 evaluation steps (0 = switch pattern evaluation start; 1 = first evaluation; 2 = second evaluation).

Switch Gap Inclusion Indicator - indicator for whether gaps in treatment episodes that are included in a switch episode will be counted as part of the switch episode duration.

Switch Pattern Cohort Inclusion Date - indicates which date to use for inclusion into the switch pattern cohort of interest as well as optionally as the index date of the treatment episode initiating the switch pattern. Valid options are the product approval date, product marketing date, other requester defined date, or computed start marketing date.

Switch Pattern Cohort Inclusion Strategy - indicates how the switch pattern cohort inclusion date will be used: 01: used only as a switch cohort entry date. First treatment episode dispensing date is used as index for computing time to first switch; 02: used as switch cohort entry date and as initial switch step index date for computing time to first switch.

Treatment Episode Truncation Indicator - indicates whether the exposure episode will be truncated at the occurrence of a requester-specified code.

Washout Period (drug/exposure) - number of days a user is required to have no evidence of prior exposure (drug

dispensing/procedure) and continuous drug and medical coverage prior to an incident treatment episode.

Washout Period (event/outcome) - number of days a user is required to have no evidence of a prior event (procedure/diagnosis) and continuous drug and medical coverage prior to an incident treatment episode.

Years at Risk - number of days supplied plus any episode gaps and exposure extension periods all divided by 365.25.

*all terms may not be used in this report



	Beta	Beta Blockers		Beta Blockers (Post-Index Enrollment Requirement)	
		Percent/		Percent/	
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation ³	
Unique patients	200,926	N/A	127,912	N/A	
Episodes	214,231	100.0%	135,970	100.0%	
Demographic Characteristics					
Age (years)	12.5	5.6	12.6	5.5	
Age					
0-1 years	28,621	13.4%	17,070	12.6%	
2-5 years	6,366	3.0%	4,062	3.0%	
6-12 years	41,380	19.3%	27,012	19.9%	
13-17 years	137,864	64.4%	87,826	64.6%	
Sex					
Female	121,477	60.5%	76,611	59.9%	
Male	79,449	39.5%	51,301	40.1%	
Race ⁴					
American Indian or Alaska Native	1,892	0.9%	1,192	0.9%	
Asian	1,774	0.9%	1,032	0.8%	
Black or African American	12,043	6.0%	7,364	5.8%	
Native Hawaiian or Other Pacific Islander	304	0.2%	185	0.1%	
Unknown	130,966	65.2%	84,670	66.2%	
White	53,947	26.8%	33,469	26.2%	
Hispanic origin					
Yes	19,979	9.9%	11,961	9.4%	
No	64,233	32.0%	39,247	30.7%	
Unknown	116,714	58.1%	76,704	60.0%	
Year					
2008	6,027	2.8%	4,617	3.4%	
2009	7,760	3.6%	5,789	4.3%	
2010	7,496	3.5%	5,636	4.1%	
2011	7,280	3.4%	5,493	4.0%	
2012	7,264	3.4%	5,646	4.2%	
2013	7,790	3.6%	5,846	4.3%	
2014	12,292	5.7%	9,713	7.1%	
2015	20,643	9.6%	15,536	11.4%	
2016	31,696	14.8%	26,057	19.2%	
2017	38,953	18.2%	29,513	21.7%	
2018	37,527	17.5%	7,514	5.5%	
2019	10,187	4.8%	7,835	5.8%	
2020	8,978	4.2%	6,031	4.4%	



	Beta	Beta Blockers		Beta Blockers (Post-Index Enrollment Requirement)	
		Percent/		Percent/	
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation ³	
2021	9,619	4.5%	744	0.5%	
2022	719	0.3%	0	0.0%	
Health Characteristics					
Charlson/Elixhauser combined comorbidity score ⁵	0.6	1.1	0.6	1.0	
Hypertension	14,689	6.9%	9,466	7.0%	
Hemangioma	15,682	7.3%	9,375	6.9%	
Heart Failure	3,233	1.5%	1,974	1.5%	
Congenital Heart Disease	18,146	8.5%	11,283	8.3%	
Atrial Fibrillation	611	0.3%	393	0.3%	
Long QT Syndrome	2,595	1.2%	1,589	1.2%	
Other Cardiac Arrhythmias	36,118	16.9%	22,469	16.5%	
Cardiac Arrhythmias (Composite)	37,742	17.6%	23,472	17.3%	
Pulmonary Hypertension	1,250	0.6%	713	0.5%	
Cardiomyopathy	3,614	1.7%	2,168	1.6%	
Coronary Artery Disease	902	0.4%	589	0.4%	
Portal Hypertension	317	0.1%	198	0.1%	
Anxiety Disorder	46,688	21.8%	28,492	21.0%	
Tremor	3,994	1.9%	2,525	1.9%	
Migraine	45,346	21.2%	30,132	22.2%	
Thyrotoxicosis	5,637	2.6%	3,609	2.7%	
Burns	487	0.2%	313	0.2%	
Glaucoma	475	0.2%	290	0.2%	
Autism	7,132	3.3%	4,463	3.3%	
Marfan's Syndrome	961	0.4%	641	0.5%	
Pheochromocytoma/Paraganglioma	129	0.1%	84	0.1%	
Diabetes	2,277	1.1%	1,449	1.1%	
Any of the above health characteristics (excluding combined comorbidity score)	154,656	72.2%	97,792	71.9%	
None of the above health characteristics (excluding combined comorbidity score)	59,575	27.8%	38,178	28.1%	
Hypoglycemia (Day 0)	130	0.1%	80	0.1%	
Hypoglycemia (0-3 Months)	737	0.3%	491	0.4%	
Hypoglycemia (3-6 Months)	532	0.2%	382	0.3%	
Hypoglycemia (6-12 Months)	695	0.3%	601	0.4%	
Hypoglycemia (Day 0) and Diabetes	****	****	****	****	
Hypoglycemia (0-3 Months) and Diabetes	93	0.0%	64	0.0%	
Hypoglycemia (3-6 Months) and Diabetes	79	0.0%	57	0.0%	
Hypoglycemia (6-12 Months) and Diabetes	90	0.0%	80	0.1%	



	Beta	Blockers	Beta Blockers (Post-Index Enrollment Requirement)		
		Percent/		Percent/	
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation ³	
Hypoglycemia (Day 0) and No Diabetes	122	0.1%	73	0.1%	
Hypoglycemia (0-3 Months) and No Diabetes	644	0.3%	427	0.3%	
Hypoglycemia (3-6 Months) and No Diabetes	453	0.2%	325	0.2%	
Hypoglycemia (6-12 Months) and No Diabetes	605	0.3%	521	0.4%	
Hypoglycemia (Day 0) and Any Metoprolol	15	0.0%	11	0.0%	
Hypoglycemia (0-3 Months) and Any Metoprolol	84	0.0%	61	0.0%	
Hypoglycemia (3-6 Months) and Any Metoprolol	65	0.0%	51	0.0%	
Hypoglycemia (6-12 Months) and Any Metoprolol	78	0.0%	66	0.0%	
Hypoglycemia (Day 0) and Any Propranolol	88	0.0%	47	0.0%	
Hypoglycemia (0-3 Months) and Any Propranolol	473	0.2%	303	0.2%	
Hypoglycemia (3-6 Months) and Any Propranolol	329	0.2%	235	0.2%	
Hypoglycemia (6-12 Months) and Any Propranolol	427	0.2%	369	0.3%	
Hypoglycemia (Day 0) and Atenolol	12	0.0%	****	****	
Hypoglycemia (0-3 Months) and Atenolol	85	0.0%	69	0.1%	
Hypoglycemia (3-6 Months) and Atenolol	76	0.0%	53	0.0%	
Hypoglycemia (6-12 Months) and Atenolol	103	0.0%	89	0.1%	
Hypoglycemia (Day 0) and Nadolol	****	****	****	****	
Hypoglycemia (0-3 Months) and Nadolol	18	0.0%	13	0.0%	
Hypoglycemia (3-6 Months) and Nadolol	15	0.0%	11	0.0%	
Hypoglycemia (6-12 Months) and Nadolol	25	0.0%	24	0.0%	
Selective Beta Blockers	50,195	23.4%	32,999	24.3%	
Non-Selective Beta Blockers	164,084	76.6%	103,005	75.8%	
Any Metoprolol	18,174	8.5%	11,540	8.5%	
Metoprolol (Extended Release)	10,259	4.8%	6,383	4.7%	
Metoprolol (Regular)	7,962	3.7%	5,194	3.8%	
Any Propranolol	147,338	68.8%	92,518	68.0%	
Propranolol (Extended Release)	16,281	7.6%	10,853	8.0%	
Propranolol (Regular)	129,011	60.2%	80,520	59.2%	
Propranolol (Hemangeol)	2,463	1.1%	1,409	1.0%	
Acebutolol	77	0.0%	56	0.0%	
Atenolol	30,660	14.3%	20,520	15.1%	
Betaxolol	173	0.1%	118	0.1%	
Bisoprolol	584	0.3%	386	0.3%	
Carvedilol	4,036	1.9%	2,410	1.8%	
Labetalol	4,991	2.3%	2,952	2.2%	
Nadolol	6,351	3.0%	4,273	3.1%	
Nebivolol	551	0.3%	397	0.3%	



	Beta	Blockers	Beta Blockers (Post-Index Enrollment Requirement)		
		Percent/		Percent/	
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation ³	
Pindolol	275	0.1%	193	0.1%	
Sotalol	1,049	0.5%	628	0.5%	
Timolol	81	0.0%	56	0.0%	
Health Characteristics by Beta Blockers					
Hypertension and Any Metoprolol	3,638	1.7%	2,290	1.7%	
Hypertension and Metoprolol (Extended Release)	2,090	1.0%	1,289	0.9%	
Hypertension and Metoprolol (Regular)	1,568	0.7%	1,018	0.7%	
Hypertension and Any Propranolol	3,869	1.8%	2,507	1.8%	
Hypertension and Propranolol (Extended Release)	476	0.2%	330	0.2%	
Hypertension and Propranolol (Regular)	3,387	1.6%	2,175	1.6%	
Hypertension and Acebutolol	****	* * * *	****	****	
Hypertension and Atenolol	4,003	1.9%	2,717	2.0%	
Hypertension and Betaxolol	****	* * * *	****	****	
Hypertension and Bisoprolol	126	0.1%	90	0.1%	
Hypertension and Carvedilol	733	0.3%	429	0.3%	
Hypertension and Labetalol	1,938	0.9%	1,179	0.9%	
Hypertension and Nadolol	184	0.1%	119	0.1%	
Hypertension and Nebivolol	145	0.1%	98	0.1%	
Hypertension and Pindolol	13	0.0%	****	****	
Hypertension and Sotalol	41	0.0%	28	0.0%	
Hypertension and Timolol	0	0.0%	0	0.0%	
Hemangioma and Any Metoprolol	14	0.0%	****	****	
Hemangioma and Metoprolol (Extended Release)	****	****	****	****	
Hemangioma and Metoprolol (Regular)	11	0.0%	****	****	
Hemangioma and Any Propranolol	15,407	7.2%	9,190	6.8%	
Hemangioma and Propranolol (Extended Release)	24	0.0%	16	0.0%	
Hemangioma and Propranolol (Regular)	13,128	6.1%	7,873	5.8%	
Hemangioma and Propranolol (Hemangeol)	2,262	1.1%	1,305	1.0%	
Hemangioma and Acebutolol	****	* * * *	****	****	
Hemangioma and Atenolol	238	0.1%	163	0.1%	
Hemangioma and Betaxolol	0	0.0%	0	0.0%	
Hemangioma and Bisoprolol	0	0.0%	0	0.0%	
Hemangioma and Carvedilol	****	* * * * *	****	****	
Hemangioma and Labetalol	****	* * * * *	****	****	
Hemangioma and Nadolol	****	****	****	****	
Hemangioma and Nebivolol	0	0.0%	0	0.0%	
Hemangioma and Pindolol	0	0.0%	0	0.0%	



	Beta Blockers		Beta Blockers (Post-Index Enrollment Requirement)	
Patient Characteristics ^{1,2}	Number/Mean	Percent/ Standard Deviation ³	Number/Mean	Percent/ Standard Deviation ³
Hemangioma and Sotalol	****	****	****	****
Hemangioma and Timolol	****	****	0	0.0%
Long QT Syndrome and Any Metoprolol Long QT Syndrome and Metoprolol (Extended Release) Long QT Syndrome and Metoprolol (Regular) Long QT Syndrome and Any Propranolol Long QT Syndrome and Propranolol (Extended Release) Long QT Syndrome and Propranolol (Regular) Long QT Syndrome and Acebutolol Long QT Syndrome and Atenolol Long QT Syndrome and Betaxolol	142 61 81 854 42 809 0 313 *****	0.1% 0.0% 0.4% 0.0% 0.4% 0.0% 0.1%	86 33 53 501 29 471 0 208 *****	0.1% 0.0% 0.0% 0.4% 0.0% 0.3% 0.0% 0.2%
Long QT Syndrome and Bisoprolol	11	0.0%	****	****
Long QT Syndrome and Carvedilol Long QT Syndrome and Labetalol	63 18	0.0%	33 12	0.0% 0.0%
Long QT Syndrome and Nadolol	1,130	0.5%	711	0.5%
Long QT Syndrome and Nebivolol	0	0.0%	0	0.0%
Long QT Syndrome and Pindolol	0	0.0%	0	0.0%
Long QT Syndrome and Sotalol Long QT Syndrome and Timolol	62 ****	0.0% ****	32 ****	0.0% ****

¹All metrics are based on total number of episodes per group, except for sex, race, and Hispanic origin which are based on total number of unique patients.

²Characteristics in blue show a standardized difference greater than 0.1.

³Value represents standard deviation where no % follows the value.

⁴Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

⁵The Charlson/Elixhauser Combined Comorbidity Score is calculated based on comorbidities observed during a requester-defined window around the exposure episode start date. (Gagne JJ, Glynn RJ, Avorn J, Levin R, Schneeweiss S. A combined comorbidity score predicted mortality in elderly patients better than existing scores. J Clin Epidemiol. 2011;64(7):749-759)

*****Data are not presented in these cells due to a small sample size or to assure a small cell cannot be recalculated through the cells presented.



	Beta Blockers		Beta Blockers (Post-Index Enrollmen Requirement)	
		Percent/		Standard
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Deviation ³
Unique patients	28,248	N/A	16,872	N/A
Episodes	28,621	100.0%	17,070	100.0%
Demographic Characteristics				
Age (years)	0.4	0.4	0.4	0.4
Sex				
Female	16,403	58.1%	9,783	58.0%
Male	11,845	41.9%	7,089	42.0%
Race ⁴				
American Indian or Alaska Native	278	1.0%	188	1.1%
Asian	305	1.1%	181	1.1%
Black or African American	1,735	6.1%	1,114	6.6%
Native Hawaiian or Other Pacific Islander	59	0.2%	31	0.2%
Unknown	19,791	70.1%	11,669	69.2%
White	6,080	21.5%	3,689	21.9%
Hispanic origin				
Yes	3,429	12.1%	2,206	13.1%
No	8,000	28.3%	4,911	29.1%
Unknown	16,819	59.5%	9,755	57.8%
Year				
2008	404	1.4%	279	1.6%
2009	500	1.7%	348	2.0%
2010	637	2.2%	444	2.6%
2011	670	2.3%	478	2.8%
2012	704	2.5%	495	2.9%
2013	830	2.9%	578	3.4%
2014	1,865	6.5%	1,421	8.3%
2015	3,352	11.7%	2,490	14.6%
2016	4,924	17.2%	3,850	22.6%
2017	5,528	19.3%	3,953	23.2%
2018	5,012	17.5%	818	4.8%
2019	1,322	4.6%	911	5.3%
2020	1,420	5.0%	900	5.3%
2021	1,349	4.7%	105	0.6%
2022	104	0.4%	0	0.0%
Health Characteristics				
Charlson/Elixhauser combined comorbidity score ⁵	0.8	1.4	0.8	1.4
Hypertension	1,273	4.4%	777	4.6%



	Beta Blockers		Beta Blockers (Post-Index Enrollment Requirement)	
		Percent/		Standard
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Deviation ³
Hemangioma	15,033	52.5%	8,942	52.4%
Heart Failure	1,615	5.6%	995	5.8%
Congenital Heart Disease	10,379	36.3%	6,240	36.6%
Atrial Fibrillation	83	0.3%	51	0.3%
Long QT Syndrome	625	2.2%	352	2.1%
Other Cardiac Arrhythmias	8,315	29.1%	5,014	29.4%
Cardiac Arrhythmias (Composite)	8,603	30.1%	5,171	30.3%
Pulmonary Hypertension	801	2.8%	427	2.5%
Cardiomyopathy	1,055	3.7%	626	3.7%
Coronary Artery Disease	212	0.7%	137	0.8%
Portal Hypertension	48	0.2%	28	0.2%
Anxiety Disorder	40	0.1%	27	0.2%
Tremor	44	0.2%	24	0.1%
Migraine	25	0.1%	15	0.1%
Thyrotoxicosis	83	0.3%	53	0.3%
Burns	91	0.3%	61	0.4%
Glaucoma	40	0.1%	26	0.2%
Autism	13	0.0%	* * * * *	****
Marfan's Syndrome	45	0.2%	29	0.2%
Pheochromocytoma/Paraganglioma	48	0.2%	32	0.2%
Diabetes	35	0.1%	24	0.1%
Any of the above health characteristics (excluding combined comorbidity score) None of the above health characteristics (excluding	26,084	91.1%	15,614	91.5%
combined comorbidity score)	2,537	8.9%	1,456	8.5%
Hypoglycemia (Day 0)	54	0.2%	25	0.1%
Hypoglycemia (0-3 Months)	207	0.7%	124	0.7%
Hypoglycemia (3-6 Months)	108	0.4%	73	0.4%
Hypoglycemia (6-12 Months)	151	0.5%	126	0.7%
Hypoglycemia (Day 0) and Diabetes	0	0.0%	0	0.0%
Hypoglycemia (0-3 Months) and Diabetes	****	* * * *	****	****
Hypoglycemia (3-6 Months) and Diabetes	****	****	****	****
Hypoglycemia (6-12 Months) and Diabetes	****	****	****	****
Hypoglycemia (Day 0) and No Diabetes	54	0.2%	25	0.1%
Hypoglycemia (0-3 Months) and No Diabetes	204	0.7%	121	0.7%
Hypoglycemia (3-6 Months) and No Diabetes	105	0.4%	70	0.4%
Hypoglycemia (6-12 Months) and No Diabetes	147	0.5%	122	0.7%
Hypoglycemia (Day 0) and Any Metoprolol	0	0.0%	0	0.0%



	Beta	Blockers	Beta Blockers (Post-Index E Requirement)	
		Percent/		Standard
atient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Deviation ³
ypoglycemia (0-3 Months) and Any Metoprolol	****	****	****	*****
ypoglycemia (3-6 Months) and Any Metoprolol	****	****	****	****
ypoglycemia (6-12 Months) and Any Metoprolol	****	****	****	****
ypoglycemia (Day 0) and Any Propranolol	51	0.2%	23	0.1%
ypoglycemia (0-3 Months) and Any Propranolol	180	0.6%	106	0.6%
ypoglycemia (3-6 Months) and Any Propranolol	81	0.3%	54	0.3%
ypoglycemia (6-12 Months) and Any Propranolol	121	0.4%	100	0.6%
ypoglycemia (Day 0) and Atenolol	****	****	****	****
ypoglycemia (0-3 Months) and Atenolol	****	****	****	****
ypoglycemia (3-6 Months) and Atenolol	****	****	****	****
ypoglycemia (6-12 Months) and Atenolol	****	****	****	****
ypoglycemia (Day 0) and Nadolol	0	0.0%	0	0.0%
ypoglycemia (0-3 Months) and Nadolol	0	0.0%	0	0.0%
ypoglycemia (3-6 Months) and Nadolol	0	0.0%	0	0.0%
ypoglycemia (6-12 Months) and Nadolol	0	0.0%	0	0.0%
elective Beta Blockers	1,307	4.6%	864	5.1%
on-Selective Beta Blockers	27,315	95.4%	16,206	94.9%
ny Metoprolol	219	0.8%	131	0.8%
letoprolol (Extended Release)	54	0.2%	29	0.2%
letoprolol (Regular)	165	0.6%	102	0.6%
ny Propranolol	25,774	90.1%	15,292	89.6%
ropranolol (Extended Release)	****	****	* * * *	****
ropranolol (Regular)	23,371	81.7%	13,918	81.5%
ropranolol (Hemangeol)	2,401	8.4%	1,372	8.0%
cebutolol	****	****	****	****
tenolol	1,075	3.8%	726	4.3%
etaxolol	0	0.0%	0	0.0%
isoprolol	****	****	****	****
arvedilol	751	2.6%	449	2.6%
abetalol	177	0.6%	117	0.7%
adolol	57	0.2%	35	0.2%
ebivolol	****	****	****	****
indolol	0	0.0%	0	0.0%
otalol	583	2.0%	332	1.9%
imolol	****	****	0	0.0%



	Beta l	Blockers	Beta Blockers (Post-Index Enrollment Requirement)	
		Percent/		Standard
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Deviation ³
Hypertension and Metoprolol (Extended Release)	****	****	****	****
Hypertension and Metoprolol (Regular)	****	****	****	****
Hypertension and Any Propranolol	873	3.1%	530	3.1%
Hypertension and Propranolol (Extended Release)	****	****	0	0.0%
Hypertension and Propranolol (Regular)	863	3.0%	526	3.1%
Hypertension and Acebutolol	0	0.0%	0	0.0%
Hypertension and Atenolol	117	0.4%	77	0.5%
Hypertension and Betaxolol	0	0.0%	0	0.0%
Hypertension and Bisoprolol	****	****	****	****
Hypertension and Carvedilol	92	0.3%	54	0.3%
Hypertension and Labetalol	130	0.5%	85	0.5%
Hypertension and Nadolol	0	0.0%	0	0.0%
Hypertension and Nebivolol	0	0.0%	0	0.0%
Hypertension and Pindolol	0	0.0%	0	0.0%
Hypertension and Sotalol	19	0.1%	11	0.1%
Hypertension and Timolol	0	0.0%	0	0.0%
Hemangioma and Any Metoprolol	****	****	****	****
Hemangioma and Metoprolol (Extended Release)	0	0.0%	0	0.0%
Hemangioma and Metoprolol (Regular)	****	****	****	****
Hemangioma and Any Propranolol	14,811	51.7%	8,789	51.5%
Hemangioma and Propranolol (Extended Release)	****	****	****	****
Hemangioma and Propranolol (Regular)	12,600	44.0%	7,513	44.0%
Hemangioma and Propranolol (Hemangeol)	2,215	7.7%	1,279	7.5%
Hemangioma and Acebutolol	****	****	****	****
Hemangioma and Atenolol	204	0.7%	142	0.8%
Hemangioma and Betaxolol	0	0.0%	0	0.0%
Hemangioma and Bisoprolol	0	0.0%	0	0.0%
Hemangioma and Carvedilol	****	****	****	****
Hemangioma and Labetalol	****	****	****	****
Hemangioma and Nadolol	****	****	****	****
Hemangioma and Nebivolol	0	0.0%	0	0.0%
Hemangioma and Pindolol	0	0.0%	0	0.0%
Hemangioma and Sotalol	****	****	****	****
Hemangioma and Timolol	****	****	0	0.0%
Long QT Syndrome and Any Metoprolol	****	****	****	****
Long QT Syndrome and Metoprolol (Extended Release)	0 ****	0.0% ****	0 ****	0.0% ****
Long QT Syndrome and Metoprolol (Regular) Long QT Syndrome and Any Propranolol	***** 524	1.8%	299	1.8%



	Beta	Blockers	Beta Blockers (Post Require	
Patient Characteristics ^{1,2}	Numerican (Noran	Percent/ Standard Deviation ³	Discussion of the second	Standard Deviation ³
Long QT Syndrome and Propranolol (Extended Release)	Number/Mean 0	0.0%	Number/Mean 0	0.0%
ong QT Syndrome and Propranolol (Regular)	520	1.8%	297	1.7%
ong QT Syndrome and Acebutolol	0	0.0%	0	0.0%
ong QT Syndrome and Atenolol	21	0.1%	****	****
ong QT Syndrome and Betaxolol	0	0.0%	0	0.0%
ong QT Syndrome and Bisoprolol	0	0.0%	0	0.0%
ong QT Syndrome and Carvedilol	21	0.1%	11	0.1%
ong QT Syndrome and Labetalol	****	****	****	****
ong QT Syndrome and Nadolol	14	0.0%	****	****
ong QT Syndrome and Nebivolol	0	0.0%	0	0.0%
ong QT Syndrome and Pindolol	0	0.0%	0	0.0%
ong QT Syndrome and Sotalol	42	0.1%	20	0.1%
ong QT Syndrome and Timolol	0	0.0%	0	0.0%

¹All metrics are based on total number of episodes per group, except for sex, race, and Hispanic origin which are based on total number of unique patients.

²Characteristics in blue show a standardized difference greater than 0.1.

³Value represents standard deviation where no % follows the value.

⁴Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

⁵The Charlson/Elixhauser Combined Comorbidity Score is calculated based on comorbidities observed during a requester-defined window around the exposure episode start date. (Gagne JJ, Glynn RJ, Avorn J, Levin R, Schneeweiss S. A combined comorbidity score predicted mortality in elderly patients better than existing scores. J Clin Epidemiol. 2011;64(7):749-759)

*****Data are not presented in these cells due to a small sample size or to assure a small cell cannot be recalculated through the cells presented.



	Beta	Blockers	-	ost-Index Enrollment uirement)
		Percent/		Percent/
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation ³
Unique patients	6,090	N/A	3,934	N/A
Episodes	6,366	100.0%	4,062	100.0%
Demographic Characteristics				
Age (years)	4.2	1.2	4.2	1.2
Sex				
Female	2,896	47.6%	1,864	47.4%
Male	3,194	52.4%	2,070	52.6%
Race ⁴				
American Indian or Alaska Native	75	1.2%	****	****
Asian	94	1.5%	61	1.6%
Black or African American	522	8.6%	331	8.4%
Native Hawaiian or Other Pacific Islander	17	0.3%	****	****
Unknown	3,853	63.3%	2,506	63.7%
White	1,529	25.1%	978	24.9%
Hispanic origin				
Yes	791	13.0%	501	12.7%
No	2,149	35.3%	1,363	34.6%
Unknown	3,150	51.7%	2,070	52.6%
Year				
2008	207	3.3%	162	4.0%
2009	231	3.6%	172	4.2%
2010	208	3.3%	154	3.8%
2011	206	3.2%	157	3.9%
2012	177	2.8%	131	3.2%
2013	200	3.1%	151	3.7%
2014	352	5.5%	281	6.9%
2015	677	10.6%	533	13.1%
2016	1,094	17.2%	918	22.6%
2017	1,299	20.4%	996	24.5%
2018	1,187	18.6%	147	3.6%
2019	195	3.1%	140	3.4%
2020	177	2.8%	****	****
2021	****	****	****	****
2022	****	****	0	0.0%
Health Characteristics				
Charlson/Elixhauser combined comorbidity score ⁵	1.1	1.6	1.0	1.5
Hypertension	733	11.5%	452	11.1%



		Blockers	•	ost-Index Enrollment uirement)
		Percent/		Percent/
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation ³
Hemangioma	413	6.5%	263	6.5%
Heart Failure	313	4.9%	177	4.4%
Congenital Heart Disease	1,303	20.5%	802	19.7%
Atrial Fibrillation	35	0.5%	21	0.5%
Long QT Syndrome	273	4.3%	175	4.3%
Other Cardiac Arrhythmias	1,897	29.8%	1,202	29.6%
Cardiac Arrhythmias (Composite)	2,092	32.9%	1,318	32.4%
Pulmonary Hypertension	98	1.5%	64	1.6%
Cardiomyopathy	313	4.9%	183	4.5%
Coronary Artery Disease	55	0.9%	35	0.9%
Portal Hypertension	53	0.8%	31	0.8%
Anxiety Disorder	221	3.5%	132	3.2%
Tremor	88	1.4%	57	1.4%
Migraine	423	6.6%	296	7.3%
Thyrotoxicosis	220	3.5%	147	3.6%
Burns	78	1.2%	51	1.3%
Glaucoma	12	0.2%	****	****
Autism	227	3.6%	154	3.8%
Marfan's Syndrome	134	2.1%	86	2.1%
Pheochromocytoma/Paraganglioma	24	0.4%	15	0.4%
Diabetes	31	0.5%	21	0.5%
Any of the above health characteristics <i>(excluding combined comorbidity score)</i> None of the above health characteristics <i>(excluding</i>	4,633	72.8%	2,951	72.6%
combined comorbidity score)	1,733	27.2%	1,111	27.4%
Hypoglycemia (Day 0)	****	****	****	****
Hypoglycemia (0-3 Months)	48	0.8%	32	0.8%
Hypoglycemia (3-6 Months)	35	0.5%	28	0.7%
Hypoglycemia (6-12 Months)	28	0.4%	24	0.6%
Hypoglycemia (Day 0) and Diabetes	0	0.0%	0	0.0%
Hypoglycemia (0-3 Months) and Diabetes	****	****	****	****
Hypoglycemia (3-6 Months) and Diabetes	****	****	****	****
Hypoglycemia (6-12 Months) and Diabetes	****	****	****	****
Hypoglycemia (Day 0) and No Diabetes	****	* * * *	****	****
Hypoglycemia (0-3 Months) and No Diabetes	43	0.7%	29	0.7%
Hypoglycemia (3-6 Months) and No Diabetes	31	0.5%	25	0.6%
Hypoglycemia (6-12 Months) and No Diabetes	26	0.4%	22	0.5%
Hypoglycemia (Day 0) and Any Metoprolol	0	0.0%	0	0.0%
• •				



	Beta	Blockers	-	ost-Index Enrollment uirement)
		Percent/		Percent/
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation
Hypoglycemia (0-3 Months) and Any Metoprolol	****	****	0	0.0%
Hypoglycemia (3-6 Months) and Any Metoprolol	****	****	****	****
Hypoglycemia (6-12 Months) and Any Metoprolol	0	0.0%	0	0.0%
Hypoglycemia (Day 0) and Any Propranolol	****	****	****	****
Hypoglycemia (0-3 Months) and Any Propranolol	27	0.4%	18	0.4%
Hypoglycemia (3-6 Months) and Any Propranolol	20	0.3%	17	0.4%
Hypoglycemia (6-12 Months) and Any Propranolol	16	0.3%	15	0.4%
lypoglycemia (Day 0) and Atenolol	****	****	****	****
Hypoglycemia (0-3 Months) and Atenolol	****	****	****	****
Hypoglycemia (3-6 Months) and Atenolol	****	****	****	****
lypoglycemia (6-12 Months) and Atenolol	****	****	****	****
Hypoglycemia (Day 0) and Nadolol	****	****	0	0.0%
lypoglycemia (0-3 Months) and Nadolol	****	****	****	****
lypoglycemia (3-6 Months) and Nadolol	****	****	****	****
lypoglycemia (6-12 Months) and Nadolol	****	****	****	****
elective Beta Blockers	2,066	32.5%	1,392	34.3%
Ion-Selective Beta Blockers	4,303	67.6%	2,671	65.8%
Any Metoprolol	378	5.9%	252	6.2%
Metoprolol (Extended Release)	127	2.0%	84	2.1%
Metoprolol (Regular)	252	4.0%	169	4.2%
Any Propranolol	3,182	50.0%	1,994	49.1%
Propranolol (Extended Release)	20	0.3%	15	0.4%
Propranolol (Regular)	3,113	48.9%	1,952	48.1%
ropranolol (Hemangeol)	52	0.8%	29	0.7%
Acebutolol	****	****	****	****
Atenolol	1,655	26.0%	1,115	27.4%
Betaxolol	****	****	0	0.0%
Bisoprolol	19	0.3%	15	0.4%
Carvedilol	464	7.3%	265	6.5%
abetalol	249	3.9%	156	3.8%
Nadolol	296	4.6%	185	4.6%
Vebivolol	11	0.2%	****	****
Pindolol	****	****	****	****
Sotalol	111	1.7%	69	1.7%
Timolol	0	0.0%	0	0.0%
Health Characteristics by Beta Blockers				
Aypertension and Any Metoprolol	74	1.2%	46	1.1%



	Beta	Blockers	Beta Blockers (Post-Index Enrollment Requirement)		
		Percent/		Percent/	
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation ³	
Hypertension and Metoprolol (Extended Release)	18	0.3%	13	0.3%	
Hypertension and Metoprolol (Regular)	56	0.9%	33	0.8%	
Hypertension and Any Propranolol	217	3.4%	127	3.1%	
Hypertension and Propranolol (Extended Release)	0	0.0%	0	0.0%	
Hypertension and Propranolol (Regular)	217	3.4%	127	3.1%	
Hypertension and Acebutolol	0	0.0%	0	0.0%	
Hypertension and Atenolol	187	2.9%	128	3.2%	
Hypertension and Betaxolol	0	0.0%	0	0.0%	
Hypertension and Bisoprolol	****	****	****	****	
Hypertension and Carvedilol	65	1.0%	35	0.9%	
Hypertension and Labetalol	180	2.8%	110	2.7%	
Hypertension and Nadolol	****	****	****	****	
Hypertension and Nebivolol	****	****	****	****	
Hypertension and Pindolol	0	0.0%	0	0.0%	
Hypertension and Sotalol	****	****	****	****	
Hypertension and Timolol	0	0.0%	0	0.0%	
Hemangioma and Any Metoprolol	****	****	0	0.0%	
Hemangioma and Metoprolol (Extended Release)	0	0.0%	0	0.0%	
Hemangioma and Metoprolol (Regular)	****	****	0	0.0%	
Hemangioma and Any Propranolol	393	6.2%	251	6.2%	
Hemangioma and Propranolol (Extended Release)	0	0.0%	0	0.0%	
Hemangioma and Propranolol (Regular)	347	5.5%	225	5.5%	
Hemangioma and Propranolol (Hemangeol)	47	0.7%	26	0.6%	
Hemangioma and Acebutolol	0	0.0%	0	0.0%	
Hemangioma and Atenolol	15	0.2%	****	****	
Hemangioma and Betaxolol	0	0.0%	0	0.0%	
Hemangioma and Bisoprolol	0	0.0%	0	0.0%	
Hemangioma and Carvedilol	****	* * * *	0	0.0%	
Hemangioma and Labetalol	****	* * * *	****	****	
Hemangioma and Nadolol	****	****	****	****	
Hemangioma and Nebivolol	0	0.0%	0	0.0%	
Hemangioma and Pindolol	0	0.0%	0	0.0%	
Hemangioma and Sotalol	0	0.0%	0	0.0%	
Hemangioma and Timolol	0	0.0%	0	0.0%	
Long QT Syndrome and Any Metoprolol	****	****	****	****	
Long QT Syndrome and Metoprolol (Extended Release)	****	****	****	****	
Long QT Syndrome and Metoprolol (Regular) Long QT Syndrome and Any Propranolol	***** 102	**** 1.6%	0 63	0.0% 1.6%	



	Beta Blockers		Beta Blockers (Post-Index Enrollment Requirement)	
Patient Characteristics ^{1,2}	Number/Mean	Percent/ Standard Deviation ³	Number/Mean	Percent/ Standard Deviation ³
Long QT Syndrome and Propranolol (Extended Release)	0	0.0%	0	0.0%
Long QT Syndrome and Propranolol (Regular)	102	1.6%	63	1.6%
Long QT Syndrome and Acebutolol	0	0.0%	0	0.0%
Long QT Syndrome and Atenolol	46	0.7%	34	0.8%
Long QT Syndrome and Betaxolol	0	0.0%	0	0.0%
Long QT Syndrome and Bisoprolol	****	****	****	****
Long QT Syndrome and Carvedilol	****	****	****	****
Long QT Syndrome and Labetalol	****	****	****	****
Long QT Syndrome and Nadolol	107	1.7%	66	1.6%
Long QT Syndrome and Nebivolol	0	0.0%	0	0.0%
Long QT Syndrome and Pindolol	0	0.0%	0	0.0%
Long QT Syndrome and Sotalol	****	****	****	****
Long QT Syndrome and Timolol	0	0.0%	0	0.0%

¹All metrics are based on total number of episodes per group, except for sex, race, and Hispanic origin which are based on total number of unique patients.

²Characteristics in blue show a standardized difference greater than 0.1.

³Value represents standard deviation where no % follows the value.

⁴Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

⁵The Charlson/Elixhauser Combined Comorbidity Score is calculated based on comorbidities observed during a requester-defined window around the exposure episode start date. (Gagne JJ, Glynn RJ, Avorn J, Levin R, Schneeweiss S. A combined comorbidity score predicted mortality in elderly patients better than existing scores. J Clin Epidemiol. 2011;64(7):749-759)

*****Data are not presented in these cells due to a small sample size or to assure a small cell cannot be recalculated through the cells presented.



	Beta	Blockers		ost-Index Enrollment irement)
		Percent/		Percent/
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation
Unique patients	39,081	N/A	25,628	N/A
Episodes	41,380	100.0%	27,012	100.0%
Demographic Characteristics				
Age (years)	10.4	1.9	10.4	1.9
Sex				
Female	19,069	48.8%	12,297	48.0%
Male	20,012	51.2%	13,331	52.0%
Race ⁴				
American Indian or Alaska Native	384	1.0%	253	1.0%
Asian	358	0.9%	218	0.9%
Black or African American	2,832	7.2%	1,802	7.0%
Native Hawaiian or Other Pacific Islander	56	0.1%	35	0.1%
Unknown	24,156	61.8%	16,058	62.7%
White	11,295	28.9%	7,262	28.3%
Hispanic origin				
Yes	4,684	12.0%	2,934	11.4%
No	13,995	35.8%	8,894	34.7%
Unknown	20,402	52.2%	13,800	53.8%
Year				
2008	1,363	3.3%	1,061	3.9%
2009	1,677	4.1%	1,287	4.8%
2010	1,553	3.8%	1,163	4.3%
2011	1,550	3.7%	1,162	4.3%
2012	1,441	3.5%	1,144	4.2%
2013	1,507	3.6%	1,141	4.2%
2014	2,443	5.9%	1,970	7.3%
2015	4,207	10.2%	3,233	12.0%
2016	6,277	15.2%	5,384	19.9%
2017	8,029	19.4%	6,290	23.3%
2018	7,317	17.7%	1,139	4.2%
2019	1,450	3.5%	1,143	4.2%
2020	1,224	3.0%	801	3.0%
2021	1,243	3.0%	94	0.3%
2022	99	0.2%	0	0.0%
Health Characteristics				
Charlson/Elixhauser combined comorbidity score ⁵	0.5	1.1	0.5	1.0
Hypertension	2,498	6.0%	1,614	6.0%



	Beta Blockers			ost-Index Enrollment irement)
		Percent/		Percent/
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation ³
Hemangioma	112	0.3%	84	0.3%
Heart Failure	489	1.2%	309	1.1%
Congenital Heart Disease	2,783	6.7%	1,830	6.8%
Atrial Fibrillation	93	0.2%	61	0.2%
Long QT Syndrome	800	1.9%	500	1.9%
Other Cardiac Arrhythmias	6,611	16.0%	4,143	15.3%
Cardiac Arrhythmias (Composite)	7,179	17.3%	4,500	16.7%
Pulmonary Hypertension	121	0.3%	75	0.3%
Cardiomyopathy	786	1.9%	476	1.8%
Coronary Artery Disease	156	0.4%	98	0.4%
Portal Hypertension	93	0.2%	70	0.3%
Anxiety Disorder	6,113	14.8%	3,867	14.3%
Tremor	546	1.3%	340	1.3%
Migraine	10,888	26.3%	7,382	27.3%
Thyrotoxicosis	1,353	3.3%	855	3.2%
Burns	110	0.3%	65	0.2%
Glaucoma	111	0.3%	72	0.3%
Autism	2,696	6.5%	1,730	6.4%
Marfan's Syndrome	369	0.9%	228	0.8%
Pheochromocytoma/Paraganglioma	26	0.1%	15	0.1%
Diabetes	328	0.8%	201	0.7%
Any of the above health characteristics (excluding combined comorbidity score) None of the above health characteristics (excluding	28,401	68.6%	18,587	68.8%
combined comorbidity score)	12,979	31.4%	8,425	31.2%
Hypoglycemia (Day 0)	****	****	****	****
Hypoglycemia (0-3 Months)	81	0.2%	49	0.2%
Hypoglycemia (3-6 Months)	67	0.2%	47	0.2%
Hypoglycemia (6-12 Months)	98	0.2%	88	0.3%
Hypoglycemia (Day 0) and Diabetes	0	0.0%	0	0.0%
Hypoglycemia (0-3 Months) and Diabetes	14	0.0%	****	****
Hypoglycemia (3-6 Months) and Diabetes	12	0.0%	****	****
Hypoglycemia (6-12 Months) and Diabetes	18	0.0%	17	0.1%
Hypoglycemia (Day 0) and No Diabetes	****	****	****	****
Hypoglycemia (0-3 Months) and No Diabetes	67	0.2%	40	0.1%
Hypoglycemia (3-6 Months) and No Diabetes	55	0.1%	40	0.1%
Hypoglycemia (6-12 Months) and No Diabetes	80	0.2%	71	0.3%
Hypoglycemia (Day 0) and Any Metoprolol	****	****	****	****



	Beta	Beta Blockers		Beta Blockers (Post-Index Enrollment Requirement)	
		Percent/		Percent/	
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation	
Hypoglycemia (0-3 Months) and Any Metoprolol	****	****	****	****	
Hypoglycemia (3-6 Months) and Any Metoprolol	****	****	****	****	
Hypoglycemia (6-12 Months) and Any Metoprolol	****	****	****	****	
Hypoglycemia (Day 0) and Any Propranolol	****	****	****	****	
Hypoglycemia (0-3 Months) and Any Propranolol	40	0.1%	24	0.1%	
Hypoglycemia (3-6 Months) and Any Propranolol	34	0.1%	25	0.1%	
Hypoglycemia (6-12 Months) and Any Propranolol	54	0.1%	48	0.2%	
Hypoglycemia (Day 0) and Atenolol	****	****	****	****	
Hypoglycemia (0-3 Months) and Atenolol	17	0.0%	11	0.0%	
Hypoglycemia (3-6 Months) and Atenolol	17	0.0%	****	****	
Hypoglycemia (6-12 Months) and Atenolol	22	0.1%	18	0.1%	
Hypoglycemia (Day 0) and Nadolol	0	0.0%	0	0.0%	
Hypoglycemia (0-3 Months) and Nadolol	****	****	****	****	
Hypoglycemia (3-6 Months) and Nadolol	****	****	****	****	
Hypoglycemia (6-12 Months) and Nadolol	****	****	****	****	
Selective Beta Blockers	11,925	28.8%	7,820	29.0%	
Non-Selective Beta Blockers	29,463	71.2%	19,197	71.1%	
Any Metoprolol	2,899	7.0%	1,826	6.8%	
Metoprolol (Extended Release)	1,536	3.7%	946	3.5%	
Metoprolol (Regular)	1,367	3.3%	883	3.3%	
Any Propranolol	25,675	62.0%	16,784	62.1%	
Propranolol (Extended Release)	2,259	5.5%	1,520	5.6%	
Propranolol (Regular)	23,481	56.7%	15,302	56.6%	
Propranolol (Hemangeol)	****	* * * * *	****	****	
Acebutolol	24	0.1%	16	0.1%	
Atenolol	8,785	21.2%	5,841	21.6%	
Betaxolol	32	0.1%	20	0.1%	
Bisoprolol	94	0.2%	55	0.2%	
Carvedilol	902	2.2%	545	2.0%	
abetalol	670	1.6%	393	1.5%	
Nadolol	2,033	4.9%	1,357	5.0%	
Nebivolol	96	0.2%	66	0.2%	
Pindolol	37	0.1%	26	0.1%	
Sotalol	142	0.3%	91	0.3%	
Timolol	****	****	****	****	
Health Characteristics by Beta Blockers					
Hypertension and Any Metoprolol	487	1.2%	327	1.2%	



	Beta Blockers		•	ost-Index Enrollment irement)
		Percent/		Percent/
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation ³
Hypertension and Metoprolol (Extended Release)	256	0.6%	166	0.6%
Hypertension and Metoprolol (Regular)	233	0.6%	163	0.6%
Hypertension and Any Propranolol	455	1.1%	303	1.1%
Hypertension and Propranolol (Extended Release)	22	0.1%	15	0.1%
Hypertension and Propranolol (Regular)	433	1.0%	287	1.1%
Hypertension and Acebutolol	0	0.0%	0	0.0%
Hypertension and Atenolol	841	2.0%	573	2.1%
Hypertension and Betaxolol	0	0.0%	0	0.0%
Hypertension and Bisoprolol	****	****	****	****
Hypertension and Carvedilol	138	0.3%	73	0.3%
Hypertension and Labetalol	518	1.3%	303	1.1%
Hypertension and Nadolol	38	0.1%	21	0.1%
Hypertension and Nebivolol	11	0.0%	****	****
Hypertension and Pindolol	0	0.0%	0	0.0%
Hypertension and Sotalol	****	****	****	****
Hypertension and Timolol	0	0.0%	0	0.0%
Hemangioma and Any Metoprolol	****	****	****	****
Hemangioma and Metoprolol (Extended Release)	****	****	0	0.0%
Hemangioma and Metoprolol (Regular)	****	****	****	****
Hemangioma and Any Propranolol	100	0.2%	78	0.3%
Hemangioma and Propranolol (Extended Release)	****	****	****	****
Hemangioma and Propranolol (Regular)	96	0.2%	76	0.3%
Hemangioma and Propranolol (Hemangeol)	0	0.0%	0	0.0%
Hemangioma and Acebutolol	0	0.0%	0	0.0%
Hemangioma and Atenolol	****	****	****	****
Hemangioma and Betaxolol	0	0.0%	0	0.0%
Hemangioma and Bisoprolol	0	0.0%	0	0.0%
Hemangioma and Carvedilol	0	0.0%	0	0.0%
Hemangioma and Labetalol	0	0.0%	0	0.0%
Hemangioma and Nadolol	0	0.0%	0	0.0%
Hemangioma and Nebivolol	0	0.0%	0	0.0%
Hemangioma and Pindolol	0	0.0%	0	0.0%
Hemangioma and Sotalol	0	0.0%	0	0.0%
Hemangioma and Timolol	0	0.0%	0	0.0%
Long QT Syndrome and Any Metoprolol	49	0.1%	31	0.1%
Long QT Syndrome and Metoprolol (Extended Release)	20	0.0%	12	0.0%
Long QT Syndrome and Metoprolol (Regular) Long QT Syndrome and Any Propranolol	29 88	0.1% 0.2%	19 50	0.1% 0.2%



	Beta Blockers		Beta Blockers (Post-Index Enrollment Requirement)	
Patient Characteristics ^{1,2}	Number/Mean	Percent/ Standard Deviation ³	Number/Mean	Percent/ Standard Deviation ³
Long QT Syndrome and Propranolol (Extended Release)	****	****	****	****
Long QT Syndrome and Propranolol (Regular)	****	****	****	****
Long QT Syndrome and Acebutolol	0	0.0%	0	0.0%
Long QT Syndrome and Atenolol	113	0.3%	77	0.3%
Long QT Syndrome and Betaxolol	****	****	0	0.0%
Long QT Syndrome and Bisoprolol	****	****	0	0.0%
Long QT Syndrome and Carvedilol	****	****	****	****
Long QT Syndrome and Labetalol	****	****	****	****
Long QT Syndrome and Nadolol	527	1.3%	335	1.2%
Long QT Syndrome and Nebivolol	0	0.0%	0	0.0%
Long QT Syndrome and Pindolol	0	0.0%	0	0.0%
Long QT Syndrome and Sotalol	****	****	****	****
Long QT Syndrome and Timolol	0	0.0%	0	0.0%

¹All metrics are based on total number of episodes per group, except for sex, race, and Hispanic origin which are based on total number of unique patients.

²Characteristics in blue show a standardized difference greater than 0.1.

³Value represents standard deviation where no % follows the value.

⁴Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

⁵The Charlson/Elixhauser Combined Comorbidity Score is calculated based on comorbidities observed during a requester-defined window around the exposure episode start date. (Gagne JJ, Glynn RJ, Avorn J, Levin R, Schneeweiss S. A combined comorbidity score predicted mortality in elderly patients better than existing scores. J Clin Epidemiol. 2011;64(7):749-759)

*****Data are not presented in these cells due to a small sample size or to assure a small cell cannot be recalculated through the cells presented.



	Beta	a Blockers	Beta Blockers (Post-Index Enrollment Requirement)		
		Percent/		Percent/	
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation	
Unique patients	129,931	N/A	82,935	N/A	
Episodes	137,864	100.0%	87,826	100.0%	
Demographic Characteristics					
Age (years)	16.0	1.3	16.0	1.3	
Sex					
Female	84,437	65.0%	53,460	64.5%	
Male	45,494	35.0%	29,475	35.5%	
Race ⁴					
American Indian or Alaska Native	1,178	0.9%	713	0.9%	
Asian	1,032	0.8%	580	0.7%	
Black or African American	7,111	5.5%	4,187	5.0%	
Native Hawaiian or Other Pacific Islander	176	0.1%	109	0.1%	
Unknown	84,817	65.3%	55,476	66.9%	
White	35,617	27.4%	21,870	26.4%	
lispanic origin					
Yes	11,247	8.7%	6,392	7.7%	
No	40,803	31.4%	24,453	29.5%	
Unknown	77,881	59.9%	52,090	62.8%	
/ear					
2008	4,053	2.9%	3,115	3.5%	
2009	5,352	3.9%	3,982	4.5%	
2010	5,098	3.7%	3,875	4.4%	
2011	4,854	3.5%	3,696	4.2%	
2012	4,942	3.6%	3,876	4.4%	
2013	5,253	3.8%	3,976	4.5%	
2014	7,632	5.5%	6,041	6.9%	
2015	12,407	9.0%	9,280	10.6%	
2016	19,401	14.1%	15,905	18.1%	
2017	24,097	17.5%	18,274	20.8%	
2018	24,011	17.4%	5,410	6.2%	
2019	7,220	5.2%	5,641	6.4%	
2020	6,157	4.5%	4,219	4.8%	
2021	6,876	5.0%	536	0.6%	
2022	511	0.4%	0	0.0%	
Health Characteristics					
Charlson/Elixhauser combined comorbidity score ⁵	0.5	0.9	0.5	0.9	
Hypertension	10,185	7.4%	6,623	7.5%	



	Beta	Blockers	-	ost-Index Enrollment uirement)
		Percent/		Percent/
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation ³
Hemangioma	124	0.1%	86	0.1%
Heart Failure	816	0.6%	493	0.6%
Congenital Heart Disease	3,681	2.7%	2,411	2.7%
Atrial Fibrillation	400	0.3%	260	0.3%
Long QT Syndrome	897	0.7%	562	0.6%
Other Cardiac Arrhythmias	19,295	14.0%	12,110	13.8%
Cardiac Arrhythmias (Composite)	19,868	14.4%	12,483	14.2%
Pulmonary Hypertension	230	0.2%	147	0.2%
Cardiomyopathy	1,460	1.1%	883	1.0%
Coronary Artery Disease	479	0.3%	319	0.4%
Portal Hypertension	123	0.1%	69	0.1%
Anxiety Disorder	40,314	29.2%	24,466	27.9%
Tremor	3,316	2.4%	2,104	2.4%
Migraine	34,010	24.7%	22,439	25.5%
Thyrotoxicosis	3,981	2.9%	2,554	2.9%
Burns	208	0.2%	136	0.2%
Glaucoma	312	0.2%	186	0.2%
Autism	4,196	3.0%	2,574	2.9%
Marfan's Syndrome	413	0.3%	298	0.3%
Pheochromocytoma/Paraganglioma	31	0.0%	22	0.0%
Diabetes	1,883	1.4%	1,203	1.4%
Any of the above health characteristics (excluding combined comorbidity score) None of the above health characteristics (excluding	95,538	69.3%	60,640	69.0%
combined comorbidity score)	42,326	30.7%	27,186	31.0%
Hypoglycemia (Day 0)	61	0.0%	42	0.0%
Hypoglycemia (0-3 Months)	401	0.3%	286	0.3%
Hypoglycemia (3-6 Months)	322	0.2%	234	0.3%
Hypoglycemia (6-12 Months)	418	0.3%	363	0.4%
Hypoglycemia (Day 0) and Diabetes	****	****	****	****
Hypoglycemia (0-3 Months) and Diabetes	71	0.1%	49	0.1%
Hypoglycemia (3-6 Months) and Diabetes	60	0.0%	44	0.1%
Hypoglycemia (6-12 Months) and Diabetes	66	0.0%	57	0.1%
Hypoglycemia (Day 0) and No Diabetes	53	0.0%	35	0.0%
Hypoglycemia (0-3 Months) and No Diabetes	330	0.2%	237	0.3%
Hypoglycemia (3-6 Months) and No Diabetes	262	0.2%	190	0.2%
Hypoglycemia (6-12 Months) and No Diabetes	352	0.3%	306	0.3%
Hypoglycemia (Day 0) and Any Metoprolol	14	0.0%	****	****



	Beta	a Blockers	Beta Blockers (Post-Index Enrollment Requirement)		
		Percent/		Percent/	
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation ³	
Hypoglycemia (0-3 Months) and Any Metoprolol	73	0.1%	54	0.1%	
lypoglycemia (3-6 Months) and Any Metoprolol	52	0.0%	39	0.0%	
Hypoglycemia (6-12 Months) and Any Metoprolol	65	0.0%	54	0.1%	
lypoglycemia (Day 0) and Any Propranolol	29	0.0%	17	0.0%	
lypoglycemia (0-3 Months) and Any Propranolol	226	0.2%	155	0.2%	
lypoglycemia (3-6 Months) and Any Propranolol	194	0.1%	139	0.2%	
lypoglycemia (6-12 Months) and Any Propranolol	236	0.2%	206	0.2%	
lypoglycemia (Day 0) and Atenolol	****	****	****	****	
lypoglycemia (0-3 Months) and Atenolol	56	0.0%	48	0.1%	
lypoglycemia (3-6 Months) and Atenolol	49	0.0%	35	0.0%	
lypoglycemia (6-12 Months) and Atenolol	71	0.1%	63	0.1%	
lypoglycemia (Day 0) and Nadolol	****	****	****	****	
lypoglycemia (0-3 Months) and Nadolol	****	****	****	* * * * *	
lypoglycemia (3-6 Months) and Nadolol	****	****	****	* * * * *	
ypoglycemia (6-12 Months) and Nadolol	17	0.0%	16	0.0%	
elective Beta Blockers	34,897	25.3%	22,923	26.1%	
on-Selective Beta Blockers	103,003	74.7%	64,931	73.9%	
ny Metoprolol	14,678	10.6%	9,331	10.6%	
Netoprolol (Extended Release)	8,542	6.2%	5,324	6.1%	
Aetoprolol (Regular)	6,178	4.5%	4,040	4.6%	
ny Propranolol	92,707	67.2%	58,448	66.5%	
ropranolol (Extended Release)	13,992	10.1%	9,311	10.6%	
ropranolol (Regular)	79,046	57.3%	49,348	56.2%	
ropranolol (Hemangeol)	0	0.0%	0	0.0%	
cebutolol	48	0.0%	37	0.0%	
tenolol	19,145	13.9%	12,838	14.6%	
etaxolol	140	0.1%	98	0.1%	
isoprolol	467	0.3%	314	0.4%	
arvedilol	1,919	1.4%	1,151	1.3%	
abetalol	3,895	2.8%	2,286	2.6%	
ladolol	3,965	2.9%	2,696	3.1%	
lebivolol	437	0.3%	318	0.4%	
indolol	235	0.2%	165	0.2%	
otalol	213	0.2%	136	0.2%	
ïmolol	73	0.1%	52	0.1%	
lealth Characteristics by Beta Blockers					
lypertension and Any Metoprolol	3,036	2.2%	1,898	2.2%	



Patient Characteristics ^{1,2} Iypertension and Metoprolol (Extended Release) Iypertension and Metoprolol (Regular) Iypertension and Any Propranolol Iypertension and Propranolol (Extended Release) Iypertension and Propranolol (Regular) Iypertension and Acebutolol Iypertension and Atenolol	Number/Mean 1,807 1,247 2,324 453 1,874 ***** 2,858 ***** 115	Percent/ Standard Deviation ³ 1.3% 0.9% 1.7% 0.3% 1.4% ***** 2.1% *****	Number/Mean 1,107 806 1,547 315 1,235 ***** 1,939	Percent/ Standard Deviation ³ 1.3% 0.9% 1.8% 0.4% 1.4% *****
lypertension and Metoprolol (Extended Release) lypertension and Metoprolol (Regular) lypertension and Any Propranolol lypertension and Propranolol (Extended Release) lypertension and Propranolol (Regular) lypertension and Acebutolol	1,807 1,247 2,324 453 1,874 ***** 2,858 *****	1.3% 0.9% 1.7% 0.3% 1.4% ***** 2.1%	1,107 806 1,547 315 1,235 *****	1.3% 0.9% 1.8% 0.4% 1.4%
Iypertension and Metoprolol (Regular) Iypertension and Any Propranolol Iypertension and Propranolol (Extended Release) Iypertension and Propranolol (Regular) Iypertension and Acebutolol	1,247 2,324 453 1,874 ***** 2,858 *****	0.9% 1.7% 0.3% 1.4% ***** 2.1%	806 1,547 315 1,235 *****	0.9% 1.8% 0.4% 1.4%
Iypertension and Any Propranolol Iypertension and Propranolol (Extended Release) Iypertension and Propranolol (Regular) Iypertension and Acebutolol	2,324 453 1,874 ***** 2,858 *****	1.7% 0.3% 1.4% ***** 2.1%	1,547 315 1,235 *****	1.8% 0.4% 1.4%
lypertension and Propranolol (Extended Release) lypertension and Propranolol (Regular) lypertension and Acebutolol	453 1,874 ***** 2,858 *****	0.3% 1.4% ***** 2.1%	315 1,235 *****	0.4% 1.4%
lypertension and Propranolol (Regular) lypertension and Acebutolol	1,874 ***** 2,858 *****	1.4% ***** 2.1%	1,235 ****	1.4%
lypertension and Acebutolol	***** 2,858 *****	***** 2.1%	****	
	2,858 *****	2.1%		****
lypertension and Atenolol	****		1,939	
		****		2.2%
lypertension and Betaxolol	115	ጥ ጥ ጥ ጥ ጥ	****	****
lypertension and Bisoprolol		0.1%	81	0.1%
lypertension and Carvedilol	438	0.3%	267	0.3%
lypertension and Labetalol	1,110	0.8%	681	0.8%
lypertension and Nadolol	140	0.1%	95	0.1%
lypertension and Nebivolol	131	0.1%	90	0.1%
lypertension and Pindolol	13	0.0%	****	* * * * *
lypertension and Sotalol	17	0.0%	14	0.0%
lypertension and Timolol	0	0.0%	0	0.0%
lemangioma and Any Metoprolol	****	****	****	* * * *
lemangioma and Metoprolol (Extended Release)	****	****	****	* * * *
lemangioma and Metoprolol (Regular)	****	****	****	* * * *
lemangioma and Any Propranolol	103	0.1%	72	0.1%
lemangioma and Propranolol (Extended Release)	19	0.0%	13	0.0%
lemangioma and Propranolol (Regular)	85	0.1%	59	0.1%
lemangioma and Propranolol (Hemangeol)	0	0.0%	0	0.0%
lemangioma and Acebutolol	0	0.0%	0	0.0%
lemangioma and Atenolol	11	0.0%	****	****
lemangioma and Betaxolol	0	0.0%	0	0.0%
lemangioma and Bisoprolol	0	0.0%	0	0.0%
lemangioma and Carvedilol	0	0.0%	0	0.0%
lemangioma and Labetalol	****	****	****	* * * * *
lemangioma and Nadolol	****	****	****	****
lemangioma and Nebivolol	0	0.0%	0	0.0%
lemangioma and Pindolol	0	0.0%	0	0.0%
lemangioma and Sotalol	0	0.0%	0	0.0%
lemangioma and Timolol	0	0.0%	0	0.0%
ong QT Syndrome and Any Metoprolol	88	0.1%	53	0.1%
ong QT Syndrome and Metoprolol (Extended Release)	40	0.0%	20	0.0%
ong QT Syndrome and Metoprolol (Regular) ong QT Syndrome and Any Propranolol	48 140	0.0% 0.1%	33 89	0.0% 0.1%



	Beta Blockers		Beta Blockers (Post-Index Enrollment Requirement)	
Patient Characteristics ^{1,2}	Number/Mean	Percent/ Standard Deviation ³	Number/Mean	Percent/ Standard Deviation ³
Long QT Syndrome and Propranolol (Extended Release)	32	0.0%	23	0.0%
Long QT Syndrome and Propranolol (Regular)	109	0.1%	67	0.1%
Long QT Syndrome and Acebutolol	0	0.0%	0	0.0%
Long QT Syndrome and Atenolol	133	0.1%	87	0.1%
Long QT Syndrome and Betaxolol	****	****	****	****
Long QT Syndrome and Bisoprolol	****	****	****	****
Long QT Syndrome and Carvedilol	26	0.0%	14	0.0%
Long QT Syndrome and Labetalol	****	****	****	****
Long QT Syndrome and Nadolol	482	0.3%	300	0.3%
Long QT Syndrome and Nebivolol	0	0.0%	0	0.0%
Long QT Syndrome and Pindolol	0	0.0%	0	0.0%
Long QT Syndrome and Sotalol	11	0.0%	****	* * * * *
Long QT Syndrome and Timolol	****	****	****	****

¹All metrics are based on total number of episodes per group, except for sex, race, and Hispanic origin which are based on total number of unique patients.

²Characteristics in blue show a standardized difference greater than 0.1.

³Value represents standard deviation where no % follows the value.

⁴Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

⁵The Charlson/Elixhauser Combined Comorbidity Score is calculated based on comorbidities observed during a requester-defined window around the exposure episode start date. (Gagne JJ, Glynn RJ, Avorn J, Levin R, Schneeweiss S. A combined comorbidity score predicted mortality in elderly patients better than existing scores. J Clin Epidemiol. 2011;64(7):749-759)

*****Data are not presented in these cells due to a small sample size or to assure a small cell cannot be recalculated through the cells presented.



				st-Index Enrollment rement)	
		Percent/		Percent/	
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation ³	
Unique patients	79,449	N/A	51,301	N/A	
Episodes	84,674	100.0%	54,436	100.0%	
Demographic Characteristics					
Age (years)	11.9	5.7	12.0	5.6	
Age					
0-1 years	12,006	14.2%	7,167	13.2%	
2-5 years	3,343	3.9%	2,141	3.9%	
6-12 years	21,234	25.1%	14,072	25.9%	
13-17 years	48,091	56.8%	31,056	57.1%	
Race ⁴					
American Indian or Alaska Native	745	0.9%	489	1.0%	
Asian	753	0.9%	442	0.9%	
Black or African American	5,125	6.5%	3,188	6.2%	
Native Hawaiian or Other Pacific Islander	135	0.2%	84	0.2%	
Unknown	51,364	64.7%	33,666	65.6%	
White	21,327	26.8%	13,432	26.2%	
Hispanic origin					
Yes	8,063	10.1%	4,934	9.6%	
No	26,002	32.7%	16,161	31.5%	
Unknown	45,384	57.1%	30,206	58.9%	
Year					
2008	2,553	3.0%	1,985	3.6%	
2009	3,246	3.8%	2,433	4.5%	
2010	3,161	3.7%	2,390	4.4%	
2011	2,972	3.5%	2,238	4.1%	
2012	3,019	3.6%	2,339	4.3%	
2013	3,179	3.8%	2,380	4.4%	
2014	4,897	5.8%	3,959	7.3%	
2015	8,265	9.8%	6,276	11.5%	
2016	12,644	14.9%	10,517	19.3%	
2017	15,748	18.6%	12,026	22.1%	
2018	14,807	17.5%	2,737	5.0%	
2019	3,654	4.3%	2,835	5.2%	
2020	3,155	3.7%	2,066	3.8%	
2021	3,154	3.7%	255	0.5%	
2022	220	0.3%	0	0.0%	



	Beta E	Blockers	Beta Blockers (Post-Index Enrollment Requirement)	
		Percent/		Percent/
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation ³
Charlson/Elixhauser combined comorbidity score ⁵	0.6	1.2	0.6	1.1
Hypertension	8,080	9.5%	5,268	9.7%
Hemangioma	4,418	5.2%	2,621	4.8%
Heart Failure	1,758	2.1%	1,078	2.0%
Congenital Heart Disease	9,862	11.6%	6,167	11.3%
Atrial Fibrillation	372	0.4%	244	0.4%
Long QT Syndrome	1,264	1.5%	768	1.4%
Other Cardiac Arrhythmias	16,112	19.0%	10,052	18.5%
Cardiac Arrhythmias (Composite)	16,903	20.0%	10,549	19.4%
Pulmonary Hypertension	699	0.8%	386	0.7%
Cardiomyopathy	2,212	2.6%	1,320	2.4%
Coronary Artery Disease	546	0.6%	352	0.6%
Portal Hypertension	169	0.2%	102	0.2%
Anxiety Disorder	15,201	18.0%	9,522	17.5%
Tremor	1,883	2.2%	1,213	2.2%
Migraine	14,132	16.7%	9,587	17.6%
Thyrotoxicosis	1,228	1.5%	822	1.5%
Burns	252	0.3%	159	0.3%
Glaucoma	201	0.2%	127	0.2%
Autism	5,400	6.4%	3,402	6.2%
Marfan's Syndrome	569	0.7%	391	0.7%
Pheochromocytoma/Paraganglioma	64	0.1%	37	0.1%
Diabetes	867	1.0%	550	1.0%
Any of the above health characteristics <i>(excluding</i>	60,502	71.5%	38,720	71.1%
combined comorbidity score) None of the above health characteristics (excluding	00,502	/1.5%	56,720	/1.1%
combined comorbidity score)	24,172	28.5%	15,716	28.9%
Hypoglycemia (Day 0)	53	0.1%	31	0.1%
Hypoglycemia (0-3 Months)	258	0.3%	159	0.3%
Hypoglycemia (3-6 Months)	178	0.2%	130	0.2%
Hypoglycemia (6-12 Months)	243	0.3%	208	0.4%
Hypoglycemia (Day 0) and Diabetes	****	****	****	****
Hypoglycemia (0-3 Months) and Diabetes	33	0.0%	24	0.0%
Hypoglycemia (3-6 Months) and Diabetes	27	0.0%	23	0.0%
Hypoglycemia (6-12 Months) and Diabetes	32	0.0%	29	0.1%
Hypoglycemia (Day 0) and No Diabetes	50	0.1%	28	0.1%
Hypoglycemia (0-3 Months) and No Diabetes	225	0.3%	135	0.2%
Hypoglycemia (3-6 Months) and No Diabetes	151	0.2%	107	0.2%



Patient Characteristics ^{1,2} Number/MeanStandarHypoglycemia (6-12 Months) and No Diabetes211	ercent/ rd Deviation ³ 0.2% ***** 0.0% 0.0% 0.0% 0.0%	Number/Mean 179 ***** 18 14 24	Percent/ Standard Deviation ³ 0.3% ***** 0.0%
Hypoglycemia (6-12 Months) and No Diabetes 211	0.2% ***** 0.0% 0.0% 0.0%	179 ***** 18 14	0.3% ***** 0.0%
	***** 0.0% 0.0% 0.0%	***** 18 14	***** 0.0%
Hypoglycemia (Day 0) and Any Metoprolol *****	0.0% 0.0% 0.0%	18 14	0.0%
	0.0% 0.0%	14	
Hypoglycemia (0-3 Months) and Any Metoprolol 21	0.0%		0.001
Hypoglycemia (3-6 Months) and Any Metoprolol 16		24	0.0%
Hypoglycemia (6-12 Months) and Any Metoprolol 26	0.0%	24	0.0%
Hypoglycemia (Day 0) and Any Propranolol 42		22	0.0%
Hypoglycemia (0-3 Months) and Any Propranolol 175	0.2%	102	0.2%
Hypoglycemia (3-6 Months) and Any Propranolol 107	0.1%	79	0.1%
Hypoglycemia (6-12 Months) and Any Propranolol 146	0.2%	122	0.2%
Hypoglycemia (Day 0) and Atenolol ***** '	****	****	****
Hypoglycemia (0-3 Months) and Atenolol 35	0.0%	24	0.0%
Hypoglycemia (3-6 Months) and Atenolol 30	0.0%	19	0.0%
Hypoglycemia (6-12 Months) and Atenolol 38	0.0%	31	0.1%
Hypoglycemia (Day 0) and Nadolol *****	****	0	0.0%
Hypoglycemia (0-3 Months) and Nadolol *****	****	****	****
Hypoglycemia (3-6 Months) and Nadolol *****	****	****	* * * *
Hypoglycemia (6-12 Months) and Nadolol *****	****	****	****
Selective Beta Blockers 22,304 2	26.3%	14,791	27.2%
Non-Selective Beta Blockers 62,384	73.7%	39,655	72.8%
Any Metoprolol 8,123	9.6%	5,188	9.5%
Metoprolol (Extended Release) 4,561	5.4%	2,856	5.2%
Metoprolol (Regular) 3,580	4.2%	2,346	4.3%
Any Propranolol 55,302 6	55.3%	35,235	64.7%
Propranolol (Extended Release) 5,768	6.8%	3,885	7.1%
Propranolol (Regular) 49,025	57.9%	31,088	57.1%
Propranolol (Hemangeol) 653	0.8%	357	0.7%
Acebutolol 29	0.0%	22	0.0%
Atenolol 13,569	L6.0%	9,176	16.9%
Betaxolol 61	0.1%	44	0.1%
Bisoprolol 258	0.3%	173	0.3%
	2.9%	1,471	2.7%
	1.4%	730	1.3%
Nadolol 2,705	3.2%	1,779	3.3%
	0.3%	197	0.4%
	0.1%	61	0.1%
	0.7%	377	0.7%
	0.0%	16	0.0%



	Beta E	Blockers	Beta Blockers (Post-Index Enrollment Requirement)	
		Percent/		Percent/
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation
Health Characteristics by Beta Blockers				
Hypertension and Any Metoprolol	2,152	2.5%	1,368	2.5%
Hypertension and Metoprolol (Extended Release)	1,263	1.5%	781	1.4%
Hypertension and Metoprolol (Regular)	900	1.1%	596	1.1%
Hypertension and Any Propranolol	1,986	2.3%	1,287	2.4%
Hypertension and Propranolol (Extended Release)	242	0.3%	171	0.3%
Hypertension and Propranolol (Regular)	1,740	2.1%	1,115	2.0%
Hypertension and Acebutolol	****	****	****	****
Hypertension and Atenolol	2,300	2.7%	1,589	2.9%
Hypertension and Betaxolol	****	****	****	****
Hypertension and Bisoprolol	67	0.1%	48	0.1%
Hypertension and Carvedilol	424	0.5%	251	0.5%
Hypertension and Labetalol	919	1.1%	568	1.0%
Hypertension and Nadolol	106	0.1%	69	0.1%
Hypertension and Nebivolol	97	0.1%	66	0.1%
Hypertension and Pindolol	****	****	****	****
Hypertension and Sotalol	26	0.0%	19	0.0%
Hypertension and Timolol	0	0.0%	0	0.0%
Hemangioma and Any Metoprolol	****	****	****	****
Hemangioma and Metoprolol (Extended Release)	0	0.0%	0	0.0%
Hemangioma and Metoprolol (Regular)	****	****	****	****
Hemangioma and Any Propranolol	4,342	5.1%	2,571	4.7%
Hemangioma and Propranolol (Extended Release)	11	0.0%	****	****
Hemangioma and Propranolol (Regular)	3,737	4.4%	2,236	4.1%
Hemangioma and Propranolol (Hemangeol)	594	0.7%	328	0.6%
Hemangioma and Acebutolol	0	0.0%	0	0.0%
Hemangioma and Atenolol	65	0.1%	43	0.1%
Hemangioma and Betaxolol	0	0.0%	0	0.0%
Hemangioma and Bisoprolol	0	0.0%	0	0.0%
Hemangioma and Carvedilol	****	****	****	****
Hemangioma and Labetalol	****	****	****	****
Hemangioma and Nadolol	****	****	****	****
Hemangioma and Nebivolol	0	0.0%	0	0.0%
Hemangioma and Pindolol	0	0.0%	0	0.0%
Hemangioma and Sotalol	0	0.0%	0	0.0%
Hemangioma and Timolol	0	0.0%	0	0.0%
Long QT Syndrome and Any Metoprolol	71	0.1%	45	0.1%



	Beta B	Blockers	Beta Blockers (Post-Index Enrollment Requirement)		
		Percent/		Percent/	
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation ³	
Long QT Syndrome and Metoprolol (Extended Release)	29	0.0%	17	0.0%	
Long QT Syndrome and Metoprolol (Regular)	42	0.0%	28	0.1%	
Long QT Syndrome and Any Propranolol	406	0.5%	237	0.4%	
Long QT Syndrome and Propranolol (Extended Release)	14	0.0%	11	0.0%	
Long QT Syndrome and Propranolol (Regular)	392	0.5%	226	0.4%	
Long QT Syndrome and Acebutolol	0	0.0%	0	0.0%	
Long QT Syndrome and Atenolol	143	0.2%	97	0.2%	
Long QT Syndrome and Betaxolol	****	****	****	****	
Long QT Syndrome and Bisoprolol	****	****	****	****	
Long QT Syndrome and Carvedilol	31	0.0%	15	0.0%	
Long QT Syndrome and Labetalol	14	0.0%	****	****	
Long QT Syndrome and Nadolol	557	0.7%	342	0.6%	
Long QT Syndrome and Nebivolol	0	0.0%	0	0.0%	
Long QT Syndrome and Pindolol	0	0.0%	0	0.0%	
Long QT Syndrome and Sotalol	35	0.0%	21	0.0%	
Long QT Syndrome and Timolol	0	0.0%	0	0.0%	

¹All metrics are based on total number of episodes per group, except for sex, race, and Hispanic origin which are based on total number of unique patients.

²Characteristics in blue show a standardized difference greater than 0.1.

³Value represents standard deviation where no % follows the value.

⁴Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

⁵The Charlson/Elixhauser Combined Comorbidity Score is calculated based on comorbidities observed during a requester-defined window around the exposure episode start date. (Gagne JJ, Glynn RJ, Avorn J, Levin R, Schneeweiss S. A combined comorbidity score predicted mortality in elderly patients better than existing scores. J Clin Epidemiol. 2011;64(7):749-759)



	Beta	Blockers		ost-Index Enrollment iirement)
		Percent/		Percent/
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation ³
Unique patients	121,477	N/A	76,611	N/A
Episodes	129,557	100.0%	81,534	100.0%
Demographic Characteristics				
Age (years)	12.9	5.6	13.0	5.5
Age				
0-1 years	16,615	12.8%	9,903	12.1%
2-5 years	3,023	2.3%	1,921	2.4%
6-12 years	20,146	15.5%	12,940	15.9%
13-17 years	89,773	69.3%	56,770	69.6%
Race ⁴				
American Indian or Alaska Native	1,147	0.9%	703	0.9%
Asian	1,021	0.8%	590	0.8%
Black or African American	6,918	5.7%	4,176	5.5%
Native Hawaiian or Other Pacific Islander	169	0.1%	101	0.1%
Unknown	79,602	65.5%	51,004	66.6%
White	32,620	26.9%	20,037	26.2%
Hispanic origin				
Yes	11,916	9.8%	7,027	9.2%
No	38,231	31.5%	23,086	30.1%
Unknown	71,330	58.7%	46,498	60.7%
Year				
2008	3,474	2.7%	2,632	3.2%
2009	4,514	3.5%	3,356	4.1%
2010	4,335	3.3%	3,246	4.0%
2011	4,308	3.3%	3,255	4.0%
2012	4,245	3.3%	3,307	4.1%
2013	4,611	3.6%	3,466	4.3%
2014	7,395	5.7%	5,754	7.1%
2015	12,378	9.6%	9,260	11.4%
2016	19,052	14.7%	15,540	19.1%
2017	23,205	17.9%	17,487	21.4%
2018	22,720	17.5%	4,777	5.9%
2019	6,533	5.0%	5,000	6.1%
2020	5,823	4.5%	3,965	4.9%
2021	6,465	5.0%	489	0.6%
2022	499	0.4%	0	0.0%



	Beta	Blockers	Beta Blockers (Post-Index Enrollm Requirement)		
		Percent/		Percent/	
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation ³	
Health Characteristics					
Charlson/Elixhauser combined comorbidity score ⁵	0.5	1.0	0.5	1.0	
Hypertension	6,609	5.1%	4,198	5.1%	
Hemangioma	11,264	8.7%	6,754	8.3%	
Heart Failure	1,475	1.1%	896	1.1%	
Congenital Heart Disease	8,284	6.4%	5,116	6.3%	
Atrial Fibrillation	239	0.2%	149	0.2%	
Long QT Syndrome	1,331	1.0%	821	1.0%	
Other Cardiac Arrhythmias	20,006	15.4%	12,417	15.2%	
Cardiac Arrhythmias (Composite)	20,839	16.1%	12,923	15.8%	
Pulmonary Hypertension	551	0.4%	327	0.4%	
Cardiomyopathy	1,402	1.1%	848	1.0%	
Coronary Artery Disease	356	0.3%	237	0.3%	
Portal Hypertension	148	0.1%	96	0.1%	
Anxiety Disorder	31,487	24.3%	18,970	23.3%	
Tremor	2,111	1.6%	1,312	1.6%	
Migraine	31,214	24.1%	20,545	25.2%	
Thyrotoxicosis	4,409	3.4%	2,787	3.4%	
Burns	235	0.2%	154	0.2%	
Glaucoma	274	0.2%	163	0.2%	
Autism	1,732	1.3%	1,061	1.3%	
Marfan's Syndrome	392	0.3%	250	0.3%	
Pheochromocytoma/Paraganglioma	65	0.1%	47	0.1%	
Diabetes	1,410	1.1%	899	1.1%	
Any of the above health characteristics (excluding					
<i>combined comorbidity score)</i> None of the above health characteristics <i>(excluding</i>	94,154	72.7%	59,072	72.5%	
combined comorbidity score)	35,403	27.3%	22,462	27.5%	
Hypoglycemia (Day 0)	77	0.1%	49	0.1%	
Hypoglycemia (0-3 Months)	479	0.4%	332	0.4%	
Hypoglycemia (3-6 Months)	354	0.3%	252	0.3%	
Hypoglycemia (6-12 Months)	452	0.3%	393	0.5%	
Hypoglycemia (Day 0) and Diabetes	****	****	****	****	
Hypoglycemia (0-3 Months) and Diabetes	60	0.0%	40	0.0%	
Hypoglycemia (3-6 Months) and Diabetes	52	0.0%	34	0.0%	
Hypoglycemia (6-12 Months) and Diabetes	58	0.0%	51	0.1%	
Hypoglycemia (Day 0) and No Diabetes	72	0.1%	45	0.1%	
Hypoglycemia (0-3 Months) and No Diabetes	419	0.3%	292	0.4%	



	Beta	Blockers		ost-Index Enrollment iirement)
		Percent/		Percent/
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation ³
Hypoglycemia (3-6 Months) and No Diabetes	302	0.2%	218	0.3%
Hypoglycemia (6-12 Months) and No Diabetes	394	0.3%	342	0.4%
Hypoglycemia (Day 0) and Any Metoprolol	11	0.0%	****	****
Hypoglycemia (0-3 Months) and Any Metoprolol	63	0.0%	43	0.1%
Hypoglycemia (3-6 Months) and Any Metoprolol	49	0.0%	37	0.0%
Hypoglycemia (6-12 Months) and Any Metoprolol	52	0.0%	42	0.1%
Hypoglycemia (Day 0) and Any Propranolol	46	0.0%	25	0.0%
Hypoglycemia (0-3 Months) and Any Propranolol	298	0.2%	201	0.2%
Hypoglycemia (3-6 Months) and Any Propranolol	222	0.2%	156	0.2%
Hypoglycemia (6-12 Months) and Any Propranolol	281	0.2%	247	0.3%
Hypoglycemia (Day 0) and Atenolol	****	****	****	****
Hypoglycemia (0-3 Months) and Atenolol	50	0.0%	45	0.1%
Hypoglycemia (3-6 Months) and Atenolol	46	0.0%	34	0.0%
Hypoglycemia (6-12 Months) and Atenolol	65	0.1%	58	0.1%
Hypoglycemia (Day 0) and Nadolol	****	****	****	****
Hypoglycemia (0-3 Months) and Nadolol	12	0.0%	****	****
Hypoglycemia (3-6 Months) and Nadolol	****	****	****	****
Hypoglycemia (6-12 Months) and Nadolol	18	0.0%	17	0.0%
Selective Beta Blockers	27,891	21.5%	18,208	22.3%
Non-Selective Beta Blockers	101,700	78.5%	63,350	77.7%
Any Metoprolol	10,051	7.8%	6,352	7.8%
Metoprolol (Extended Release)	5,698	4.4%	3,527	4.3%
Metoprolol (Regular)	4,382	3.4%	2,848	3.5%
Any Propranolol	92,036	71.0%	57,283	70.3%
Propranolol (Extended Release)	10,513	8.1%	6,968	8.5%
Propranolol (Regular)	79,986	61.7%	49,432	60.6%
Propranolol (Hemangeol)	1,810	1.4%	1,052	1.3%
Acebutolol	48	0.0%	34	0.0%
Atenolol	17,091	13.2%	11,344	13.9%
Betaxolol	112	0.1%	74	0.1%
Bisoprolol	326	0.3%	213	0.3%
Carvedilol	1,585	1.2%	939	1.2%
Labetalol	3,792	2.9%	2,222	2.7%
Nadolol	3,646	2.8%	2,494	3.1%
Nebivolol	275	0.2%	200	0.2%
Pindolol	179	0.1%	132	0.2%
Sotalol	417	0.3%	251	0.3%



	Beta	Blockers	•	kers (Post-Index Enrollment Requirement)	
		Percent/		Percent/	
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation ³	
Timolol	61	0.0%	40	0.0%	
Health Characteristics by Beta Blockers					
Hypertension and Any Metoprolol	1,486	1.1%	922	1.1%	
Hypertension and Metoprolol (Extended Release)	827	0.6%	508	0.6%	
Hypertension and Metoprolol (Regular)	668	0.5%	422	0.5%	
Hypertension and Any Propranolol	1,883	1.5%	1,220	1.5%	
Hypertension and Propranolol (Extended Release)	234	0.2%	159	0.2%	
Hypertension and Propranolol (Regular)	1,647	1.3%	1,060	1.3%	
Hypertension and Acebutolol	****	****	****	****	
Hypertension and Atenolol	1,703	1.3%	1,128	1.4%	
Hypertension and Betaxolol	****	****	****	****	
Hypertension and Bisoprolol	59	0.0%	42	0.1%	
Hypertension and Carvedilol	309	0.2%	178	0.2%	
Hypertension and Labetalol	1,019	0.8%	611	0.7%	
Hypertension and Nadolol	78	0.1%	50	0.1%	
Hypertension and Nebivolol	48	0.0%	32	0.0%	
Hypertension and Pindolol	****	****	****	****	
Hypertension and Sotalol	15	0.0%	****	****	
Hypertension and Timolol	0	0.0%	0	0.0%	
Hemangioma and Any Metoprolol	****	****	****	****	
Hemangioma and Metoprolol (Extended Release)	****	****	****	****	
Hemangioma and Metoprolol (Regular)	****	****	****	****	
Hemangioma and Any Propranolol	11,065	8.5%	6,619	8.1%	
Hemangioma and Propranolol (Extended Release)	13	0.0%	****	****	
Hemangioma and Propranolol (Regular)	9,391	7.2%	5,637	6.9%	
Hemangioma and Propranolol (Hemangeol)	1,668	1.3%	977	1.2%	
Hemangioma and Acebutolol	****	****	****	****	
Hemangioma and Atenolol	173	0.1%	120	0.1%	
Hemangioma and Betaxolol	0	0.0%	0	0.0%	
Hemangioma and Bisoprolol	0	0.0%	0	0.0%	
Hemangioma and Carvedilol	****	****	****	****	
Hemangioma and Labetalol	****	****	****	****	
Hemangioma and Nadolol	****	****	****	****	
Hemangioma and Nebivolol	0	0.0%	0	0.0%	
Hemangioma and Pindolol	0	0.0%	0	0.0%	
Hemangioma and Sotalol	****	****	****	****	
Hemangioma and Timolol	****	****	0	0.0%	



	Beta Blockers		Beta Blockers (Post-Index Enrollment Requirement)		
Patient Characteristics ^{1,2}	Number/Mean	Percent/ Standard Deviation ³	Number/Mean	Percent/ Standard Deviation ³	
Long QT Syndrome and Any Metoprolol Long QT Syndrome and Metoprolol (Extended	71	0.1%	41	0.1%	
Release)	32	0.0%	16	0.0%	
Long QT Syndrome and Metoprolol (Regular)	39	0.0%	25	0.0%	
Long QT Syndrome and Any Propranolol Long QT Syndrome and Propranolol (Extended	448	0.3%	264	0.3%	
Release)	28	0.0%	18	0.0%	
Long QT Syndrome and Propranolol (Regular)	417	0.3%	245	0.3%	
Long QT Syndrome and Acebutolol	0	0.0%	0	0.0%	
Long QT Syndrome and Atenolol	170	0.1%	111	0.1%	
Long QT Syndrome and Betaxolol	****	****	0	0.0%	
Long QT Syndrome and Bisoprolol	****	****	****	****	
Long QT Syndrome and Carvedilol	32	0.0%	18	0.0%	
Long QT Syndrome and Labetalol	****	****	****	****	
Long QT Syndrome and Nadolol	573	0.4%	369	0.5%	
Long QT Syndrome and Nebivolol	0	0.0%	0	0.0%	
Long QT Syndrome and Pindolol	0	0.0%	0	0.0%	
Long QT Syndrome and Sotalol	27	0.0%	11	0.0%	
Long QT Syndrome and Timolol	****	****	****	****	

¹All metrics are based on total number of episodes per group, except for sex, race, and Hispanic origin which are based on total number of unique patients.

²Characteristics in blue show a standardized difference greater than 0.1.

³Value represents standard deviation where no % follows the value.

⁴Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

⁵The Charlson/Elixhauser Combined Comorbidity Score is calculated based on comorbidities observed during a requester-defined window around the exposure episode start date. (Gagne JJ, Glynn RJ, Avorn J, Levin R, Schneeweiss S. A combined comorbidity score predicted mortality in elderly patients better than existing scores. J Clin Epidemiol. 2011;64(7):749-759)



	Beta	Blockers	•	ost-Index Enrollment uirement)
		Percent/		Percent/
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation ³
Unique patients	11,845	N/A	7,089	N/A
Episodes	12,006	100.0%	7,167	100.0%
Demographic Characteristics				
Age (years)	0.4	0.4	0.4	0.4
Race ⁴				
American Indian or Alaska Native	125	1.1%	84	1.2%
Asian	128	1.1%	76	1.1%
Black or African American	865	7.3%	541	7.6%
Native Hawaiian or Other Pacific Islander	26	0.2%	11	0.2%
Unknown	8,188	69.1%	4,807	67.8%
White	2,513	21.2%	1,570	22.1%
Hispanic origin				
Yes	1,418	12.0%	932	13.1%
No	3,479	29.4%	2,171	30.6%
Unknown	6,948	58.7%	3,986	56.2%
Year				
2008	220	1.8%	155	2.2%
2009	246	2.0%	168	2.3%
2010	282	2.3%	194	2.7%
2011	280	2.3%	186	2.6%
2012	315	2.6%	225	3.1%
2013	353	2.9%	244	3.4%
2014	799	6.7%	624	8.7%
2015	1,432	11.9%	1,047	14.6%
2016	2,079	17.3%	1,627	22.7%
2017	2,357	19.6%	1,693	23.6%
2018	2,119	17.6%	320	4.5%
2019	490	4.1%	339	4.7%
2020	508	4.2%	312	4.4%
2021	499	4.2%	33	0.5%
2022	27	0.2%	0	0.0%
Health Characteristics				
Charlson/Elixhauser combined comorbidity score ⁵	1.1	1.5	1.1	1.5
Hypertension	765	6.4%	453	6.3%
Hemangioma	4,248	35.4%	2,510	35.0%
Heart Failure	893	7.4%	538	7.5%
Congenital Heart Disease	5,497	45.8%	3,287	45.9%



	Beta	Blockers	•	ost-Index Enrollment uirement)
		Percent/		Percent/
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation ³
Atrial Fibrillation	42	0.3%	29	0.4%
Long QT Syndrome	313	2.6%	177	2.5%
Other Cardiac Arrhythmias	4,820	40.1%	2,878	40.2%
Cardiac Arrhythmias (Composite)	4,952	41.2%	2,955	41.2%
Pulmonary Hypertension	463	3.9%	238	3.3%
Cardiomyopathy	598	5.0%	349	4.9%
Coronary Artery Disease	135	1.1%	85	1.2%
Portal Hypertension	23	0.2%	13	0.2%
Anxiety Disorder	20	0.2%	13	0.2%
Tremor	26	0.2%	16	0.2%
Migraine	13	0.1%	****	****
Thyrotoxicosis	38	0.3%	25	0.3%
Burns	53	0.4%	33	0.5%
Glaucoma	17	0.1%	12	0.2%
Autism	****	****	****	****
Marfan's Syndrome	25	0.2%	16	0.2%
Pheochromocytoma/Paraganglioma	17	0.1%	****	****
Diabetes	20	0.2%	12	0.2%
Any of the above health characteristics (excluding combined comorbidity score)	10,827	90.2%	6,454	90.1%
None of the above health characteristics (excluding combined comorbidity score)	1,179	9.8%	713	9.9%
Hypoglycemia (Day 0)	32	0.3%	16	0.2%
Hypoglycemia (0-3 Months)	105	0.9%	56	0.8%
Hypoglycemia (3-6 Months)	42	0.3%	27	0.4%
Hypoglycemia (5 5 Months) Hypoglycemia (6-12 Months)	64	0.5%	50	0.7%
Hypoglycemia (Day 0) and Diabetes	0	0.0%	0	0.0%
Hypoglycemia (0-3 Months) and Diabetes	****	****	****	****
Hypoglycemia (3-6 Months) and Diabetes	****	****	****	****
Hypoglycemia (5 0 Months) and Diabetes Hypoglycemia (6-12 Months) and Diabetes	****	****	****	****
Hypoglycemia (Day 0) and No Diabetes	32	0.3%	16	0.2%
Hypoglycemia (0-3 Months) and No Diabetes	104	0.9%	55	0.8%
Hypoglycemia (3-6 Months) and No Diabetes	41	0.3%	26	0.8%
Hypoglycemia (6-12 Months) and No Diabetes	63	0.5%	20 49	0.4%
Hypoglycemia (Day 0) and Any Metoprolol	0	0.0%	49 0	0.0%
Hypoglycemia (0-3 Months) and Any Metoprolol	0	0.0%	0	0.0%
	0	0.0%		0.0%
Hypoglycemia (3-6 Months) and Any Metoprolol			0	
Hypoglycemia (6-12 Months) and Any Metoprolol	0	0.0%	0	0.0%



	Beta	Blockers	•	ost-Index Enrollment uirement)
		Percent/		Percent/
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation ³
Hypoglycemia (Day 0) and Any Propranolol	30	0.2%	15	0.2%
Hypoglycemia (0-3 Months) and Any Propranolol	93	0.8%	49	0.7%
Hypoglycemia (3-6 Months) and Any Propranolol	33	0.3%	22	0.3%
Hypoglycemia (6-12 Months) and Any Propranolol	51	0.4%	39	0.5%
Hypoglycemia (Day 0) and Atenolol	****	****	****	****
Hypoglycemia (0-3 Months) and Atenolol	****	****	****	****
Hypoglycemia (3-6 Months) and Atenolol	****	****	****	****
Hypoglycemia (6-12 Months) and Atenolol	****	****	****	****
Hypoglycemia (Day 0) and Nadolol	0	0.0%	0	0.0%
Hypoglycemia (0-3 Months) and Nadolol	0	0.0%	0	0.0%
Hypoglycemia (3-6 Months) and Nadolol	0	0.0%	0	0.0%
Hypoglycemia (6-12 Months) and Nadolol	0	0.0%	0	0.0%
Selective Beta Blockers	706	5.9%	466	6.5%
Non-Selective Beta Blockers	11,301	94.1%	6,701	93.5%
Any Metoprolol	133	1.1%	79	1.1%
Metoprolol (Extended Release)	36	0.3%	18	0.3%
Metoprolol (Regular)	97	0.8%	61	0.9%
Any Propranolol	10,444	87.0%	6,206	86.6%
Propranolol (Extended Release)	****	****	****	****
Propranolol (Regular)	9,797	81.6%	5,851	81.6%
Propranolol (Hemangeol)	641	5.3%	351	4.9%
Acebutolol	0	0.0%	0	0.0%
Atenolol	566	4.7%	382	5.3%
Betaxolol	0	0.0%	0	0.0%
Bisoprolol	****	****	****	****
Carvedilol	407	3.4%	235	3.3%
Labetalol	100	0.8%	61	0.9%
Nadolol	21	0.2%	14	0.2%
Nebivolol	****	****	****	****
Pindolol	0	0.0%	0	0.0%
Sotalol	346	2.9%	197	2.7%
Timolol	0	0.0%	0	0.0%
Health Characteristics by Beta Blockers				
Hypertension and Any Metoprolol	25	0.2%	12	0.2%
Hypertension and Metoprolol (Extended Release)	****	****	****	****
Hypertension and Metoprolol (Regular)	****	****	* * * *	****
Hypertension and Any Propranolol	523	4.4%	309	4.3%



		Blockers	Beta Blockers (P	ost-Index Enrollment uirement)
		Percent/		Percent/
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation ³
Hypertension and Propranolol (Extended Release)	0	0.0%	0	0.0%
Hypertension and Propranolol (Regular)	517	4.3%	306	4.3%
Hypertension and Acebutolol	0	0.0%	0	0.0%
Hypertension and Atenolol	69	0.6%	44	0.6%
Hypertension and Betaxolol	0	0.0%	0	0.0%
Hypertension and Bisoprolol	****	****	****	****
Hypertension and Carvedilol	58	0.5%	34	0.5%
Hypertension and Labetalol	78	0.6%	46	0.6%
Hypertension and Nadolol	0	0.0%	0	0.0%
Hypertension and Nebivolol	0	0.0%	0	0.0%
Hypertension and Pindolol	0	0.0%	0	0.0%
Hypertension and Sotalol	11	0.1%	****	****
Hypertension and Timolol	0	0.0%	0	0.0%
Hemangioma and Any Metoprolol	****	****	****	****
Hemangioma and Metoprolol (Extended Release)	0	0.0%	0	0.0%
Hemangioma and Metoprolol (Regular)	****	****	****	****
Hemangioma and Any Propranolol	4,184	34.8%	2,465	34.4%
Hemangioma and Propranolol (Extended Release)	****	****	****	****
Hemangioma and Propranolol (Regular)	3,596	30.0%	2,139	29.8%
Hemangioma and Propranolol (Hemangeol)	587	4.9%	325	4.5%
Hemangioma and Acebutolol	0	0.0%	0	0.0%
Hemangioma and Atenolol	58	0.5%	40	0.6%
Hemangioma and Betaxolol	0	0.0%	0	0.0%
Hemangioma and Bisoprolol	0	0.0%	0	0.0%
Hemangioma and Carvedilol	****	****	****	****
Hemangioma and Labetalol	****	****	****	****
Hemangioma and Nadolol	0	0.0%	0	0.0%
Hemangioma and Nebivolol	0	0.0%	0	0.0%
Hemangioma and Pindolol	0	0.0%	0	0.0%
Hemangioma and Sotalol	0	0.0%	0	0.0%
Hemangioma and Timolol	0	0.0%	0	0.0%
Long QT Syndrome and Any Metoprolol	0	0.0%	0	0.0%
Long QT Syndrome and Metoprolol (Extended Release)	0	0.0%	0	0.0%
Long QT Syndrome and Metoprolol (Regular) Long QT Syndrome and Any Propranolol	0 268	0.0% 2.2%	0 152	0.0% 2.1%
Long QT Syndrome and Propranolol (Extended Release)	0	0.0%	0	0.0%
Long QT Syndrome and Propranolol (Regular)	268	2.2%	152	2.1%
Long QT Syndrome and Acebutolol	0	0.0%	0	0.0%



	Beta	Blockers	•	ost-Index Enrollment Jirement)
Patient Characteristics ^{1,2}	Number/Mean	Percent/ Standard Deviation ³	Number/Mean	Percent/ Standard Deviation ³
Long QT Syndrome and Atenolol	****	****	****	****
Long QT Syndrome and Betaxolol	0	0.0%	0	0.0%
Long QT Syndrome and Bisoprolol	0	0.0%	0	0.0%
Long QT Syndrome and Carvedilol	****	****	****	****
Long QT Syndrome and Labetalol	****	****	****	****
Long QT Syndrome and Nadolol	****	****	****	****
Long QT Syndrome and Nebivolol	0	0.0%	0	0.0%
Long QT Syndrome and Pindolol	0	0.0%	0	0.0%
Long QT Syndrome and Sotalol	23	0.2%	13	0.2%
Long QT Syndrome and Timolol	0	0.0%	0	0.0%

¹All metrics are based on total number of episodes per group, except for sex, race, and Hispanic origin which are based on total number of unique patients.

²Characteristics in blue show a standardized difference greater than 0.1.

³Value represents standard deviation where no % follows the value.

⁴Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

⁵The Charlson/Elixhauser Combined Comorbidity Score is calculated based on comorbidities observed during a requester-defined window around the exposure episode start date. (Gagne JJ, Glynn RJ, Avorn J, Levin R, Schneeweiss S. A combined comorbidity score predicted mortality in elderly patients better than existing scores. J Clin Epidemiol. 2011;64(7):749-759)



Table 1i. Aggregated Characteristics of Beta Blockers and Beta Blockers (Post-Index Enrollment Requirement) in the Sentinel
Distributed Database (SDD) from January 1, 2008 to May 31, 2022 (Age group: 0-1 years, Sex: Female)

	Beta	Blockers	Beta Blockers (Post-Index Enrollment Requirement)	
		Percent/		Percent/
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation ³
Unique patients	16,403	N/A	9,783	N/A
Episodes	16,615	100.0%	9,903	100.0%
Demographic Characteristics				
Age (years)	0.4	0.4	0.4	0.4
Race ⁴				
American Indian or Alaska Native	153	0.9%	104	1.1%
Asian	177	1.1%	105	1.1%
Black or African American	870	5.3%	573	5.9%
Native Hawaiian or Other Pacific Islander	33	0.2%	20	0.2%
Unknown	11,603	70.7%	6,862	70.1%
White	3,567	21.7%	2,119	21.7%
Hispanic origin				
Yes	2,011	12.3%	1,274	13.0%
No	4,521	27.6%	2,740	28.0%
Unknown	9,871	60.2%	5,769	59.0%
Year				
2008	184	1.1%	124	1.3%
2009	254	1.5%	180	1.8%
2010	355	2.1%	250	2.5%
2011	390	2.3%	292	2.9%
2012	389	2.3%	270	2.7%
2013	477	2.9%	334	3.4%
2014	1,066	6.4%	797	8.0%
2015	1,920	11.6%	1,443	14.6%
2016	2,845	17.1%	2,223	22.4%
2017	3,171	19.1%	2,260	22.8%
2018	2,893	17.4%	498	5.0%
2019	832	5.0%	572	5.8%
2020	912	5.5%	588	5.9%
2021	850	5.1%	72	0.7%
2022	77	0.5%	0	0.0%
Health Characteristics				
Charlson/Elixhauser combined comorbidity score ⁵	0.6	1.2	0.6	1.2
Hypertension	508	3.1%	324	3.3%
Hemangioma	10,785	64.9%	6,432	65.0%
Heart Failure	722	4.3%	457	4.6%
Congenital Heart Disease	4,882	29.4%	2,953	29.8%



			Beta Blockers (Post-Index Enrollment Requirement)		
		Percent/		Percent/	
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation ³	
Atrial Fibrillation	41	0.2%	22	0.2%	
Long QT Syndrome	312	1.9%	175	1.8%	
Other Cardiac Arrhythmias	3,495	21.0%	2,136	21.6%	
Cardiac Arrhythmias (Composite)	3,651	22.0%	2,216	22.4%	
Pulmonary Hypertension	338	2.0%	189	1.9%	
Cardiomyopathy	457	2.8%	277	2.8%	
Coronary Artery Disease	77	0.5%	52	0.5%	
Portal Hypertension	25	0.2%	15	0.2%	
Anxiety Disorder	20	0.1%	14	0.1%	
Tremor	18	0.1%	****	****	
Migraine	12	0.1%	****	****	
Thyrotoxicosis	45	0.3%	28	0.3%	
Burns	38	0.2%	28	0.3%	
Glaucoma	23	0.1%	14	0.1%	
Autism	* * * * *	****	* * * * *	****	
Marfan's Syndrome	20	0.1%	13	0.1%	
Pheochromocytoma/Paraganglioma	31	0.2%	22	0.2%	
Diabetes	15	0.1%	12	0.1%	
Any of the above health characteristics (excluding combined comorbidity score) None of the above health characteristics (excluding	15,257	91.8%	9,160	92.5%	
combined comorbidity score)	1,358	8.2%	743	7.5%	
Hypoglycemia (Day 0)	22	0.1%	****	****	
Hypoglycemia (0-3 Months)	102	0.6%	68	0.7%	
Hypoglycemia (3-6 Months)	66	0.4%	46	0.5%	
Hypoglycemia (6-12 Months)	87	0.5%	76	0.8%	
Hypoglycemia (Day 0) and Diabetes	0	0.0%	0	0.0%	
Hypoglycemia (0-3 Months) and Diabetes	****	****	****	****	
Hypoglycemia (3-6 Months) and Diabetes	****	****	****	****	
Hypoglycemia (6-12 Months) and Diabetes	****	****	****	****	
Hypoglycemia (Day 0) and No Diabetes	22	0.1%	****	****	
Hypoglycemia (0-3 Months) and No Diabetes	100	0.6%	66	0.7%	
Hypoglycemia (3-6 Months) and No Diabetes	64	0.4%	44	0.4%	
Hypoglycemia (6-12 Months) and No Diabetes	84	0.5%	73	0.7%	
Hypoglycemia (Day 0) and Any Metoprolol	0	0.0%	0	0.0%	
Hypoglycemia (0-3 Months) and Any Metoprolol	****	****	****	****	
Hypoglycemia (3-6 Months) and Any Metoprolol	****	****	****	****	
Hypoglycemia (6-12 Months) and Any Metoprolol	****	****	****	****	



	Beta	Blockers		ost-Index Enrollment iirement)
		Percent/		Percent/
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation ³
Hypoglycemia (Day 0) and Any Propranolol	21	0.1%	****	****
Hypoglycemia (0-3 Months) and Any Propranolol	87	0.5%	57	0.6%
Hypoglycemia (3-6 Months) and Any Propranolol	48	0.3%	32	0.3%
Hypoglycemia (6-12 Months) and Any Propranolol	70	0.4%	61	0.6%
Hypoglycemia (Day 0) and Atenolol	****	****	****	****
Hypoglycemia (0-3 Months) and Atenolol	****	****	****	****
Hypoglycemia (3-6 Months) and Atenolol	****	****	****	****
Hypoglycemia (6-12 Months) and Atenolol	****	****	****	****
Hypoglycemia (Day 0) and Nadolol	0	0.0%	0	0.0%
Hypoglycemia (0-3 Months) and Nadolol	0	0.0%	0	0.0%
Hypoglycemia (3-6 Months) and Nadolol	0	0.0%	0	0.0%
Hypoglycemia (6-12 Months) and Nadolol	0	0.0%	0	0.0%
Selective Beta Blockers	601	3.6%	398	4.0%
Non-Selective Beta Blockers	16,014	96.4%	9,505	96.0%
Any Metoprolol	86	0.5%	52	0.5%
Metoprolol (Extended Release)	18	0.1%	11	0.1%
Metoprolol (Regular)	68	0.4%	41	0.4%
Any Propranolol	15,330	92.3%	9,086	91.7%
Propranolol (Extended Release)	****	****	****	****
Propranolol (Regular)	13,574	81.7%	8,067	81.5%
Propranolol (Hemangeol)	1,760	10.6%	1,021	10.3%
Acebutolol	****	****	****	****
Atenolol	509	3.1%	344	3.5%
Betaxolol	0	0.0%	0	0.0%
Bisoprolol	0	0.0%	0	0.0%
Carvedilol	344	2.1%	214	2.2%
Labetalol	77	0.5%	56	0.6%
Nadolol	36	0.2%	21	0.2%
Nebivolol	****	****	****	* * * * *
Pindolol	0	0.0%	0	0.0%
Sotalol	237	1.4%	135	1.4%
Timolol	****	****	0	0.0%
Health Characteristics by Beta Blockers				
Hypertension and Any Metoprolol	16	0.1%	****	****
Hypertension and Metoprolol (Extended Release)	****	****	0	0.0%
Hypertension and Metoprolol (Regular)	****	****	****	****
Hypertension and Any Propranolol	350	2.1%	221	2.2%



	Beta	Blockers	-	ost-Index Enrollment iirement)
		Percent/		Percent/
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation ³
Hypertension and Propranolol (Extended Release)	****	****	0	0.0%
Hypertension and Propranolol (Regular)	346	2.1%	220	2.2%
Hypertension and Acebutolol	0	0.0%	0	0.0%
Hypertension and Atenolol	48	0.3%	33	0.3%
Hypertension and Betaxolol	0	0.0%	0	0.0%
Hypertension and Bisoprolol	0	0.0%	0	0.0%
Hypertension and Carvedilol	34	0.2%	20	0.2%
Hypertension and Labetalol	52	0.3%	39	0.4%
Hypertension and Nadolol	0	0.0%	0	0.0%
Hypertension and Nebivolol	0	0.0%	0	0.0%
Hypertension and Pindolol	0	0.0%	0	0.0%
Hypertension and Sotalol	* * * * *	****	****	* * * *
Hypertension and Timolol	0	0.0%	0	0.0%
Hemangioma and Any Metoprolol	****	****	****	****
Hemangioma and Metoprolol (Extended Release)	0	0.0%	0	0.0%
Hemangioma and Metoprolol (Regular)	****	****	****	****
Hemangioma and Any Propranolol	10,627	64.0%	6,324	63.9%
Hemangioma and Propranolol (Extended Release)	0	0.0%	0	0.0%
Hemangioma and Propranolol (Regular)	9,004	54.2%	5,374	54.3%
Hemangioma and Propranolol (Hemangeol)	1,628	9.8%	954	9.6%
Hemangioma and Acebutolol	****	****	****	****
Hemangioma and Atenolol	146	0.9%	102	1.0%
Hemangioma and Betaxolol	0	0.0%	0	0.0%
Hemangioma and Bisoprolol	0	0.0%	0	0.0%
Hemangioma and Carvedilol	* * * * *	****	****	* * * * *
Hemangioma and Labetalol	* * * * *	****	****	* * * * *
Hemangioma and Nadolol	* * * * *	****	****	* * * * *
Hemangioma and Nebivolol	0	0.0%	0	0.0%
Hemangioma and Pindolol	0	0.0%	0	0.0%
Hemangioma and Sotalol	****	****	****	****
Hemangioma and Timolol	****	****	0	0.0%
Long QT Syndrome and Any Metoprolol	****	****	****	****
Long QT Syndrome and Metoprolol (Extended Release)	0 ****	0.0% ****	0 ****	0.0% ****
Long QT Syndrome and Metoprolol (Regular) Long QT Syndrome and Any Propranolol	256	1.5%	147	1.5%
Long QT Syndrome and Propranolol (Extended Release)	0	0.0%	0	0.0%
Long QT Syndrome and Propranolol (Regular)	252	1.5%	145	1.5%
Long QT Syndrome and Acebutolol	0	0.0%	0	0.0%



	Beta	Blockers	•	ost-Index Enrollment irement)
Patient Characteristics ^{1,2}	Number/Mean	Percent/ Standard Deviation ³	Number/Mean	Percent/ Standard Deviation ³
Long QT Syndrome and Atenolol	12	0.1%	****	****
Long QT Syndrome and Betaxolol	0	0.0%	0	0.0%
Long QT Syndrome and Bisoprolol	0	0.0%	0	0.0%
Long QT Syndrome and Carvedilol	12	0.1%	****	****
Long QT Syndrome and Labetalol	****	****	****	****
Long QT Syndrome and Nadolol	****	****	* * * * *	****
Long QT Syndrome and Nebivolol	0	0.0%	0	0.0%
Long QT Syndrome and Pindolol	0	0.0%	0	0.0%
Long QT Syndrome and Sotalol	19	0.1%	* * * * *	****
Long QT Syndrome and Timolol	0	0.0%	0	0.0%

¹All metrics are based on total number of episodes per group, except for sex, race, and Hispanic origin which are based on total number of unique patients.

²Characteristics in blue show a standardized difference greater than 0.1.

³Value represents standard deviation where no % follows the value.

⁴Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

⁵The Charlson/Elixhauser Combined Comorbidity Score is calculated based on comorbidities observed during a requester-defined window around the exposure episode start date. (Gagne JJ, Glynn RJ, Avorn J, Levin R, Schneeweiss S. A combined comorbidity score predicted mortality in elderly patients better than existing scores. J Clin Epidemiol. 2011;64(7):749-759)



	Beta	Blockers	Beta Blockers (Post-Index Enrollment Requirement)		
		Percent/		Percent/	
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation ³	
Unique patients	3,194	N/A	2,070	N/A	
Episodes	3,343	100.0%	2,141	100.0%	
Demographic Characteristics					
Age (years)	4.2	1.2	4.2	1.2	
Race ⁴					
American Indian or Alaska Native	****	****	30	1.4%	
Asian	44	1.4%	****	****	
Black or African American	284	8.9%	190	9.2%	
Native Hawaiian or Other Pacific Islander	* * * * *	****	****	****	
Unknown	1,988	62.2%	1,293	62.5%	
White	828	25.9%	524	25.3%	
Hispanic origin					
Yes	385	12.1%	239	11.5%	
No	1,160	36.3%	750	36.2%	
Unknown	1,649	51.6%	1,081	52.2%	
Year					
2008	90	2.7%	80	3.7%	
2009	127	3.8%	94	4.4%	
2010	123	3.7%	87	4.1%	
2011	109	3.3%	85	4.0%	
2012	98	2.9%	73	3.4%	
2013	105	3.1%	78	3.6%	
2014	176	5.3%	139	6.5%	
2015	351	10.5%	280	13.1%	
2016	566	16.9%	479	22.4%	
2017	694	20.8%	542	25.3%	
2018	640	19.1%	79	3.7%	
2019	90	2.7%	65	3.0%	
2020	95	2.8%	****	****	
2021	****	****	****	****	
2022	****	****	0	0.0%	
Health Characteristics					
Charlson/Elixhauser combined comorbidity score ⁵	1.1	1.7	1.0	1.6	
Hypertension	413	12.4%	256	12.0%	
Hemangioma	89	2.7%	55	2.6%	
Heart Failure	150	4.5%	88	4.1%	
Congenital Heart Disease	731	21.9%	446	20.8%	



	Beta	Blockers	-	st-Index Enrollment rement)
		Percent/		Percent/
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation ³
Atrial Fibrillation	22	0.7%	13	0.6%
Long QT Syndrome	138	4.1%	88	4.1%
Other Cardiac Arrhythmias	1,019	30.5%	647	30.2%
Cardiac Arrhythmias (Composite)	1,117	33.4%	705	32.9%
Pulmonary Hypertension	56	1.7%	36	1.7%
Cardiomyopathy	175	5.2%	97	4.5%
Coronary Artery Disease	28	0.8%	20	0.9%
Portal Hypertension	28	0.8%	16	0.7%
Anxiety Disorder	118	3.5%	75	3.5%
Tremor	47	1.4%	32	1.5%
Migraine	232	6.9%	157	7.3%
Thyrotoxicosis	47	1.4%	32	1.5%
Burns	41	1.2%	26	1.2%
Glaucoma	****	****	****	****
Autism	178	5.3%	118	5.5%
Marfan's Syndrome	82	2.5%	49	2.3%
Pheochromocytoma/Paraganglioma	14	0.4%	* * * * *	****
Diabetes	17	0.5%	11	0.5%
Any of the above health characteristics (excluding combined comorbidity score) None of the above health characteristics (excluding	2,383	71.3%	1,518	70.9%
combined comorbidity score)	960	28.7%	623	29.1%
Hypoglycemia (Day 0)	****	****	****	****
Hypoglycemia (0-3 Months)	18	0.5%	14	0.7%
Hypoglycemia (3-6 Months)	18	0.5%	16	0.7%
Hypoglycemia (6-12 Months)	14	0.4%	12	0.6%
Hypoglycemia (Day 0) and Diabetes	0	0.0%	0	0.0%
Hypoglycemia (0-3 Months) and Diabetes	****	****	****	****
Hypoglycemia (3-6 Months) and Diabetes	****	****	****	****
Hypoglycemia (6-12 Months) and Diabetes	****	****	****	****
Hypoglycemia (Day 0) and No Diabetes	****	****	****	****
Hypoglycemia (0-3 Months) and No Diabetes	16	0.5%	12	0.6%
Hypoglycemia (3-6 Months) and No Diabetes	16	0.5%	14	0.7%
Hypoglycemia (6-12 Months) and No Diabetes	13	0.4%	11	0.5%
Hypoglycemia (Day 0) and Any Metoprolol	0	0.0%	0	0.0%
Hypoglycemia (0-3 Months) and Any Metoprolol	****	****	0	0.0%
Hypoglycemia (3-6 Months) and Any Metoprolol	0	0.0%	0	0.0%
Hypoglycemia (6-12 Months) and Any Metoprolol	0	0.0%	0	0.0%



	Beta	Blockers	-	st-Index Enrollment rement)
		Percent/		Percent/
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation
Hypoglycemia (Day 0) and Any Propranolol	0	0.0%	0	0.0%
Hypoglycemia (0-3 Months) and Any Propranolol	****	****	****	****
Hypoglycemia (3-6 Months) and Any Propranolol	12	0.4%	11	0.5%
Hypoglycemia (6-12 Months) and Any Propranolol	****	****	****	****
Hypoglycemia (Day 0) and Atenolol	0	0.0%	0	0.0%
Hypoglycemia (0-3 Months) and Atenolol	****	****	****	****
Hypoglycemia (3-6 Months) and Atenolol	****	****	****	****
Hypoglycemia (6-12 Months) and Atenolol	****	****	****	****
Hypoglycemia (Day 0) and Nadolol	****	****	0	0.0%
Hypoglycemia (0-3 Months) and Nadolol	****	****	****	****
Hypoglycemia (3-6 Months) and Nadolol	****	****	****	****
Hypoglycemia (6-12 Months) and Nadolol	0	0.0%	0	0.0%
Selective Beta Blockers	1,160	34.7%	780	36.4%
Non-Selective Beta Blockers	2,183	65.3%	1,361	63.6%
Any Metoprolol	241	7.2%	160	7.5%
Metoprolol (Extended Release)	76	2.3%	54	2.5%
Metoprolol (Regular)	166	5.0%	107	5.0%
Any Propranolol	1,570	47.0%	993	46.4%
Propranolol (Extended Release)	****	****	****	****
Propranolol (Regular)	1,554	46.5%	983	45.9%
Propranolol (Hemangeol)	****	****	****	****
Acebutolol	****	****	* * * * *	* * * * *
Atenolol	900	26.9%	607	28.4%
Betaxolol	0	0.0%	0	0.0%
Bisoprolol	11	0.3%	****	****
Carvedilol	244	7.3%	137	6.4%
abetalol	160	4.8%	97	4.5%
Nadolol	144	4.3%	93	4.3%
Nebivolol	****	****	****	****
Pindolol	****	****	****	****
Sotalol	65	1.9%	40	1.9%
Timolol	0	0.0%	0	0.0%
Health Characteristics by Beta Blockers				
Hypertension and Any Metoprolol	46	1.4%	28	1.3%
Hypertension and Metoprolol (Extended Release)	****	****	****	****
Hypertension and Metoprolol (Regular)	****	****	****	****
Hypertension and Any Propranolol	109	3.3%	64	3.0%



	Beta	Blockers	•	st-Index Enrollment rement)
		Percent/		Percent/
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation ³
Hypertension and Propranolol (Extended Release)	0	0.0%	0	0.0%
Hypertension and Propranolol (Regular)	109	3.3%	64	3.0%
Hypertension and Acebutolol	0	0.0%	0	0.0%
Hypertension and Atenolol	98	2.9%	68	3.2%
Hypertension and Betaxolol	0	0.0%	0	0.0%
Hypertension and Bisoprolol	* * * * *	****	****	****
Hypertension and Carvedilol	37	1.1%	22	1.0%
Hypertension and Labetalol	116	3.5%	70	3.3%
Hypertension and Nadolol	****	****	****	****
Hypertension and Nebivolol	****	****	****	****
Hypertension and Pindolol	0	0.0%	0	0.0%
Hypertension and Sotalol	****	****	0	0.0%
Hypertension and Timolol	0	0.0%	0	0.0%
Hemangioma and Any Metoprolol	****	****	0	0.0%
Hemangioma and Metoprolol (Extended Release)	****	****	0	0.0%
Hemangioma and Metoprolol (Regular)	****	****	0	0.0%
Hemangioma and Any Propranolol	85	2.5%	54	2.5%
Hemangioma and Propranolol (Extended Release)	0	0.0%	0	0.0%
Hemangioma and Propranolol (Regular)	****	****	****	****
Hemangioma and Propranolol (Hemangeol)	****	****	****	****
Hemangioma and Acebutolol	0	0.0%	0	0.0%
Hemangioma and Atenolol	****	****	****	****
Hemangioma and Betaxolol	0	0.0%	0	0.0%
Hemangioma and Bisoprolol	0	0.0%	0	0.0%
Hemangioma and Carvedilol	0	0.0%	0	0.0%
Hemangioma and Labetalol	0	0.0%	0	0.0%
Hemangioma and Nadolol	0	0.0%	0	0.0%
Hemangioma and Nebivolol	0	0.0%	0	0.0%
Hemangioma and Pindolol	0	0.0%	0	0.0%
Hemangioma and Sotalol	0	0.0%	0	0.0%
Hemangioma and Timolol	0	0.0%	0	0.0%
Long QT Syndrome and Any Metoprolol	****	****	0	0.0%
Long QT Syndrome and Metoprolol (Extended	0 ****	0.0% ****	0	0.0%
Long QT Syndrome and Metoprolol (Regular) Long QT Syndrome and Any Propranolol	***** 50	***** 1.5%	0 29	0.0% 1.4%
Long QT Syndrome and Propranolol (Extended	0	0.0%	0	0.0%
Long QT Syndrome and Propranolol (Regular)	50	1.5%	29	1.4%
Long QT Syndrome and Acebutolol	0	0.0%	0	0.0%



Table 1j. Aggregated Characteristics of Beta Blockers and Beta Blockers (Post-Index Enrollment Requirement) in the Sentinel
Distributed Database (SDD) from January 1, 2008 to May 31, 2022 (Age group: 2-5 years, Sex: Male)

	Beta	Blockers	Beta Blockers (Post-Index Enrollment Requirement)		
Patient Characteristics ^{1,2}	Number/Mean	Percent/ Standard Deviation ³	Number/Mean	Percent/ Standard Deviation ³	
Long QT Syndrome and Atenolol	24	0.7%	19	0.9%	
Long QT Syndrome and Betaxolol	0	0.0%	0	0.0%	
Long QT Syndrome and Bisoprolol	****	****	****	****	
Long QT Syndrome and Carvedilol	****	****	****	****	
Long QT Syndrome and Labetalol	****	****	****	****	
Long QT Syndrome and Nadolol	51	1.5%	30	1.4%	
Long QT Syndrome and Nebivolol	0	0.0%	0	0.0%	
Long QT Syndrome and Pindolol	0	0.0%	0	0.0%	
Long QT Syndrome and Sotalol	****	****	****	****	
Long QT Syndrome and Timolol	0	0.0%	0	0.0%	

¹All metrics are based on total number of episodes per group, except for sex, race, and Hispanic origin which are based on total number of unique patients.

²Characteristics in blue show a standardized difference greater than 0.1.

³Value represents standard deviation where no % follows the value.

⁴Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

⁵The Charlson/Elixhauser Combined Comorbidity Score is calculated based on comorbidities observed during a requester-defined window around the exposure episode start date. (Gagne JJ, Glynn RJ, Avorn J, Levin R, Schneeweiss S. A combined comorbidity score predicted mortality in elderly patients better than existing scores. J Clin Epidemiol. 2011;64(7):749-759)



	Beta Blockers		Beta Blockers (Post-Index Enrollment Requirement)	
		Percent/		Percent/
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation ³
Unique patients	2,896	N/A	1,864	N/A
Episodes	3,023	100.0%	1,921	100.0%
Demographic Characteristics				
Age (years)	4.1	1.2	4.1	1.2
Race⁴				
American Indian or Alaska Native	****	****	****	****
Asian	50	1.7%	33	1.8%
Black or African American	238	8.2%	141	7.6%
Native Hawaiian or Other Pacific Islander	****	****	****	****
Unknown	1,865	64.4%	1,213	65.1%
White	701	24.2%	454	24.4%
Hispanic origin				
Yes	406	14.0%	262	14.1%
No	989	34.2%	613	32.9%
Unknown	1,501	51.8%	989	53.1%
Year				
2008	117	3.9%	82	4.3%
2009	104	3.4%	78	4.1%
2010	85	2.8%	67	3.5%
2011	97	3.2%	72	3.7%
2012	79	2.6%	58	3.0%
2013	95	3.1%	73	3.8%
2014	176	5.8%	142	7.4%
2015	326	10.8%	253	13.2%
2016	528	17.5%	439	22.9%
2017	605	20.0%	454	23.6%
2018	547	18.1%	68	3.5%
2019	105	3.5%	75	3.9%
2020	82	2.7%	****	****
2021	****	****	****	****
2022	****	****	0	0.0%
Health Characteristics			-	
Charlson/Elixhauser combined comorbidity score ⁵	1.0	1.6	1.0	1.5
Hypertension	320	10.6%	196	10.2%
Hemangioma	324	10.7%	208	10.8%
Heart Failure	163	5.4%	89	4.6%
Congenital Heart Disease	572	18.9%	356	18.5%



	Beta Blockers		Beta Blockers (Post-Index Enrollment Requirement)	
		Percent/		Percent/
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation ³
Atrial Fibrillation	13	0.4%	****	****
Long QT Syndrome	135	4.5%	87	4.5%
Other Cardiac Arrhythmias	878	29.0%	555	28.9%
Cardiac Arrhythmias (Composite)	975	32.3%	613	31.9%
Pulmonary Hypertension	42	1.4%	28	1.5%
Cardiomyopathy	138	4.6%	86	4.5%
Coronary Artery Disease	27	0.9%	15	0.8%
Portal Hypertension	25	0.8%	15	0.8%
Anxiety Disorder	103	3.4%	57	3.0%
Tremor	41	1.4%	25	1.3%
Migraine	191	6.3%	139	7.2%
Thyrotoxicosis	173	5.7%	115	6.0%
Burns	37	1.2%	25	1.3%
Glaucoma	****	****	****	****
Autism	49	1.6%	36	1.9%
Marfan's Syndrome	52	1.7%	37	1.9%
Pheochromocytoma/Paraganglioma	****	****	****	****
Diabetes	14	0.5%	****	****
Any of the above health characteristics <i>(excluding combined comorbidity score)</i> None of the above health characteristics <i>(excluding</i>	2,250	74.4%	1,433	74.6%
combined comorbidity score)	773	25.6%	488	25.4%
Hypoglycemia (Day 0)	****	****	****	****
Hypoglycemia (0-3 Months)	30	1.0%	18	0.9%
Hypoglycemia (3-6 Months)	17	0.6%	12	0.6%
Hypoglycemia (6-12 Months)	14	0.5%	12	0.6%
Hypoglycemia (Day 0) and Diabetes	0	0.0%	0	0.0%
Hypoglycemia (0-3 Months) and Diabetes	****	****	****	****
Hypoglycemia (3-6 Months) and Diabetes	****	****	****	****
Hypoglycemia (6-12 Months) and Diabetes	****	****	****	****
Hypoglycemia (Day 0) and No Diabetes	****	****	****	****
Hypoglycemia (0-3 Months) and No Diabetes	27	0.9%	17	0.9%
Hypoglycemia (3-6 Months) and No Diabetes	15	0.5%	11	0.6%
Hypoglycemia (6-12 Months) and No Diabetes	13	0.4%	11	0.6%
Hypoglycemia (Day 0) and Any Metoprolol	0	0.0%	0	0.0%
Hypoglycemia (0-3 Months) and Any Metoprolol	0	0.0%	0	0.0%
Hypoglycemia (3-6 Months) and Any Metoprolol	* * * * *	****	****	****
Hypoglycemia (6-12 Months) and Any Metoprolol	0	0.0%	0	0.0%



	Beta	Beta Blockers		Beta Blockers (Post-Index Enrollment Requirement)	
		Percent/		Percent/	
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation ³	
Hypoglycemia (Day 0) and Any Propranolol	****	****	****	****	
Hypoglycemia (0-3 Months) and Any Propranolol	19	0.6%	11	0.6%	
Hypoglycemia (3-6 Months) and Any Propranolol	****	****	****	****	
Hypoglycemia (6-12 Months) and Any Propranolol	****	****	****	****	
Hypoglycemia (Day 0) and Atenolol	****	****	****	****	
Hypoglycemia (0-3 Months) and Atenolol	****	****	****	****	
Hypoglycemia (3-6 Months) and Atenolol	****	****	****	****	
Hypoglycemia (6-12 Months) and Atenolol	****	****	****	****	
Hypoglycemia (Day 0) and Nadolol	0	0.0%	0	0.0%	
Hypoglycemia (0-3 Months) and Nadolol	****	****	****	****	
Hypoglycemia (3-6 Months) and Nadolol	****	****	****	****	
Hypoglycemia (6-12 Months) and Nadolol	****	****	****	****	
Selective Beta Blockers	906	30.0%	612	31.9%	
Non-Selective Beta Blockers	2,120	70.1%	1,310	68.2%	
Any Metoprolol	137	4.5%	92	4.8%	
Metoprolol (Extended Release)	51	1.7%	30	1.6%	
Metoprolol (Regular)	86	2.8%	62	3.2%	
Any Propranolol	1,612	53.3%	1,001	52.1%	
Propranolol (Extended Release)	****	****	****	****	
Propranolol (Regular)	1,559	51.6%	969	50.4%	
Propranolol (Hemangeol)	45	1.5%	26	1.4%	
Acebutolol	* * * *	****	****	****	
Atenolol	755	25.0%	508	26.4%	
Betaxolol	****	****	0	0.0%	
Bisoprolol	****	****	****	****	
Carvedilol	220	7.3%	128	6.7%	
Labetalol	89	2.9%	59	3.1%	
Nadolol	152	5.0%	92	4.8%	
Nebivolol	****	****	****	****	
Pindolol	****	****	****	****	
Sotalol	46	1.5%	29	1.5%	
Timolol	0	0.0%	0	0.0%	
Health Characteristics by Beta Blockers					
Hypertension and Any Metoprolol	28	0.9%	18	0.9%	
Hypertension and Metoprolol (Extended Release)	****	****	****	****	
Hypertension and Metoprolol (Regular)	****	****	****	****	
Hypertension and Any Propranolol	108	3.6%	63	3.3%	



	Beta	Beta Blockers		Beta Blockers (Post-Index Enrollment Requirement)	
		Percent/		Percent/	
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation ³	
Hypertension and Propranolol (Extended Release)	0	0.0%	0	0.0%	
Hypertension and Propranolol (Regular)	108	3.6%	63	3.3%	
Hypertension and Acebutolol	0	0.0%	0	0.0%	
Hypertension and Atenolol	89	2.9%	60	3.1%	
Hypertension and Betaxolol	0	0.0%	0	0.0%	
Hypertension and Bisoprolol	0	0.0%	0	0.0%	
Hypertension and Carvedilol	28	0.9%	13	0.7%	
Hypertension and Labetalol	64	2.1%	40	2.1%	
Hypertension and Nadolol	****	****	****	****	
Hypertension and Nebivolol	****	****	****	****	
Hypertension and Pindolol	0	0.0%	0	0.0%	
Hypertension and Sotalol	****	****	****	****	
Hypertension and Timolol	0	0.0%	0	0.0%	
Hemangioma and Any Metoprolol	0	0.0%	0	0.0%	
Hemangioma and Metoprolol (Extended Release)	0	0.0%	0	0.0%	
Hemangioma and Metoprolol (Regular)	0	0.0%	0	0.0%	
Hemangioma and Any Propranolol	308	10.2%	197	10.3%	
Hemangioma and Propranolol (Extended Release)	0	0.0%	0	0.0%	
Hemangioma and Propranolol (Regular)	269	8.9%	174	9.1%	
Hemangioma and Propranolol (Hemangeol)	40	1.3%	23	1.2%	
Hemangioma and Acebutolol	0	0.0%	0	0.0%	
Hemangioma and Atenolol	12	0.4%	****	****	
Hemangioma and Betaxolol	0	0.0%	0	0.0%	
Hemangioma and Bisoprolol	0	0.0%	0	0.0%	
Hemangioma and Carvedilol	****	****	0	0.0%	
Hemangioma and Labetalol	****	****	****	****	
Hemangioma and Nadolol	****	****	****	****	
Hemangioma and Nebivolol	0	0.0%	0	0.0%	
Hemangioma and Pindolol	0	0.0%	0	0.0%	
Hemangioma and Sotalol	0	0.0%	0	0.0%	
Hemangioma and Timolol	0	0.0%	0	0.0%	
Long QT Syndrome and Any Metoprolol	* * * * *	****	****	****	
Long QT Syndrome and Metoprolol (Extended Release)	****	****	****	****	
Long QT Syndrome and Metoprolol (Regular) Long QT Syndrome and Any Propranolol	***** 52	**** 1.7%	0 34	0.0% 1.8%	
Long QT Syndrome and Propranolol (Extended Release)	0	0.0%	0	0.0%	
Long QT Syndrome and Propranolol (Regular)	52	1.7%	34	1.8%	
Long QT Syndrome and Acebutolol	0	0.0%	0	0.0%	



Table 1k. Aggregated Characteristics of Beta Blockers and Beta Blockers (Post-Index Enrollment Requirement) in the Sentinel
Distributed Database (SDD) from January 1, 2008 to May 31, 2022 (Age group: 2-5 years, Sex: Female)

	Beta	Blockers	Beta Blockers (Post-Index Enrollment Requirement)	
Patient Characteristics ^{1,2}	Number/Mean	Percent/ Standard Deviation ³	Number/Mean	Percent/ Standard Deviation ³
Long QT Syndrome and Atenolol	22	0.7%	15	0.8%
Long QT Syndrome and Betaxolol	0	0.0%	0	0.0%
Long QT Syndrome and Bisoprolol	0	0.0%	0	0.0%
Long QT Syndrome and Carvedilol	****	****	****	****
Long QT Syndrome and Labetalol	0	0.0%	0	0.0%
Long QT Syndrome and Nadolol	56	1.9%	36	1.9%
Long QT Syndrome and Nebivolol	0	0.0%	0	0.0%
Long QT Syndrome and Pindolol	0	0.0%	0	0.0%
Long QT Syndrome and Sotalol	****	****	0	0.0%
Long QT Syndrome and Timolol	0	0.0%	0	0.0%

¹All metrics are based on total number of episodes per group, except for sex, race, and Hispanic origin which are based on total number of unique patients.

²Characteristics in blue show a standardized difference greater than 0.1.

³Value represents standard deviation where no % follows the value.

⁴Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

⁵The Charlson/Elixhauser Combined Comorbidity Score is calculated based on comorbidities observed during a requester-defined window around the exposure episode start date. (Gagne JJ, Glynn RJ, Avorn J, Levin R, Schneeweiss S. A combined comorbidity score predicted mortality in elderly patients better than existing scores. J Clin Epidemiol. 2011;64(7):749-759)



	Beta	Beta Blockers		Beta Blockers (Post-Index Enrollment Requirement)	
		Percent/		Percent/	
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation ³	
Unique patients	20,012	N/A	13,331	N/A	
Episodes	21,234	100.0%	14,072	100.0%	
Demographic Characteristics					
Age (years)	10.3	1.9	10.3	1.9	
Race ⁴					
American Indian or Alaska Native	195	1.0%	133	1.0%	
Asian	169	0.8%	110	0.8%	
Black or African American	1,469	7.3%	951	7.1%	
Native Hawaiian or Other Pacific Islander	34	0.2%	20	0.2%	
Unknown	12,321	61.6%	8,309	62.3%	
White	5,824	29.1%	3,808	28.6%	
Hispanic origin					
Yes	2,262	11.3%	1,425	10.7%	
No	7,222	36.1%	4,674	35.1%	
Unknown	10,528	52.6%	7,232	54.2%	
Year					
2008	764	3.6%	602	4.3%	
2009	884	4.2%	689	4.9%	
2010	812	3.8%	609	4.3%	
2011	808	3.8%	619	4.4%	
2012	772	3.6%	618	4.4%	
2013	786	3.7%	606	4.3%	
2014	1,232	5.8%	1,006	7.1%	
2015	2,102	9.9%	1,626	11.6%	
2016	3,231	15.2%	2,786	19.8%	
2017	4,189	19.7%	3,290	23.4%	
2018	3,666	17.3%	593	4.2%	
2019	725	3.4%	578	4.1%	
2020	625	2.9%	399	2.8%	
2021	596	2.8%	51	0.4%	
2022	42	0.2%	0	0.0%	
Health Characteristics					
Charlson/Elixhauser combined comorbidity score ⁵	0.5	1.1	0.5	1.0	
Hypertension	1,338	6.3%	853	6.1%	
Hemangioma	41	0.2%	28	0.2%	
Heart Failure	255	1.2%	166	1.2%	
Congenital Heart Disease	1,561	7.4%	1,054	7.5%	



Patient Characteristics ¹² Number/Mean Standard Deviation ³ Number/Mean Standard Atrial Fibrillation 54 0.3% 38 1 Carg Cyndrome 452 2.1% 282 1 Other Cardiac Arrhythmias 3,168 14.9% 2,230 1 Pulmonary Hypertension 55 0.3% 32 1 Cardiac Arrhythmias (Composite) 3,479 16.4% 2,230 1 Pulmonary Hypertension 55 0.3% 32 1 Arxiety Disorder 3,077 14.5% 2,058 2 Tremor 308 1.5% 198 1 Migraine 5,129 24.2% 3,563 2 Thyrotoxicosis 293 1.4% 190 1 Burns 60 0.3% 40 1 1 Diabetes 17 0.1% 136 1 1 Pheochromocytoma/Paraganglioma 17 0.1% 1 1 1	Beta Blockers (Post-Index Enrollment Requirement)		
Atrial Fibrillation 54 0.3% 38 Long QT Syndrome 452 2.1% 282 Other Cardiac Arrhythmias 3,168 14.9% 2,031 1 Cardiac Arrhythmias (Composite) 3,479 16.4% 2,230 1 Pulmonary Hypertension 55 0.3% 32 1 Cardiomyopathy 446 2.1% 277 1 Coronary Artery Disease 94 0.4% 58 1 Portal Hypertension 49 0.2% 37 1 Anxiety Disorder 3,077 14.5% 2,058 1 Tremor 308 1.5% 198 190 Burns 69 0.3% 43 190 Burns 69 0.3% 40 136 Pheochromocytoma/Paraganglioma 17 0.1% 136 Pheochromocytoma/Paraganglioma 17 0.1% 136 Phypoglycemia (Day 0)	ercent/		
Long QT Syndrome 452 2.1% 282 Other Cardiac Arrhythmias 3,168 14.9% 2,031 1 Cardiac Arrhythmias (Composite) 3,479 16.4% 2,230 1 Pulmonary Hypertension 55 0.3% 32 1 Cardiomyopathy 446 2.1% 277 1 Coronary Artery Disease 94 0.4% 58 1 Portal Hypertension 49 0.2% 37 1 Anxiety Disorder 3,077 14.5% 2,058 1 Tremor 308 1.5% 198 1 Burns 69 0.3% 43 1 Glaucoma 60 0.3% 40 1 Autism 2,125 10.0% 1,383 1 Pheochromocytoma/Paraganglioma 17 0.1% 1 1 Other Cardiac Arrhythmias (0-3 Months) 40 0.2% 2 1 Autism 2,125 10.0% 1,36 1	rd Deviation [®]		
Other Cardiac Arrhythmias 3,168 14.9% 2,031 1 Cardiac Arrhythmias (Composite) 3,479 16.4% 2,230 1 Pulmonary Hypertension 55 0.3% 32 1 Cardiomyopathy 446 2.1% 277 1 Coronary Artery Disease 94 0.4% 58 1 Portal Hypertension 49 0.2% 37 1 Anxiety Disorder 3,077 14.5% 2,058 2 Tremor 308 1.5% 198 1 1 Migraine 5,129 24.2% 3,563 2 2 Thyrotoxicosis 293 1.4% 190 1 <td>0.3%</td>	0.3%		
Cardiac Arrhythmia (Composite) 3,479 16.4% 2,230 1 Pulmonary Hypertension 55 0.3% 32 1 Cardiomyopathy 446 2.1% 277 1 Coronary Artery Disease 94 0.4% 58 1 Portal Hypertension 49 0.2% 37 1 Anxiety Disorder 3,077 14.5% 2,058 1 Tremor 308 1.5% 198 1 Migraine 5,129 24.2% 3,563 2 Thyrotoxicosis 293 1.4% 190 1 Burns 69 0.3% 40 1 Autism 2,125 10.0% 1,383 1 Diabetes 157 0.7% 95 1 Any of the above health characteristics (excluding combined comorbidity score) 6,871 32.4% 4,485 3 None of the above health characteristics (excluding combined comorbidity score) 6,871 32.4% 4,485 3 Hypoglycemia (Day 0) ***** ****** ************************************	2.0%		
Pulmonary Hypertension 55 0.3% 32 Cardiomyopathy 446 2.1% 277 Coronary Artery Disease 94 0.4% 58 Portal Hypertension 49 0.2% 37 44 Anxiety Disorder 3,077 14.5% 2,058 44 Migraine 5,129 24.2% 3,563 27 Thyrotoxicosis 293 1.4% 190 43 Glaucoma 60 0.3% 43 40 Autism 2,125 10.0% 1,383 43 Diabetes 157 0.1% 446 448 Any of the above health characteristics (excluding combined comorbidity score) 14,363 67.6% 9,587 64 Mypoglycemia (0-3 Months) 40 0.2% 22 4485 34 Hypoglycemia (0-3 Months) 40 0.2% 22 4485 44 Hypoglycemia (0-3 Months) 40 0.2% 22 44 44 44 Hypogl	14.4%		
Cardiomyophy 446 2.1% 277 Coronary Artery Disease 94 0.4% 58 Portal Hypertension 49 0.2% 37 Anxiety Disorder 3,077 14.5% 2,058 42 Migraine 5,129 24.2% 3,563 22 Thyrotoxicosis 293 1.4% 190 16 Burns 69 0.3% 43 16 Glaucoma 60 0.3% 40 16 Autism 2,125 10.0% 1,383 16 Pheochromocytoma/Paraganglioma 17 0.1% 16 16 Diabetes 17 0.1% 16 16 16 Hypoglycemia (Cay O) 14,363 67.6% 9,587 66 16	15.8%		
Coronary Artery Disease 94 0.4% 58 Portal Hypertension 49 0.2% 37 Anxiety Disorder 3,077 14.5% 2,058 17 Tremor 308 1.5% 198 198 Migraine 5,129 24.2% 3,563 23 Thyrotoxicosis 293 1.4% 190 16 Burns 69 0.3% 43 16 Glaucoma 60 0.3% 40 16 Autism 2,125 10.0% 1,383 16 Pheochromocytoma/Paraganglioma 17 0.1% 136 16 Diabetes 157 0.7% 95 16 16 16 16 Hypoglycemia (Day O) ***** ***** ***** 16 17 132.4% 4,485 23 16 Hypoglycemia (Day O) ***** ****** ****** ******* 16 16 16 16 16 16 16	0.2%		
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Hypoglycemia (Day 0) and No Diabetes***************Hypoglycemia (0-3 Months) and No Diabetes330.2%18Hypoglycemia (3-6 Months) and No Diabetes240.1%16	****		
Hypoglycemia (0-3 Months) and No Diabetes330.2%18Hypoglycemia (3-6 Months) and No Diabetes240.1%16	****		
Hypoglycemia (3-6 Months) and No Diabetes 24 0.1% 16	0.1%		
	0.1%		
	0.2%		

Trypogrycenna (5-0 Months) and Any Metoprotor	****		



	Beta	Blockers		ost-Index Enrollment irement)
		Percent/		Percent/
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation ³
Hypoglycemia (Day 0) and Any Propranolol	****	****	****	****
Hypoglycemia (0-3 Months) and Any Propranolol	22	0.1%	12	0.1%
Hypoglycemia (3-6 Months) and Any Propranolol	15	0.1%	12	0.1%
Hypoglycemia (6-12 Months) and Any Propranolol	27	0.1%	23	0.2%
Hypoglycemia (Day 0) and Atenolol	0	0.0%	0	0.0%
Hypoglycemia (0-3 Months) and Atenolol	****	****	****	****
Hypoglycemia (3-6 Months) and Atenolol	****	****	****	****
Hypoglycemia (6-12 Months) and Atenolol	****	****	****	****
Hypoglycemia (Day 0) and Nadolol	0	0.0%	0	0.0%
Hypoglycemia (0-3 Months) and Nadolol	****	****	****	****
Hypoglycemia (3-6 Months) and Nadolol	****	****	****	****
Hypoglycemia (6-12 Months) and Nadolol	****	****	****	****
Selective Beta Blockers	6,050	28.5%	4,029	28.6%
Non-Selective Beta Blockers	15,187	71.5%	10,045	71.4%
Any Metoprolol	1,557	7.3%	1,002	7.1%
Metoprolol (Extended Release)	800	3.8%	500	3.6%
Metoprolol (Regular)	760	3.6%	504	3.6%
Any Propranolol	13,122	61.8%	8,737	62.1%
Propranolol (Extended Release)	1,148	5.4%	781	5.6%
Propranolol (Regular)	12,000	56.5%	7,972	56.7%
Propranolol (Hemangeol)	****	****	****	****
Acebutolol	16	0.1%	11	0.1%
Atenolol	4,338	20.4%	2,924	20.8%
Betaxolol	17	0.1%	12	0.1%
Bisoprolol	53	0.2%	31	0.2%
Carvedilol	556	2.6%	334	2.4%
Labetalol	352	1.7%	204	1.4%
Nadolol	1,045	4.9%	698	5.0%
Nebivolol	72	0.3%	52	0.4%
Pindolol	20	0.1%	11	0.1%
Sotalol	89	0.4%	59	0.4%
Timolol	* * * *	****	****	****
Health Characteristics by Beta Blockers				
Hypertension and Any Metoprolol	280	1.3%	182	1.3%
Hypertension and Metoprolol (Extended Release)	140	0.7%	82	0.6%
Hypertension and Metoprolol (Regular)	141	0.7%	101	0.7%
Hypertension and Any Propranolol	229	1.1%	156	1.1%



	Beta Blockers		Beta Blockers (Post-Index Enrollment Requirement)		
		Percent/		Percent/	
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation ³	
Hypertension and Propranolol (Extended Release)	****	****	****	****	
Hypertension and Propranolol (Regular)	219	1.0%	150	1.1%	
Hypertension and Acebutolol	0	0.0%	0	0.0%	
Hypertension and Atenolol	452	2.1%	306	2.2%	
Hypertension and Betaxolol	0	0.0%	0	0.0%	
Hypertension and Bisoprolol	****	****	****	****	
Hypertension and Carvedilol	72	0.3%	34	0.2%	
Hypertension and Labetalol	277	1.3%	161	1.1%	
Hypertension and Nadolol	21	0.1%	****	****	
Hypertension and Nebivolol	****	****	****	****	
Hypertension and Pindolol	0	0.0%	0	0.0%	
Hypertension and Sotalol	****	****	****	****	
Hypertension and Timolol	0	0.0%	0	0.0%	
Hemangioma and Any Metoprolol	****	****	****	****	
Hemangioma and Metoprolol (Extended Release)	0	0.0%	0	0.0%	
Hemangioma and Metoprolol (Regular)	****	****	****	****	
Hemangioma and Any Propranolol	39	0.2%	27	0.2%	
Hemangioma and Propranolol (Extended Release)	****	****	****	****	
Hemangioma and Propranolol (Regular)	36	0.2%	26	0.2%	
Hemangioma and Propranolol (Hemangeol)	0	0.0%	0	0.0%	
Hemangioma and Acebutolol	0	0.0%	0	0.0%	
Hemangioma and Atenolol	0	0.0%	0	0.0%	
Hemangioma and Betaxolol	0	0.0%	0	0.0%	
Hemangioma and Bisoprolol	0	0.0%	0	0.0%	
Hemangioma and Carvedilol	0	0.0%	0	0.0%	
Hemangioma and Labetalol	0	0.0%	0	0.0%	
Hemangioma and Nadolol	0	0.0%	0	0.0%	
Hemangioma and Nebivolol	0	0.0%	0	0.0%	
Hemangioma and Pindolol	0	0.0%	0	0.0%	
Hemangioma and Sotalol	0	0.0%	0	0.0%	
Hemangioma and Timolol	0	0.0%	0	0.0%	
Long QT Syndrome and Any Metoprolol	30	0.1%	19	0.1%	
Long QT Syndrome and Metoprolol (Extended Release)	13	0.1%	****	****	
Long QT Syndrome and Metoprolol (Regular)	17	0.1%	****	****	
Long QT Syndrome and Any Propranolol Long QT Syndrome and Propranolol (Extended Release)	44 ****	0.2% ****	29 ****	0.2% ****	
Long QT Syndrome and Propranolol (Regular)	****	****	****	****	
Long QT Syndrome and Acebutolol	0	0.0%	0	0.0%	



	Beta	Beta Blockers		Beta Blockers (Post-Index Enrollment Requirement)	
Patient Characteristics ^{1,2}	Number/Mean	Percent/ Standard Deviation ³	Number/Mean	Percent/ Standard Deviation ³	
Long QT Syndrome and Atenolol	62	0.3%	42	0.3%	
Long QT Syndrome and Betaxolol	0	0.0%	0	0.0%	
Long QT Syndrome and Bisoprolol	****	****	0	0.0%	
Long QT Syndrome and Carvedilol	****	****	****	****	
Long QT Syndrome and Labetalol	****	****	****	****	
Long QT Syndrome and Nadolol	300	1.4%	188	1.3%	
Long QT Syndrome and Nebivolol	0	0.0%	0	0.0%	
Long QT Syndrome and Pindolol	0	0.0%	0	0.0%	
Long QT Syndrome and Sotalol	****	****	****	****	
Long QT Syndrome and Timolol	0	0.0%	0	0.0%	

¹All metrics are based on total number of episodes per group, except for sex, race, and Hispanic origin which are based on total number of unique patients.

²Characteristics in blue show a standardized difference greater than 0.1.

³Value represents standard deviation where no % follows the value.

⁴Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

⁵The Charlson/Elixhauser Combined Comorbidity Score is calculated based on comorbidities observed during a requester-defined window around the exposure episode start date. (Gagne JJ, Glynn RJ, Avorn J, Levin R, Schneeweiss S. A combined comorbidity score predicted mortality in elderly patients better than existing scores. J Clin Epidemiol. 2011;64(7):749-759)



	Beta Blockers		Beta Blockers (Post-Index Enrollment Requirement)	
		Percent/		Percent/
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation ³
Unique patients	19,069	N/A	12,297	N/A
Episodes	20,146	100.0%	12,940	100.0%
Demographic Characteristics				
Age (years)	10.5	1.9	10.5	1.9
Race ⁴				
American Indian or Alaska Native	189	1.0%	120	1.0%
Asian	189	1.0%	108	0.9%
Black or African American	1,363	7.1%	851	6.9%
Native Hawaiian or Other Pacific Islander	22	0.1%	15	0.1%
Unknown	11,835	62.1%	7,749	63.0%
White	5,471	28.7%	3,454	28.1%
Hispanic origin				
Yes	2,422	12.7%	1,509	12.3%
No	6,773	35.5%	4,220	34.3%
Unknown	9,874	51.8%	6,568	53.4%
Year				
2008	599	3.0%	459	3.5%
2009	793	3.9%	598	4.6%
2010	741	3.7%	554	4.3%
2011	742	3.7%	543	4.2%
2012	669	3.3%	526	4.1%
2013	721	3.6%	535	4.1%
2014	1,211	6.0%	964	7.4%
2015	2,105	10.4%	1,607	12.4%
2016	3,046	15.1%	2,598	20.1%
2017	3,840	19.1%	3,000	23.2%
2018	3,651	18.1%	546	4.2%
2019	725	3.6%	565	4.4%
2020	599	3.0%	402	3.1%
2021	647	3.2%	43	0.3%
2022	57	0.3%	0	0.0%
Health Characteristics				
Charlson/Elixhauser combined comorbidity score ⁵	0.5	1.1	0.5	1.1
Hypertension	1,160	5.8%	761	5.9%
Hemangioma	71	0.4%	56	0.4%
Heart Failure	234	1.2%	143	1.1%
Congenital Heart Disease	1,222	6.1%	776	6.0%



	Beta Blockers		Beta Blockers (Post-Index Enrollment Requirement)	
		Percent/		Percent/
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation ³
Atrial Fibrillation	39	0.2%	23	0.2%
Long QT Syndrome	348	1.7%	218	1.7%
Other Cardiac Arrhythmias	3,443	17.1%	2,112	16.3%
Cardiac Arrhythmias (Composite)	3,700	18.4%	2,270	17.5%
Pulmonary Hypertension	66	0.3%	43	0.3%
Cardiomyopathy	340	1.7%	199	1.5%
Coronary Artery Disease	62	0.3%	40	0.3%
Portal Hypertension	44	0.2%	33	0.3%
Anxiety Disorder	3,036	15.1%	1,809	14.0%
Tremor	238	1.2%	142	1.1%
Migraine	5,759	28.6%	3,819	29.5%
Thyrotoxicosis	1,060	5.3%	665	5.1%
Burns	41	0.2%	22	0.2%
Glaucoma	51	0.3%	32	0.2%
Autism	571	2.8%	347	2.7%
Marfan's Syndrome	167	0.8%	92	0.7%
Pheochromocytoma/Paraganglioma	****	****	****	****
Diabetes	171	0.8%	106	0.8%
Any of the above health characteristics <i>(excluding combined comorbidity score)</i> None of the above health characteristics <i>(excluding</i>	14,038	69.7%	9,000	69.6%
combined comorbidity score)	6,108	30.3%	3,940	30.4%
Hypoglycemia (Day 0)	****	****	****	****
Hypoglycemia (0-3 Months)	41	0.2%	27	0.2%
Hypoglycemia (3-6 Months)	37	0.2%	26	0.2%
Hypoglycemia (6-12 Months)	55	0.3%	52	0.4%
Hypoglycemia (Day 0) and Diabetes	0	0.0%	0	0.0%
Hypoglycemia (0-3 Months) and Diabetes	****	****	****	****
Hypoglycemia (3-6 Months) and Diabetes	****	****	****	****
Hypoglycemia (6-12 Months) and Diabetes	****	****	****	****
Hypoglycemia (Day 0) and No Diabetes	****	****	****	****
Hypoglycemia (0-3 Months) and No Diabetes	34	0.2%	22	0.2%
Hypoglycemia (3-6 Months) and No Diabetes	31	0.2%	24	0.2%
Hypoglycemia (6-12 Months) and No Diabetes	45	0.2%	43	0.3%
Hypoglycemia (Day 0) and Any Metoprolol	0	0.0%	0	0.0%
Hypoglycemia (0-3 Months) and Any Metoprolol	****	****	****	****
Hypoglycemia (3-6 Months) and Any Metoprolol	****	****	****	****
Hypoglycemia (6-12 Months) and Any Metoprolol	****	****	****	****



	Beta Blockers		Beta Blockers (Post-Index Enrollment Requirement)	
		Percent/		Percent/
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation ³
Hypoglycemia (Day 0) and Any Propranolol	****	****	****	****
Hypoglycemia (0-3 Months) and Any Propranolol	18	0.1%	12	0.1%
Hypoglycemia (3-6 Months) and Any Propranolol	19	0.1%	13	0.1%
Hypoglycemia (6-12 Months) and Any Propranolol	27	0.1%	25	0.2%
Hypoglycemia (Day 0) and Atenolol	****	****	****	****
Hypoglycemia (0-3 Months) and Atenolol	****	****	****	****
Hypoglycemia (3-6 Months) and Atenolol	****	****	****	****
Hypoglycemia (6-12 Months) and Atenolol	12	0.1%	11	0.1%
Hypoglycemia (Day 0) and Nadolol	0	0.0%	0	0.0%
Hypoglycemia (0-3 Months) and Nadolol	****	****	****	****
Hypoglycemia (3-6 Months) and Nadolol	0	0.0%	0	0.0%
Hypoglycemia (6-12 Months) and Nadolol	****	****	****	****
Selective Beta Blockers	5,875	29.2%	3,791	29.3%
Non-Selective Beta Blockers	14,276	70.9%	9,152	70.7%
Any Metoprolol	1,342	6.7%	824	6.4%
Metoprolol (Extended Release)	736	3.7%	446	3.4%
Metoprolol (Regular)	607	3.0%	379	2.9%
Any Propranolol	12,553	62.3%	8,047	62.2%
Propranolol (Extended Release)	1,111	5.5%	739	5.7%
Propranolol (Regular)	11,481	57.0%	7,330	56.6%
Propranolol (Hemangeol)	****	****	****	****
Acebutolol	****	****	****	****
Atenolol	4,447	22.1%	2,917	22.5%
Betaxolol	15	0.1%	****	****
Bisoprolol	41	0.2%	24	0.2%
Carvedilol	346	1.7%	211	1.6%
Labetalol	318	1.6%	189	1.5%
Nadolol	988	4.9%	659	5.1%
Nebivolol	24	0.1%	14	0.1%
Pindolol	17	0.1%	15	0.1%
Sotalol	53	0.3%	32	0.2%
Timolol	****	****	****	****
Health Characteristics by Beta Blockers				
Hypertension and Any Metoprolol	207	1.0%	145	1.1%
Hypertension and Metoprolol (Extended Release)	116	0.6%	84	0.6%
Hypertension and Metoprolol (Regular)	92	0.5%	62	0.5%
Hypertension and Any Propranolol	226	1.1%	147	1.1%



	Beta	Blockers	Beta Blockers (Post-Index Enr Requirement)	
		Percent/		Percent/
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation ³
Hypertension and Propranolol (Extended Release)	12	0.1%	****	****
Hypertension and Propranolol (Regular)	214	1.1%	137	1.1%
Hypertension and Acebutolol	0	0.0%	0	0.0%
Hypertension and Atenolol	389	1.9%	267	2.1%
Hypertension and Betaxolol	0	0.0%	0	0.0%
Hypertension and Bisoprolol	****	****	****	****
Hypertension and Carvedilol	66	0.3%	39	0.3%
Hypertension and Labetalol	241	1.2%	142	1.1%
Hypertension and Nadolol	17	0.1%	12	0.1%
Hypertension and Nebivolol	****	****	****	****
Hypertension and Pindolol	0	0.0%	0	0.0%
Hypertension and Sotalol	****	****	****	****
Hypertension and Timolol	0	0.0%	0	0.0%
Hemangioma and Any Metoprolol	****	****	****	* * * * *
Hemangioma and Metoprolol (Extended Release)	****	****	0	0.0%
Hemangioma and Metoprolol (Regular)	****	****	****	****
Hemangioma and Any Propranolol	61	0.3%	51	0.4%
Hemangioma and Propranolol (Extended Release)	****	****	****	****
Hemangioma and Propranolol (Regular)	****	****	****	****
Hemangioma and Propranolol (Hemangeol)	0	0.0%	0	0.0%
Hemangioma and Acebutolol	0	0.0%	0	0.0%
Hemangioma and Atenolol	****	****	****	****
Hemangioma and Betaxolol	0	0.0%	0	0.0%
Hemangioma and Bisoprolol	0	0.0%	0	0.0%
Hemangioma and Carvedilol	0	0.0%	0	0.0%
Hemangioma and Labetalol	0	0.0%	0	0.0%
Hemangioma and Nadolol	0	0.0%	0	0.0%
Hemangioma and Nebivolol	0	0.0%	0	0.0%
Hemangioma and Pindolol	0	0.0%	0	0.0%
Hemangioma and Sotalol	0	0.0%	0	0.0%
Hemangioma and Timolol	0	0.0%	0	0.0%
Long QT Syndrome and Any Metoprolol	19	0.1%	12	0.1%
Long QT Syndrome and Metoprolol (Extended Release)	****	****	*****	****
Long QT Syndrome and Metoprolol (Regular) Long QT Syndrome and Any Propranolol	44	***** 0.2%	21	0.2%
Long QT Syndrome and Propranolol (Extended Release)	****	****	****	****
Long QT Syndrome and Propranolol (Regular)	39	0.2%	18	0.1%
Long QT Syndrome and Acebutolol	0	0.0%	0	0.0%



	Beta	Blockers	Beta Blockers (Post-Index Enrollment Requirement)	
Patient Characteristics ^{1,2}	Number/Mean	Percent/ Standard Deviation ³	Number/Mean	Percent/ Standard Deviation ³
Long QT Syndrome and Atenolol	51	0.3%	35	0.3%
Long QT Syndrome and Betaxolol	****	****	0	0.0%
Long QT Syndrome and Bisoprolol	****	****	0	0.0%
Long QT Syndrome and Carvedilol	****	****	* * * * *	****
Long QT Syndrome and Labetalol	0	0.0%	0	0.0%
Long QT Syndrome and Nadolol	227	1.1%	147	1.1%
Long QT Syndrome and Nebivolol	0	0.0%	0	0.0%
Long QT Syndrome and Pindolol	0	0.0%	0	0.0%
Long QT Syndrome and Sotalol	****	****	****	****
Long QT Syndrome and Timolol	0	0.0%	0	0.0%

¹All metrics are based on total number of episodes per group, except for sex, race, and Hispanic origin which are based on total number of unique patients.

²Characteristics in blue show a standardized difference greater than 0.1.

³Value represents standard deviation where no % follows the value.

⁴Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

⁵The Charlson/Elixhauser Combined Comorbidity Score is calculated based on comorbidities observed during a requester-defined window around the exposure episode start date. (Gagne JJ, Glynn RJ, Avorn J, Levin R, Schneeweiss S. A combined comorbidity score predicted mortality in elderly patients better than existing scores. J Clin Epidemiol. 2011;64(7):749-759)

*****Data are not presented in these cells due to a small sample size or to assure a small cell cannot be recalculated through the cells presented.



	Beta	Blockers		ost-Index Enrollment irement)
		Percent/		Percent/
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation ³
Unique patients	45,494	N/A	29,475	N/A
Episodes	48,091	100.0%	31,056	100.0%
Demographic Characteristics				
Age (years)	15.9	1.4	15.9	1.4
Race ⁴				
American Indian or Alaska Native	396	0.9%	247	0.8%
Asian	416	0.9%	229	0.8%
Black or African American	2,576	5.7%	1,536	5.2%
Native Hawaiian or Other Pacific Islander	69	0.2%	48	0.2%
Unknown	29,628	65.1%	19,746	67.0%
White	12,409	27.3%	7,669	26.0%
Hispanic origin				
Yes	4,079	9.0%	2,372	8.0%
No	14,453	31.8%	8,719	29.6%
Unknown	26,962	59.3%	18,384	62.4%
Year				
2008	1,479	3.1%	1,148	3.7%
2009	1,989	4.1%	1,482	4.8%
2010	1,944	4.0%	1,500	4.8%
2011	1,775	3.7%	1,348	4.3%
2012	1,834	3.8%	1,423	4.6%
2013	1,935	4.0%	1,452	4.7%
2014	2,690	5.6%	2,190	7.1%
2015	4,380	9.1%	3,323	10.7%
2016	6,768	14.1%	5,625	18.1%
2017	8,508	17.7%	6,501	20.9%
2018	8,382	17.4%	1,745	5.6%
2019	2,349	4.9%	1,853	6.0%
2020	1,927	4.0%	1,299	4.2%
2021	1,982	4.1%	167	0.5%
2022	149	0.3%	0	0.0%
Health Characteristics				
Charlson/Elixhauser combined comorbidity score ⁵	0.5	1.0	0.5	1.0
Hypertension	5,564	11.6%	3,706	11.9%
Hemangioma	40	0.1%	28	0.1%
Heart Failure	460	1.0%	286	0.9%
Congenital Heart Disease	2,073	4.3%	1,380	4.4%



	Beta Blockers			ost-Index Enrollment irement)
		Percent/		Percent/
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation ³
Atrial Fibrillation	254	0.5%	164	0.5%
Long QT Syndrome	361	0.8%	221	0.7%
Other Cardiac Arrhythmias	7,105	14.8%	4,496	14.5%
Cardiac Arrhythmias (Composite)	7,355	15.3%	4,659	15.0%
Pulmonary Hypertension	125	0.3%	80	0.3%
Cardiomyopathy	993	2.1%	597	1.9%
Coronary Artery Disease	289	0.6%	189	0.6%
Portal Hypertension	69	0.1%	36	0.1%
Anxiety Disorder	11,986	24.9%	7,376	23.8%
Tremor	1,502	3.1%	967	3.1%
Migraine	8,758	18.2%	5,858	18.9%
Thyrotoxicosis	850	1.8%	575	1.9%
Burns	89	0.2%	57	0.2%
Glaucoma	115	0.2%	70	0.2%
Autism	3,091	6.4%	1,897	6.1%
Marfan's Syndrome	260	0.5%	190	0.6%
Pheochromocytoma/Paraganglioma	16	0.0%	****	****
Diabetes	673	1.4%	432	1.4%
Any of the above health characteristics <i>(excluding combined comorbidity score)</i> None of the above health characteristics <i>(excluding</i>	32,929	68.5%	21,161	68.1%
combined comorbidity score)	15,162	31.5%	9,895	31.9%
Hypoglycemia (Day 0)	17	0.0%	12	0.0%
Hypoglycemia (0-3 Months)	95	0.2%	67	0.2%
Hypoglycemia (3-6 Months)	88	0.2%	66	0.2%
Hypoglycemia (6-12 Months)	122	0.3%	110	0.4%
Hypoglycemia (Day 0) and Diabetes	****	****	****	****
Hypoglycemia (0-3 Months) and Diabetes	23	0.0%	17	0.1%
Hypoglycemia (3-6 Months) and Diabetes	18	0.0%	15	0.0%
Hypoglycemia (6-12 Months) and Diabetes	22	0.0%	19	0.1%
Hypoglycemia (Day 0) and No Diabetes	14	0.0%	****	****
Hypoglycemia (0-3 Months) and No Diabetes	72	0.1%	50	0.2%
Hypoglycemia (3-6 Months) and No Diabetes	70	0.1%	51	0.2%
Hypoglycemia (6-12 Months) and No Diabetes	100	0.2%	91	0.3%
Hypoglycemia (Day 0) and Any Metoprolol	****	****	****	****
Hypoglycemia (0-3 Months) and Any Metoprolol	17	0.0%	15	0.0%
Hypoglycemia (3-6 Months) and Any Metoprolol	13	0.0%	11	0.0%
	10	0.070		0.070



	Beta Blockers		Beta Blockers (Post-Index Enrollment Requirement)	
		Percent/		Percent/
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation ³
Hypoglycemia (Day 0) and Any Propranolol	11	0.0%	****	****
Hypoglycemia (0-3 Months) and Any Propranolol	52	0.1%	34	0.1%
Hypoglycemia (3-6 Months) and Any Propranolol	47	0.1%	34	0.1%
Hypoglycemia (6-12 Months) and Any Propranolol	60	0.1%	52	0.2%
Hypoglycemia (Day 0) and Atenolol	****	****	****	****
Hypoglycemia (0-3 Months) and Atenolol	19	0.0%	15	0.0%
Hypoglycemia (3-6 Months) and Atenolol	18	0.0%	13	0.0%
Hypoglycemia (6-12 Months) and Atenolol	23	0.0%	21	0.1%
Hypoglycemia (Day 0) and Nadolol	0	0.0%	0	0.0%
Hypoglycemia (0-3 Months) and Nadolol	****	****	****	****
Hypoglycemia (3-6 Months) and Nadolol	****	****	****	****
Hypoglycemia (6-12 Months) and Nadolol	****	****	****	****
Selective Beta Blockers	14,388	29.9%	9,516	30.6%
Non-Selective Beta Blockers	33,713	70.1%	21,548	69.4%
Any Metoprolol	6,192	12.9%	3,947	12.7%
Metoprolol (Extended Release)	3,649	7.6%	2,284	7.4%
Metoprolol (Regular)	2,557	5.3%	1,674	5.4%
Any Propranolol	30,166	62.7%	19,299	62.1%
Propranolol (Extended Release)	4,603	9.6%	3,091	10.0%
Propranolol (Regular)	25,674	53.4%	16,282	52.4%
Propranolol (Hemangeol)	0	0.0%	0	0.0%
Acebutolol	12	0.0%	****	****
Atenolol	7,765	16.1%	5,263	16.9%
Betaxolol	44	0.1%	32	0.1%
Bisoprolol	190	0.4%	133	0.4%
Carvedilol	1,244	2.6%	765	2.5%
Labetalol	587	1.2%	368	1.2%
Nadolol	1,495	3.1%	974	3.1%
Nebivolol	193	0.4%	136	0.4%
Pindolol	74	0.2%	49	0.2%
Sotalol	132	0.3%	81	0.3%
Timolol	16	0.0%	13	0.0%
Health Characteristics by Beta Blockers				
Hypertension and Any Metoprolol	1,801	3.7%	1,146	3.7%
Hypertension and Metoprolol (Extended Release)	1,106	2.3%	687	2.2%
Hypertension and Metoprolol (Regular)	705	1.5%	467	1.5%
Hypertension and Any Propranolol	1,125	2.3%	758	2.4%



	Beta	Blockers	Beta Blockers (Post-Index Enrollr Requirement)	
		Percent/		Percent/
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation ³
Hypertension and Propranolol (Extended Release)	232	0.5%	165	0.5%
Hypertension and Propranolol (Regular)	895	1.9%	595	1.9%
Hypertension and Acebutolol	****	****	****	****
Hypertension and Atenolol	1,681	3.5%	1,171	3.8%
Hypertension and Betaxolol	* * * * *	****	****	****
Hypertension and Bisoprolol	64	0.1%	45	0.1%
Hypertension and Carvedilol	257	0.5%	161	0.5%
Hypertension and Labetalol	448	0.9%	291	0.9%
Hypertension and Nadolol	81	0.2%	58	0.2%
Hypertension and Nebivolol	89	0.2%	61	0.2%
Hypertension and Pindolol	****	****	****	****
Hypertension and Sotalol	12	0.0%	11	0.0%
Hypertension and Timolol	0	0.0%	0	0.0%
Hemangioma and Any Metoprolol	0	0.0%	0	0.0%
Hemangioma and Metoprolol (Extended Release)	0	0.0%	0	0.0%
Hemangioma and Metoprolol (Regular)	0	0.0%	0	0.0%
Hemangioma and Any Propranolol	34	0.1%	25	0.1%
Hemangioma and Propranolol (Extended Release)	****	****	****	****
Hemangioma and Propranolol (Regular)	* * * * *	****	****	****
Hemangioma and Propranolol (Hemangeol)	0	0.0%	0	0.0%
Hemangioma and Acebutolol	0	0.0%	0	0.0%
Hemangioma and Atenolol	* * * * *	****	****	0.0%
Hemangioma and Betaxolol	0	0.0%	0	0.0%
Hemangioma and Bisoprolol	0	0.0%	0	0.0%
Hemangioma and Carvedilol	0	0.0%	0	0.0%
Hemangioma and Labetalol	0	0.0%	0	0.0%
Hemangioma and Nadolol	* * * * *	****	****	****
Hemangioma and Nebivolol	0	0.0%	0	0.0%
Hemangioma and Pindolol	0	0.0%	0	0.0%
Hemangioma and Sotalol	0	0.0%	0	0.0%
Hemangioma and Timolol	0	0.0%	0	0.0%
Long QT Syndrome and Any Metoprolol	40	0.1%	26	0.1%
Long QT Syndrome and Metoprolol (Extended Release)	16	0.0%	****	****
Long QT Syndrome and Metoprolol (Regular) Long QT Syndrome and Any Propranolol	24 44	0.0% 0.1%	17 27	0.1% 0.1%
Long QT Syndrome and Propranolol (Extended Release)	****	****	~/ ****	****
Long QT Syndrome and Propranolol (Regular)	****	****	****	****
Long QT Syndrome and Acebutolol	0	0.0%	0	0.0%



	Beta	Beta Blockers		Beta Blockers (Post-Index Enrollment Requirement)	
Patient Characteristics ^{1,2}	Number/Mean	Percent/ Standard Deviation ³	Number/Mean	Percent/ Standard Deviation ³	
Long QT Syndrome and Atenolol	48	0.1%	31	0.1%	
Long QT Syndrome and Betaxolol	****	****	****	****	
Long QT Syndrome and Bisoprolol	****	****	****	****	
Long QT Syndrome and Carvedilol	13	0.0%	****	****	
Long QT Syndrome and Labetalol	****	****	****	****	
Long QT Syndrome and Nadolol	202	0.4%	121	0.4%	
Long QT Syndrome and Nebivolol	0	0.0%	0	0.0%	
Long QT Syndrome and Pindolol	0	0.0%	0	0.0%	
Long QT Syndrome and Sotalol	****	****	****	****	
Long QT Syndrome and Timolol	0	0.0%	0	0.0%	

¹All metrics are based on total number of episodes per group, except for sex, race, and Hispanic origin which are based on total number of unique patients.

²Characteristics in blue show a standardized difference greater than 0.1.

³Value represents standard deviation where no % follows the value.

⁴Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

⁵The Charlson/Elixhauser Combined Comorbidity Score is calculated based on comorbidities observed during a requester-defined window around the exposure episode start date. (Gagne JJ, Glynn RJ, Avorn J, Levin R, Schneeweiss S. A combined comorbidity score predicted mortality in elderly patients better than existing scores. J Clin Epidemiol. 2011;64(7):749-759)

*****Data are not presented in these cells due to a small sample size or to assure a small cell cannot be recalculated through the cells presented.



	Beta	Blockers		st-Index Enrollment rement)
		Percent/		Percent/
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation
Unique patients	84,437	N/A	53,460	N/A
Episodes	89,773	100.0%	56,770	100.0%
Demographic Characteristics				
Age (years)	16.0	1.3	16.0	1.3
Race ⁴				
American Indian or Alaska Native	782	0.9%	466	0.9%
Asian	616	0.7%	351	0.7%
Black or African American	4,535	5.4%	2,651	5.0%
Native Hawaiian or Other Pacific Islander	107	0.1%	61	0.1%
Unknown	55,189	65.4%	35,730	66.8%
White	23,208	27.5%	14,201	26.6%
Hispanic origin				
Yes	7,168	8.5%	4,020	7.5%
No	26,350	31.2%	15,734	29.4%
Unknown	50,919	60.3%	33,706	63.0%
Year				
2008	2,574	2.9%	1,967	3.5%
2009	3,363	3.7%	2,500	4.4%
2010	3,154	3.5%	2,375	4.2%
2011	3,079	3.4%	2,348	4.1%
2012	3,108	3.5%	2,453	4.3%
2013	3,318	3.7%	2,524	4.4%
2014	4,942	5.5%	3,851	6.8%
2015	8,027	8.9%	5,957	10.5%
2016	12,633	14.1%	10,280	18.1%
2017	15,589	17.4%	11,773	20.7%
2018	15,629	17.4%	3,665	6.5%
2019	4,871	5.4%	3,788	6.7%
2020	4,230	4.7%	2,920	5.1%
2021	4,894	5.5%	369	0.6%
2022	362	0.4%	0	0.0%
Health Characteristics				
Charlson/Elixhauser combined comorbidity score ⁵	0.5	0.9	0.5	0.9
Hypertension	4,621	5.1%	2,917	5.1%
Hemangioma	84	0.1%	58	0.1%
Heart Failure	356	0.4%	207	0.4%
Congenital Heart Disease	1,608	1.8%	1,031	1.8%



	Beta	Blockers	•	st-Index Enrollment rement)
		Percent/		Percent/
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation ³
Atrial Fibrillation	146	0.2%	96	0.2%
Long QT Syndrome	536	0.6%	341	0.6%
Other Cardiac Arrhythmias	12,190	13.6%	7,614	13.4%
Cardiac Arrhythmias (Composite)	12,513	13.9%	7,824	13.8%
Pulmonary Hypertension	105	0.1%	67	0.1%
Cardiomyopathy	467	0.5%	286	0.5%
Coronary Artery Disease	190	0.2%	130	0.2%
Portal Hypertension	54	0.1%	33	0.1%
Anxiety Disorder	28,328	31.6%	17,090	30.1%
Tremor	1,814	2.0%	1,137	2.0%
Migraine	25,252	28.1%	16,581	29.2%
Thyrotoxicosis	3,131	3.5%	1,979	3.5%
Burns	119	0.1%	79	0.1%
Glaucoma	197	0.2%	116	0.2%
Autism	1,105	1.2%	677	1.2%
Marfan's Syndrome	153	0.2%	108	0.2%
Pheochromocytoma/Paraganglioma	15	0.0%	12	0.0%
Diabetes	1,210	1.3%	771	1.4%
Any of the above health characteristics (excluding combined comorbidity score) None of the above health characteristics (excluding	62,609	69.7%	39,479	69.5%
combined comorbidity score)	27,164	30.3%	17,291	30.5%
Hypoglycemia (Day 0)	44	0.0%	30	0.1%
Hypoglycemia (0-3 Months)	306	0.3%	219	0.4%
Hypoglycemia (3-6 Months)	234	0.3%	168	0.3%
Hypoglycemia (6-12 Months)	296	0.3%	253	0.4%
Hypoglycemia (Day 0) and Diabetes	****	****	****	****
Hypoglycemia (0-3 Months) and Diabetes	48	0.1%	32	0.1%
Hypoglycemia (3-6 Months) and Diabetes	42	0.0%	29	0.1%
Hypoglycemia (6-12 Months) and Diabetes	44	0.0%	38	0.1%
Hypoglycemia (Day 0) and No Diabetes	39	0.0%	26	0.0%
Hypoglycemia (0-3 Months) and No Diabetes	258	0.3%	187	0.3%
Hypoglycemia (3-6 Months) and No Diabetes	192	0.2%	139	0.2%
Hypoglycemia (6-12 Months) and No Diabetes	252	0.3%	215	0.4%
Hypoglycemia (Day 0) and Any Metoprolol	11	0.0%	****	****
Hypoglycemia (0-3 Months) and Any Metoprolol	56	0.1%	39	0.1%
Hypoglycemia (3-6 Months) and Any Metoprolol	39	0.0%	28	0.0%
Hypoglycemia (6-12 Months) and Any Metoprolol	41	0.0%	32	0.1%



	Beta	Blockers	Beta Blockers (Post-Index Enrollment Requirement)		
		Percent/		Percent/	
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation ³	
Hypoglycemia (Day 0) and Any Propranolol	18	0.0%	11	0.0%	
Hypoglycemia (0-3 Months) and Any Propranolol	174	0.2%	121	0.2%	
Hypoglycemia (3-6 Months) and Any Propranolol	147	0.2%	105	0.2%	
Hypoglycemia (6-12 Months) and Any Propranolol	176	0.2%	154	0.3%	
Hypoglycemia (Day 0) and Atenolol	****	****	****	****	
Hypoglycemia (0-3 Months) and Atenolol	37	0.0%	33	0.1%	
Hypoglycemia (3-6 Months) and Atenolol	31	0.0%	22	0.0%	
Hypoglycemia (6-12 Months) and Atenolol	48	0.1%	42	0.1%	
Hypoglycemia (Day 0) and Nadolol	****	****	****	* * * * *	
Hypoglycemia (0-3 Months) and Nadolol	****	****	****	* * * *	
Hypoglycemia (3-6 Months) and Nadolol	****	****	****	* * * * *	
Hypoglycemia (6-12 Months) and Nadolol	12	0.0%	11	0.0%	
Selective Beta Blockers	20,509	22.8%	13,407	23.6%	
Non-Selective Beta Blockers	69,290	77.2%	43,383	76.4%	
Any Metoprolol	8,486	9.5%	5,384	9.5%	
Metoprolol (Extended Release)	4,893	5.5%	3,040	5.4%	
Metoprolol (Regular)	3,621	4.0%	2,366	4.2%	
Any Propranolol	62,541	69.7%	39,149	69.0%	
Propranolol (Extended Release)	9,389	10.5%	6,220	11.0%	
Propranolol (Regular)	53,372	59.5%	33,066	58.2%	
Propranolol (Hemangeol)	0	0.0%	0	0.0%	
Acebutolol	36	0.0%	27	0.0%	
Atenolol	11,380	12.7%	7,575	13.3%	
Betaxolol	96	0.1%	66	0.1%	
Bisoprolol	277	0.3%	181	0.3%	
Carvedilol	675	0.8%	386	0.7%	
Labetalol	3,308	3.7%	1,918	3.4%	
Nadolol	2,470	2.8%	1,722	3.0%	
Nebivolol	244	0.3%	182	0.3%	
Pindolol	161	0.2%	116	0.2%	
Sotalol	81	0.1%	55	0.1%	
Timolol	57	0.1%	39	0.1%	
Health Characteristics by Beta Blockers					
Hypertension and Any Metoprolol	1,235	1.4%	752	1.3%	
Hypertension and Metoprolol (Extended Release)	701	0.8%	420	0.7%	
Hypertension and Metoprolol (Regular)	542	0.6%	339	0.6%	
Hypertension and Any Propranolol	1,199	1.3%	789	1.4%	



	Beta	Blockers		st-Index Enrollment rement)
		Percent/		Percent/
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation ³
Hypertension and Propranolol (Extended Release)	221	0.2%	150	0.3%
Hypertension and Propranolol (Regular)	979	1.1%	640	1.1%
Hypertension and Acebutolol	****	****	****	****
Hypertension and Atenolol	1,177	1.3%	768	1.4%
Hypertension and Betaxolol	****	****	****	****
Hypertension and Bisoprolol	51	0.1%	36	0.1%
Hypertension and Carvedilol	181	0.2%	106	0.2%
Hypertension and Labetalol	662	0.7%	390	0.7%
Hypertension and Nadolol	59	0.1%	37	0.1%
Hypertension and Nebivolol	42	0.0%	29	0.1%
Hypertension and Pindolol	****	****	****	****
Hypertension and Sotalol	****	****	****	****
Hypertension and Timolol	0	0.0%	0	0.0%
Hemangioma and Any Metoprolol	****	****	****	****
Hemangioma and Metoprolol (Extended Release)	****	****	****	****
Hemangioma and Metoprolol (Regular)	****	****	****	****
Hemangioma and Any Propranolol	69	0.1%	47	0.1%
Hemangioma and Propranolol (Extended Release)	12	0.0%	****	****
Hemangioma and Propranolol (Regular)	58	0.1%	****	* * * *
Hemangioma and Propranolol (Hemangeol)	0	0.0%	0	0.0%
Hemangioma and Acebutolol	0	0.0%	0	0.0%
Hemangioma and Atenolol	****	****	****	****
Hemangioma and Betaxolol	0	0.0%	0	0.0%
Hemangioma and Bisoprolol	0	0.0%	0	0.0%
Hemangioma and Carvedilol	0	0.0%	0	0.0%
Hemangioma and Labetalol	* * * * *	****	****	* * * *
Hemangioma and Nadolol	****	****	****	****
Hemangioma and Nebivolol	0	0.0%	0	0.0%
Hemangioma and Pindolol	0	0.0%	0	0.0%
Hemangioma and Sotalol	0	0.0%	0	0.0%
Hemangioma and Timolol	0	0.0%	0	0.0%
Long QT Syndrome and Any Metoprolol	48	0.1%	27	0.0%
Long QT Syndrome and Metoprolol (Extended Release)	24	0.0%	11	0.0%
Long QT Syndrome and Metoprolol (Regular) Long QT Syndrome and Any Propranolol	24 96	0.0% 0.1%	16 62	0.0% 0.1%
Long QT Syndrome and Propranolol (Extended	23	0.0%	15	0.0%
Long QT Syndrome and Propranolol (Regular)	74	0.1%	48	0.1%
Long QT Syndrome and Acebutolol	0	0.0%	0	0.0%



	Beta	Beta Blockers		Beta Blockers (Post-Index Enrollment Requirement)	
Patient Characteristics ^{1,2}	Number/Mean	Percent/ Standard Deviation ³	Number/Mean	Percent/ Standard Deviation ³	
Long QT Syndrome and Atenolol	85	0.1%	56	0.1%	
Long QT Syndrome and Betaxolol	0	0.0%	0	0.0%	
Long QT Syndrome and Bisoprolol	****	****	****	****	
Long QT Syndrome and Carvedilol	13	0.0%	****	****	
Long QT Syndrome and Labetalol	****	****	****	****	
Long QT Syndrome and Nadolol	280	0.3%	179	0.3%	
Long QT Syndrome and Nebivolol	0	0.0%	0	0.0%	
Long QT Syndrome and Pindolol	0	0.0%	0	0.0%	
Long QT Syndrome and Sotalol	****	****	****	****	
Long QT Syndrome and Timolol	****	****	****	****	

¹All metrics are based on total number of episodes per group, except for sex, race, and Hispanic origin which are based on total number of unique patients.

²Characteristics in blue show a standardized difference greater than 0.1.

³Value represents standard deviation where no % follows the value.

⁴Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

⁵The Charlson/Elixhauser Combined Comorbidity Score is calculated based on comorbidities observed during a requester-defined window around the exposure episode start date. (Gagne JJ, Glynn RJ, Avorn J, Levin R, Schneeweiss S. A combined comorbidity score predicted mortality in elderly patients better than existing scores. J Clin Epidemiol. 2011;64(7):749-759)

*****Data are not presented in these cells due to a small sample size or to assure a small cell cannot be recalculated through the cells presented.



	Beta	Blockers	Beta Blockers (Post-Index Enrollme Requirement)	
		Percent/		Percent/
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation ³
Unique patients	17,419	N/A	11,084	N/A
Episodes	18,174	100.0%	11,540	100.0%
Demographic Characteristics				
Age (years)	14.9	3.3	14.8	3.3
Age				
0-1 years	219	1.2%	131	1.1%
2-5 years	378	2.1%	252	2.2%
6-12 years	2,899	16.0%	1,826	15.8%
13-17 years	14,678	80.8%	9,331	80.9%
Sex				
Female	9,616	55.2%	6,083	54.9%
Male	7,803	44.8%	5,001	45.1%
Race ⁴				
American Indian or Alaska Native	141	0.8%	86	0.8%
Asian	167	1.0%	92	0.8%
Black or African American	1,238	7.1%	737	6.6%
Native Hawaiian or Other Pacific Islander	27	0.2%	14	0.1%
Unknown	11,265	64.7%	7,367	66.5%
White	4,581	26.3%	2,788	25.2%
Hispanic origin				
Yes	1,711	9.8%	984	8.9%
No	5,670	32.6%	3,384	30.5%
Unknown	10,038	57.6%	6,716	60.6%
Year				
2008	706	3.9%	539	4.7%
2009	767	4.2%	580	5.0%
2010	753	4.1%	568	4.9%
2011	683	3.8%	524	4.5%
2012	650	3.6%	496	4.3%
2013	660	3.6%	491	4.3%
2014	979	5.4%	768	6.7%
2015	1,640	9.0%	1,227	10.6%
2016	2,460	13.5%	1,984	17.2%
2017	3,443	18.9%	2,618	22.7%
2018	3,270	18.0%	653	5.7%
2019	796	4.4%	609	5.3%
2020	666	3.7%	419	3.6%



	Beta	Blockers	-	ost-Index Enrollment iirement)
		Percent/		Percent/
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation ³
2021	638	3.5%	64	0.6%
2022	63	0.3%	0	0.0%
Health Characteristics				
Charlson/Elixhauser combined comorbidity score ⁵	0.7	1.3	0.7	1.3
Hypertension	3,638	20.0%	2,290	19.8%
Hemangioma	14	0.1%	****	****
Heart Failure	397	2.2%	240	2.1%
Congenital Heart Disease	1,664	9.2%	1,103	9.6%
Atrial Fibrillation	190	1.0%	127	1.1%
Long QT Syndrome	142	0.8%	86	0.7%
Other Cardiac Arrhythmias	6,498	35.8%	3,992	34.6%
Cardiac Arrhythmias (Composite)	6,587	36.2%	4,050	35.1%
Pulmonary Hypertension	109	0.6%	71	0.6%
Cardiomyopathy	731	4.0%	438	3.8%
Coronary Artery Disease	288	1.6%	185	1.6%
Portal Hypertension	20	0.1%	****	****
Anxiety Disorder	2,899	16.0%	1,794	15.5%
Tremor	127	0.7%	83	0.7%
Migraine	2,355	13.0%	1,532	13.3%
Thyrotoxicosis	282	1.6%	181	1.6%
Burns	31	0.2%	20	0.2%
Glaucoma	49	0.3%	38	0.3%
Autism	410	2.3%	236	2.0%
Marfan's Syndrome	96	0.5%	61	0.5%
Pheochromocytoma/Paraganglioma	12	0.1%	****	****
Diabetes	429	2.4%	273	2.4%
Any of the above health characteristics <i>(excluding combined comorbidity score)</i> None of the above health characteristics <i>(excluding</i>	13,309	73.2%	8,387	72.7%
combined comorbidity score)	4,865	26.8%	3,153	27.3%
Hypoglycemia (Day 0)	15	0.1%	11	0.1%
Hypoglycemia (0-3 Months)	84	0.5%	61	0.5%
Hypoglycemia (3-6 Months)	65	0.4%	51	0.4%
Hypoglycemia (6-12 Months)	78	0.4%	66	0.6%
Hypoglycemia (Day 0) and Diabetes	****	****	****	****
Hypoglycemia (0-3 Months) and Diabetes	18	0.1%	14	0.1%
Hypoglycemia (3-6 Months) and Diabetes	11	0.1%	****	****
Hypoglycemia (6-12 Months) and Diabetes	14	0.1%	11	0.1%



	Beta	Blockers	Beta Blockers (Post-Index Enrollment Requirement)	
		Percent/		Percent/
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation ³
Hypoglycemia (Day 0) and No Diabetes	13	0.1%	****	****
Hypoglycemia (0-3 Months) and No Diabetes	66	0.4%	47	0.4%
Hypoglycemia (3-6 Months) and No Diabetes	54	0.3%	43	0.4%
Hypoglycemia (6-12 Months) and No Diabetes	64	0.4%	55	0.5%
Hypoglycemia (Day 0) and Any Metoprolol	15	0.1%	11	0.1%
Hypoglycemia (0-3 Months) and Any Metoprolol	84	0.5%	61	0.5%
Hypoglycemia (3-6 Months) and Any Metoprolol	65	0.4%	51	0.4%
Hypoglycemia (6-12 Months) and Any Metoprolol	78	0.4%	66	0.6%
Hypoglycemia (Day 0) and Any Propranolol	0	0.0%	0	0.0%
Hypoglycemia (0-3 Months) and Any Propranolol	0	0.0%	0	0.0%
Hypoglycemia (3-6 Months) and Any Propranolol	0	0.0%	0	0.0%
Hypoglycemia (6-12 Months) and Any Propranolol	0	0.0%	0	0.0%
Hypoglycemia (Day 0) and Atenolol	0	0.0%	0	0.0%
Hypoglycemia (0-3 Months) and Atenolol	0	0.0%	0	0.0%
Hypoglycemia (3-6 Months) and Atenolol	0	0.0%	0	0.0%
Hypoglycemia (6-12 Months) and Atenolol	0	0.0%	0	0.0%
Hypoglycemia (Day 0) and Nadolol	0	0.0%	0	0.0%
Hypoglycemia (0-3 Months) and Nadolol	0	0.0%	0	0.0%
Hypoglycemia (3-6 Months) and Nadolol	0	0.0%	0	0.0%
Hypoglycemia (6-12 Months) and Nadolol	0	0.0%	0	0.0%
Selective Beta Blockers	18,174	100.0%	11,540	100.0%
Non-Selective Beta Blockers	26	0.1%	19	0.2%
Any Metoprolol	18,174	100.0%	11,540	100.0%
Metoprolol (Extended Release)	10,259	56.4%	6,383	55.3%
Metoprolol (Regular)	7,962	43.8%	5,194	45.0%
Any Propranolol	18	0.1%	15	0.1%
Propranolol (Extended Release)	****	****	****	****
Propranolol (Regular)	****	* * * *	****	****
Propranolol (Hemangeol)	0	0.0%	0	0.0%
Acebutolol	0	0.0%	0	0.0%
Atenolol	19	0.1%	14	0.1%
Betaxolol	0	0.0%	0	0.0%
Bisoprolol	0	0.0%	0	0.0%
Carvedilol	****	****	****	****
Labetalol	****	****	0	0.0%
Nadolol	0	0.0%	0	0.0%
Nebivolol	****	****	****	****



	Beta	Blockers	Beta Blockers (Post-Index Enrollment Requirement)	
		Percent/		Percent/
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation ³
Pindolol	0	0.0%	0	0.0%
Sotalol	****	****	****	****
Timolol	0	0.0%	0	0.0%
Health Characteristics by Beta Blockers				
Hypertension and Any Metoprolol	3,638	20.0%	2,290	19.8%
Hypertension and Metoprolol (Extended Release)	2,090	11.5%	1,289	11.2%
Hypertension and Metoprolol (Regular)	1,568	8.6%	1,018	8.8%
Hypertension and Any Propranolol	****	****	****	****
Hypertension and Propranolol (Extended Release)	0	0.0%	0	0.0%
Hypertension and Propranolol (Regular)	****	* * * * *	****	****
Hypertension and Acebutolol	0	0.0%	0	0.0%
Hypertension and Atenolol	****	****	****	****
Hypertension and Betaxolol	0	0.0%	0	0.0%
Hypertension and Bisoprolol	0	0.0%	0	0.0%
Hypertension and Carvedilol	0	0.0%	0	0.0%
Hypertension and Labetalol	0	0.0%	0	0.0%
Hypertension and Nadolol	0	0.0%	0	0.0%
Hypertension and Nebivolol	0	0.0%	0	0.0%
Hypertension and Pindolol	0	0.0%	0	0.0%
Hypertension and Sotalol	0	0.0%	0	0.0%
Hypertension and Timolol	0	0.0%	0	0.0%
Hemangioma and Any Metoprolol	14	0.1%	****	****
Hemangioma and Metoprolol (Extended Release)	****	* * * * *	****	****
Hemangioma and Metoprolol (Regular)	****	****	****	****
Hemangioma and Any Propranolol	0	0.0%	0	0.0%
Hemangioma and Propranolol (Extended Release)	0	0.0%	0	0.0%
Hemangioma and Propranolol (Regular)	0	0.0%	0	0.0%
Hemangioma and Propranolol (Hemangeol)	0	0.0%	0	0.0%
Hemangioma and Acebutolol	0	0.0%	0	0.0%
Hemangioma and Atenolol	0	0.0%	0	0.0%
Hemangioma and Betaxolol	0	0.0%	0	0.0%
Hemangioma and Bisoprolol	0	0.0%	0	0.0%
Hemangioma and Carvedilol	0	0.0%	0	0.0%
Hemangioma and Labetalol	0	0.0%	0	0.0%
Hemangioma and Nadolol	0	0.0%	0	0.0%
Hemangioma and Nebivolol	0	0.0%	0	0.0%
Hemangioma and Pindolol	0	0.0%	0	0.0%



	Beta Blockers		Beta Blockers (Post-Index Enrollment Requirement)	
Patient Characteristics ^{1,2}	Number/Mean	Percent/ Standard Deviation ³	Number/Mean	Percent/ Standard Deviation ³
Hemangioma and Sotalol	0	0.0%	0	0.0%
Hemangioma and Timolol	0	0.0%	0	0.0%
Long QT Syndrome and Any Metoprolol Long QT Syndrome and Metoprolol (Extended Release) Long QT Syndrome and Metoprolol (Regular) Long QT Syndrome and Any Propranolol Long QT Syndrome and Propranolol (Extended Release) Long QT Syndrome and Propranolol (Regular)	142 61 81 0 0 0	0.8% 0.3% 0.4% 0.0% 0.0% 0.0%	86 33 53 0 0 0	0.7% 0.3% 0.5% 0.0% 0.0% 0.0%
Long QT Syndrome and Acebutolol Long QT Syndrome and Atenolol Long QT Syndrome and Betaxolol	0 0 0	0.0% 0.0% 0.0%	0 0 0	0.0% 0.0% 0.0%
Long QT Syndrome and Bisoprolol Long QT Syndrome and Carvedilol	0 *****	0.0%	0 *****	0.0%
Long QT Syndrome and Labetalol Long QT Syndrome and Nadolol	0 0	0.0% 0.0%	0 0	0.0% 0.0%
Long QT Syndrome and Nebivolol Long QT Syndrome and Pindolol	0	0.0%	0	0.0%
Long QT Syndrome and Sotalol Long QT Syndrome and Timolol	0 0	0.0% 0.0%	0 0	0.0% 0.0%

¹All metrics are based on total number of episodes per group, except for sex, race, and Hispanic origin which are based on total number of unique patients.

²Characteristics in blue show a standardized difference greater than 0.1.

³Value represents standard deviation where no % follows the value.

⁴Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

⁵The Charlson/Elixhauser Combined Comorbidity Score is calculated based on comorbidities observed during a requester-defined window around the exposure episode start date. (Gagne JJ, Glynn RJ, Avorn J, Levin R, Schneeweiss S. A combined comorbidity score predicted mortality in elderly patients better than existing scores. J Clin Epidemiol. 2011;64(7):749-759)

*****Data are not presented in these cells due to a small sample size or to assure a small cell cannot be recalculated through the cells presented.



Unique patients 9,921 N/A 6,192 N/A Episodes 10,259 100.0% 6,383 100.0% Demographic Characteristics		Beta	Blockers		ost-Index Enrollment uirement)
Unique patients9,921N/A6,192N/AEpisodes10,259100.0%6,383100.0%Demographic Characteristis*********************************			Percent/		Percent/
Episodes 10,259 100,0% 6,333 100,0% Demognit Characteristic	Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation ³
Demographic Characteristics Age 15.1 2.9 15.1 2.8 Age 0 9 9 0.5% 29 0.5% 0-1 years 54 0.5% 29 0.5% 6-12 years 1.27 1.2% 84 1.3% 6-12 years 1.536 15.0% 946 1.48% 13-17 years 8,542 8.3.3% 5,324 8.3.4% Sex Female 5,494 55.4% 3,414 55.1% Male 4,427 44.6% 2,778 44.9% Race ⁴	Unique patients	9,921	N/A	6,192	N/A
Age (vers) 15.1 2.9 15.1 2.8 Age 0.1 years 54 0.5% 29 0.5% 2-5 years 127 1.5% 94 1.48% 13-17 years 1.536 15.0% 946 1.48% 13-17 years 8,542 83.3% 5,324 83.4% Sex	Episodes	10,259	100.0%	6,383	100.0%
No $2 + 2 + 2 + 2 + 2 + 2 + 2 + 2 + 2 + 2 +$	Demographic Characteristics				
0-1 years540.5%290.5%2-5 years1271.2%841.3%6-12 years1,53615.0%94644.8%13-17 years8,54083.3%5,24083.4%13-17 years5,49455.4%3,41455.1%American Indian or Alaska Native740.7%440.7%American Indian or Alaska Native740.7%440.7%Asian1031.0%540.9%Black or African American6516.6%3706.0%Native Hawailan or Other Pacific Islander180.2%110.2%Unknown6,63366.9%4,30569.5%White2,4223.4%1,6782.7.1%Unknown2,98630.1%1,6782.7.1%Vear20093873.8%2.904.5%20103923.8%2.904.5%20113563.5%2.644.1%20123573.5%2.644.1%20133613.5%2.644.1%20143563.5%2.644.1%20158118.7%4.166.5%20145455.3%4.166.5%20158118.7%6.7410.6%20161,2971,26%1,05416.5%20161,2971,26%1,05416.5%20161,2941,8541,65%3,146.5%	Age (years)	15.1	2.9	15.1	2.8
2-years 127 1.2% 84 1.3% 6-12 years 1,536 15.0% 946 14.8% 13-17 years 8,542 83.3% 5,324 83.4% 13-17 years 8,542 83.3% 5,324 83.4% 13-17 years 8,494 83.3% 5,324 83.4% Sec	Age				
6-1 years 1,536 15.0% 946 14.8% 13-17 years 8,542 83.3% 5,324 83.4% Set	0-1 years	54	0.5%	29	0.5%
13-17 years8,54283.3%5,32483.4%SexFemale5,49455.4%3,41455.1%Male4,2744.6%2,778M4.9%Marcian Indian or Alaska Native740.7%440.7%American Indian or Alaska Native740.7%440.7%Asian1031.0%540.9%Black or African American6516.6%3706.0%Native Hawaiian or Other Pacific Islander180.2%110.2%Unknown6,63366.9%4,30569.5%White2,9422,46%4,30569.5%White2,98630.1%1,6782,71%Unknown6,0146.06%3.9664.5%Vear23.8%2.904.5%20093873.8%2.904.5%20103563.5%2.544.0%20113563.5%2.544.0%20123573.5%2.644.1%20133773.7%2.704.2%20145455.3%4166.5%20158918.7%67410.6%20161,29712.6%10.5415%20151,89418.5%37113.8%20161,29712.6%10.5415%20151,89418.5%37115.8%20161,8941,89418.5%37120161,894 </td <td>2-5 years</td> <td>127</td> <td>1.2%</td> <td>84</td> <td>1.3%</td>	2-5 years	127	1.2%	84	1.3%
Sex Female 5,494 55.4% 3,414 55.1% Male 4,427 44.6% 2,778 44.9% Marican Indian or Alaska Native 74 0.7% 44 0.9% American Indian or Alaska Native 74 0.7% 44 0.9% Black or African American 651 6.6% 370 6.0% Native Hawaiian or Other Pacific Islander 18 0.2% 11 0.2% Uhknown 6,633 66.9% 4,305 69.5% White 2,442 24.6% 1,408 22.7% Uhknown 6,014 60.6% 3,996 64.5% Unknown 6,014 60.6% 3,996 64.5% Unknown 6,014 60.6% 3,996 64.5% 2008 442 4.3% 344 5.2% 2010 387 3.8% 290 4.5% 2011 356 3.5% 264 4.1% 2012 357 3.5%	6-12 years	1,536	15.0%	946	14.8%
Female5,49455.4%3,41455.1%Male4,42744.6%2,77844.9%Mace ⁴ 740.7%440.7%Asin1031.0%540.9%Black or African American6516.6%3706.0%Native Hawaiian or Other Pacific Islander180.2%110.2%Uhknown6,63366.9%4,305695%White2,42224.6%1,40822.7%Uhknown6,61460.1%1,67827.1%No2,98630.1%1,67827.1%Unknown6,01460.6%3.99664.5%Year219.3%5188.4%No2,98630.1%1,6782.7%2008424.3%3345.2%20103873.8%2904.5%20113563.5%2644.1%20123573.5%2644.1%20133773.7%2704.2%20145455.3%4166.5%20158918.7%67410.6%20161,29712.6%1,05113.6%201719.4%19.0%1,47123.0%201819.9%1,47423.0%3.6%20145455.3%41.66.5%201561.9%1,29712.6%1,05420161,29712.6%1,0546.5%201519.9% </td <td>13-17 years</td> <td>8,542</td> <td>83.3%</td> <td>5,324</td> <td>83.4%</td>	13-17 years	8,542	83.3%	5,324	83.4%
Male 4,427 44.6% 2,778 44.9% Race ⁴ 74 0.7% 44 0.7% Asian 103 1.0% 54 0.9% Black or African American 651 6.6% 370 6.0% Native Hawaiian or Other Pacific Islander 18 0.2% 11 0.2% Unknown 6,633 66.9% 4,305 69.5% White 2,426 24.6% 1,408 22.7% Unknown 6,633 66.9% 4,305 69.5% White 2,986 30.1% 1,678 27.1% Unknown 6,014 60.6% 3,996 64.5% 2008 442 4.3% 334 5.2% 2010 387 3.8% 297 4.7%	Sex				
American Indian or Alaska Native 74 0.7% 44 0.7% Asian 103 1.0% 54 0.9% Black or African American 651 6.6% 370 6.0% Native Hawaiian or Other Pacific Islander 18 0.2% 11 0.2% Unknown 6.633 66.9% 4,305 69.5% White 2.42 24.6% 1,408 22.6% Itspanic origin 74 9.3% 518 8.4% No 2.986 30.1% 1,678 27.1% Unknown 6.014 60.6% 3.996 64.5% 2009 387 3.8% 2.97 4.7% 2010 357 3.5% 2.64 4	Female	5,494	55.4%	3,414	55.1%
American Indian or Alaska Native 74 0.7% 44 0.7% Asian 103 1.0% 54 0.9% Black or African American 651 6.6% 370 6.0% Native Hawaiian or Other Pacific Islander 18 0.2% 11 0.2% Unknown 6.633 66.9% 4,305 69.5% White 2,442 24.6% 1,408 22.7% Hispanic origin 2,986 30.1% 1,678 27.1% Ver 2,986 30.1% 1,678 27.1% Outknown 6,014 60.6% 3,996 64.5% Ver 2008 442 4.3% 334 5.2% 2009 387 3.8% 297 4.7% 2010 392 3.8% 290 4.5% 2011 355 5.5% 264 4.1% 2013 377 3.7% 270 4.2% 2014 545 5.3% 416 6.5% <td>Male</td> <td>4,427</td> <td>44.6%</td> <td>2,778</td> <td>44.9%</td>	Male	4,427	44.6%	2,778	44.9%
Asian1031.0%540.9%Back or African American6516.6%3706.0%Native Hawaiian or Other Pacific Islander180.2%110.2%Unknown6.63366.9%4,30569.5%White2,44224.6%1,40822.7%Hispanic origin79.3%5188.4%No2,98630.1%1,67827.1%Unknown6,01460.6%3,99664.5%Ver73.8%2974.7%20084424.3%3345.2%20093873.8%2974.7%20103923.8%2904.5%20113563.5%2644.1%20133573.7%2704.2%20145455.3%4166.5%20158918.7%67410.6%20161,29712.6%1,05416.5%20171,94519.0%1,47123.0%20181,89418.5%3715.8%	Race ⁴				
Black or African American 651 6.6% 370 6.0% Native Hawaiian or Other Pacific Islander 18 0.2% 11 0.2% Unknown 6.633 66.9% 4,305 69.5% White 2,442 24.6% 1,408 22.7% White 2,422 24.6% 1,408 22.7% Unknown 6,014 60.6% 3,996 64.5% 2008 442 4.3% 334 5.2% 2010 387 3.8% 297 4.7% 2011 356 3.5% 264 4.1% 2012 357 3.5% 264 4.1%	American Indian or Alaska Native	74	0.7%	44	0.7%
Native Hawaiian or Other Pacific Islander 18 0.2% 11 0.2% Unknown 6,633 66.9% 4,305 69.5% White 2,442 24.6% 1,408 22.7% Hispanic origin 2,986 30.1% 1,678 27.1% Unknown 6,014 60.6% 3,996 64.5% Unknown 6,014 60.6% 3,996 64.5% Year 2008 442 4.3% 334 5.2% 2009 387 3.8% 297 4.7% 2010 392 3.8% 290 4.5% 2011 356 3.5% 254 4.0% 2012 357 3.5% 264 4.1% 2013 377 3.7% 270 4.2% 2014 545 5.3% 416 6.5% 2015 891 8.7% 674 10.6% 2016 1,297 12.6% 1,054 16.5% 201	Asian	103	1.0%	54	0.9%
Unknown6,63366.9%4,30569.5%White2,44224.6%1,40822.7%Hspanic origin9.3%5188.4%No2,98630.1%1,67827.1%Unknown6,0430.966.536.5%20084424.3%3345.2%20093873.8%2974.7%20103923.8%2904.5%20113563.5%2644.1%20133773.5%2644.1%20145455.3%4166.5%20158918.7%67410.6%20161,29712.6%1,05416.5%20171,94519.0%1,47123.0%20181,89418.5%3715.8%20194784.7%3555.6%	Black or African American	651	6.6%	370	6.0%
White2,44224.6%1,40822.7%Hispanic origin9219.3%5188.4%No2,98630.1%1,67827.1%Unknown6,01460.6%3,9966.45%Year74.3%3345.2%20084424.3%3345.2%20093873.8%2974.7%20103923.8%2904.5%20113563.5%2644.1%20123573.5%2644.1%20133773.7%2704.2%20145455.3%4166.5%20158918.7%67410.6%20161,29712.6%1,05416.5%20171,94519.0%1,47123.0%20181,89418.5%3715.8%20194784.7%3555.6%	Native Hawaiian or Other Pacific Islander	18	0.2%	11	0.2%
Yes9219.3%5.188.4%No2,98630.1%1,67827.1%Unknown6,01460.6%3,99664.5%2084424.3%3345.2%2093873.8%2974.7%20103923.8%2904.5%20113563.5%2544.0%20123573.5%2644.1%20133773.7%2704.2%20145455.3%4166.5%20156918.7%67410.6%20161,29712.6%1,05416.5%20171,94519.0%1,47123.0%20181,89418.5%3715.8%20194784.7%3555.6%	Unknown	6,633	66.9%	4,305	69.5%
Yes9219.3%5188.4%No2,98630.1%1,67827.1%Unknown6,01460.6%3,99664.5%Year3345.2%20084424.3%3345.2%20093873.8%2974.7%20103923.8%2904.5%20113563.5%2544.0%20123573.5%2644.1%20133773.7%2704.2%20145455.3%4166.5%20158918.7%67410.6%20161,29712.6%1,05416.5%20171,94519.0%1,47123.0%20181,8944.5%3715.8%20194784.7%3555.6%	White	2,442	24.6%	1,408	22.7%
No2,98630.1%1,67827.1%Unknown6,01460.6%3,99664.5%Year70084424.3%3345.2%20093873.8%2974.7%20103923.8%2904.5%20113563.5%2544.0%20123573.5%2644.1%20133773.7%2704.2%20145455.3%4166.5%20158918.7%67410.6%20161,29712.6%1,05416.5%20171,94519.0%1,47123.0%20184784.7%3555.6%	Hispanic origin				
Unknown6,01460.6%3,99664.5%Year20084424.3%3345.2%20093873.8%2974.7%20103923.8%2904.5%20113563.5%2544.0%20123573.5%2644.1%20133773.7%2704.2%20145455.3%4166.5%20158918.7%67410.6%20161,29712.6%1,05416.5%20171,94519.0%1,47123.0%20181,89418.5%3715.8%20194784.7%3555.6%	Yes	921	9.3%	518	8.4%
Year20084424.3%3345.2%20093873.8%2974.7%20103923.8%2904.5%20113563.5%2544.0%20123573.5%2644.1%20133773.7%2704.2%20145455.3%4166.5%20158918.7%67410.6%20161,29712.6%1,05416.5%20181,89418.5%3715.8%20194784.7%3555.6%	No	2,986	30.1%	1,678	27.1%
20084424.3%3345.2%20093873.8%2974.7%20103923.8%2904.5%20113563.5%2544.0%20123573.5%2644.1%20133773.7%2704.2%20145455.3%4166.5%20158918.7%67410.6%20161,29712.6%1,05416.5%20171,94519.0%1,47123.0%20181,89418.5%3715.8%20194784.7%3555.6%	Unknown	6,014	60.6%	3,996	64.5%
20093873.8%2974.7%20103923.8%2904.5%20113563.5%2544.0%20123573.5%2644.1%20133773.7%2704.2%20145455.3%4166.5%20158918.7%67410.6%20161,29712.6%1,05416.5%20171,94519.0%1,47123.0%20181,89418.5%3715.8%20194784.7%3555.6%	Year				
20103923.8%2904.5%20113563.5%2544.0%20123573.5%2644.1%20133773.7%2704.2%20145455.3%4166.5%20158918.7%67410.6%20161,29712.6%1,05416.5%20171,94519.0%1,47123.0%20181,89418.5%3715.8%20194784.7%3555.6%	2008	442	4.3%	334	5.2%
20113563.5%2544.0%20123573.5%2644.1%20133773.7%2704.2%20145455.3%4166.5%20158918.7%67410.6%20161,29712.6%1,05416.5%201719.0%1,47123.0%20181,89418.5%3715.8%20194784.7%3555.6%	2009	387	3.8%	297	4.7%
20123573.5%2644.1%20133773.7%2704.2%20145455.3%4166.5%20158918.7%67410.6%20161,29712.6%1,05416.5%201719.0%1,47123.0%20181,89418.5%3715.8%20194784.7%3555.6%	2010	392	3.8%	290	4.5%
20133773.7%2704.2%20145455.3%4166.5%20158918.7%67410.6%20161,29712.6%1,05416.5%201719.0%1,47123.0%20181,89418.5%3715.8%20194784.7%3555.6%	2011	356	3.5%	254	4.0%
20145455.3%4166.5%20158918.7%67410.6%20161,29712.6%1,05416.5%201719.0%1,47123.0%20181,89418.5%3715.8%20194784.7%3555.6%	2012	357	3.5%	264	4.1%
20158918.7%67410.6%20161,29712.6%1,05416.5%20171,94519.0%1,47123.0%20181,89418.5%3715.8%20194784.7%3555.6%	2013	377	3.7%	270	4.2%
20161,29712.6%1,05416.5%20171,94519.0%1,47123.0%20181,89418.5%3715.8%20194784.7%3555.6%	2014	545	5.3%	416	6.5%
20171,94519.0%1,47123.0%20181,89418.5%3715.8%20194784.7%3555.6%	2015	891	8.7%	674	10.6%
20181,89418.5%3715.8%20194784.7%3555.6%	2016	1,297	12.6%	1,054	16.5%
2019 478 4.7% 355 5.6%	2017	1,945	19.0%	1,471	23.0%
	2018	1,894	18.5%	371	5.8%
2020 414 4.0% 293 4.6%	2019	478	4.7%	355	5.6%
	2020	414	4.0%	293	4.6%



	Beta	Blockers	•	ost-Index Enrollment uirement)
		Percent/		Percent/
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation ³
2021	442	4.3%	40	0.6%
2022	42	0.4%	0	0.0%
Health Characteristics				
Charlson/Elixhauser combined comorbidity score ⁵	0.6	1.2	0.6	1.2
Hypertension	2,090	20.4%	1,289	20.2%
Hemangioma	* * * * *	****	****	****
Heart Failure	171	1.7%	103	1.6%
Congenital Heart Disease	835	8.1%	547	8.6%
Atrial Fibrillation	109	1.1%	73	1.1%
Long QT Syndrome	61	0.6%	33	0.5%
Other Cardiac Arrhythmias	3,721	36.3%	2,275	35.6%
Cardiac Arrhythmias (Composite)	3,761	36.7%	2,301	36.0%
Pulmonary Hypertension	48	0.5%	30	0.5%
Cardiomyopathy	383	3.7%	226	3.5%
Coronary Artery Disease	135	1.3%	83	1.3%
Portal Hypertension	****	****	****	****
Anxiety Disorder	1,660	16.2%	979	15.3%
Tremor	57	0.6%	38	0.6%
Migraine	1,469	14.3%	932	14.6%
Thyrotoxicosis	147	1.4%	90	1.4%
Burns	14	0.1%	****	****
Glaucoma	30	0.3%	22	0.3%
Autism	212	2.1%	123	1.9%
Marfan's Syndrome	60	0.6%	38	0.6%
Pheochromocytoma/Paraganglioma	****	****	****	****
Diabetes	202	2.0%	124	1.9%
Any of the above health characteristics (excluding				
<i>combined comorbidity score)</i> None of the above health characteristics <i>(excluding</i>	7,638	74.5%	4,728	74.1%
combined comorbidity score)	2,621	25.5%	1,655	25.9%
Hypoglycemia (Day 0)	****	****	****	****
Hypoglycemia (0-3 Months)	43	0.4%	34	0.5%
Hypoglycemia (3-6 Months)	31	0.3%	22	0.3%
Hypoglycemia (6-12 Months)	42	0.4%	37	0.6%
Hypoglycemia (Day 0) and Diabetes	0	0.0%	0	0.0%
Hypoglycemia (0-3 Months) and Diabetes	****	****	****	****
Hypoglycemia (3-6 Months) and Diabetes	* * * * *	****	****	****
Hypoglycemia (6-12 Months) and Diabetes	****	****	****	****



	Beta	Blockers	Beta Blockers (Post-Index Enrollment Requirement)		
		Percent/		Percent/	
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation ³	
Hypoglycemia (Day 0) and No Diabetes	****	****	****	****	
Hypoglycemia (0-3 Months) and No Diabetes	35	0.3%	27	0.4%	
Hypoglycemia (3-6 Months) and No Diabetes	25	0.2%	17	0.3%	
Hypoglycemia (6-12 Months) and No Diabetes	36	0.4%	31	0.5%	
Hypoglycemia (Day 0) and Any Metoprolol	****	****	****	****	
Hypoglycemia (0-3 Months) and Any Metoprolol	43	0.4%	34	0.5%	
Hypoglycemia (3-6 Months) and Any Metoprolol	31	0.3%	22	0.3%	
Hypoglycemia (6-12 Months) and Any Metoprolol	42	0.4%	37	0.6%	
Hypoglycemia (Day 0) and Any Propranolol	0	0.0%	0	0.0%	
Hypoglycemia (0-3 Months) and Any Propranolol	0	0.0%	0	0.0%	
Hypoglycemia (3-6 Months) and Any Propranolol	0	0.0%	0	0.0%	
Hypoglycemia (6-12 Months) and Any Propranolol	0	0.0%	0	0.0%	
Hypoglycemia (Day 0) and Atenolol	0	0.0%	0	0.0%	
Hypoglycemia (0-3 Months) and Atenolol	0	0.0%	0	0.0%	
Hypoglycemia (3-6 Months) and Atenolol	0	0.0%	0	0.0%	
Hypoglycemia (6-12 Months) and Atenolol	0	0.0%	0	0.0%	
Hypoglycemia (Day 0) and Nadolol	0	0.0%	0	0.0%	
Hypoglycemia (0-3 Months) and Nadolol	0	0.0%	0	0.0%	
Hypoglycemia (3-6 Months) and Nadolol	0	0.0%	0	0.0%	
Hypoglycemia (6-12 Months) and Nadolol	0	0.0%	0	0.0%	
Selective Beta Blockers	10,259	100.0%	6,383	100.0%	
Non-Selective Beta Blockers	16	0.2%	12	0.2%	
Any Metoprolol	10,259	100.0%	6,383	100.0%	
Metoprolol (Extended Release)	10,259	100.0%	6,383	100.0%	
Metoprolol (Regular)	47	0.5%	37	0.6%	
Any Propranolol	11	0.1%	****	****	
Propranolol (Extended Release)	0	0.0%	0	0.0%	
Propranolol (Regular)	11	0.1%	****	****	
Propranolol (Hemangeol)	0	0.0%	0	0.0%	
Acebutolol	0	0.0%	0	0.0%	
Atenolol	15	0.1%	11	0.2%	
Betaxolol	0	0.0%	0	0.0%	
Bisoprolol	0	0.0%	0	0.0%	
Carvedilol	****	****	****	****	
Labetalol	****	****	0	0.0%	
Nadolol	0	0.0%	0	0.0%	
Nebivolol	0	0.0%	0	0.0%	



	Beta	Blockers	Beta Blockers (Post-Index Enrollment Requirement)	
		Percent/		Percent/
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation ³
Pindolol	0	0.0%	0	0.0%
Sotalol	0	0.0%	0	0.0%
Timolol	0	0.0%	0	0.0%
Health Characteristics by Beta Blockers				
Hypertension and Any Metoprolol	2,090	20.4%	1,289	20.2%
Hypertension and Metoprolol (Extended Release)	2,090	20.4%	1,289	20.2%
Hypertension and Metoprolol (Regular)	20	0.2%	17	0.3%
Hypertension and Any Propranolol	****	****	****	****
Hypertension and Propranolol (Extended Release)	0	0.0%	0	0.0%
Hypertension and Propranolol (Regular)	****	****	****	****
Hypertension and Acebutolol	0	0.0%	0	0.0%
Hypertension and Atenolol	****	****	****	****
Hypertension and Betaxolol	0	0.0%	0	0.0%
Hypertension and Bisoprolol	0	0.0%	0	0.0%
Hypertension and Carvedilol	0	0.0%	0	0.0%
Hypertension and Labetalol	0	0.0%	0	0.0%
Hypertension and Nadolol	0	0.0%	0	0.0%
Hypertension and Nebivolol	0	0.0%	0	0.0%
Hypertension and Pindolol	0	0.0%	0	0.0%
Hypertension and Sotalol	0	0.0%	0	0.0%
Hypertension and Timolol	0	0.0%	0	0.0%
Hemangioma and Any Metoprolol	****	****	****	****
Hemangioma and Metoprolol (Extended Release)	****	****	****	****
Hemangioma and Metoprolol (Regular)	0	0.0%	0	0.0%
Hemangioma and Any Propranolol	0	0.0%	0	0.0%
Hemangioma and Propranolol (Extended Release)	0	0.0%	0	0.0%
Hemangioma and Propranolol (Regular)	0	0.0%	0	0.0%
Hemangioma and Propranolol (Hemangeol)	0	0.0%	0	0.0%
Hemangioma and Acebutolol	0	0.0%	0	0.0%
Hemangioma and Atenolol	0	0.0%	0	0.0%
Hemangioma and Betaxolol	0	0.0%	0	0.0%
Hemangioma and Bisoprolol	0	0.0%	0	0.0%
Hemangioma and Carvedilol	0	0.0%	0	0.0%
Hemangioma and Labetalol	0	0.0%	0	0.0%
Hemangioma and Nadolol	0	0.0%	0	0.0%
Hemangioma and Nebivolol	0	0.0%	0	0.0%
Hemangioma and Pindolol	0	0.0%	0	0.0%



	Beta	Blockers	•	ost-Index Enrollment Jirement)
Patient Characteristics ^{1,2}	Number/Mean	Percent/ Standard Deviation ³	Number/Mean	Percent/ Standard Deviation ³
Hemangioma and Sotalol	0	0.0%	0	0.0%
Hemangioma and Timolol	0	0.0%	0	0.0%
Long QT Syndrome and Any Metoprolol Long QT Syndrome and Metoprolol (Extended Release) Long QT Syndrome and Metoprolol (Regular) Long QT Syndrome and Any Propranolol Long QT Syndrome and Propranolol (Extended Release) Long QT Syndrome and Propranolol (Regular) Long QT Syndrome and Acebutolol Long QT Syndrome and Atenolol	61 61 0 0 0 0 0 0	0.6% 0.6% 0.0% 0.0% 0.0% 0.0% 0.0%	33 33 0 0 0 0 0 0 0	0.5% 0.5% 0.0% 0.0% 0.0% 0.0% 0.0%
Long QT Syndrome and Betaxolol	0	0.0%	0	0.0%
Long QT Syndrome and Bisoprolol Long QT Syndrome and Carvedilol	0 0	0.0% 0.0%	0 0	0.0% 0.0%
Long QT Syndrome and Labetalol	0	0.0% 0.0%	0	0.0% 0.0%
Long QT Syndrome and Nadolol Long QT Syndrome and Nebivolol	0	0.0%	0 0	0.0%
Long QT Syndrome and Pindolol Long QT Syndrome and Sotalol Long QT Syndrome and Timolol	0 0 0	0.0% 0.0% 0.0%	0 0 0	0.0% 0.0% 0.0%

¹All metrics are based on total number of episodes per group, except for sex, race, and Hispanic origin which are based on total number of unique patients.

²Characteristics in blue show a standardized difference greater than 0.1.

³Value represents standard deviation where no % follows the value.

⁴Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

⁵The Charlson/Elixhauser Combined Comorbidity Score is calculated based on comorbidities observed during a requester-defined window around the exposure episode start date. (Gagne JJ, Glynn RJ, Avorn J, Levin R, Schneeweiss S. A combined comorbidity score predicted mortality in elderly patients better than existing scores. J Clin Epidemiol. 2011;64(7):749-759)

*****Data are not presented in these cells due to a small sample size or to assure a small cell cannot be recalculated through the cells presented.



		Blockers	-	ost-Index Enrollment uirement)
		Percent/		Percent/
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation ³
Unique patients	7,620	N/A	4,975	N/A
Episodes	7,962	100.0%	5,194	100.0%
Demographic Characteristics				
Age (years)	14.5	3.8	14.5	3.7
Age				
0-1 years	165	2.1%	102	2.0%
2-5 years	252	3.2%	169	3.3%
6-12 years	1,367	17.2%	883	17.0%
13-17 years	6,178	77.6%	4,040	77.8%
Sex				
Female	4,192	55.0%	2,714	54.6%
Male	3,428	45.0%	2,261	45.4%
Race ⁴				
American Indian or Alaska Native	69	0.9%	43	0.9%
Asian	****	****	* * * * *	* * * * *
Black or African American	599	7.9%	377	7.6%
Native Hawaiian or Other Pacific Islander	* * * * *	* * * * *	* * * * *	* * * * *
Unknown	4,698	61.7%	3,104	62.4%
White	2,181	28.6%	1,410	28.3%
Hispanic origin				
Yes	799	10.5%	467	9.4%
No	2,735	35.9%	1,743	35.0%
Unknown	4,086	53.6%	2,765	55.6%
Year				
2008	275	3.5%	213	4.1%
2009	383	4.8%	286	5.5%
2010	362	4.5%	279	5.4%
2011	327	4.1%	270	5.2%
2012	293	3.7%	232	4.5%
2013	286	3.6%	224	4.3%
2014	435	5.5%	352	6.8%
2015	755	9.5%	559	10.8%
2016	1,170	14.7%	937	18.0%
2017	1,506	18.9%	1,154	22.2%
2018	1,379	17.3%	283	5.4%
2019	318	4.0%	254	4.9%
2020	254	3.2%	127	2.4%



	Beta	Blockers	Beta Blockers (Post-Index Enrollment Requirement)	
		Percent/		Percent/
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation ³
2021	198	2.5%	24	0.5%
2022	21	0.3%	0	0.0%
Health Characteristics				
Charlson/Elixhauser combined comorbidity score ⁵	0.8	1.5	0.8	1.4
Hypertension	1,568	19.7%	1,018	19.6%
Hemangioma	11	0.1%	****	****
Heart Failure	226	2.8%	137	2.6%
Congenital Heart Disease	830	10.4%	557	10.7%
Atrial Fibrillation	81	1.0%	54	1.0%
Long QT Syndrome	81	1.0%	53	1.0%
Other Cardiac Arrhythmias	2,790	35.0%	1,725	33.2%
Cardiac Arrhythmias (Composite)	2,839	35.7%	1,757	33.8%
Pulmonary Hypertension	61	0.8%	41	0.8%
Cardiomyopathy	350	4.4%	213	4.1%
Coronary Artery Disease	153	1.9%	102	2.0%
Portal Hypertension	17	0.2%	****	****
Anxiety Disorder	1,245	15.6%	820	15.8%
Tremor	70	0.9%	45	0.9%
Migraine	893	11.2%	607	11.7%
Thyrotoxicosis	135	1.7%	91	1.8%
Burns	17	0.2%	13	0.3%
Glaucoma	19	0.2%	16	0.3%
Autism	198	2.5%	113	2.2%
Marfan's Syndrome	36	0.5%	23	0.4%
Pheochromocytoma/Paraganglioma	****	****	****	****
Diabetes	229	2.9%	151	2.9%
Any of the above health characteristics (excluding	5 700	74 70/	2 600	74.00/
<i>combined comorbidity score)</i> None of the above health characteristics <i>(excluding</i>	5,708	71.7%	3,690	71.0%
combined comorbidity score)	2,254	28.3%	1,504	29.0%
Hypoglycemia (Day 0)	****	****	****	****
Hypoglycemia (0-3 Months)	41	0.5%	27	0.5%
Hypoglycemia (3-6 Months)	34	0.4%	29	0.6%
Hypoglycemia (6-12 Months)	37	0.5%	30	0.6%
Hypoglycemia (Day 0) and Diabetes	****	****	* * * * *	****
Hypoglycemia (0-3 Months) and Diabetes	****	****	* * * * *	****
Hypoglycemia (3-6 Months) and Diabetes	****	****	****	****
Hypoglycemia (6-12 Months) and Diabetes	* * * * *	****	* * * * *	****



	Beta	Blockers	Beta Blockers (Post-Index Enrollment Requirement)		
		Percent/		Percent/	
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation ³	
Hypoglycemia (Day 0) and No Diabetes	****	****	****	****	
Hypoglycemia (0-3 Months) and No Diabetes	****	****	****	****	
Hypoglycemia (3-6 Months) and No Diabetes	29	0.4%	26	0.5%	
Hypoglycemia (6-12 Months) and No Diabetes	29	0.4%	25	0.5%	
Hypoglycemia (Day 0) and Any Metoprolol	****	****	****	****	
Hypoglycemia (0-3 Months) and Any Metoprolol	41	0.5%	27	0.5%	
Hypoglycemia (3-6 Months) and Any Metoprolol	34	0.4%	29	0.6%	
Hypoglycemia (6-12 Months) and Any Metoprolol	37	0.5%	30	0.6%	
Hypoglycemia (Day 0) and Any Propranolol	0	0.0%	0	0.0%	
Hypoglycemia (0-3 Months) and Any Propranolol	0	0.0%	0	0.0%	
Hypoglycemia (3-6 Months) and Any Propranolol	0	0.0%	0	0.0%	
Hypoglycemia (6-12 Months) and Any Propranolol	0	0.0%	0	0.0%	
Hypoglycemia (Day 0) and Atenolol	0	0.0%	0	0.0%	
Hypoglycemia (0-3 Months) and Atenolol	0	0.0%	0	0.0%	
Hypoglycemia (3-6 Months) and Atenolol	0	0.0%	0	0.0%	
Hypoglycemia (6-12 Months) and Atenolol	0	0.0%	0	0.0%	
Hypoglycemia (Day 0) and Nadolol	0	0.0%	0	0.0%	
Hypoglycemia (0-3 Months) and Nadolol	0	0.0%	0	0.0%	
Hypoglycemia (3-6 Months) and Nadolol	0	0.0%	0	0.0%	
Hypoglycemia (6-12 Months) and Nadolol	0	0.0%	0	0.0%	
Selective Beta Blockers	7,962	100.0%	5,194	100.0%	
Non-Selective Beta Blockers	****	****	****	****	
Any Metoprolol	7,962	100.0%	5,194	100.0%	
Metoprolol (Extended Release)	47	0.6%	37	0.7%	
Metoprolol (Regular)	7,962	100.0%	5,194	100.0%	
Any Propranolol	* * * *	****	****	****	
Propranolol (Extended Release)	****	****	****	****	
Propranolol (Regular)	****	****	****	****	
Propranolol (Hemangeol)	0	0.0%	0	0.0%	
Acebutolol	0	0.0%	0	0.0%	
Atenolol	* * * * *	****	****	****	
Betaxolol	0	0.0%	0	0.0%	
Bisoprolol	0	0.0%	0	0.0%	
Carvedilol	****	****	****	****	
Labetalol	0	0.0%	0	0.0%	
Nadolol	0	0.0%	0	0.0%	
Nebivolol	****	****	****	****	



	Beta Blockers		Beta Blockers (Post-Index Enrollment Requirement)	
		Percent/		Percent/
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation ³
Pindolol	0	0.0%	0	0.0%
Sotalol	****	****	****	****
Timolol	0	0.0%	0	0.0%
Health Characteristics by Beta Blockers				
Hypertension and Any Metoprolol	1,568	19.7%	1,018	19.6%
Hypertension and Metoprolol (Extended Release)	20	0.3%	17	0.3%
Hypertension and Metoprolol (Regular)	1,568	19.7%	1,018	19.6%
Hypertension and Any Propranolol	0	0.0%	0	0.0%
Hypertension and Propranolol (Extended Release)	0	0.0%	0	0.0%
Hypertension and Propranolol (Regular)	0	0.0%	0	0.0%
Hypertension and Acebutolol	0	0.0%	0	0.0%
Hypertension and Atenolol	0	0.0%	0	0.0%
Hypertension and Betaxolol	0	0.0%	0	0.0%
Hypertension and Bisoprolol	0	0.0%	0	0.0%
Hypertension and Carvedilol	0	0.0%	0	0.0%
Hypertension and Labetalol	0	0.0%	0	0.0%
Hypertension and Nadolol	0	0.0%	0	0.0%
Hypertension and Nebivolol	0	0.0%	0	0.0%
Hypertension and Pindolol	0	0.0%	0	0.0%
Hypertension and Sotalol	0	0.0%	0	0.0%
Hypertension and Timolol	0	0.0%	0	0.0%
Hemangioma and Any Metoprolol	11	0.1%	****	****
Hemangioma and Metoprolol (Extended Release)	0	0.0%	0	0.0%
Hemangioma and Metoprolol (Regular)	11	0.1%	****	****
Hemangioma and Any Propranolol	0	0.0%	0	0.0%
Hemangioma and Propranolol (Extended Release)	0	0.0%	0	0.0%
Hemangioma and Propranolol (Regular)	0	0.0%	0	0.0%
Hemangioma and Propranolol (Hemangeol)	0	0.0%	0	0.0%
Hemangioma and Acebutolol	0	0.0%	0	0.0%
Hemangioma and Atenolol	0	0.0%	0	0.0%
Hemangioma and Betaxolol	0	0.0%	0	0.0%
Hemangioma and Bisoprolol	0	0.0%	0	0.0%
Hemangioma and Carvedilol	0	0.0%	0	0.0%
Hemangioma and Labetalol	0	0.0%	0	0.0%
Hemangioma and Nadolol	0	0.0%	0	0.0%
Hemangioma and Nebivolol	0	0.0%	0	0.0%
Hemangioma and Pindolol	0	0.0%	0	0.0%



	Beta Blockers		Beta Blockers (Post-Index Enrollment Requirement)	
Patient Characteristics ^{1,2}	Number/Mean	Percent/ Standard Deviation ³	Number/Mean	Percent/ Standard Deviation ³
Hemangioma and Sotalol	0	0.0%	0	0.0%
Hemangioma and Timolol	0	0.0%	0	0.0%
Long QT Syndrome and Any Metoprolol Long QT Syndrome and Metoprolol (Extended Release) Long QT Syndrome and Metoprolol (Regular) Long QT Syndrome and Any Propranolol Long QT Syndrome and Propranolol (Extended Release) Long QT Syndrome and Propranolol (Regular) Long QT Syndrome and Acebutolol Long QT Syndrome and Atenolol Long QT Syndrome and Betaxolol	81 0 81 0 0 0 0 0 0	1.0% 0.0% 1.0% 0.0% 0.0% 0.0% 0.0% 0.0%	53 0 53 0 0 0 0 0 0 0 0	1.0% 0.0% 1.0% 0.0% 0.0% 0.0% 0.0% 0.0%
Long QT Syndrome and Bisoprolol Long QT Syndrome and Carvedilol	U ****	0.0%	U ****	0.0%
Long QT Syndrome and Labetalol Long QT Syndrome and Nadolol Long QT Syndrome and Nebivolol Long QT Syndrome and Pindolol Long QT Syndrome and Sotalol Long QT Syndrome and Timolol	0 0 0 0 0	0.0% 0.0% 0.0% 0.0% 0.0%	0 0 0 0 0	0.0% 0.0% 0.0% 0.0% 0.0%

¹All metrics are based on total number of episodes per group, except for sex, race, and Hispanic origin which are based on total number of unique patients.

²Characteristics in blue show a standardized difference greater than 0.1.

³Value represents standard deviation where no % follows the value.

⁴Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

⁵The Charlson/Elixhauser Combined Comorbidity Score is calculated based on comorbidities observed during a requester-defined window around the exposure episode start date. (Gagne JJ, Glynn RJ, Avorn J, Levin R, Schneeweiss S. A combined comorbidity score predicted mortality in elderly patients better than existing scores. J Clin Epidemiol. 2011;64(7):749-759)

*****Data are not presented in these cells due to a small sample size or to assure a small cell cannot be recalculated through the cells presented.



Unique patients 139,518 N/A 87,789 N/A Episodes 147,338 100.0% 92,518 100.0% Demographic Characteristics 12.0 6.1 12.2 5.9 Age (years) 12.0 6.1 12.2 5.9 O-1 years 25,774 17.5% 15,292 16.5% 2-5 years 3,182 2.2% 1,994 2.2% 6-12 years 25,675 17.4% 16,784 18.1% 13-17 years 92,707 62.9% 58,448 63.2% Sex 54,257 61.8% Male 87,050 62.4% 54,257 61.8% Male 1,364 1.0% 863 1.0% Asian 1,141 0.8% 660 0.8%		Beta	Blockers		ost-Index Enrollment Jirement)
Unique patients 139,518 N/A 87,789 N/A Episodes 147,338 100.0% 92,518 100.0% Demographic Characteristics			Percent/		Percent/
Episodes 147,338 100.0% 92,518 100.0% Demogribi Characteristic	Patient Characteristics ^{1,2}	Number/Mean		Number/Mean	Standard Deviation ³
Demographic Characteristics 12.0 6.1 12.2 5.9 Age -	Unique patients	139,518	N/A	87,789	N/A
Age (years) 12.0 6.1 12.2 5.9 Age -<	Episodes	147,338	100.0%	92,518	100.0%
No No 24^{e1} 25,77417.5%15,29216.5%2-5 years3,1822.2%16,78418.1%3-17 years25,67517.4%16,78418.1%3-17 years25,0750.2.9%58,44863.2%Sex </td <td>Demographic Characteristics</td> <td></td> <td></td> <td></td> <td></td>	Demographic Characteristics				
0-1 years25,77417.5%15,29216.5%2-5 years3,1822.2%1,9942.2%6-12 years25,67517.4%16.78418.1%13-17 years29,67517.4%16.7846.3213-17 years29,776.2.9%58,4486.32SevFemale87,0506.2.4%54,2576.1.8%Male52,46837.6%33,53238.2%American Indian or Alaska Native1,3641.0%8631.0%Asian1,4140.8%6.600.8%Black or African American6,9415.0%4,2954.9%Native Hawaiian or Other Pacific Islander1870.1%1150.1%Unknown91,22865.3%58,14066.2%No44,43531.8%26,93630.7%Unknown13,6429.8%8,1699.3%No44,43531.8%26,93630.7%Vear20094,4413.0%3.3813.7%20104,4443.0%3.3813.7%20114,5063.1%3.3923.6%20126,6203.1%3.5924.1%20148,3765.7%6.5777.1%201514,6609.5%10.59211.4%201621,73914.8%20,7622.5%201826,81518.2%5.4415.9%	Age (years)	12.0	6.1	12.2	5.9
2-5 years 3,182 2.2% 1,994 2.2% 6-12 years 25,675 17.4% 16,784 18.1% 13-17 years 92,707 62.9% 58,448 63.2% Sex	Age				
6-12 years25,67517.4%16,78418.1%13-17 years92,70762.9%58,44863.2%Sex*********************************	0-1 years	25,774	17.5%	15,292	16.5%
13.17 years 92,707 62.9% 58,448 63.2% Sex Female 87,050 62.4% 54,257 61.8% Male 52,468 37.6% 33,532 38.2% Marcican Indian or Alaska Native 1,364 1.0% 863 1.0% Asian 1,141 0.8% 660 0.8% Black or African American 6,941 5.0% 4,295 4.9% Native Hawailan or Other Pacific Islander 187 0.1% 115 0.1% Unknown 91,128 65.3% 58,140 662.2% White 35,642 9.8% 8,169 9.3% Ibanor 13,642 9.8% 8,169 9.3% Iuknown 13,642 9.8% 8,169 9.3% Unknown 81,441 58.4% 52,684 60.0% Ver 13,642 9.8% 3,813 3.7% 2008 3,434 2.3% 2,635 2.8% 2009 4,441 3.0% 3,381 3.7% 2011 4,506 3.1%	2-5 years	3,182	2.2%	1,994	2.2%
Sex Female 87,050 62.4% 54,257 61.8% Male 52,468 37.6% 33,532 38.2% American Indian or Alaska Native 1,364 1.0% 863 1.0% Asian 1,141 0.8% 660 0.8% Black or African American 6,941 5.0% 4.295 4.9% Native Hawaiian or Other Pacific Islander 187 0.1% 115 0.1% Unknown 91,128 65.3% 58,140 662% White 38,757 27.8% 23,716 27.0% Hispanic origin 1 13642 9.8% 8,169 9.3% No 44,435 31.8% 26,936 60.0% Unknown 81,441 58.4% 52,684 60.0% Vear 13,642 9.8% 8,169 9.3% Outs 3,434 2.3% 2,635 2.8% 2008 3,434 2.3% 3,636 2.8% 2010 4,620<	6-12 years	25,675	17.4%	16,784	18.1%
Fenale 87,050 62.4% 54,257 61.8% Male 52,468 37.6% 33,532 38.2% Race ⁴	13-17 years	92,707	62.9%	58,448	63.2%
Male 52,468 37.6% 33,532 38.2% Race ⁴ 1,364 1.0% 863 1.0% Asian 1,141 0.8% 660 0.8% Black or African American 6,941 5.0% 4,295 4.9% Native Hawaiian or Other Pacific Islander 187 0.1% 6.2% 6.2% Unknown 91,128 65.3% 88,140 6.2% White 38,757 27.8% 8,616 2.7% Hypanic origin 13,642 9.8% 8,169 9.3% No 44,435 31.8% 26,936 30.7% Unknown 81,441 3.0% 3,281 6.6% Vear 3 3,434 2.3% 2,635 2.8% 2008 3,434 3.0% 3,381 3.7% 2010 4,441 3.0% 3,381 3.7% 2011 4,506 3.1% 3,590 3.9% 2012 4,620 3.1% 3,590	Sex				
Rarei 1,364 1.0% 863 1.0% Asian 1,141 0.8% 660 0.8% Black or African American 6,941 5.0% 4,295 4.9% Native Hawaiian or Other Pacific Islander 187 0.1% 115 0.1% Unknown 91,128 65.3% 58,140 66.2% White 38,57 27.8% 23,716 23,87 Hispanic origin 1 58,440 66.2% 30,7% No 44,435 31.8% 26,636 30,7% Unknown 81,441 58,4% 52,684 60.0% Unknown 81,441 3.0% 3,290 3.6% Ver 2008 3,434 2.3% 2,635 2.8% 2010 4,441 3.0% 3,381 3.7% 2011 4,620 3.1% 3,590 3.9% 2012 4,620 3.1% 3,590 3.9% 2013 5,023 3,4% 3,66	Female	87,050	62.4%	54,257	61.8%
American Indian or Alaska Native1,3641.0%8631.0%Asian1,1410.8%6600.8%Black or African American6,9415.0%4,2954.9%Native Hawaiian or Other Pacific Islander1870.1%1150.1%Unknown91,12865.3%58,14066.2%White38,75727.8%23,71627.0%Hispanic origin7786.330.7%Yes13,6429.8%8,1699.3%No44,43531.8%26,93630.7%Unknown81,44158.4%52,68460.0%Year20083,4342.3%2,6352.8%20094,4413.0%3,2903.6620104,4443.0%3,2903.6%20114,5063.1%3,3923.7%20136,6273.1%3,5903.9%20148,3765.7%6,5777.1%201514,0609.5%10,59211.4%201621,73914.8%17,88819.3%201727,17318.4%20,7662.5%201826,81518.2%5,4815.9%20197,6885.2%5,8776.4%	Male	52,468	37.6%	33,532	38.2%
Asian1,1410.8%6600.8%Black or African American6,9415.0%4,2954.9%Native Hawaiian or Other Pacific Islander1870.1%1150.1%Unknown91,12865.3%58,14066.2%White38,75727.8%23,71627.0%Hispanic origin13,6429.8%8,1699.3%No44,43531.8%26,93630.7%Unknown81,44158.4%52,68460.0%Vear20083,4342.3%2,6352.8%20094,4413.0%3,2903.6%20104,4443.0%3,3813.7%20114,5063.1%3,5903.9%201320,233.4%3,7664.1%201450,233.4%3,7664.1%201514,0609.5%10,59211.4%201621,73914.8%17,88819.3%201727,17318.4%20,77622.5%201826,81518.2%5,4815.9%	Race ⁴				
Black or African American 6,941 5.0% 4,295 4,9% Native Hawaiian or Other Pacific Islander 187 0.1% 115 0.1% Unknown 91,128 65.3% 58,140 66.2% White 38,757 27.8% 23,716 27.0% Hispanic origin 31,642 9.8% 8,169 9.3% No 44,435 31.8% 26,936 30.7% Unknown 81,441 58.4% 52,684 60.0% Year 2008 3,434 2.3% 2,635 2.8% 2010 4,441 3.0% 3,290 3.6% 2011 4,506 3.1% 3,392 3.7% 2012 4,620 3.1% 3,590 3.9% 2013 5,023 3.4% 3,766 4.1% 2014 8,376 5.7% 6,577 7.1% 2015 14,060 9.5% 10,592 11.4% 2016 21,739 14.8% 17,888 </td <td>American Indian or Alaska Native</td> <td>1,364</td> <td>1.0%</td> <td>863</td> <td>1.0%</td>	American Indian or Alaska Native	1,364	1.0%	863	1.0%
Native Hawaiian or Other Pacific Islander 187 0.1% 115 0.1% Unknown 91,128 65.3% 58,140 66.2% White 38,757 27.8% 23,716 27.0% Hispanic origin 13,642 9.8% 8,169 9.3% No 44,435 31.8% 26,936 30.7% Unknown 81,441 58.4% 52,684 60.0% Year 2008 3,434 2.3% 2,635 2.8% 2009 4,441 3.0% 3,290 3.6% 2010 4,620 3.1% 3,392 3.7% 2011 4,506 3.1% 3,590 3.9% 2012 4,620 3.1% 3,590 3.9% 2013 5,023 3.4% 3,766 4.1% 2014 8,376 5.7% 6,577 7.1% 2015 14,060 9.5% 10,592 11.4% 2016 21,739 14.8% 20,776 22.5%	Asian	1,141	0.8%	660	0.8%
Unknown91,12865.3%58,14066.2%White38,75727.8%23,71627.0%Hispanic origin13,6429.8%8,1699.3%No44,43531.8%26,93630.7%Unknown81,44158.4%52,6840.0%Year20083,4342.3%2,6352.8%20094,4413.0%3,2903.6%20104,4443.0%3,3813.7%20114,5063.1%3,3923.7%20124,6203.1%3,5903.9%20135,0233.4%3,7664.1%20148,3765.7%6,5777.1%201514,0609.5%10,59211.4%201621,73914.8%17,88819.3%201727,17318.4%20,77622.5%201826,81518.2%5,4815.9%20197,6885.2%5,8776.4%	Black or African American	6,941	5.0%	4,295	4.9%
White38,75727.8%23,71627.0%Hispanic originYes13,6429.8%8,1699.3%No44,43531.8%26,93630.7%Unknown8,14458.4%52,68460.0%Year32,3732,6352.8%20083,4342.3%2,6352.8%20094,4413.0%3,2903.6%20104,4443.0%3,3813.7%20114,5063.1%3,3923.7%20124,6203.1%3,5903.9%20135,0233.4%3,7664.1%20148,3765.7%6,5777.1%201514,0609.5%10,59211.4%201621,73914.8%17,88819.3%201727,17318.4%20,76622.5%201826,81518.2%5,4815.9%20197,6885.2%5,8776.4%	Native Hawaiian or Other Pacific Islander	187	0.1%	115	0.1%
Yes 13,642 9.8% 8,169 9.3% No 44,435 31.8% 26,936 30.7% Unknown 81,441 58.4% 52,684 60.0% Yer 7 7 7 7 7 7 2008 3,434 2.3% 2,635 2.8% 3 7 2009 4,441 3.0% 3,290 3.6% 3 3 7 2010 4,444 3.0% 3,381 3.7% 3 3 3 7 2011 4,506 3.1% 3,392 3.7% 3 3 3 3 3 2012 4,620 3.1% 3,590 3.9% 3	Unknown	91,128	65.3%	58,140	66.2%
Yes13,6429.8%8,1699.3%No44,43531.8%26,93630.7%Unknown81,44158.4%52,68460.0%Year77720083,4342.3%2,6352.8%20094,4413.0%3,2903.6%20104,4443.0%3,3813.7%20114,5063.1%3,3923.7%20124,6203.1%3,5903.9%20135,0233.4%3,7664.1%20148,3765.7%6,5777.1%201514,0609.5%10,59211.4%201621,73914.8%17,88819.3%201727,17318.4%20,77622.5%201826,81518.2%5,8776,4%	White	38,757	27.8%	23,716	27.0%
No44,43531.8%26,93630.7%Unknown81,44158.4%52,68460.0%Year70083,4342.3%2,6352.8%20094,4413.0%3,2903.6%20104,4443.0%3,3813.7%20114,5063.1%3,3923.7%20124,6203.1%3,5903.9%20135,0233.4%3,7664.1%20148,3765.7%6,5777.1%201514,0609.5%10,59211.4%201621,73914.8%17,88819.3%201727,17318.4%20,77622.5%201826,81518.2%5,4815.9%20197,6885.2%5,8776.4%	Hispanic origin				
Unknown81,44158.4%52,68460.0%Year20083,4342.3%2,6352.8%20094,4413.0%3,2903.6%20104,4443.0%3,3813.7%20114,5063.1%3,3923.7%20124,6203.1%3,5903.9%20135,0233.4%3,7664.1%20148,3765.7%6,5777.1%201514,0609.5%10,59211.4%201621,73914.8%17,88819.3%201727,17318.4%20,77622.5%201820,7685.2%5,8776,4%	Yes	13,642	9.8%	8,169	9.3%
Year20083,4342.3%2,6352.8%20094,4413.0%3,2903.6%20104,4443.0%3,3813.7%20114,5063.1%3,3923.7%20124,6203.1%3,5903.9%20135,0233.4%3,7664.1%20148,3765.7%6,5777.1%201514,0609.5%10,59211.4%201621,73914.8%17,88819.3%201727,17318.4%20,77622.5%201826,81518.2%5,4815.9%20197,6885.2%5,8776.4%	No	44,435	31.8%	26,936	30.7%
20083,4342.3%2,6352.8%20094,4413.0%3,2903.6%20104,4443.0%3,3813.7%20114,5063.1%3,3923.7%20124,6203.1%3,5903.9%20135,0233.4%3,7664.1%20148,3765.7%6,5777.1%201514,0609.5%10,59211.4%201621,73914.8%17,88819.3%201727,17318.4%20,77622.5%201826,81518.2%5,4815.9%20197,6885.2%5,8776.4%	Unknown	81,441	58.4%	52,684	60.0%
20094,4413.0%3,2903.6%20104,4443.0%3,3813.7%20114,5063.1%3,3923.7%20124,6203.1%3,5903.9%20135,0233.4%3,7664.1%20148,3765.7%6,5777.1%201514,0609.5%10,59211.4%201621,73914.8%20,77622.5%201727,17318.2%5,4815.9%20197,6885.2%5,8776.4%	Year				
20104,4443.0%3,3813.7%20114,5063.1%3,3923.7%20124,6203.1%3,5903.9%20135,0233.4%3,7664.1%20148,3765.7%6,5777.1%201514,0609.5%10,59211.4%201621,73914.8%17,88819.3%201727,17318.4%20,77622.5%201826,81518.2%5,4815.9%20197,6885.2%5,8776.4%	2008	3,434	2.3%	2,635	2.8%
20114,5063.1%3,3923.7%20124,6203.1%3,5903.9%20135,0233.4%3,7664.1%20148,3765.7%6,5777.1%201514,0609.5%10,59211.4%201621,73914.8%17,88819.3%201727,17318.4%20,77622.5%201826,81518.2%5,4815.9%20197,6885.2%5,8776.4%	2009	4,441	3.0%	3,290	3.6%
20124,6203.1%3,5903.9%20135,0233.4%3,7664.1%20148,3765.7%6,5777.1%201514,0609.5%10,59211.4%201621,73914.8%17,88819.3%201727,17318.4%20,77622.5%201826,81518.2%5,4815.9%20197,6885.2%5,8776.4%	2010	4,444	3.0%	3,381	3.7%
20135,0233.4%3,7664.1%20148,3765.7%6,5777.1%201514,0609.5%10,59211.4%201621,73914.8%17,88819.3%201727,17318.4%20,77622.5%201826,81518.2%5,4815.9%20197,6885.2%5,8776.4%	2011	4,506	3.1%	3,392	3.7%
20148,3765.7%6,5777.1%201514,0609.5%10,59211.4%201621,73914.8%17,88819.3%201727,17318.4%20,77622.5%201826,81518.2%5,4815.9%20197,6885.2%5,8776.4%	2012	4,620	3.1%	3,590	3.9%
201514,0609.5%10,59211.4%201621,73914.8%17,88819.3%201727,17318.4%20,77622.5%201826,81518.2%5,4815.9%20197,6885.2%5,8776.4%	2013	5,023	3.4%	3,766	4.1%
201621,73914.8%17,88819.3%201727,17318.4%20,77622.5%201826,81518.2%5,4815.9%20197,6885.2%5,8776.4%	2014	8,376	5.7%	6,577	7.1%
201727,17318.4%20,77622.5%201826,81518.2%5,4815.9%20197,6885.2%5,8776.4%	2015	14,060	9.5%	10,592	11.4%
201826,81518.2%5,4815.9%20197,6885.2%5,8776.4%	2016	21,739	14.8%	17,888	19.3%
2019 7,688 5.2% 5,877 6.4%	2017	27,173	18.4%	20,776	22.5%
	2018	26,815	18.2%	5,481	5.9%
2020 6,840 4.6% 4,699 5.1%	2019	7,688	5.2%	5,877	6.4%
	2020	6,840	4.6%	4,699	5.1%



	Beta	Blockers	-	ost-Index Enrollment iirement)
		Percent/		Percent/
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation ³
2021	7,639	5.2%	574	0.6%
2022	540	0.4%	0	0.0%
Health Characteristics				
Charlson/Elixhauser combined comorbidity score ⁵	0.5	0.9	0.5	0.9
Hypertension	3,869	2.6%	2,507	2.7%
Hemangioma	15,407	10.5%	9,190	9.9%
Heart Failure	1,100	0.7%	661	0.7%
Congenital Heart Disease	9,814	6.7%	5,874	6.3%
Atrial Fibrillation	100	0.1%	64	0.1%
Long QT Syndrome	854	0.6%	501	0.5%
Other Cardiac Arrhythmias	14,490	9.8%	8,765	9.5%
Cardiac Arrhythmias (Composite)	14,960	10.2%	9,031	9.8%
Pulmonary Hypertension	681	0.5%	368	0.4%
Cardiomyopathy	764	0.5%	441	0.5%
Coronary Artery Disease	210	0.1%	143	0.2%
Portal Hypertension	213	0.1%	139	0.2%
Anxiety Disorder	38,644	26.2%	23,335	25.2%
Tremor	3,551	2.4%	2,225	2.4%
Migraine	37,030	25.1%	24,426	26.4%
Thyrotoxicosis	2,392	1.6%	1,519	1.6%
Burns	384	0.3%	243	0.3%
Glaucoma	308	0.2%	186	0.2%
Autism	5,806	3.9%	3,622	3.9%
Marfan's Syndrome	87	0.1%	48	0.1%
Pheochromocytoma/Paraganglioma	66	0.0%	43	0.0%
Diabetes	1,078	0.7%	657	0.7%
Any of the above health characteristics (excluding combined comorbidity score) None of the above health characteristics (excluding	106,268	72.1%	66,396	71.8%
combined comorbidity score)	41,070	27.9%	26,122	28.2%
Hypoglycemia (Day 0)	88	0.1%	47	0.1%
Hypoglycemia (0-3 Months)	473	0.3%	303	0.3%
Hypoglycemia (3-6 Months)	329	0.2%	235	0.3%
Hypoglycemia (6-12 Months)	427	0.3%	369	0.4%
Hypoglycemia (Day 0) and Diabetes	****	****	****	****
Hypoglycemia (0-3 Months) and Diabetes	48	0.0%	27	0.0%
Hypoglycemia (3-6 Months) and Diabetes	42	0.0%	33	0.0%
Hypoglycemia (6-12 Months) and Diabetes	44	0.0%	42	0.0%



typoglycemia (Day 0) and No Diabetes 86 0.1% 45 0.0% typoglycemia (J-3 Months) and No Diabetes 287 0.2% 202 0.2% typoglycemia (J-2 Months) and No Diabetes 283 0.3% 327 0.4% typoglycemia (J-2 Months) and Any Metoprolol 0 0.0% 0 0.0% typoglycemia (J-3 Months) and Any Metoprolol 0 0.0% 0 0.0% typoglycemia (J-4 Months) and Any Metoprolol 0 0.0% 0 0.0% typoglycemia (J-4 Months) and Any Metoprolol 0 0.0% 0 0.0% typoglycemia (J-6 Months) and Any Propranolol 473 0.3% 303 0.3% typoglycemia (J-6 Months) and Any Propranolol 427 0.3% 369 0.4% typoglycemia (J-6 Months) and Atenolol 0 0.0% 0 0.0% typoglycemia (J-6 Months) and Atenolol 0 0.0% 0 0.0% typoglycemia (J-6 Months) and Atenolol 0 0.0% 0 0.0% typoglycemia (J-6 Months) and Atenolol 0 0.0%		Beta	Blockers	Beta Blockers (Post-Index Enrollment Requirement)	
typoglycemia (Day 0) and No Diabetes 86 0.1% 45 0.0% typoglycemia (J-3 Months) and No Diabetes 287 0.2% 202 0.2% typoglycemia (J-2 Months) and No Diabetes 283 0.3% 327 0.4% typoglycemia (J-2 Months) and Any Metoprolol 0 0.0% 0 0.0% typoglycemia (J-3 Months) and Any Metoprolol 0 0.0% 0 0.0% typoglycemia (J-4 Months) and Any Metoprolol 0 0.0% 0 0.0% typoglycemia (J-6 Months) and Any Metoprolol 0 0.0% 0 0.0% typoglycemia (J-6 Months) and Any Propranolol 473 0.3% 303 0.3% typoglycemia (J-6 Months) and Any Propranolol 427 0.3% 369 0.4% typoglycemia (J-6 Months) and Atenolol 0 0.0% 0 0.0% typoglycemia (J-6 Months) and Atenolol 0 0.0% 0 0.0% typoglycemia (J-6 Months) and Atenolol 0 0.0% 0 0.0% typoglycemia (J-6 Months) and Atenolol 0 0.0%			Percent/		Percent/
Arroglycemia (0-3 Months) and No Diabetes 425 0.3% 276 0.3% 4ypoglycemia (3-6 Months) and No Diabetes 287 0.2% 202 0.2% typoglycemia (0-3 Months) and No Diabetes 383 0.3% 327 0.4% typoglycemia (0-3 Months) and Any Metoprolol 0 0.0% 0 0.0% typoglycemia (3-6 Months) and Any Metoprolol 0 0.0% 0 0.0% typoglycemia (3-6 Months) and Any Metoprolol 0 0.0% 0 0.0% typoglycemia (3-6 Months) and Any Propranolol 473 0.3% 303 0.3% typoglycemia (3-6 Months) and Any Propranolol 427 0.3% 369 0.4% typoglycemia (3-6 Months) and Any Propranolol 427 0.3% 369 0.4% typoglycemia (3-6 Months) and Atenolol 0 0.0% 0 0.0% typoglycemia (3-6 Months) and Atenolol 0 0.0% 0 0.0% typoglycemia (3-6 Months) and Atenolol 0 0.0% 0 0.0% typoglycemia (3-6 Months) and Madolol 0	Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation ³
And Section And Section And Section And Section Appoglycemia [6:3 Months] and No Diabetes 383 0.3% 327 0.4% Appoglycemia [0:3 Months] and Any Metoprolol 0 0.0% 0 0.0% Appoglycemia [0:3 Months] and Any Metoprolol 0 0.0% 0 0.0% Appoglycemia [0:3 Months] and Any Metoprolol 0 0.0% 0 0.0% Appoglycemia [0:3 Months] and Any Propranolol 488 0.1% 47 0.1% Appoglycemia [0:3 Months] and Any Propranolol 427 0.3% 303 0.3% Appoglycemia [0:3 Months] and Any Propranolol 427 0.3% 369 0.4% Appoglycemia [0:3 Months] and Atenolol 0 0.0% 0 0.0% Appoglycemia [0:3 Months] and Atenolol 0 0.0% 0 0.0% Appoglycemia [0:3 Months] and Atenolol 0 0.0% 0 0.0% Appoglycemia [0:4 Months] and Atenolol 0 0.0% 0 0.0% Appoglycemia [0:5 Months] and Atenolol 0 0.0% 0	Hypoglycemia (Day 0) and No Diabetes	86	0.1%	45	0.0%
Npoglycenia (6-12 Months) and No Diabetes 383 0.3% 327 0.4% 4ypoglycenia (0-3 Months) and Any Metoprolol 0 0.0% 0 0.0% typoglycenia (0-3 Months) and Any Metoprolol 0 0.0% 0 0.0% typoglycenia (3-5 Months) and Any Metoprolol 0 0.0% 0 0.0% typoglycenia (3-5 Months) and Any Metoprolol 0 0.0% 0 0.0% typoglycenia (3-5 Months) and Any Propranolol 473 0.3% 303 0.3% typoglycenia (6-12 Months) and Any Propranolol 427 0.3% 369 0.0% typoglycenia (5-12 Months) and Any Propranolol 427 0.3% 369 0.0% typoglycenia (5-12 Months) and Atenolol 0 0.0% 0 0.0% typoglycenia (5-2 Months) and Atenolol 0 0.0% 0 0.0% typoglycenia (5-12 Months) and Atenolol 0 0.0% 0 0.0% typoglycenia (5-12 Months) and Atenolol 0 0.0% 0 0.0% typoglycenia (5-3 Months) and Nadolol 0	Hypoglycemia (0-3 Months) and No Diabetes	425	0.3%	276	0.3%
Typoglycemia (Day 0) and Any Metoprolol 0 0.0% 0 0.0% typoglycemia (G-3 Months) and Any Metoprolol 0 0.0% 0 0.0% typoglycemia (G-2 Months) and Any Metoprolol 0 0.0% 0 0.0% typoglycemia (G-2 Months) and Any Metoprolol 0 0.0% 0 0.0% typoglycemia (G-3 Months) and Any Propranolol 88 0.3% 303 0.3% typoglycemia (G-3 Months) and Any Propranolol 229 0.2% 225 0.3% typoglycemia (G-12 Months) and Any Propranolol 227 0.3% 369 0.4% typoglycemia (G-3 Months) and Any Propranolol 0 0.0% 0 0.0% typoglycemia (G-3 Months) and Atenolol 0 0.0% 0 0.0% typoglycemia (G-3 Months) and Atenolol 0 0.0% 0 0.0% typoglycemia (G-3 Months) and Atenolol 0 0.0% 0 0.0% typoglycemia (G-3 Months) and Madolol 0 0.0% 0 0.0% typoglycemia (G-12 Months) and Madolol 0 0.0% </td <td>Hypoglycemia (3-6 Months) and No Diabetes</td> <td>287</td> <td>0.2%</td> <td>202</td> <td>0.2%</td>	Hypoglycemia (3-6 Months) and No Diabetes	287	0.2%	202	0.2%
typoglycemia (0-3 Months) and Any Metoprolol 0 0.0% 0 0.0% typoglycemia (6-12 Months) and Any Metoprolol 0 0.0% 0 0.0% typoglycemia (6-12 Months) and Any Metoprolol 0 0.0% 0 0.0% typoglycemia (Day 0) and Any Propranolol 88 0.1% 47 0.1% typoglycemia (0-3 Months) and Any Propranolol 329 0.2% 235 0.3% typoglycemia (0-3 Months) and Any Propranolol 427 0.3% 369 0.4% typoglycemia (0-3 Months) and Atenolol 0 0.0% 0 0.0% typoglycemia (0-3 Months) and Atenolol 0 0.0% 0 0.0% typoglycemia (3-6 Months) and Atenolol 0 0.0% 0 0.0% typoglycemia (3-6 Months) and Atenolol 0 0.0% 0 0.0% typoglycemia (3-6 Months) and Nadolol 0 0.0% 0 0.0% typoglycemia (3-6 Months) and Nadolol 0 0.0% 0 0.0% typoglycemia (3-6 Months) and Nadolol 0 0.0% <td< td=""><td>Hypoglycemia (6-12 Months) and No Diabetes</td><td>383</td><td>0.3%</td><td>327</td><td>0.4%</td></td<>	Hypoglycemia (6-12 Months) and No Diabetes	383	0.3%	327	0.4%
Nypoglycemia (3-6 Months) and Any Metoprolol 0 0.0% 0 0.0% typoglycemia (3-6 Months) and Any Metoprolol 0 0.0% 0 0.0% typoglycemia (3-6 Months) and Any Propranolol 88 0.1% 47 0.1% typoglycemia (3-6 Months) and Any Propranolol 229 0.2% 235 0.3% typoglycemia (5-12 Months) and Any Propranolol 229 0.2% 235 0.3% typoglycemia (5-12 Months) and Any Propranolol 0 0.0% 0 0.0% typoglycemia (5-12 Months) and Atenolol 0 0.0% 0 0.0% typoglycemia (5-12 Months) and Atenolol 0 0.0% 0 0.0% typoglycemia (5-12 Months) and Atenolol 0 0.0% 0 0.0% typoglycemia (3-6 Months) and Atenolol 0 0.0% 0 0.0% typoglycemia (3-6 Months) and Atenolol 0 0.0% 0 0.0% typoglycemia (3-6 Months) and Madolol 0 0.0% 0 0.0% typoglycemia (3-6 Months) and Nadolol 0 0.0%	Hypoglycemia (Day 0) and Any Metoprolol	0	0.0%	0	0.0%
Number of the second	Hypoglycemia (0-3 Months) and Any Metoprolol	0	0.0%	0	0.0%
Number of the second	Hypoglycemia (3-6 Months) and Any Metoprolol	0	0.0%	0	0.0%
Hypoglycemia (0-3 Months) and Any Propranolol 473 0.3% 303 0.3% Hypoglycemia (3-6 Months) and Any Propranolol 329 0.2% 235 0.3% Hypoglycemia (6-12 Months) and Any Propranolol 427 0.3% 369 0.4% Hypoglycemia (0a) and Atenolol 0 0.0% 0 0.0% Hypoglycemia (3-6 Months) and Atenolol 0 0.0% 0 0.0% Hypoglycemia (5-12 Months) and Atenolol 0 0.0% 0 0.0% Hypoglycemia (5-12 Months) and Atenolol 0 0.0% 0 0.0% Hypoglycemia (5-12 Months) and Atenolol 0 0.0% 0 0.0% Hypoglycemia (5-12 Months) and Nadolol 0 0.0% 0 0.0% Hypoglycemia (5-12 Months) and Nadolol 0 0.0% 0 0.0% Hypoglycemia (5-12 Months) and Nadolol 0 0.0% 0 0.0% Hypoglycemia (5-12 Months) and Nadolol 0 0.0% 0 0.0% Non-Selective Beta Blockers 147.338 100.0% 15	Hypoglycemia (6-12 Months) and Any Metoprolol	0	0.0%	0	0.0%
Number Number Number Number Hypoglycemia (3-6 Months) and Any Propranolol 427 0.3% 369 0.4% Hypoglycemia (Day 0) and Atenolol 0 0.0% 0 0.0% Hypoglycemia (0-3 Months) and Atenolol 0 0.0% 0 0.0% Hypoglycemia (3-6 Months) and Atenolol 0 0.0% 0 0.0% Hypoglycemia (3-6 Months) and Atenolol 0 0.0% 0 0.0% Hypoglycemia (3-6 Months) and Atenolol 0 0.0% 0 0.0% Hypoglycemia (3-6 Months) and Atenolol 0 0.0% 0 0.0% Hypoglycemia (3-6 Months) and Nadolol 0 0.0% 0 0.0% Hypoglycemia (3-6 Months) and Nadolol 0 0.0% 0 0.0% Hypoglycemia (3-6 Months) and Nadolol 0 0.0% 0 0.0% Hypoglycemia (3-6 Months) and Nadolol 0 0.0% 0 0.0% Von-Selective Beta Blockers 31 0.0% 24 0.0% Nany Metoprolol <t< td=""><td>Hypoglycemia (Day 0) and Any Propranolol</td><td>88</td><td>0.1%</td><td>47</td><td>0.1%</td></t<>	Hypoglycemia (Day 0) and Any Propranolol	88	0.1%	47	0.1%
And the set of the se	Hypoglycemia (0-3 Months) and Any Propranolol	473	0.3%	303	0.3%
Hypoglycemia (Day 0) and Atenolol 0 0.0% 0 0.0% Hypoglycemia (0-3 Months) and Atenolol 0 0.0% 0 0.0% Hypoglycemia (3-6 Months) and Atenolol 0 0.0% 0 0.0% Hypoglycemia (6-12 Months) and Atenolol 0 0.0% 0 0.0% Hypoglycemia (0-3 Months) and Nadolol 0 0.0% 0 0.0% Hypoglycemia (0-3 Months) and Nadolol 0 0.0% 0 0.0% Hypoglycemia (3-6 Months) and Nadolol 0 0.0% 0 0.0% Hypoglycemia (6-12 Months) and Nadolol 0 0.0% 0 0.0% Hypoglycemia (6-12 Months) and Nadolol 0 0.0% 0 0.0% Selective Beta Blockers 31 0.0% 24 0.0% Any Metoprolol 18 0.0% 15 0.0% Any Propranolol 147,338 100.0% 92,518 100.0% Propranolol (Regular) 129,011 87.6% 80.520 87.0% Propranolol (Regular) <	Hypoglycemia (3-6 Months) and Any Propranolol	329	0.2%	235	0.3%
Number Number Number Number Hypoglycemia (3-3 Months) and Atenolol 0 0.0% 0 0.0% Hypoglycemia (3-6 Months) and Atenolol 0 0.0% 0 0.0% Hypoglycemia (6-12 Months) and Atenolol 0 0.0% 0 0.0% Hypoglycemia (Day 0) and Nadolol 0 0.0% 0 0.0% Hypoglycemia (3-6 Months) and Nadolol 0 0.0% 0 0.0% Hypoglycemia (3-6 Months) and Nadolol 0 0.0% 0 0.0% Hypoglycemia (3-6 Months) and Nadolol 0 0.0% 0 0.0% Hypoglycemia (6-12 Months) and Nadolol 0 0.0% 0 0.0% Selective Beta Blockers 31 0.0% 24 0.0% Non-Selective Beta Blockers 147,338 100.0% 15 0.0% Any Metoprolol 18 0.0% 92,518 100.0% Propranolol (Regular) 147,338 100.0% 92,518 10.0% Propranolol (Regular) 129,011 87	Hypoglycemia (6-12 Months) and Any Propranolol	427	0.3%	369	0.4%
Hypoglycemia (3-6 Months) and Atenolol 0 0.0% 0 0.0% Hypoglycemia (6-12 Months) and Atenolol 0 0.0% 0 0.0% Hypoglycemia (1-12 Months) and Nadolol 0 0.0% 0 0.0% Hypoglycemia (0-3 Months) and Nadolol 0 0.0% 0 0.0% Hypoglycemia (3-6 Months) and Nadolol 0 0.0% 0 0.0% Hypoglycemia (3-6 Months) and Nadolol 0 0.0% 0 0.0% Hypoglycemia (3-6 Months) and Nadolol 0 0.0% 0 0.0% Hypoglycemia (3-6 Months) and Nadolol 0 0.0% 0 0.0% Hypoglycemia (3-6 Months) and Nadolol 0 0.0% 0 0.0% Hypoglycemia (3-6 Months) and Nadolol 0 0.0% 0 0.0% Selective Beta Blockers 31 0.0% 24 0.0% Non-Selective Beta Blockers 147,338 100.0% 92,518 100.0% Any Propranolol 147,338 100.0% 92,518 100.0% Propr	Hypoglycemia (Day 0) and Atenolol	0	0.0%	0	0.0%
Hypoglycemia (6-12 Months) and Atenolol 0 0.0% 0 0.0% Hypoglycemia (0-3 Months) and Nadolol 0 0.0% 0 0.0% Hypoglycemia (0-3 Months) and Nadolol 0 0.0% 0 0.0% Hypoglycemia (3-6 Months) and Nadolol 0 0.0% 0 0.0% Hypoglycemia (3-6 Months) and Nadolol 0 0.0% 0 0.0% Hypoglycemia (6-12 Months) and Nadolol 0 0.0% 0 0.0% Hypoglycemia (6-12 Months) and Nadolol 0 0.0% 0 0.0% Selective Beta Blockers 31 0.0% 92,518 100.0% Non-Selective Beta Blockers 147,338 100.0% 92,518 100.0% Any Metoprolol 18 0.0% 92,518 100.0% Any Propranolol (Regular) 147,338 100.0% 92,518 10.0% Propranolol (Regular) 129,011 87.6% 80,520 87.0% Propranolol (Regular) 2,463 1.7% 1,409 1.5% Acebutolol	Hypoglycemia (0-3 Months) and Atenolol	0	0.0%	0	0.0%
Hypoglycemia (Day 0) and Nadolol 0 0.0% 0 0.0% Hypoglycemia (Day 0) and Nadolol 0 0.0% 0 0.0% Hypoglycemia (D-3 Months) and Nadolol 0 0.0% 0 0.0% Hypoglycemia (G-12 Months) and Nadolol 0 0.0% 0 0.0% Hypoglycemia (G-12 Months) and Nadolol 0 0.0% 0 0.0% Selective Beta Blockers 31 0.0% 24 0.0% Non-Selective Beta Blockers 147,338 100.0% 92,518 100.0% Non-Selective Beta Blockers 147,338 100.0% 92,518 100.0% Any Metoprolol (Regular) ****** ****** ****** ****** Any Propranolol (Extended Release) 16,281 11.1% 10,853 11.7% Propranolol (Regular) 2,463 1.7% 1,409 1.5% Acebutolol 0 0.0% 0 0.0% Acebutolol 0 0.0% 0 0.0% Acebutolol 0 0.0%	Hypoglycemia (3-6 Months) and Atenolol	0	0.0%	0	0.0%
Aypoglycemia (0-3 Months) and Nadolol 0 0.0% 0 0.0% Hypoglycemia (3-6 Months) and Nadolol 0 0.0% 0 0.0% Hypoglycemia (6-12 Months) and Nadolol 0 0.0% 0 0.0% Idpoglycemia (6-12 Months) and Nadolol 0 0.0% 0 0.0% Selective Beta Blockers 31 0.0% 24 0.0% Non-Selective Beta Blockers 147,338 100.0% 24 0.0% Non-Selective Beta Blockers 147,338 100.0% 15 0.0% Metoprolol (Extended Release) ****** ****** ****** ****** Metoprolol (Regular) 147,338 100.0% 100.0% 100.0% Propranolol (Extended Release) 16,281 11.1% 10,853 11.7% Propranolol (Regular) 2,463 1.7% 1,409 1.5% Acebutolol 0 0.0% 0 0.0% Atenolol (Hemangeol) 13 0.0% 0 0.0% Bisoprolol 0 0.	Hypoglycemia (6-12 Months) and Atenolol	0	0.0%	0	0.0%
Hypoglycemia (3-6 Months) and Nadolol 0 0.0% 0 0.0% Hypoglycemia (6-12 Months) and Nadolol 0 0.0% 0 0.0% Selective Beta Blockers 31 0.0% 24 0.0% Non-Selective Beta Blockers 147,338 100.0% 92,518 100.0% Non-Selective Beta Blockers 147,338 0.0% 92,518 0.0% Any Metoprolol 18 0.0% 15 0.0% Metoprolol (Regular) ****** ****** ****** ****** Any Propranolol (Regular) 147,338 100.0% 92,518 100.0% Propranolol (Regular) 147,338 100.0% 92,518 100.0% Propranolol (Regular) 147,338 100.0% 92,518 100.0% Propranolol (Regular) 129,011 87.6% 80,520 87.0% Propranolol (Regular) 2,463 1.7% 1,409 1.5% Acebutolol 0 0.0% 0 0.0% 0.0% Sisoprolol 0	Hypoglycemia (Day 0) and Nadolol	0	0.0%	0	0.0%
Hypoglycemia (6-12 Months) and Nadolol 0 0.0% 0.0% Selective Beta Blockers 31 0.0% 24 0.0% Non-Selective Beta Blockers 147,338 100.0% 92,518 100.0% Non-Selective Beta Blockers 147,338 0.0% 15 0.0% Any Metoprolol 18 0.0% 15 0.0% Metoprolol (Extended Release) ****** ****** ****** Any Propranolol (Regular) 147,338 100.0% 92,518 100.0% Propranolol (Regular) 129,011 87.6% 80,520 87.0% Acebutolol 0 0.0% 0 0.0% Acebutolol 0 0.0% 0 0.0% Sisoprolol 0 0.0% 0 0.0%	Hypoglycemia (0-3 Months) and Nadolol	0	0.0%	0	0.0%
Selective Beta Blockers 31 0.0% 24 0.0% Non-Selective Beta Blockers 147,338 100.0% 92,518 100.0% Any Metoprolol 18 0.0% 15 0.0% Metoprolol (Extended Release) ****** ****** ****** Metoprolol (Regular) ****** ****** ****** Any Propranolol 147,338 100.0% 92,518 100.0% Propranolol (Regular) ****** ****** ****** ****** Any Propranolol (Extended Release) 16,281 11.1% 10,853 11.7% Propranolol (Regular) 129,011 87.6% 80,520 87.0% Propranolol (Hemangeol) 2,463 1.7% 1,409 1.5% Acebutolol 0 0.0% 0 0.0% Bisoprolol 0.13 0.0% 0 0.0% Bisoprolol 0 0.0% 0 0.0% Carvedilol 0 0.0% 0 0.0% Atenolol	Hypoglycemia (3-6 Months) and Nadolol	0	0.0%	0	0.0%
Non-Selective Beta Blockers 147,338 100.0% 92,518 100.0% Any Metoprolol 18 0.0% 15 0.0% Metoprolol (Extended Release) ***** ***** ***** ***** Metoprolol (Regular) ***** ***** ***** ***** Any Propranolol 147,338 100.0% 92,518 100.0% Propranolol (Regular) 147,338 100.0% 92,518 100.0% Propranolol (Extended Release) 16,281 11.1% 10,853 11.7% Propranolol (Regular) 2,463 1.7% 1,409 1.5% Acebutolol 0 0.0% 0 0.0% Acebutolol 0 0.0% 0 0.0% Betaxolol 0 0.0% 0 0.0% Carvedilol 0 0.0% 0 0.0% Betatolol 0 0.0% 0 0.0% Carvedilol 0 0.0% 0 0.0% Labetalol 0	Hypoglycemia (6-12 Months) and Nadolol	0	0.0%	0	0.0%
Any Metoprolol 18 0.0% 15 0.0% Metoprolol (Extended Release) ****** ****** ****** ****** Any Propranolol (Regular) ****** ****** ****** ****** Any Propranolol (Extended Release) 147,338 100.0% 92,518 100.0% Propranolol (Extended Release) 16,281 11.1% 10,853 11.7% Propranolol (Regular) 129,011 87.6% 80,520 87.0% Propranolol (Hemangeol) 2,463 1.7% 1,409 1.5% Acebutolol 0 0.0% 0 0.0% Atenolol 13 0.0% 0 0.0% Bataxolol 0 0.0% 0 0.0% Carvedilol 0 0.0% 0 0.0% Carvedilol 0 0.0% 0 0.0%	Selective Beta Blockers	31	0.0%	24	0.0%
Metoprolol (Extended Release) ***** ***** ***** ***** Metoprolol (Regular) ***** ***** ***** ***** Any Propranolol 147,338 100.0% 92,518 100.0% Propranolol (Extended Release) 16,281 11.1% 10,853 11.7% Propranolol (Regular) 129,011 87.6% 80,520 87.0% Propranolol (Hemangeol) 2,463 1.7% 1,409 1.5% Acebutolol 0 0.0% 0 0.0% Atenolol 13 0.0% 0 0.0% Bisoprolol 0 0.0% 0 0.0% Carvedilol 0 0.0% 0 0.0% Abetalol 0 0.0% 0 0.0%	Non-Selective Beta Blockers	147,338	100.0%	92,518	100.0%
Metoprolol (Regular) ***** ***** ***** ***** ***** Any Propranolol 147,338 100.0% 92,518 100.0% Propranolol (Extended Release) 16,281 11.1% 10,853 11.7% Propranolol (Regular) 129,011 87.6% 80,520 87.0% Propranolol (Hemangeol) 2,463 1.7% 1,409 1.5% Acebutolol 0 0.0% 0 0.0% Atenolol 13 0.0% ****** ****** Betaxolol 0 0.0% 0 0.0% Carvedilol 7 0.0% 0 0.0% Adelol 0.0% 0 0.0% 0 0.0%	Any Metoprolol	18	0.0%	15	0.0%
Any Propranolol 147,338 100.0% 92,518 100.0% Propranolol (Extended Release) 16,281 11.1% 10,853 11.7% Propranolol (Regular) 129,011 87.6% 80,520 87.0% Propranolol (Hemangeol) 2,463 1.7% 1,409 1.5% Acebutolol 0 0.0% 0 0.0% Atenolol 13 0.0% 0 0.0% Betaxolol 0 0.0% 0 0.0% Carvedilol 0 0.0% 0 0.0% Carvedilol 0 0.0% 0 0.0% Carvedilol ****** 0 0.0% 0.0%	Metoprolol (Extended Release)	****	****	****	****
Propranolol (Extended Release)16,28111.1%10,85311.7%Propranolol (Regular)129,01187.6%80,52087.0%Propranolol (Hemangeol)2,4631.7%1,4091.5%Acebutolol00.0%00.0%Acebutolol00.0%00.0%Atenolol130.0%**********Betaxolol00.0%00.0%Bisoprolol00.0%00.0%Carvedilol**********00.0%Labetalol00.0%00.0%Madolol********************	Metoprolol (Regular)	****	****	****	****
Propranolol (Regular)129,01187.6%80,52087.0%Propranolol (Hemangeol)2,4631.7%1,4091.5%Acebutolol00.0%00.0%Atenolol130.0%**********Betaxolol00.0%00.0%Bisoprolol00.0%00.0%Carvedilol**********00.0%Labetalol00.0%00.0%Madolol********************	Any Propranolol	147,338	100.0%	92,518	100.0%
Propranolol (Hemangeol) 2,463 1.7% 1,409 1.5% Acebutolol 0 0.0% 0 0.0% Atenolol 13 0.0% ***** ***** Betaxolol 0 0.0% 0 0.0% Bisoprolol 0 0.0% 0 0.0% Carvedilol ***** 0 0.0% Labetalol 0 0.0% 0 0.0% Nadolol ***** ***** ***** *****	Propranolol (Extended Release)	16,281	11.1%	10,853	11.7%
Acebutolol00.0%00.0%Atenolol130.0%**********Betaxolol00.0%00.0%Bisoprolol00.0%00.0%Carvedilol*********00.0%Labetalol00.0%00.0%Nadolol********************	Propranolol (Regular)	129,011	87.6%	80,520	87.0%
Atenolol 13 0.0% ***** ***** Betaxolol 0 0.0% 0 0.0% Bisoprolol 0 0.0% 0 0.0% Carvedilol ***** 0 0.0% Labetalol 0 0.0% 0 0.0% Vadolol ***** ***** ***** ***** *****	Propranolol (Hemangeol)	2,463	1.7%	1,409	1.5%
Activitie 15 0.0% Betaxolol 0 0.0% 0 0.0% Bisoprolol 0 0.0% 0 0.0% Carvedilol ***** ***** 0 0.0% Labetalol 0 0.0% 0 0.0% Nadolol ***** ***** ***** *****	Acebutolol	0	0.0%	0	0.0%
Bisoprolol 0 0.0% 0 0.0% Carvedilol **** ***** 0 0.0% Labetalol 0 0.0% 0 0.0% Nadolol ***** ***** ***** ***** *****	Atenolol	13	0.0%	****	****
Carvedilol ***** 0 0.0% Labetalol 0 0.0% 0 0.0% Nadolol ***** ***** ***** *****	Betaxolol	0	0.0%	0	0.0%
Labetalol 0 0.0% 0 0.0% Nadolol **** ***** ***** *****	Bisoprolol	0	0.0%	0	0.0%
Nadolol ***** **** **** ****	Carvedilol	****	****	0	0.0%
	Labetalol	0	0.0%	0	0.0%
Nebivolol 0 0.0% 0 0.0%	Nadolol	****	****	****	****
	Nebivolol	0	0.0%	0	0.0%



	Beta	Blockers	•	ost-Index Enrollment µirement)
		Percent/		Percent/
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation ³
Pindolol	****	****	****	****
Sotalol	25	0.0%	17	0.0%
Timolol	0	0.0%	0	0.0%
Health Characteristics by Beta Blockers				
Hypertension and Any Metoprolol	****	****	****	****
Hypertension and Metoprolol (Extended Release)	****	****	****	****
Hypertension and Metoprolol (Regular)	0	0.0%	0	0.0%
Hypertension and Any Propranolol	3,869	2.6%	2,507	2.7%
Hypertension and Propranolol (Extended Release)	476	0.3%	330	0.4%
Hypertension and Propranolol (Regular)	3,387	2.3%	2,175	2.4%
Hypertension and Acebutolol	0	0.0%	0	0.0%
Hypertension and Atenolol	****	****	****	****
Hypertension and Betaxolol	0	0.0%	0	0.0%
Hypertension and Bisoprolol	0	0.0%	0	0.0%
Hypertension and Carvedilol	0	0.0%	0	0.0%
Hypertension and Labetalol	0	0.0%	0	0.0%
Hypertension and Nadolol	0	0.0%	0	0.0%
Hypertension and Nebivolol	0	0.0%	0	0.0%
Hypertension and Pindolol	0	0.0%	0	0.0%
Hypertension and Sotalol	0	0.0%	0	0.0%
Hypertension and Timolol	0	0.0%	0	0.0%
Hemangioma and Any Metoprolol	0	0.0%	0	0.0%
Hemangioma and Metoprolol (Extended Release)	0	0.0%	0	0.0%
Hemangioma and Metoprolol (Regular)	0	0.0%	0	0.0%
Hemangioma and Any Propranolol	15,407	10.5%	9,190	9.9%
Hemangioma and Propranolol (Extended Release)	24	0.0%	16	0.0%
Hemangioma and Propranolol (Regular)	13,128	8.9%	7,873	8.5%
Hemangioma and Propranolol (Hemangeol)	2,262	1.5%	1,305	1.4%
Hemangioma and Acebutolol	0	0.0%	0	0.0%
Hemangioma and Atenolol	0	0.0%	0	0.0%
Hemangioma and Betaxolol	0	0.0%	0	0.0%
Hemangioma and Bisoprolol	0	0.0%	0	0.0%
Hemangioma and Carvedilol	0	0.0%	0	0.0%
Hemangioma and Labetalol	0	0.0%	0	0.0%
Hemangioma and Nadolol	0	0.0%	0	0.0%
Hemangioma and Nebivolol	0	0.0%	0	0.0%
Hemangioma and Pindolol	0	0.0%	0	0.0%



	Beta Blockers		Beta Blockers (Post-Index Enrollmen Requirement)	
Patient Characteristics ^{1,2}	Number/Mean	Percent/ Standard Deviation ³	Number/Mean	Percent/ Standard Deviation ³
Hemangioma and Sotalol	0	0.0%	0	0.0%
Hemangioma and Timolol	0	0.0%	0	0.0%
Long QT Syndrome and Any Metoprolol Long QT Syndrome and Metoprolol (Extended Release) Long QT Syndrome and Metoprolol (Regular) Long QT Syndrome and Any Propranolol	0 0 0 854	0.0% 0.0% 0.0% 0.6%	0 0 501	0.0% 0.0% 0.0% 0.5%
Long QT Syndrome and Propranolol (Extended Release)	42	0.0%	29	0.0%
Long QT Syndrome and Propranolol (Regular)	809	0.5%	471	0.5%
Long QT Syndrome and Acebutolol	0	0.0%	0	0.0%
Long QT Syndrome and Atenolol	0	0.0%	0	0.0%
Long QT Syndrome and Betaxolol	0	0.0%	0	0.0%
Long QT Syndrome and Bisoprolol	0	0.0%	0	0.0%
Long QT Syndrome and Carvedilol	0	0.0%	0	0.0%
Long QT Syndrome and Labetalol	0	0.0%	0	0.0%
Long QT Syndrome and Nadolol	0	0.0%	0	0.0%
Long QT Syndrome and Nebivolol	0	0.0%	0	0.0%
Long QT Syndrome and Pindolol	0	0.0%	0	0.0%
Long QT Syndrome and Sotalol	****	****	****	****
Long QT Syndrome and Timolol	0	0.0%	0	0.0%

¹All metrics are based on total number of episodes per group, except for sex, race, and Hispanic origin which are based on total number of unique patients.

²Characteristics in blue show a standardized difference greater than 0.1.

³Value represents standard deviation where no % follows the value.

⁴Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

⁵The Charlson/Elixhauser Combined Comorbidity Score is calculated based on comorbidities observed during a requester-defined window around the exposure episode start date. (Gagne JJ, Glynn RJ, Avorn J, Levin R, Schneeweiss S. A combined comorbidity score predicted mortality in elderly patients better than existing scores. J Clin Epidemiol. 2011;64(7):749-759)

*****Data are not presented in these cells due to a small sample size or to assure a small cell cannot be recalculated through the cells presented.



		a Blockers	Beta Blockers (Post-Index Enrollment Requirement)	
		Percent/		Percent/
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation ³
Unique patients	15,680	N/A	10,483	N/A
Episodes	16,281	100.0%	10,853	100.0%
Demographic Characteristics				
Age (years)	15.4	2.2	15.3	2.2
Age				
0-1 years	****	****	****	****
2-5 years	****	****	****	****
6-12 years	2,259	13.9%	1,520	14.0%
13-17 years	13,992	85.9%	9,311	85.8%
Sex				
Female	10,139	64.7%	6,733	64.2%
Male	5,541	35.3%	3,750	35.8%
Race ⁴				
American Indian or Alaska Native	141	0.9%	94	0.9%
Asian	61	0.4%	****	****
Black or African American	766	4.9%	452	4.3%
Native Hawaiian or Other Pacific Islander	13	0.1%	****	****
Unknown	10,216	65.2%	7,062	67.4%
White	4,483	28.6%	2,829	27.0%
Hispanic origin				
Yes	897	5.7%	552	5.3%
No	4,930	31.4%	3,039	29.0%
Unknown	9,853	62.8%	6,892	65.7%
Year				
2008	651	4.0%	492	4.5%
2009	882	5.4%	639	5.9%
2010	851	5.2%	647	6.0%
2011	826	5.1%	623	5.7%
2012	777	4.8%	604	5.6%
2013	812	5.0%	616	5.7%
2014	1,085	6.7%	819	7.5%
2015	1,521	9.3%	1,217	11.2%
2016	2,290	14.1%	1,923	17.7%
2017	2,626	16.1%	1,930	17.8%
2018	2,289	14.1%	502	4.6%
2019	619	3.8%	463	4.3%
2020	489	3.0%	345	3.2%



	Beta	Blockers	Beta Blockers (Post-Index Enrollment Requirement)	
		Percent/		Percent/
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation ³
2021	506	3.1%	33	0.3%
2022	57	0.4%	0	0.0%
Health Characteristics				
Charlson/Elixhauser combined comorbidity score ⁵	0.3	0.6	0.2	0.6
Hypertension	476	2.9%	330	3.0%
Hemangioma	24	0.1%	16	0.1%
Heart Failure	****	****	****	****
Congenital Heart Disease	89	0.5%	69	0.6%
Atrial Fibrillation	****	****	****	****
_ong QT Syndrome	42	0.3%	29	0.3%
Other Cardiac Arrhythmias	658	4.0%	409	3.8%
Cardiac Arrhythmias (Composite)	690	4.2%	432	4.0%
Pulmonary Hypertension	****	****	****	****
Cardiomyopathy	12	0.1%	****	****
Coronary Artery Disease	****	****	****	****
Portal Hypertension	****	****	****	****
Anxiety Disorder	2,893	17.8%	1,813	16.7%
Tremor	586	3.6%	381	3.5%
Vigraine	8,398	51.6%	5,723	52.7%
Thyrotoxicosis	112	0.7%	83	0.8%
Burns	24	0.1%	13	0.1%
Glaucoma	31	0.2%	23	0.2%
Autism	447	2.7%	304	2.8%
Marfan's Syndrome	****	****	****	****
Pheochromocytoma/Paraganglioma	0	0.0%	0	0.0%
Diabetes	112	0.7%	77	0.7%
Any of the above health characteristics <i>(excluding</i>		U ,U		••••
combined comorbidity score)	11,272	69.2%	7,563	69.7%
None of the above health characteristics (excluding combined comorbidity score)	5,009	30.8%	3,290	30.3%
Hypoglycemia (Day 0)	****	****	****	****
Typoglycemia (0-3 Months)	29	0.2%	21	0.2%
Hypoglycemia (3-6 Months)	29	0.2%	19	0.2%
Hypoglycemia (6-12 Months)	35	0.2%	28	0.3%
Hypoglycemia (Day 0) and Diabetes	>> ****	U.2 <i>7</i> 0 ****	20 ****	U.5 <i>7</i> 0 ****
Hypoglycemia (0-3 Months) and Diabetes	****	****	****	****
	****	****	****	****
Hypoglycemia (3-6 Months) and Diabetes Hypoglycemia (6-12 Months) and Diabetes	****	****	****	****



	Beta	Blockers	Beta Blockers (Post-Index Enrollment Requirement)	
		Percent/		Percent/
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation ³
Hypoglycemia (Day 0) and No Diabetes	****	****	****	****
Hypoglycemia (0-3 Months) and No Diabetes	28	0.2%	20	0.2%
Hypoglycemia (3-6 Months) and No Diabetes	24	0.1%	16	0.1%
Hypoglycemia (6-12 Months) and No Diabetes	34	0.2%	27	0.2%
Hypoglycemia (Day 0) and Any Metoprolol	0	0.0%	0	0.0%
Hypoglycemia (0-3 Months) and Any Metoprolol	0	0.0%	0	0.0%
Hypoglycemia (3-6 Months) and Any Metoprolol	0	0.0%	0	0.0%
Hypoglycemia (6-12 Months) and Any Metoprolol	0	0.0%	0	0.0%
Hypoglycemia (Day 0) and Any Propranolol	****	****	****	****
Hypoglycemia (0-3 Months) and Any Propranolol	29	0.2%	21	0.2%
Hypoglycemia (3-6 Months) and Any Propranolol	29	0.2%	19	0.2%
Hypoglycemia (6-12 Months) and Any Propranolol	35	0.2%	28	0.3%
Hypoglycemia (Day 0) and Atenolol	0	0.0%	0	0.0%
Hypoglycemia (0-3 Months) and Atenolol	0	0.0%	0	0.0%
Hypoglycemia (3-6 Months) and Atenolol	0	0.0%	0	0.0%
Hypoglycemia (6-12 Months) and Atenolol	0	0.0%	0	0.0%
Hypoglycemia (Day 0) and Nadolol	0	0.0%	0	0.0%
Hypoglycemia (0-3 Months) and Nadolol	0	0.0%	0	0.0%
Hypoglycemia (3-6 Months) and Nadolol	0	0.0%	0	0.0%
Hypoglycemia (6-12 Months) and Nadolol	0	0.0%	0	0.0%
Selective Beta Blockers	****	****	****	****
Non-Selective Beta Blockers	16,281	100.0%	10,853	100.0%
Any Metoprolol	****	****	****	****
Metoprolol (Extended Release)	0	0.0%	0	0.0%
Metoprolol (Regular)	****	****	****	****
Any Propranolol	16,281	100.0%	10,853	100.0%
Propranolol (Extended Release)	16,281	100.0%	10,853	100.0%
Propranolol (Regular)	406	2.5%	257	2.4%
Propranolol (Hemangeol)	0	0.0%	0	0.0%
Acebutolol	0	0.0%	0	0.0%
Atenolol	****	****	****	****
Betaxolol	0	0.0%	0	0.0%
Bisoprolol	0	0.0%	0	0.0%
Carvedilol	0	0.0%	0	0.0%
Labetalol	0	0.0%	0	0.0%
Nadolol	****	****	****	****
Nebivolol	0	0.0%	0	0.0%



	Beta	Blockers	-	ost-Index Enrollment iirement)
		Percent/		Percent/
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation ³
Pindolol	0	0.0%	0	0.0%
Sotalol	0	0.0%	0	0.0%
Timolol	0	0.0%	0	0.0%
Health Characteristics by Beta Blockers				
Hypertension and Any Metoprolol	0	0.0%	0	0.0%
Hypertension and Metoprolol (Extended Release)	0	0.0%	0	0.0%
Hypertension and Metoprolol (Regular)	0	0.0%	0	0.0%
Hypertension and Any Propranolol	476	2.9%	330	3.0%
Hypertension and Propranolol (Extended Release)	476	2.9%	330	3.0%
Hypertension and Propranolol (Regular)	****	****	****	****
Hypertension and Acebutolol	0	0.0%	0	0.0%
Hypertension and Atenolol	0	0.0%	0	0.0%
Hypertension and Betaxolol	0	0.0%	0	0.0%
Hypertension and Bisoprolol	0	0.0%	0	0.0%
Hypertension and Carvedilol	0	0.0%	0	0.0%
Hypertension and Labetalol	0	0.0%	0	0.0%
Hypertension and Nadolol	0	0.0%	0	0.0%
Hypertension and Nebivolol	0	0.0%	0	0.0%
Hypertension and Pindolol	0	0.0%	0	0.0%
Hypertension and Sotalol	0	0.0%	0	0.0%
Hypertension and Timolol	0	0.0%	0	0.0%
Hemangioma and Any Metoprolol	0	0.0%	0	0.0%
Hemangioma and Metoprolol (Extended Release)	0	0.0%	0	0.0%
Hemangioma and Metoprolol (Regular)	0	0.0%	0	0.0%
Hemangioma and Any Propranolol	24	0.1%	16	0.1%
Hemangioma and Propranolol (Extended Release)	24	0.1%	16	0.1%
Hemangioma and Propranolol (Regular)	****	****	0	0.0%
Hemangioma and Propranolol (Hemangeol)	0	0.0%	0	0.0%
Hemangioma and Acebutolol	0	0.0%	0	0.0%
Hemangioma and Atenolol	0	0.0%	0	0.0%
Hemangioma and Betaxolol	0	0.0%	0	0.0%
Hemangioma and Bisoprolol	0	0.0%	0	0.0%
Hemangioma and Carvedilol	0	0.0%	0	0.0%
Hemangioma and Labetalol	0	0.0%	0	0.0%
Hemangioma and Nadolol	0	0.0%	0	0.0%
Hemangioma and Nebivolol	0	0.0%	0	0.0%
Hemangioma and Pindolol	0	0.0%	0	0.0%



Table 1t. Aggregated Characteristics of Beta Blockers and Beta Blockers (Post-Index Enrollment Requirement) in the Sentinel
Distributed Database (SDD) from January 1, 2008 to May 31, 2022 (Propranolol (Extended Release))

	Beta	Blockers	•	ost-Index Enrollment iirement)
Patient Characteristics ^{1,2}	Number/Mean	Percent/ Standard Deviation ³	Number/Mean	Percent/ Standard Deviation ³
Hemangioma and Sotalol	0	0.0%	0	0.0%
Hemangioma and Timolol	0	0.0%	0	0.0%
Long QT Syndrome and Any Metoprolol Long QT Syndrome and Metoprolol (Extended Release) Long QT Syndrome and Metoprolol (Regular)	0 0 0	0.0% 0.0% 0.0%	0 0 0	0.0% 0.0% 0.0%
Long QT Syndrome and Any Propranolol Long QT Syndrome and Propranolol (Extended Release)	42 42	0.3% 0.3%	29 29	0.3% 0.3%
Long QT Syndrome and Propranolol (Regular)	****	****	****	****
Long QT Syndrome and Acebutolol	0	0.0%	0	0.0%
Long QT Syndrome and Atenolol	0	0.0%	0	0.0%
Long QT Syndrome and Betaxolol	0	0.0%	0	0.0%
Long QT Syndrome and Bisoprolol	0	0.0%	0	0.0%
Long QT Syndrome and Carvedilol	0	0.0%	0	0.0%
Long QT Syndrome and Labetalol	0	0.0%	0	0.0%
Long QT Syndrome and Nadolol	0	0.0%	0	0.0%
Long QT Syndrome and Nebivolol	0	0.0%	0	0.0%
Long QT Syndrome and Pindolol	0	0.0%	0	0.0%
Long QT Syndrome and Sotalol	0	0.0%	0	0.0%
Long QT Syndrome and Timolol	0	0.0%	0	0.0%

¹All metrics are based on total number of episodes per group, except for sex, race, and Hispanic origin which are based on total number of unique patients.

²Characteristics in blue show a standardized difference greater than 0.1.

³Value represents standard deviation where no % follows the value.

⁴Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

⁵The Charlson/Elixhauser Combined Comorbidity Score is calculated based on comorbidities observed during a requester-defined window around the exposure episode start date. (Gagne JJ, Glynn RJ, Avorn J, Levin R, Schneeweiss S. A combined comorbidity score predicted mortality in elderly patients better than existing scores. J Clin Epidemiol. 2011;64(7):749-759)

*****Data are not presented in these cells due to a small sample size or to assure a small cell cannot be recalculated through the cells presented.



	Beta	Blockers	Beta Blockers (Post-Index Enrollment Requirement)	
		Percent/		Percent/
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation ³
Unique patients	122,366	N/A	76,527	
Episodes	129,011	100.0%	80,520	100.0%
Demographic Characteristics				
Age (years)	11.9	6.1	11.9	6.0
Age				
0-1 years	23,371	18.1%	13,918	17.3%
2-5 years	3,113	2.4%	1,952	2.4%
6-12 years	23,481	18.2%	15,302	19.0%
13-17 years	79,046	61.3%	49,348	61.3%
Sex				
Female	75,746	61.9%	46,885	61.3%
Male	46,620	38.1%	29,642	38.7%
Race ⁴				
American Indian or Alaska Native	1,226	1.0%	768	1.0%
Asian	1,049	0.9%	606	0.8%
Black or African American	6,153	5.0%	3,830	5.0%
Native Hawaiian or Other Pacific Islander	171	0.1%	104	0.1%
Unknown	79,669	65.1%	50,416	65.9%
White	34,098	27.9%	20,803	27.2%
Hispanic origin				
Yes	12,552	10.3%	7,492	9.8%
No	39,317	32.1%	23,808	31.1%
Unknown	70,497	57.6%	45,227	59.1%
Year				
2008	2,792	2.2%	2,151	2.7%
2009	3,569	2.8%	2,660	3.3%
2010	3,605	2.8%	2,744	3.4%
2011	3,690	2.9%	2,778	3.5%
2012	3,859	3.0%	2,997	3.7%
2013	4,225	3.3%	3,162	3.9%
2014	7,269	5.6%	5,738	7.1%
2015	12,355	9.6%	9,239	11.5%
2016	19,052	14.8%	15,645	19.4%
2017	24,078	18.7%	18,524	23.0%
2018	24,102	18.7%	4,870	6.0%
2019	6,917	5.4%	5,307	6.6%
2020	6,128	4.7%	4,180	5.2%



	Beta	Blockers	•	ost-Index Enrollment irement)
		Percent/		Percent/
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation ³
2021	6,902	5.3%	525	0.7%
2022	468	0.4%	0	0.0%
Health Characteristics				
Charlson/Elixhauser combined comorbidity score ⁵	0.5	0.9	0.5	0.9
Hypertension	3,387	2.6%	2,175	2.7%
Hemangioma	13,128	10.2%	7,873	9.8%
Heart Failure	1,090	0.8%	654	0.8%
Congenital Heart Disease	9,387	7.3%	5,616	7.0%
Atrial Fibrillation	96	0.1%	62	0.1%
Long QT Syndrome	809	0.6%	471	0.6%
Other Cardiac Arrhythmias	13,786	10.7%	8,335	10.4%
Cardiac Arrhythmias (Composite)	14,222	11.0%	8,577	10.7%
Pulmonary Hypertension	671	0.5%	362	0.4%
Cardiomyopathy	744	0.6%	430	0.5%
Coronary Artery Disease	199	0.2%	136	0.2%
Portal Hypertension	209	0.2%	136	0.2%
Anxiety Disorder	35,834	27.8%	21,568	26.8%
Tremor	2,975	2.3%	1,849	2.3%
Migraine	28,869	22.4%	18,846	23.4%
Thyrotoxicosis	2,282	1.8%	1,437	1.8%
Burns	358	0.3%	228	0.3%
Glaucoma	279	0.2%	165	0.2%
Autism	5,370	4.2%	3,322	4.1%
Marfan's Syndrome	80	0.1%	42	0.1%
Pheochromocytoma/Paraganglioma	64	0.0%	42	0.1%
Diabetes	967	0.7%	581	0.7%
Any of the above health characteristics (excluding				
<i>combined comorbidity score)</i> None of the above health characteristics <i>(excluding</i>	93,022	72.1%	57,706	71.7%
combined comorbidity score)	35,989	27.9%	22,814	28.3%
Hypoglycemia (Day 0)	85	0.1%	45	0.1%
Hypoglycemia (0-3 Months)	442	0.3%	281	0.3%
Hypoglycemia (3-6 Months)	296	0.2%	215	0.3%
Hypoglycemia (6-12 Months)	387	0.3%	336	0.4%
Hypoglycemia (Day 0) and Diabetes	****	****	****	****
Hypoglycemia (0-3 Months) and Diabetes	47	0.0%	26	0.0%
Hypoglycemia (3-6 Months) and Diabetes	37	0.0%	30	0.0%
Hypoglycemia (6-12 Months) and Diabetes	43	0.0%	41	0.1%



	Beta	Blockers	•	ost-Index Enrollment irement)
		Percent/		Percent/
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation ³
Hypoglycemia (Day 0) and No Diabetes	84	0.1%	44	0.1%
Hypoglycemia (0-3 Months) and No Diabetes	395	0.3%	255	0.3%
Hypoglycemia (3-6 Months) and No Diabetes	259	0.2%	185	0.2%
Hypoglycemia (6-12 Months) and No Diabetes	344	0.3%	295	0.4%
Hypoglycemia (Day 0) and Any Metoprolol	0	0.0%	0	0.0%
Hypoglycemia (0-3 Months) and Any Metoprolol	0	0.0%	0	0.0%
Hypoglycemia (3-6 Months) and Any Metoprolol	0	0.0%	0	0.0%
Hypoglycemia (6-12 Months) and Any Metoprolol	0	0.0%	0	0.0%
Hypoglycemia (Day 0) and Any Propranolol	85	0.1%	45	0.1%
Hypoglycemia (0-3 Months) and Any Propranolol	442	0.3%	281	0.3%
Hypoglycemia (3-6 Months) and Any Propranolol	296	0.2%	215	0.3%
Hypoglycemia (6-12 Months) and Any Propranolol	387	0.3%	336	0.4%
Hypoglycemia (Day 0) and Atenolol	0	0.0%	0	0.0%
Hypoglycemia (0-3 Months) and Atenolol	0	0.0%	0	0.0%
Hypoglycemia (3-6 Months) and Atenolol	0	0.0%	0	0.0%
Hypoglycemia (6-12 Months) and Atenolol	0	0.0%	0	0.0%
Hypoglycemia (Day 0) and Nadolol	0	0.0%	0	0.0%
Hypoglycemia (0-3 Months) and Nadolol	0	0.0%	0	0.0%
Hypoglycemia (3-6 Months) and Nadolol	0	0.0%	0	0.0%
Hypoglycemia (6-12 Months) and Nadolol	0	0.0%	0	0.0%
Selective Beta Blockers	28	0.0%	22	0.0%
Non-Selective Beta Blockers	129,011	100.0%	80,520	100.0%
Any Metoprolol	17	0.0%	14	0.0%
Metoprolol (Extended Release)	****	****	****	****
Metoprolol (Regular)	****	****	****	****
Any Propranolol	129,011	100.0%	80,520	100.0%
Propranolol (Extended Release)	406	0.3%	257	0.3%
Propranolol (Regular)	129,011	100.0%	80,520	100.0%
Propranolol (Hemangeol)	11	0.0%	****	****
Acebutolol	0	0.0%	0	0.0%
Atenolol	11	0.0%	****	****
Betaxolol	0	0.0%	0	0.0%
Bisoprolol	0	0.0%	0	0.0%
Carvedilol	****	****	0	0.0%
Labetalol	0	0.0%	0	0.0%
Nadolol	****	****	****	****
Nebivolol	0	0.0%	0	0.0%



	Beta	Blockers		ost-Index Enrollment irement)
		Percent/		Percent/
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation ³
Pindolol	****	****	****	****
Sotalol	25	0.0%	17	0.0%
Timolol	0	0.0%	0	0.0%
Health Characteristics by Beta Blockers				
Hypertension and Any Metoprolol	****	****	****	****
Hypertension and Metoprolol (Extended Release)	****	* * * * *	****	****
Hypertension and Metoprolol (Regular)	0	0.0%	0	0.0%
Hypertension and Any Propranolol	3,387	2.6%	2,175	2.7%
Hypertension and Propranolol (Extended Release)	****	****	****	****
Hypertension and Propranolol (Regular)	3,387	2.6%	2,175	2.7%
Hypertension and Acebutolol	0	0.0%	0	0.0%
Hypertension and Atenolol	****	****	****	****
Hypertension and Betaxolol	0	0.0%	0	0.0%
Hypertension and Bisoprolol	0	0.0%	0	0.0%
Hypertension and Carvedilol	0	0.0%	0	0.0%
Hypertension and Labetalol	0	0.0%	0	0.0%
Hypertension and Nadolol	0	0.0%	0	0.0%
Hypertension and Nebivolol	0	0.0%	0	0.0%
Hypertension and Pindolol	0	0.0%	0	0.0%
Hypertension and Sotalol	0	0.0%	0	0.0%
Hypertension and Timolol	0	0.0%	0	0.0%
Hemangioma and Any Metoprolol	0	0.0%	0	0.0%
Hemangioma and Metoprolol (Extended Release)	0	0.0%	0	0.0%
Hemangioma and Metoprolol (Regular)	0	0.0%	0	0.0%
Hemangioma and Any Propranolol	13,128	10.2%	7,873	9.8%
Hemangioma and Propranolol (Extended Release)	****	****	0	0.0%
Hemangioma and Propranolol (Regular)	13,128	10.2%	7,873	9.8%
Hemangioma and Propranolol (Hemangeol)	****	****	****	****
Hemangioma and Acebutolol	0	0.0%	0	0.0%
Hemangioma and Atenolol	0	0.0%	0	0.0%
Hemangioma and Betaxolol	0	0.0%	0	0.0%
Hemangioma and Bisoprolol	0	0.0%	0	0.0%
Hemangioma and Carvedilol	0	0.0%	0	0.0%
Hemangioma and Labetalol	0	0.0%	0	0.0%
Hemangioma and Nadolol	0	0.0%	0	0.0%
Hemangioma and Nebivolol	0	0.0%	0	0.0%
Hemangioma and Pindolol	0	0.0%	0	0.0%



	Beta Blockers		Beta Blockers (Post-Index Enrollment Requirement)	
Patient Characteristics ^{1,2}	Number/Mean	Percent/ Standard Deviation ³	Number/Mean	Percent/ Standard Deviation ³
Hemangioma and Sotalol	0	0.0%	0	0.0%
Hemangioma and Timolol	0	0.0%	0	0.0%
Long QT Syndrome and Any Metoprolol Long QT Syndrome and Metoprolol (Extended Release) Long QT Syndrome and Metoprolol (Regular) Long QT Syndrome and Any Propranolol Long QT Syndrome and Propranolol (Extended Release)	0 0 0 809 *****	0.0% 0.0% 0.6% *****	0 0 471 *****	0.0% 0.0% 0.0% 0.6% *****
Long QT Syndrome and Propranolol (Regular)	809	0.6%	471	0.6%
Long QT Syndrome and Acebutolol	0	0.0%	0	0.0%
Long QT Syndrome and Atenolol	0	0.0%	0	0.0%
Long QT Syndrome and Betaxolol	0	0.0%	0	0.0%
Long QT Syndrome and Bisoprolol	0	0.0%	0	0.0%
Long QT Syndrome and Carvedilol	0	0.0%	0	0.0%
Long QT Syndrome and Labetalol	0	0.0%	0	0.0%
Long QT Syndrome and Nadolol	0	0.0%	0	0.0%
Long QT Syndrome and Nebivolol	0	0.0%	0	0.0%
Long QT Syndrome and Pindolol	0	0.0%	0	0.0%
Long QT Syndrome and Sotalol Long QT Syndrome and Timolol	**** 0	***** 0.0%	**** 0	***** 0.0%

¹All metrics are based on total number of episodes per group, except for sex, race, and Hispanic origin which are based on total number of unique patients.

²Characteristics in blue show a standardized difference greater than 0.1.

³Value represents standard deviation where no % follows the value.

⁴Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

⁵The Charlson/Elixhauser Combined Comorbidity Score is calculated based on comorbidities observed during a requester-defined window around the exposure episode start date. (Gagne JJ, Glynn RJ, Avorn J, Levin R, Schneeweiss S. A combined comorbidity score predicted mortality in elderly patients better than existing scores. J Clin Epidemiol. 2011;64(7):749-759)

*****Data are not presented in these cells due to a small sample size or to assure a small cell cannot be recalculated through the cells presented.



	Beta	Blockers	Beta Blockers (Post-Index Enrollment Requirement)	
		Percent/		Percent/
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation ³
Unique patients	2,437	N/A	1,400	N/A
Episodes	2,463	100.0%	1,409	100.0%
Demographic Characteristics				
Age (years)	0.5	0.7	0.5	0.7
Age				
0-1 years	2,401	97.5%	1,372	97.4%
2-5 years	****	****	****	****
6-12 years	****	****	****	****
13-17 years	0	0.0%	0	0.0%
Sex				
Female	1,791	73.5%	1,044	74.6%
Male	646	26.5%	356	25.4%
Race ⁴				
American Indian or Alaska Native	****	****	****	****
Asian	36	1.5%	19	1.4%
Black or African American	61	2.5%	33	2.4%
Native Hawaiian or Other Pacific Islander	****	****	****	****
Unknown	1,870	76.7%	1,083	77.4%
White	458	18.8%	256	18.3%
Hispanic origin				
Yes	234	9.6%	149	10.6%
No	503	20.6%	272	19.4%
Unknown	1,700	69.8%	979	69.9%
Year				
2008	0	0.0%	0	0.0%
2009	0	0.0%	0	0.0%
2010	0	0.0%	0	0.0%
2011	0	0.0%	0	0.0%
2012	0	0.0%	0	0.0%
2013	0	0.0%	0	0.0%
2014	52	2.1%	44	3.1%
2015	235	9.5%	174	12.3%
2016	459	18.6%	365	25.9%
2017	535	21.7%	365	25.9%
2018	493	20.0%	134	9.5%
2019	174	7.1%	123	8.7%
2020	241	9.8%	185	13.1%



	Beta	Blockers	Beta Blockers (Post-Index Enrollment Requirement)	
		Percent/		Percent/
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation ³
2021	256	10.4%	19	1.3%
2022	18	0.7%	0	0.0%
Health Characteristics				
Charlson/Elixhauser combined comorbidity score ⁵	0.1	0.5	0.1	0.5
Hypertension	****	****	****	****
Hemangioma	2,262	91.8%	1,305	92.6%
Heart Failure	****	****	****	****
Congenital Heart Disease	341	13.8%	191	13.6%
Atrial Fibrillation	0	0.0%	0	0.0%
Long QT Syndrome	****	****	****	****
Other Cardiac Arrhythmias	68	2.8%	38	2.7%
Cardiac Arrhythmias (Composite)	70	2.8%	39	2.8%
Pulmonary Hypertension	****	****	****	****
Cardiomyopathy	****	****	****	****
Coronary Artery Disease	****	****	****	****
Portal Hypertension	0	0.0%	0	0.0%
Anxiety Disorder	****	****	****	****
Tremor	****	****	****	****
Migraine	****	****	****	****
Thyrotoxicosis	0	0.0%	0	0.0%
Burns	****	****	****	****
Glaucoma	****	****	****	****
Autism	****	****	****	****
Marfan's Syndrome	0	0.0%	0	0.0%
Pheochromocytoma/Paraganglioma	****	****	****	****
Diabetes	****	****	****	****
Any of the above health characteristics (excluding				
<i>combined comorbidity score)</i> None of the above health characteristics <i>(excluding</i>	2,291	93.0%	1,324	94.0%
combined comorbidity score)	172	7.0%	85	6.0%
Hypoglycemia (Day 0)	0	0.0%	0	0.0%
Hypoglycemia (0-3 Months)	****	****	****	****
Hypoglycemia (3-6 Months)	****	****	****	****
Hypoglycemia (6-12 Months)	****	****	****	****
Hypoglycemia (Day 0) and Diabetes	0	0.0%	0	0.0%
Hypoglycemia (0-3 Months) and Diabetes	0	0.0%	0	0.0%
Hypoglycemia (3-6 Months) and Diabetes	0	0.0%	0	0.0%
Hypoglycemia (6-12 Months) and Diabetes	0	0.0%	0	0.0%



	Beta	Blockers	Beta Blockers (Post-Index Enrollment Requirement)	
		Percent/		Percent/
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation ³
Hypoglycemia (Day 0) and No Diabetes	0	0.0%	0	0.0%
Hypoglycemia (0-3 Months) and No Diabetes	****	****	****	****
Hypoglycemia (3-6 Months) and No Diabetes	* * * * *	****	****	****
Hypoglycemia (6-12 Months) and No Diabetes	****	****	****	****
Hypoglycemia (Day 0) and Any Metoprolol	0	0.0%	0	0.0%
Hypoglycemia (0-3 Months) and Any Metoprolol	0	0.0%	0	0.0%
Hypoglycemia (3-6 Months) and Any Metoprolol	0	0.0%	0	0.0%
Hypoglycemia (6-12 Months) and Any Metoprolol	0	0.0%	0	0.0%
Hypoglycemia (Day 0) and Any Propranolol	0	0.0%	0	0.0%
Hypoglycemia (0-3 Months) and Any Propranolol	****	****	****	****
Hypoglycemia (3-6 Months) and Any Propranolol	****	****	****	****
Hypoglycemia (6-12 Months) and Any Propranolol	****	****	****	****
Hypoglycemia (Day 0) and Atenolol	0	0.0%	0	0.0%
Hypoglycemia (0-3 Months) and Atenolol	0	0.0%	0	0.0%
Hypoglycemia (3-6 Months) and Atenolol	0	0.0%	0	0.0%
Hypoglycemia (6-12 Months) and Atenolol	0	0.0%	0	0.0%
Hypoglycemia (Day 0) and Nadolol	0	0.0%	0	0.0%
Hypoglycemia (0-3 Months) and Nadolol	0	0.0%	0	0.0%
Hypoglycemia (3-6 Months) and Nadolol	0	0.0%	0	0.0%
Hypoglycemia (6-12 Months) and Nadolol	0	0.0%	0	0.0%
Selective Beta Blockers	0	0.0%	0	0.0%
Non-Selective Beta Blockers	2,463	100.0%	1,409	100.0%
Any Metoprolol	0	0.0%	0	0.0%
Metoprolol (Extended Release)	0	0.0%	0	0.0%
Metoprolol (Regular)	0	0.0%	0	0.0%
Any Propranolol	2,463	100.0%	1,409	100.0%
Propranolol (Extended Release)	0	0.0%	0	0.0%
Propranolol (Regular)	11	0.4%	****	****
Propranolol (Hemangeol)	2,463	100.0%	1,409	100.0%
Acebutolol	0	0.0%	0	0.0%
Atenolol	0	0.0%	0	0.0%
Betaxolol	0	0.0%	0	0.0%
Bisoprolol	0	0.0%	0	0.0%
Carvedilol	0	0.0%	0	0.0%
Labetalol	0	0.0%	0	0.0%
Nadolol	0	0.0%	0	0.0%
Nebivolol	0	0.0%	0	0.0%



	Beta	Blockers	Beta Blockers (Post-Index Enrollment Requirement)	
		Percent/		Percent/
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation ³
Pindolol	0	0.0%	0	0.0%
Sotalol	0	0.0%	0	0.0%
Timolol	0	0.0%	0	0.0%
Health Characteristics by Beta Blockers				
Hypertension and Any Metoprolol	0	0.0%	0	0.0%
Hypertension and Metoprolol (Extended Release)	0	0.0%	0	0.0%
Hypertension and Metoprolol (Regular)	0	0.0%	0	0.0%
Hypertension and Any Propranolol	****	* * * *	* * * *	****
Hypertension and Propranolol (Extended Release)	0	0.0%	0	0.0%
Hypertension and Propranolol (Regular)	0	0.0%	0	0.0%
Hypertension and Acebutolol	0	0.0%	0	0.0%
Hypertension and Atenolol	0	0.0%	0	0.0%
Hypertension and Betaxolol	0	0.0%	0	0.0%
Hypertension and Bisoprolol	0	0.0%	0	0.0%
Hypertension and Carvedilol	0	0.0%	0	0.0%
Hypertension and Labetalol	0	0.0%	0	0.0%
Hypertension and Nadolol	0	0.0%	0	0.0%
Hypertension and Nebivolol	0	0.0%	0	0.0%
Hypertension and Pindolol	0	0.0%	0	0.0%
Hypertension and Sotalol	0	0.0%	0	0.0%
Hypertension and Timolol	0	0.0%	0	0.0%
Hemangioma and Any Metoprolol	0	0.0%	0	0.0%
Hemangioma and Metoprolol (Extended Release)	0	0.0%	0	0.0%
Hemangioma and Metoprolol (Regular)	0	0.0%	0	0.0%
Hemangioma and Any Propranolol	2,262	91.8%	1,305	92.6%
Hemangioma and Propranolol (Extended Release)	0	0.0%	0	0.0%
Hemangioma and Propranolol (Regular)	****	****	****	****
Hemangioma and Propranolol (Hemangeol)	2,262	91.8%	1,305	92.6%
Hemangioma and Acebutolol	0	0.0%	0	0.0%
Hemangioma and Atenolol	0	0.0%	0	0.0%
Hemangioma and Betaxolol	0	0.0%	0	0.0%
Hemangioma and Bisoprolol	0	0.0%	0	0.0%
Hemangioma and Carvedilol	0	0.0%	0	0.0%
Hemangioma and Labetalol	0	0.0%	0	0.0%
Hemangioma and Nadolol	0	0.0%	0	0.0%
Hemangioma and Nebivolol	0	0.0%	0	0.0%
Hemangioma and Pindolol	0	0.0%	0	0.0%



	Beta Blockers		•	st-Index Enrollment rement)
Patient Characteristics ^{1,2}	Number/Mean	Percent/ Standard Deviation ³	Number/Mean	Percent/ Standard Deviation ³
Hemangioma and Sotalol	0	0.0%	0	0.0%
Hemangioma and Timolol	0	0.0%	0	0.0%
Long QT Syndrome and Any Metoprolol Long QT Syndrome and Metoprolol (Extended Release) Long QT Syndrome and Metoprolol (Regular) Long QT Syndrome and Any Propranolol	0 0 0 *****	0.0% 0.0% 0.0% *****	0 0 0 *****	0.0% 0.0% 0.0% *****
Long QT Syndrome and Propranolol (Extended Release)	0	0.0%	0	0.0%
Long QT Syndrome and Propranolol (Regular)	0	0.0%	0	0.0%
Long QT Syndrome and Acebutolol	0	0.0%	0	0.0%
Long QT Syndrome and Atenolol	0	0.0%	0	0.0%
Long QT Syndrome and Betaxolol	0	0.0%	0	0.0%
Long QT Syndrome and Bisoprolol	0	0.0%	0	0.0%
Long QT Syndrome and Carvedilol	0	0.0%	0	0.0%
Long QT Syndrome and Labetalol	0	0.0%	0	0.0%
Long QT Syndrome and Nadolol	0	0.0%	0	0.0%
Long QT Syndrome and Nebivolol	0	0.0%	0	0.0%
Long QT Syndrome and Pindolol	0	0.0%	0	0.0%
Long QT Syndrome and Sotalol Long QT Syndrome and Timolol	0 0	0.0% 0.0%	0 0	0.0% 0.0%

¹All metrics are based on total number of episodes per group, except for sex, race, and Hispanic origin which are based on total number of unique patients.

²Characteristics in blue show a standardized difference greater than 0.1.

³Value represents standard deviation where no % follows the value.

⁴Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

⁵The Charlson/Elixhauser Combined Comorbidity Score is calculated based on comorbidities observed during a requester-defined window around the exposure episode start date. (Gagne JJ, Glynn RJ, Avorn J, Levin R, Schneeweiss S. A combined comorbidity score predicted mortality in elderly patients better than existing scores. J Clin Epidemiol. 2011;64(7):749-759)

*****Data are not presented in these cells due to a small sample size or to assure a small cell cannot be recalculated through the cells presented.



	Beta	Blockers	Beta Blockers (Post-Index Enrollment Requirement)	
		Percent/		Percent/
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation ³
Unique patients	75	N/A	54	N/A
Episodes	77	100.0%	56	100.0%
Demographic Characteristics				
Age (years)	13.2	4.5	13.5	4.0
Age				
0-1 years	****	****	****	****
2-5 years	****	****	****	****
6-12 years	****	****	****	****
13-17 years	48	62.3%	37	66.1%
Sex				
Female	48	64.0%	34	63.0%
Male	27	36.0%	20	37.0%
Race ⁴				
American Indian or Alaska Native	0	0.0%	0	0.0%
Asian	0	0.0%	0	0.0%
Black or African American	****	****	****	****
Native Hawaiian or Other Pacific Islander	0	0.0%	0	0.0%
Unknown	52	69.3%	40	74.1%
White	****	****	****	****
Hispanic origin				
Yes	0	0.0%	0	0.0%
No	18	24.0%	****	****
Unknown	57	76.0%	****	****
Year				
2008	****	****	****	****
2009	15	19.5%	****	****
2010	****	****	****	****
2011	****	****	****	****
2012	****	****	****	****
2013	****	****	****	****
2014	11	14.3%	****	****
2015	****	****	****	****
2016	****	****	****	****
2017	****	****	****	****
2018	****	****	****	****
2019	****	****	****	****
2020	0	0.0%	0	0.0%



	Beta	Blockers	Beta Blockers (Post-Index Enrollment Requirement)	
		Percent/		Percent/
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation ³
2021	* * * * *	****	0	0.0%
2022	0	0.0%	0	0.0%
Health Characteristics				
Charlson/Elixhauser combined comorbidity score ⁵	0.4	0.5	0.4	0.5
Hypertension	****	****	****	****
Hemangioma	* * * * *	****	* * * *	****
Heart Failure	0	0.0%	0	0.0%
Congenital Heart Disease	****	****	****	****
Atrial Fibrillation	0	0.0%	0	0.0%
Long QT Syndrome	0	0.0%	0	0.0%
Other Cardiac Arrhythmias	26	33.8%	18	32.1%
Cardiac Arrhythmias (Composite)	26	33.8%	18	32.1%
Pulmonary Hypertension	0	0.0%	0	0.0%
Cardiomyopathy	0	0.0%	0	0.0%
Coronary Artery Disease	****	****	****	****
Portal Hypertension	0	0.0%	0	0.0%
Anxiety Disorder	15	19.5%	****	****
Tremor	0	0.0%	0	0.0%
Migraine	****	****	****	****
Thyrotoxicosis	0	0.0%	0	0.0%
Burns	0	0.0%	0	0.0%
Glaucoma	0	0.0%	0	0.0%
Autism	****	****	****	****
Marfan's Syndrome	0	0.0%	0	0.0%
Pheochromocytoma/Paraganglioma	0	0.0%	0	0.0%
Diabetes	0	0.0%	0	0.0%
Any of the above health characteristics (excluding				
<i>combined comorbidity score)</i> None of the above health characteristics <i>(excluding</i>	47	61.0%	34	60.7%
combined comorbidity score)	30	39.0%	22	39.3%
Hypoglycemia (Day 0)	****	****	****	****
Hypoglycemia (0-3 Months)	****	****	****	****
Hypoglycemia (3-6 Months)	****	****	****	****
Hypoglycemia (6-12 Months)	0	0.0%	0	0.0%
Hypoglycemia (Day 0) and Diabetes	0	0.0%	0	0.0%
Hypoglycemia (0-3 Months) and Diabetes	0	0.0%	0	0.0%
Hypoglycemia (3-6 Months) and Diabetes	0	0.0%	0	0.0%
Hypoglycemia (6-12 Months) and Diabetes	0	0.0%	0	0.0%



Patient Characteristics12Number/MeanStandard Deviation3Number/MeanStandardHypoglycemia (Day 0) and No Diabetes***********************Hypoglycemia (0-3 Months) and No Diabetes******************Hypoglycemia (3-6 Months) and No Diabetes00.0%00.0Hypoglycemia (6-12 Months) and No Diabetes00.0%00.0Hypoglycemia (0-3 Months) and Any Metoprolol00.0%00.0Hypoglycemia (0-3 Months) and Any Metoprolol00.0%00.0Hypoglycemia (3-6 Months) and Any Metoprolol00.0%00.0Hypoglycemia (0-3 Months) and Any Metoprolol00.0%00.0Hypoglycemia (0-3 Months) and Any Metoprolol00.0%00.0Hypoglycemia (3-6 Months) and Any Propranolol00.0%00.0Hypoglycemia (0-3 Months) and Any Propranolol00.0%00.0Hypoglycemia (0-3 Months) and Any Propranolol00.0%00.0Hypoglycemia (3-6 Months) and Any Propranolol00.0%00.0Hypoglycemia (0-3 Months) and Any Propranolol00.0%00.0Hypoglycemia (0-3 Months) and Any Propranolol00.0%00.0Hypoglycemia (3-6 Months) and Atenolol00.0%00.0Hypoglycemia (3-6 Months) and Atenolol00.0%00.0Hypoglycemia (0-3 Months) and Nadolol00.0%00.0 <th>cent/ Deviation³ *** *** 0% 0% 0%</th>	cent/ Deviation ³ *** *** 0% 0% 0%
Hypoglycemia (Day 0) and No Diabetes********************Hypoglycemia (0-3 Months) and No Diabetes*****************Hypoglycemia (3-6 Months) and No Diabetes00.0%0Hypoglycemia (6-12 Months) and No Diabetes00.0%0Hypoglycemia (Day 0) and Any Metoprolol00.0%0Hypoglycemia (0-3 Months) and Any Metoprolol00.0%0Hypoglycemia (3-6 Months) and Any Propranolol00.0%0Hypoglycemia (3-6 Months) and Atenolol00.0%0Hypoglycemia (3-6 Months) and Nadolol00.0%0Hypoglycemia (3-6 Months) and Nadolol0<	*** *** 0% 0%
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Hypoglycemia (0-3 Months) and No Diabetes ***** ***** ***** Hypoglycemia (3-6 Months) and No Diabetes 0 0.0% 0 0.04 Hypoglycemia (0-3 Months) and No Diabetes 0 0.0% 0 0.04 Hypoglycemia (0-3 Months) and Any Metoprolol 0 0.0% 0 0.04 Hypoglycemia (0-3 Months) and Any Metoprolol 0 0.0% 0 0.04 Hypoglycemia (6-12 Months) and Any Metoprolol 0 0.0% 0 0.04 Hypoglycemia (0-3 Months) and Any Metoprolol 0 0.0% 0 0.04 Hypoglycemia (0-3 Months) and Any Propranolol 0 0.0% 0 0.04 Hypoglycemia (3-6 Months) and Any Propranolol 0 0.0% 0 0.04 Hypoglycemia (3-6 Months) and Any Propranolol 0 0.0% 0 0.04 Hypoglycemia (3-6 Months) and Atenolol 0 0.0% 0 0.04 Hypoglycemia (3-6 Months) and Atenolol 0 0.0% 0 0.04 Hypoglycemia (3-6 Months) and Atenolol 0 0.0%	.0% .0%
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Acebutolol 77 100.0% 56 100	0.0%
Atenolol 0 0.0% 0 0.0	.0%
Betaxolol 0 0.0% 0 0.0	.0%
Bisoprolol 0 0.0% 0 0.0	.0%
Carvedilol 0 0.0% 0 0.0	.0%
Labetalol 0 0.0% 0 0.0	.0%
Nadolol 0 0.0% 0 0.0	
Nebivolol 0 0.0% 0 0.0	.0%



	Beta	Blockers	Beta Blockers (Post-Index Enrollment Requirement)	
		Percent/		Percent/
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation
Pindolol	0	0.0%	0	0.0%
Sotalol	0	0.0%	0	0.0%
Timolol	0	0.0%	0	0.0%
Health Characteristics by Beta Blockers				
Hypertension and Any Metoprolol	0	0.0%	0	0.0%
Hypertension and Metoprolol (Extended Release)	0	0.0%	0	0.0%
Hypertension and Metoprolol (Regular)	0	0.0%	0	0.0%
Hypertension and Any Propranolol	0	0.0%	0	0.0%
Hypertension and Propranolol (Extended Release)	0	0.0%	0	0.0%
Hypertension and Propranolol (Regular)	0	0.0%	0	0.0%
Hypertension and Acebutolol	****	****	****	****
Hypertension and Atenolol	0	0.0%	0	0.0%
Hypertension and Betaxolol	0	0.0%	0	0.0%
Hypertension and Bisoprolol	0	0.0%	0	0.0%
Hypertension and Carvedilol	0	0.0%	0	0.0%
Hypertension and Labetalol	0	0.0%	0	0.0%
Hypertension and Nadolol	0	0.0%	0	0.0%
Hypertension and Nebivolol	0	0.0%	0	0.0%
Hypertension and Pindolol	0	0.0%	0	0.0%
Hypertension and Sotalol	0	0.0%	0	0.0%
Hypertension and Timolol	0	0.0%	0	0.0%
Hemangioma and Any Metoprolol	0	0.0%	0	0.0%
Hemangioma and Metoprolol (Extended Release)	0	0.0%	0	0.0%
Hemangioma and Metoprolol (Regular)	0	0.0%	0	0.0%
Hemangioma and Any Propranolol	0	0.0%	0	0.0%
Hemangioma and Propranolol (Extended Release)	0	0.0%	0	0.0%
Hemangioma and Propranolol (Regular)	0	0.0%	0	0.0%
Hemangioma and Propranolol (Hemangeol)	0	0.0%	0	0.0%
Hemangioma and Acebutolol	****	****	****	****
Hemangioma and Atenolol	0	0.0%	0	0.0%
Hemangioma and Betaxolol	0	0.0%	0	0.0%
Hemangioma and Bisoprolol	0	0.0%	0	0.0%
Hemangioma and Carvedilol	0	0.0%	0	0.0%
Hemangioma and Labetalol	0	0.0%	0	0.0%
Hemangioma and Nadolol	0	0.0%	0	0.0%
Hemangioma and Nebivolol	0	0.0%	0	0.0%
Hemangioma and Pindolol	0	0.0%	0	0.0%



	Beta	Blockers	•	st-Index Enrollment rement)
Patient Characteristics ^{1,2}	Number/Mean	Percent/ Standard Deviation ³	Number/Mean	Percent/ Standard Deviation ³
Hemangioma and Sotalol	0	0.0%	0	0.0%
Hemangioma and Timolol	0	0.0%	0	0.0%
Long QT Syndrome and Any Metoprolol Long QT Syndrome and Metoprolol (Extended Release) Long QT Syndrome and Metoprolol (Regular) Long QT Syndrome and Any Propranolol Long QT Syndrome and Propranolol (Extended Release) Long QT Syndrome and Propranolol (Regular) Long QT Syndrome and Acebutolol Long QT Syndrome and Acebutolol	0 0 0 0 0 0 0	0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0%	0 0 0 0 0 0 0 0	0.0% 0.0% 0.0% 0.0% 0.0% 0.0%
Long QT Syndrome and Betaxolol Long QT Syndrome and Bisoprolol	0	0.0% 0.0%	0 0	0.0% 0.0%
Long QT Syndrome and Carvedilol Long QT Syndrome and Labetalol	0	0.0%	0	0.0% 0.0%
Long QT Syndrome and Nadolol Long QT Syndrome and Nebivolol	0 0	0.0% 0.0%	0 0	0.0% 0.0%
Long QT Syndrome and Pindolol Long QT Syndrome and Sotalol Long QT Syndrome and Timolol	0 0 0	0.0% 0.0% 0.0%	0 0 0	0.0% 0.0% 0.0%

¹All metrics are based on total number of episodes per group, except for sex, race, and Hispanic origin which are based on total number of unique patients.

²Characteristics in blue show a standardized difference greater than 0.1.

³Value represents standard deviation where no % follows the value.

⁴Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

⁵The Charlson/Elixhauser Combined Comorbidity Score is calculated based on comorbidities observed during a requester-defined window around the exposure episode start date. (Gagne JJ, Glynn RJ, Avorn J, Levin R, Schneeweiss S. A combined comorbidity score predicted mortality in elderly patients better than existing scores. J Clin Epidemiol. 2011;64(7):749-759)

*****Data are not presented in these cells due to a small sample size or to assure a small cell cannot be recalculated through the cells presented.



	Beta	a Blockers	Beta Blockers (Post-Index Enrollment Requirement)	
		Percent/		Percent/
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation ³
Unique patients	28,587	N/A	19,259	N/A
Episodes	30,660	100.0%	20,520	100.0%
Demographic Characteristics				
Age (years)	13.0	4.3	13.0	4.3
Age				
0-1 years	1,075	3.5%	726	3.5%
2-5 years	1,655	5.4%	1,115	5.4%
6-12 years	8,785	28.7%	5,841	28.5%
13-17 years	19,145	62.4%	12,838	62.6%
Sex				
Female	16,001	56.0%	10,672	55.4%
Male	12,586	44.0%	8,587	44.6%
Race ⁴				
American Indian or Alaska Native	223	0.8%	151	0.8%
Asian	318	1.1%	191	1.0%
Black or African American	2,060	7.2%	1,290	6.7%
Native Hawaiian or Other Pacific Islander	47	0.2%	28	0.1%
Unknown	18,905	66.1%	12,880	66.9%
White	7,034	24.6%	4,719	24.5%
Hispanic origin				
Yes	3,081	10.8%	1,908	9.9%
No	8,806	30.8%	5,746	29.8%
Unknown	16,700	58.4%	11,605	60.3%
Year				
2008	1,266	4.1%	973	4.7%
2009	1,680	5.5%	1,263	6.2%
2010	1,488	4.9%	1,100	5.4%
2011	1,349	4.4%	1,018	5.0%
2012	1,236	4.0%	985	4.8%
2013	1,330	4.3%	1,022	5.0%
2014	1,863	6.1%	1,516	7.4%
2015	3,151	10.3%	2,410	11.7%
2016	4,841	15.8%	4,049	19.7%
2017	4,989	16.3%	3,724	18.1%
2018	4,443	14.5%	898	4.4%
2019	1,120	3.7%	894	4.4%
2020	924	3.0%	590	2.9%



	Beta	Blockers	Beta Blockers (Post-Index Enrollment Requirement)	
		Percent/		Percent/
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation ³
2021	889	2.9%	78	0.4%
2022	91	0.3%	0	0.0%
Health Characteristics				
Charlson/Elixhauser combined comorbidity score ⁵	0.7	1.1	0.7	1.1
Hypertension	4,003	13.1%	2,717	13.2%
Hemangioma	238	0.8%	163	0.8%
Heart Failure	338	1.1%	233	1.1%
Congenital Heart Disease	3,876	12.6%	2,619	12.8%
Atrial Fibrillation	156	0.5%	96	0.5%
Long QT Syndrome	313	1.0%	208	1.0%
Other Cardiac Arrhythmias	10,372	33.8%	6,782	33.1%
Cardiac Arrhythmias (Composite)	10,594	34.6%	6,936	33.8%
Pulmonary Hypertension	166	0.5%	111	0.5%
Cardiomyopathy	680	2.2%	449	2.2%
Coronary Artery Disease	150	0.5%	104	0.5%
Portal Hypertension	18	0.1%	11	0.1%
Anxiety Disorder	3,511	11.5%	2,309	11.3%
Tremor	238	0.8%	165	0.8%
Migraine	3,609	11.8%	2,501	12.2%
Thyrotoxicosis	2,906	9.5%	1,866	9.1%
Burns	48	0.2%	33	0.2%
Glaucoma	76	0.2%	42	0.2%
Autism	566	1.8%	374	1.8%
Marfan's Syndrome	745	2.4%	507	2.5%
Pheochromocytoma/Paraganglioma	13	0.0%	****	****
Diabetes	454	1.5%	306	1.5%
Any of the above health characteristics (excluding combined comorbidity score)	22,865	74.6%	15,253	74.3%
None of the above health characteristics (excluding	7,795	25.4%	5,267	25.7%
combined comorbidity score)	12	0.0%	****	×***
Hypoglycemia (Day 0) Hypoglycemia (0.2 Monthe)	85	0.3%	69	0.3%
Hypoglycemia (0-3 Months)	76			
Hypoglycemia (3-6 Months)		0.2%	53 80	0.3%
Hypoglycemia (6-12 Months)	103 ****	0.3% ****	89 ****	0.4% ****
Hypoglycemia (Day 0) and Diabetes				
Hypoglycemia (0-3 Months) and Diabetes	15	0.0%	14 ****	0.1% ****
Hypoglycemia (3-6 Months) and Diabetes	16	0.1%		
Hypoglycemia (6-12 Months) and Diabetes	17	0.1%	14	0.1%



	Beta	Blockers	•	ost-Index Enrollment irement)
		Percent/		Percent/
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation ³
Hypoglycemia (Day 0) and No Diabetes	11	0.0%	****	****
Hypoglycemia (0-3 Months) and No Diabetes	70	0.2%	55	0.3%
Hypoglycemia (3-6 Months) and No Diabetes	60	0.2%	44	0.2%
Hypoglycemia (6-12 Months) and No Diabetes	86	0.3%	75	0.4%
Hypoglycemia (Day 0) and Any Metoprolol	0	0.0%	0	0.0%
Hypoglycemia (0-3 Months) and Any Metoprolol	0	0.0%	0	0.0%
Hypoglycemia (3-6 Months) and Any Metoprolol	0	0.0%	0	0.0%
Hypoglycemia (6-12 Months) and Any Metoprolol	0	0.0%	0	0.0%
Hypoglycemia (Day 0) and Any Propranolol	0	0.0%	0	0.0%
Hypoglycemia (0-3 Months) and Any Propranolol	0	0.0%	0	0.0%
Hypoglycemia (3-6 Months) and Any Propranolol	0	0.0%	0	0.0%
Hypoglycemia (6-12 Months) and Any Propranolol	0	0.0%	0	0.0%
Hypoglycemia (Day 0) and Atenolol	12	0.0%	****	****
Hypoglycemia (0-3 Months) and Atenolol	85	0.3%	69	0.3%
Hypoglycemia (3-6 Months) and Atenolol	76	0.2%	53	0.3%
Hypoglycemia (6-12 Months) and Atenolol	103	0.3%	89	0.4%
Hypoglycemia (Day 0) and Nadolol	0	0.0%	0	0.0%
Hypoglycemia (0-3 Months) and Nadolol	0	0.0%	0	0.0%
Hypoglycemia (3-6 Months) and Nadolol	0	0.0%	0	0.0%
Hypoglycemia (6-12 Months) and Nadolol	0	0.0%	0	0.0%
Selective Beta Blockers	30,660	100.0%	20,520	100.0%
Non-Selective Beta Blockers	22	0.1%	15	0.1%
Any Metoprolol	19	0.1%	14	0.1%
Metoprolol (Extended Release)	15	0.0%	11	0.1%
Metoprolol (Regular)	****	****	****	****
Any Propranolol	13	0.0%	****	****
Propranolol (Extended Release)	****	****	****	****
Propranolol (Regular)	11	0.0%	****	****
Propranolol (Hemangeol)	0	0.0%	0	0.0%
Acebutolol	0	0.0%	0	0.0%
Atenolol	30,660	100.0%	20,520	100.0%
Betaxolol	****	****	****	****
Bisoprolol	****	****	****	****
Carvedilol	****	****	****	****
Labetalol	****	****	****	****
Nadolol	****	****	****	****
Nebivolol	****	****	****	****



	Beta	Blockers	•	ost-Index Enrollment irement)
		Percent/		Percent/
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation
Pindolol	0	0.0%	0	0.0%
Sotalol	****	****	****	****
Timolol	0	0.0%	0	0.0%
Health Characteristics by Beta Blockers				
Hypertension and Any Metoprolol	****	****	****	****
Hypertension and Metoprolol (Extended Release)	****	****	****	****
Hypertension and Metoprolol (Regular)	0	0.0%	0	0.0%
Hypertension and Any Propranolol	****	****	****	****
Hypertension and Propranolol (Extended Release)	0	0.0%	0	0.0%
Hypertension and Propranolol (Regular)	****	****	****	****
Hypertension and Acebutolol	0	0.0%	0	0.0%
Hypertension and Atenolol	4,003	13.1%	2,717	13.2%
Hypertension and Betaxolol	0	0.0%	0	0.0%
Hypertension and Bisoprolol	****	****	****	****
Hypertension and Carvedilol	0	0.0%	0	0.0%
Hypertension and Labetalol	****	****	****	****
Hypertension and Nadolol	0	0.0%	0	0.0%
Hypertension and Nebivolol	0	0.0%	0	0.0%
Hypertension and Pindolol	0	0.0%	0	0.0%
Hypertension and Sotalol	0	0.0%	0	0.0%
Hypertension and Timolol	0	0.0%	0	0.0%
Hemangioma and Any Metoprolol	0	0.0%	0	0.0%
Hemangioma and Metoprolol (Extended Release)	0	0.0%	0	0.0%
Hemangioma and Metoprolol (Regular)	0	0.0%	0	0.0%
Hemangioma and Any Propranolol	0	0.0%	0	0.0%
Hemangioma and Propranolol (Extended Release)	0	0.0%	0	0.0%
Hemangioma and Propranolol (Regular)	0	0.0%	0	0.0%
Hemangioma and Propranolol (Hemangeol)	0	0.0%	0	0.0%
Hemangioma and Acebutolol	0	0.0%	0	0.0%
Hemangioma and Atenolol	238	0.8%	163	0.8%
Hemangioma and Betaxolol	0	0.0%	0	0.0%
Hemangioma and Bisoprolol	0	0.0%	0	0.0%
Hemangioma and Carvedilol	0	0.0%	0	0.0%
Hemangioma and Labetalol	0	0.0%	0	0.0%
Hemangioma and Nadolol	0	0.0%	0	0.0%
Hemangioma and Nebivolol	0	0.0%	0	0.0%
Hemangioma and Pindolol	0	0.0%	0	0.0%



	Beta	Blockers	•	st-Index Enrollment irement)
Patient Characteristics ^{1,2}	Number/Mean	Percent/ Standard Deviation ³	Number/Mean	Percent/ Standard Deviation ³
Hemangioma and Sotalol	0	0.0%	0	0.0%
Hemangioma and Timolol	0	0.0%	0	0.0%
Long QT Syndrome and Any Metoprolol Long QT Syndrome and Metoprolol (Extended Release) Long QT Syndrome and Metoprolol (Regular) Long QT Syndrome and Any Propranolol Long QT Syndrome and Propranolol (Extended Release) Long QT Syndrome and Propranolol (Regular) Long QT Syndrome and Acebutolol Long QT Syndrome and Acebutolol	0 0 0 0 0 0 313	0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 1.0%	0 0 0 0 0 0 208	0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 1.0%
Long QT Syndrome and Betaxolol Long QT Syndrome and Bisoprolol	0 0	0.0% 0.0%	0 0	0.0% 0.0%
Long QT Syndrome and Carvedilol Long QT Syndrome and Labetalol	0 0	0.0% 0.0%	0	0.0%
Long QT Syndrome and Nadolol	0	0.0%	0	0.0%
Long QT Syndrome and Nebivolol Long QT Syndrome and Pindolol	0 0	0.0% 0.0%	0 0	0.0% 0.0%
Long QT Syndrome and Sotalol Long QT Syndrome and Timolol	0 0	0.0% 0.0%	0 0	0.0% 0.0%

¹All metrics are based on total number of episodes per group, except for sex, race, and Hispanic origin which are based on total number of unique patients.

²Characteristics in blue show a standardized difference greater than 0.1.

³Value represents standard deviation where no % follows the value.

⁴Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

⁵The Charlson/Elixhauser Combined Comorbidity Score is calculated based on comorbidities observed during a requester-defined window around the exposure episode start date. (Gagne JJ, Glynn RJ, Avorn J, Levin R, Schneeweiss S. A combined comorbidity score predicted mortality in elderly patients better than existing scores. J Clin Epidemiol. 2011;64(7):749-759)

*****Data are not presented in these cells due to a small sample size or to assure a small cell cannot be recalculated through the cells presented.



	Bet	a Blockers		ost-Index Enrollment irement)
		Percent/		Percent/
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation ³
Unique patients	168	N/A	115	N/A
Episodes	173	100.0%	118	100.0%
Demographic Characteristics				
Age (years)	15.0	2.3	15.3	2.2
Age				
0-1 years	0	0.0%	0	0.0%
2-5 years	****	****	0	0.0%
6-12 years	****	****	20	16.9%
13-17 years	140	80.9%	98	83.1%
Sex				
Female	109	64.9%	72	62.6%
Male	59	35.1%	43	37.4%
Race ⁴				
American Indian or Alaska Native	0	0.0%	0	0.0%
Asian	****	****	0	0.0%
Black or African American	****	****	****	****
Native Hawaiian or Other Pacific Islander	****	****	0	0.0%
Unknown	121	72.0%	86	74.8%
White	43	25.6%	****	****
Hispanic origin				
Yes	* * * * *	* * * *	****	* * * *
No	****	****	****	****
Unknown	131	78.0%	90	78.3%
Year				
2008	****	****	****	****
2009	****	****	****	****
2010	17	9.8%	13	11.0%
2011	****	****	****	****
2012	12	6.9%	****	****
2013	****	****	****	****
2014	20	11.6%	18	15.3%
2015	17	9.8%	****	****
2016	19	11.0%	14	11.9%
2017	20	11.6%	18	15.3%
2018	18	10.4%	****	****
2019	****	****	****	****
2020	****	****	****	****



	Bet	a Blockers	•	ost-Index Enrollment irement)
		Percent/		Percent/
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation ³
2021	****	****	****	****
2022	****	****	0	0.0%
Health Characteristics				
Charlson/Elixhauser combined comorbidity score ⁵	1.0	1.0	0.9	0.9
Hypertension	* * * *	****	****	****
Hemangioma	0	0.0%	0	0.0%
Heart Failure	****	****	0	0.0%
Congenital Heart Disease	16	9.2%	12	10.2%
Atrial Fibrillation	****	****	****	****
Long QT Syndrome	****	****	****	****
Other Cardiac Arrhythmias	107	61.8%	66	55.9%
Cardiac Arrhythmias (Composite)	109	63.0%	67	56.8%
Pulmonary Hypertension	0	0.0%	0	0.0%
Cardiomyopathy	0	0.0%	0	0.0%
Coronary Artery Disease	0	0.0%	0	0.0%
Portal Hypertension	****	****	0	0.0%
Anxiety Disorder	42	24.3%	33	28.0%
Tremor	****	****	****	****
Migraine	15	8.7%	11	9.3%
Thyrotoxicosis	****	****	****	****
Burns	****	****	****	****
Glaucoma	0	0.0%	0	0.0%
Autism	****	****	****	****
Marfan's Syndrome	0	0.0%	0	0.0%
Pheochromocytoma/Paraganglioma	0	0.0%	0	0.0%
Diabetes	0	0.0%	0	0.0%
Any of the above health characteristics (excluding				
combined comorbidity score)	136	78.6%	91	77.1%
None of the above health characteristics (excluding combined comorbidity score)	37	21.4%	27	22.9%
Hypoglycemia (Day 0)	0	0.0%	0	0.0%
Hypoglycemia (0-3 Months)	****	****	****	****
Hypoglycemia (3-6 Months)	****	* * * *	****	****
Hypoglycemia (6-12 Months)	0	0.0%	0	0.0%
Hypoglycemia (Day 0) and Diabetes	0	0.0%	0	0.0%
Hypoglycemia (0-3 Months) and Diabetes	0	0.0%	0	0.0%
Hypoglycemia (3-6 Months) and Diabetes	0	0.0%	0	0.0%
Hypoglycemia (6-12 Months) and Diabetes	0	0.0%	0	0.0%



	Beta	a Blockers	-	ost-Index Enrollment irement)
		Percent/		Percent/
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation ³
Hypoglycemia (Day 0) and No Diabetes	0	0.0%	0	0.0%
Hypoglycemia (0-3 Months) and No Diabetes	****	****	****	****
Hypoglycemia (3-6 Months) and No Diabetes	****	****	****	****
Hypoglycemia (6-12 Months) and No Diabetes	0	0.0%	0	0.0%
Hypoglycemia (Day 0) and Any Metoprolol	0	0.0%	0	0.0%
Hypoglycemia (0-3 Months) and Any Metoprolol	0	0.0%	0	0.0%
Hypoglycemia (3-6 Months) and Any Metoprolol	0	0.0%	0	0.0%
Hypoglycemia (6-12 Months) and Any Metoprolol	0	0.0%	0	0.0%
Hypoglycemia (Day 0) and Any Propranolol	0	0.0%	0	0.0%
Hypoglycemia (0-3 Months) and Any Propranolol	0	0.0%	0	0.0%
Hypoglycemia (3-6 Months) and Any Propranolol	0	0.0%	0	0.0%
Hypoglycemia (6-12 Months) and Any Propranolol	0	0.0%	0	0.0%
Hypoglycemia (Day 0) and Atenolol	0	0.0%	0	0.0%
Hypoglycemia (0-3 Months) and Atenolol	0	0.0%	0	0.0%
Hypoglycemia (3-6 Months) and Atenolol	0	0.0%	0	0.0%
Hypoglycemia (6-12 Months) and Atenolol	0	0.0%	0	0.0%
Hypoglycemia (Day 0) and Nadolol	0	0.0%	0	0.0%
Hypoglycemia (0-3 Months) and Nadolol	0	0.0%	0	0.0%
Hypoglycemia (3-6 Months) and Nadolol	0	0.0%	0	0.0%
Hypoglycemia (6-12 Months) and Nadolol	0	0.0%	0	0.0%
Selective Beta Blockers	173	100.0%	118	100.0%
Non-Selective Beta Blockers	0	0.0%	0	0.0%
Any Metoprolol	0	0.0%	0	0.0%
Metoprolol (Extended Release)	0	0.0%	0	0.0%
Metoprolol (Regular)	0	0.0%	0	0.0%
Any Propranolol	0	0.0%	0	0.0%
Propranolol (Extended Release)	0	0.0%	0	0.0%
Propranolol (Regular)	0	0.0%	0	0.0%
Propranolol (Hemangeol)	0	0.0%	0	0.0%
Acebutolol	0	0.0%	0	0.0%
Atenolol	****	****	****	****
Betaxolol	173	100.0%	118	100.0%
Bisoprolol	0	0.0%	0	0.0%
Carvedilol	0	0.0%	0	0.0%
Labetalol	0	0.0%	0	0.0%
	0	0.070	0	010/0
Nadolol	0	0.0%	0	0.0%



	Bet	a Blockers	Beta Blockers (Post-Index Enrollmen Requirement)		
		Percent/		Percent/	
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation	
Pindolol	0	0.0%	0	0.0%	
Sotalol	0	0.0%	0	0.0%	
Timolol	0	0.0%	0	0.0%	
Health Characteristics by Beta Blockers					
Hypertension and Any Metoprolol	0	0.0%	0	0.0%	
Hypertension and Metoprolol (Extended Release)	0	0.0%	0	0.0%	
Hypertension and Metoprolol (Regular)	0	0.0%	0	0.0%	
Hypertension and Any Propranolol	0	0.0%	0	0.0%	
Hypertension and Propranolol (Extended Release)	0	0.0%	0	0.0%	
Hypertension and Propranolol (Regular)	0	0.0%	0	0.0%	
Hypertension and Acebutolol	0	0.0%	0	0.0%	
Hypertension and Atenolol	0	0.0%	0	0.0%	
Hypertension and Betaxolol	****	* * * *	****	****	
Hypertension and Bisoprolol	0	0.0%	0	0.0%	
Hypertension and Carvedilol	0	0.0%	0	0.0%	
lypertension and Labetalol	0	0.0%	0	0.0%	
Hypertension and Nadolol	0	0.0%	0	0.0%	
Appertension and Nebivolol	0	0.0%	0	0.0%	
Hypertension and Pindolol	0	0.0%	0	0.0%	
Hypertension and Sotalol	0	0.0%	0	0.0%	
Hypertension and Timolol	0	0.0%	0	0.0%	
Iemangioma and Any Metoprolol	0	0.0%	0	0.0%	
Hemangioma and Metoprolol (Extended Release)	0	0.0%	0	0.0%	
Hemangioma and Metoprolol (Regular)	0	0.0%	0	0.0%	
Hemangioma and Any Propranolol	0	0.0%	0	0.0%	
Hemangioma and Propranolol (Extended Release)	0	0.0%	0	0.0%	
Hemangioma and Propranolol (Regular)	0	0.0%	0	0.0%	
Hemangioma and Propranolol (Hemangeol)	0	0.0%	0	0.0%	
Iemangioma and Acebutolol	0	0.0%	0	0.0%	
lemangioma and Atenolol	0	0.0%	0	0.0%	
lemangioma and Betaxolol	0	0.0%	0	0.0%	
lemangioma and Bisoprolol	0	0.0%	0	0.0%	
Iemangioma and Carvedilol	0	0.0%	0	0.0%	
- Hemangioma and Labetalol	0	0.0%	0	0.0%	
Hemangioma and Nadolol	0	0.0%	0	0.0%	
Hemangioma and Nebivolol	0	0.0%	0	0.0%	
Hemangioma and Pindolol	0	0.0%	0	0.0%	



	Beta Blockers			Beta Blockers (Post-Index Enrollment Requirement)	
Patient Characteristics ^{1,2}	Number/Mean	Percent/ Standard Deviation ³	Number/Mean	Percent/ Standard Deviation ³	
Hemangioma and Sotalol	0	0.0%	0	0.0%	
Hemangioma and Timolol	0	0.0%	0	0.0%	
Long QT Syndrome and Any Metoprolol Long QT Syndrome and Metoprolol (Extended Long QT Syndrome and Metoprolol (Regular) Long QT Syndrome and Any Propranolol Long QT Syndrome and Propranolol (Extended Release) Long QT Syndrome and Propranolol (Regular) Long QT Syndrome and Acebutolol	0 0 0 0 0 0	0.0% 0.0% 0.0% 0.0% 0.0% 0.0%	0 0 0 0 0 0	0.0% 0.0% 0.0% 0.0% 0.0% 0.0%	
Long QT Syndrome and Atenolol	0	0.0%	0	0.0%	
Long QT Syndrome and Betaxolol Long QT Syndrome and Bisoprolol Long QT Syndrome and Carvedilol	***** 0 0	***** 0.0% 0.0%	***** 0 0	***** 0.0% 0.0%	
Long QT Syndrome and Labetalol Long QT Syndrome and Nadolol Long QT Syndrome and Nebivolol	0 0 0	0.0% 0.0% 0.0%	0 0 0	0.0% 0.0% 0.0%	
Long QT Syndrome and Pindolol Long QT Syndrome and Sotalol	0	0.0%	0	0.0%	
Long QT Syndrome and Timolol	0	0.0%	0	0.0%	

¹All metrics are based on total number of episodes per group, except for sex, race, and Hispanic origin which are based on total number of unique patients.

²Characteristics in blue show a standardized difference greater than 0.1.

³Value represents standard deviation where no % follows the value.

⁴Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

⁵The Charlson/Elixhauser Combined Comorbidity Score is calculated based on comorbidities observed during a requester-defined window around the exposure episode start date. (Gagne JJ, Glynn RJ, Avorn J, Levin R, Schneeweiss S. A combined comorbidity score predicted mortality in elderly patients better than existing scores. J Clin Epidemiol. 2011;64(7):749-759)

*****Data are not presented in these cells due to a small sample size or to assure a small cell cannot be recalculated through the cells presented.



		Blockers		ost-Index Enrollment irement)
		Percent/		Percent/
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation ³
Unique patients	568	N/A	375	N/A
Episodes	584	100.0%	386	100.0%
Demographic Characteristics				
Age (years)	14.6	3.5	14.7	3.5
Age				
0-1 years	****	****	****	****
2-5 years	****	****	****	****
6-12 years	94	16.1%	55	14.2%
13-17 years	467	80.0%	314	81.3%
Sex				
Female	318	56.0%	206	54.9%
Male	250	44.0%	169	45.1%
Race ⁴				
American Indian or Alaska Native	****	****	****	****
Asian	****	****	****	****
Black or African American	****	****	****	****
Native Hawaiian or Other Pacific Islander	0	0.0%	0	0.0%
Unknown	415	73.1%	282	75.2%
White	110	19.4%	70	18.7%
Hispanic origin				
Yes	46	8.1%	28	7.5%
No	135	23.8%	76	20.3%
Unknown	387	68.1%	271	72.3%
Year				
2008	30	5.1%	25	6.5%
2009	46	7.9%	33	8.5%
2010	34	5.8%	30	7.8%
2011	28	4.8%	20	5.2%
2012	29	5.0%	23	6.0%
2013	21	3.6%	17	4.4%
2014	25	4.3%	23	6.0%
2015	55	9.4%	41	10.6%
2016	64	11.0%	49	12.7%
2017	90	15.4%	75	19.4%
2018	87	14.9%	21	5.4%
2019	19	3.3%	16	4.1%
2020	****	****	****	****



	Beta	Blockers	Beta Blockers (Post-Index Enrollmer Requirement)	
		Percent/		Percent/
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation
2021	35	6.0%	****	****
2022	****	****	0	0.0%
Health Characteristics				
Charlson/Elixhauser combined comorbidity score ⁵	0.4	1.0	0.3	1.0
Hypertension	126	21.6%	90	23.3%
Hemangioma	0	0.0%	0	0.0%
Heart Failure	****	****	****	****
Congenital Heart Disease	40	6.8%	22	5.7%
Atrial Fibrillation	****	****	****	****
Long QT Syndrome	11	1.9%	****	****
Other Cardiac Arrhythmias	153	26.2%	94	24.4%
Cardiac Arrhythmias (Composite)	159	27.2%	97	25.1%
Pulmonary Hypertension	****	****	****	****
Cardiomyopathy	****	****	****	****
Coronary Artery Disease	****	****	****	****
Portal Hypertension	0	0.0%	0	0.0%
Anxiety Disorder	85	14.6%	51	13.2%
Tremor	****	****	****	****
Migraine	46	7.9%	30	7.8%
Thyrotoxicosis	****	****	****	****
Burns	0	0.0%	0	0.0%
Glaucoma	0	0.0%	0	0.0%
Autism	21	3.6%	11	2.8%
Marfan's Syndrome	****	****	****	****
, Pheochromocytoma/Paraganglioma	0	0.0%	0	0.0%
Diabetes	12	2.1%	****	****
Any of the above health characteristics (excluding				
combined comorbidity score)	366	62.7%	235	60.9%
None of the above health characteristics (excluding combined comorbidity score)	218	37.3%	151	39.1%
Hypoglycemia (Day 0)	0	0.0%	0	0.0%
Hypoglycemia (0-3 Months)	****	****	****	****
Hypoglycemia (3-6 Months)	0	0.0%	0	0.0%
Hypoglycemia (6-12 Months)	0	0.0%	0	0.0%
Hypoglycemia (Day 0) and Diabetes	0	0.0%	0	0.0%
Hypoglycemia (0-3 Months) and Diabetes	0	0.0%	0	0.0%
Hypoglycemia (3-6 Months) and Diabetes	0	0.0%	0	0.0%
Hypoglycemia (5-0 Months) and Diabetes Hypoglycemia (6-12 Months) and Diabetes	0	0.0%	0	0.0%



	Beta Blockers (Post-Inde Beta Blockers Requirement			
		Percent/		Percent/
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation ³
Hypoglycemia (Day 0) and No Diabetes	0	0.0%	0	0.0%
Hypoglycemia (0-3 Months) and No Diabetes	****	****	****	****
Hypoglycemia (3-6 Months) and No Diabetes	0	0.0%	0	0.0%
Hypoglycemia (6-12 Months) and No Diabetes	0	0.0%	0	0.0%
Hypoglycemia (Day 0) and Any Metoprolol	0	0.0%	0	0.0%
Hypoglycemia (0-3 Months) and Any Metoprolol	0	0.0%	0	0.0%
Hypoglycemia (3-6 Months) and Any Metoprolol	0	0.0%	0	0.0%
Hypoglycemia (6-12 Months) and Any Metoprolol	0	0.0%	0	0.0%
Hypoglycemia (Day 0) and Any Propranolol	0	0.0%	0	0.0%
Hypoglycemia (0-3 Months) and Any Propranolol	0	0.0%	0	0.0%
Hypoglycemia (3-6 Months) and Any Propranolol	0	0.0%	0	0.0%
Hypoglycemia (6-12 Months) and Any Propranolol	0	0.0%	0	0.0%
Hypoglycemia (Day 0) and Atenolol	0	0.0%	0	0.0%
Hypoglycemia (0-3 Months) and Atenolol	0	0.0%	0	0.0%
Hypoglycemia (3-6 Months) and Atenolol	0	0.0%	0	0.0%
Hypoglycemia (6-12 Months) and Atenolol	0	0.0%	0	0.0%
Hypoglycemia (Day 0) and Nadolol	0	0.0%	0	0.0%
Hypoglycemia (0-3 Months) and Nadolol	0	0.0%	0	0.0%
Hypoglycemia (3-6 Months) and Nadolol	0	0.0%	0	0.0%
Hypoglycemia (6-12 Months) and Nadolol	0	0.0%	0	0.0%
Selective Beta Blockers	584	100.0%	386	100.0%
Non-Selective Beta Blockers	0	0.0%	0	0.0%
Any Metoprolol	0	0.0%	0	0.0%
Metoprolol (Extended Release)	0	0.0%	0	0.0%
Metoprolol (Regular)	0	0.0%	0	0.0%
Any Propranolol	0	0.0%	0	0.0%
Propranolol (Extended Release)	0	0.0%	0	0.0%
Propranolol (Regular)	0	0.0%	0	0.0%
Propranolol (Hemangeol)	0	0.0%	0	0.0%
Acebutolol	0	0.0%	0	0.0%
Atenolol	****	****	****	****
Betaxolol	0	0.0%	0	0.0%
Bisoprolol	584	100.0%	386	100.0%
Carvedilol	0	0.0%	0	0.0%
Labetalol	0	0.0%	0	0.0%
Nadolol	0	0.0%	0	0.0%
Nebivolol	****	****	0	0.0%



	Beta	Blockers	Beta Blockers (Post-Index Enrollment Requirement)		
		Percent/		Percent/	
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation ³	
Pindolol	0	0.0%	0	0.0%	
Sotalol	0	0.0%	0	0.0%	
Timolol	0	0.0%	0	0.0%	
Health Characteristics by Beta Blockers					
Hypertension and Any Metoprolol	0	0.0%	0	0.0%	
Hypertension and Metoprolol (Extended Release)	0	0.0%	0	0.0%	
Hypertension and Metoprolol (Regular)	0	0.0%	0	0.0%	
Hypertension and Any Propranolol	0	0.0%	0	0.0%	
Hypertension and Propranolol (Extended Release)	0	0.0%	0	0.0%	
Hypertension and Propranolol (Regular)	0	0.0%	0	0.0%	
Hypertension and Acebutolol	0	0.0%	0	0.0%	
Hypertension and Atenolol	****	****	****	****	
Hypertension and Betaxolol	0	0.0%	0	0.0%	
Hypertension and Bisoprolol	126	21.6%	90	23.3%	
Hypertension and Carvedilol	0	0.0%	0	0.0%	
Hypertension and Labetalol	0	0.0%	0	0.0%	
Hypertension and Nadolol	0	0.0%	0	0.0%	
Hypertension and Nebivolol	****	****	0	0.0%	
Hypertension and Pindolol	0	0.0%	0	0.0%	
Hypertension and Sotalol	0	0.0%	0	0.0%	
Hypertension and Timolol	0	0.0%	0	0.0%	
Hemangioma and Any Metoprolol	0	0.0%	0	0.0%	
Hemangioma and Metoprolol (Extended Release)	0	0.0%	0	0.0%	
Hemangioma and Metoprolol (Regular)	0	0.0%	0	0.0%	
Hemangioma and Any Propranolol	0	0.0%	0	0.0%	
Hemangioma and Propranolol (Extended Release)	0	0.0%	0	0.0%	
Hemangioma and Propranolol (Regular)	0	0.0%	0	0.0%	
Hemangioma and Propranolol (Hemangeol)	0	0.0%	0	0.0%	
Hemangioma and Acebutolol	0	0.0%	0	0.0%	
Hemangioma and Atenolol	0	0.0%	0	0.0%	
Hemangioma and Betaxolol	0	0.0%	0	0.0%	
Hemangioma and Bisoprolol	0	0.0%	0	0.0%	
Hemangioma and Carvedilol	0	0.0%	0	0.0%	
Hemangioma and Labetalol	0	0.0%	0	0.0%	
Hemangioma and Nadolol	0	0.0%	0	0.0%	
Hemangioma and Nebivolol	0	0.0%	0	0.0%	
Hemangioma and Pindolol	0	0.0%	0	0.0%	



	Beta Blockers		Beta Blockers (Post-Index Enrollment Requirement)	
Patient Characteristics ^{1,2}	Number/Mean	Percent/ Standard Deviation ³	Number/Mean	Percent/ Standard Deviation ³
Hemangioma and Sotalol	0	0.0%	0	0.0%
Hemangioma and Timolol	0	0.0%	0	0.0%
Long QT Syndrome and Any Metoprolol Long QT Syndrome and Metoprolol (Extended Release) Long QT Syndrome and Metoprolol (Regular) Long QT Syndrome and Any Propranolol Long QT Syndrome and Propranolol (Extended Release) Long QT Syndrome and Propranolol (Regular) Long QT Syndrome and Acebutolol	0 0 0 0 0 0	0.0% 0.0% 0.0% 0.0% 0.0% 0.0%	0 0 0 0 0 0	0.0% 0.0% 0.0% 0.0% 0.0% 0.0%
Long QT Syndrome and Atenolol	0	0.0%	0	0.0%
Long QT Syndrome and Betaxolol	0	0.0%	0	0.0%
Long QT Syndrome and Bisoprolol	11	1.9%	* * * * *	****
Long QT Syndrome and Carvedilol	0	0.0%	0	0.0%
Long QT Syndrome and Labetalol	0	0.0%	0	0.0%
Long QT Syndrome and Nadolol	0	0.0%	0	0.0%
Long QT Syndrome and Nebivolol	0	0.0%	0	0.0%
Long QT Syndrome and Pindolol	0	0.0%	0	0.0%
Long QT Syndrome and Sotalol Long QT Syndrome and Timolol	0 0	0.0% 0.0%	0 0	0.0% 0.0%

¹All metrics are based on total number of episodes per group, except for sex, race, and Hispanic origin which are based on total number of unique patients.

²Characteristics in blue show a standardized difference greater than 0.1.

³Value represents standard deviation where no % follows the value.

⁴Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

⁵The Charlson/Elixhauser Combined Comorbidity Score is calculated based on comorbidities observed during a requester-defined window around the exposure episode start date. (Gagne JJ, Glynn RJ, Avorn J, Levin R, Schneeweiss S. A combined comorbidity score predicted mortality in elderly patients better than existing scores. J Clin Epidemiol. 2011;64(7):749-759)

*****Data are not presented in these cells due to a small sample size or to assure a small cell cannot be recalculated through the cells presented.



	Beta	Blockers	Beta Blockers (Post-Index Enrollme Requirement)	
		Percent/		Percent/
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation ³
Unique patients	3,730	N/A	2,246	N/A
Episodes	4,036	100.0%	2,410	100.0%
Demographic Characteristics				
Age (years)	10.4	6.2	10.4	6.2
Age				
0-1 years	751	18.6%	449	18.6%
2-5 years	464	11.5%	265	11.0%
6-12 years	902	22.3%	545	22.6%
13-17 years	1,919	47.5%	1,151	47.8%
Sex				
Female	1,476	39.6%	882	39.3%
Male	2,254	60.4%	1,364	60.7%
Race ⁴				
American Indian or Alaska Native	52	1.4%	29	1.3%
Asian	****	****	****	****
Black or African American	436	11.7%	258	11.5%
Native Hawaiian or Other Pacific Islander	****	****	****	****
Unknown	2,289	61.4%	1,416	63.0%
White	899	24.1%	512	22.8%
Hispanic origin				
Yes	498	13.4%	286	12.7%
No	1,369	36.7%	778	34.6%
Unknown	1,863	49.9%	1,182	52.6%
Year				
2008	102	2.5%	78	3.2%
2009	122	3.0%	84	3.5%
2010	115	2.8%	82	3.4%
2011	112	2.8%	92	3.8%
2012	129	3.2%	95	3.9%
2013	133	3.3%	91	3.8%
2014	199	4.9%	164	6.8%
2015	389	9.6%	271	11.2%
2016	680	16.8%	552	22.9%
2017	927	23.0%	655	27.2%
2018	802	19.9%	88	3.7%
2019	124	3.1%	100	4.1%
2020	110	2.7%	****	****



	Beta	Blockers	•	ost-Index Enrollment iirement)
		Percent/		Percent/
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation ³
2021	****	****	****	****
2022	****	****	0	0.0%
Health Characteristics				
Charlson/Elixhauser combined comorbidity score ⁵	2.1	2.2	2.1	2.2
Hypertension	733	18.2%	429	17.8%
Hemangioma	****	****	****	****
Heart Failure	1,134	28.1%	683	28.3%
Congenital Heart Disease	1,424	35.3%	880	36.5%
Atrial Fibrillation	32	0.8%	20	0.8%
Long QT Syndrome	63	1.6%	33	1.4%
Other Cardiac Arrhythmias	1,276	31.6%	773	32.1%
Cardiac Arrhythmias (Composite)	1,296	32.1%	781	32.4%
Pulmonary Hypertension	167	4.1%	100	4.1%
Cardiomyopathy	1,174	29.1%	672	27.9%
Coronary Artery Disease	182	4.5%	109	4.5%
Portal Hypertension	****	****	****	****
Anxiety Disorder	259	6.4%	147	6.1%
Tremor	****	****	****	****
Migraine	80	2.0%	40	1.7%
Thyrotoxicosis	11	0.3%	****	****
Burns	****	****	****	****
Glaucoma	13	0.3%	****	****
Autism	81	2.0%	53	2.2%
Marfan's Syndrome	****	****	****	****
Pheochromocytoma/Paraganglioma	****	****	****	****
Diabetes	100	2.5%	69	2.9%
Any of the above health characteristics (excluding				
combined comorbidity score)	3,021	74.9%	1,806	74.9%
None of the above health characteristics (excluding combined comorbidity score)	1,015	25.1%	604	25.1%
Hypoglycemia (Day 0)	****	****	****	****
Hypoglycemia (0-3 Months)	24	0.6%	14	0.6%
Hypoglycemia (3-6 Months)	20	0.5%	13	0.5%
Hypoglycemia (6-12 Months)	33	0.8%	28	1.2%
Hypoglycemia (Day 0) and Diabetes	****	****	****	****
Hypoglycemia (0-3 Months) and Diabetes	****	****	****	****
Hypoglycemia (3-6 Months) and Diabetes	****	****	****	****
Hypoglycemia (6-12 Months) and Diabetes	****	****	****	****



	Beta	Blockers	Beta Blockers (Post-Index Enrollment Requirement)		
		Percent/		Percent/	
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation ³	
Hypoglycemia (Day 0) and No Diabetes	0	0.0%	0	0.0%	
Hypoglycemia (0-3 Months) and No Diabetes	20	0.5%	****	****	
Hypoglycemia (3-6 Months) and No Diabetes	16	0.4%	****	****	
Hypoglycemia (6-12 Months) and No Diabetes	27	0.7%	22	0.9%	
Hypoglycemia (Day 0) and Any Metoprolol	0	0.0%	0	0.0%	
Hypoglycemia (0-3 Months) and Any Metoprolol	0	0.0%	0	0.0%	
Hypoglycemia (3-6 Months) and Any Metoprolol	0	0.0%	0	0.0%	
Hypoglycemia (6-12 Months) and Any Metoprolol	0	0.0%	0	0.0%	
Hypoglycemia (Day 0) and Any Propranolol	0	0.0%	0	0.0%	
Hypoglycemia (0-3 Months) and Any Propranolol	0	0.0%	0	0.0%	
Hypoglycemia (3-6 Months) and Any Propranolol	0	0.0%	0	0.0%	
Hypoglycemia (6-12 Months) and Any Propranolol	0	0.0%	0	0.0%	
Hypoglycemia (Day 0) and Atenolol	0	0.0%	0	0.0%	
Hypoglycemia (0-3 Months) and Atenolol	0	0.0%	0	0.0%	
Hypoglycemia (3-6 Months) and Atenolol	0	0.0%	0	0.0%	
Hypoglycemia (6-12 Months) and Atenolol	0	0.0%	0	0.0%	
Hypoglycemia (Day 0) and Nadolol	0	0.0%	0	0.0%	
Hypoglycemia (0-3 Months) and Nadolol	0	0.0%	0	0.0%	
Hypoglycemia (3-6 Months) and Nadolol	0	0.0%	0	0.0%	
Hypoglycemia (6-12 Months) and Nadolol	0	0.0%	0	0.0%	
Selective Beta Blockers	****	****	****	****	
Non-Selective Beta Blockers	4,036	100.0%	2,410	100.0%	
Any Metoprolol	****	****	****	****	
Metoprolol (Extended Release)	****	****	****	****	
Metoprolol (Regular)	****	****	****	****	
Any Propranolol	****	****	0	0.0%	
Propranolol (Extended Release)	0	0.0%	0	0.0%	
Propranolol (Regular)	****	****	0	0.0%	
Propranolol (Hemangeol)	0	0.0%	0	0.0%	
Acebutolol	0	0.0%	0	0.0%	
Atenolol	****	****	****	****	
Betaxolol	0	0.0%	0	0.0%	
Bisoprolol	0	0.0%	0	0.0%	
Carvedilol	4,036	100.0%	2,410	100.0%	
Labetalol	, ****	****	0	0.0%	
Nadolol					
	0	0.0%	0	0.0%	



	Beta Blockers		Beta Blockers (Post-Index Enrollment Requirement)	
		Percent/		Percent/
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation ³
Pindolol	0	0.0%	0	0.0%
Sotalol	****	****	****	****
Timolol	0	0.0%	0	0.0%
Health Characteristics by Beta Blockers				
Hypertension and Any Metoprolol	0	0.0%	0	0.0%
Hypertension and Metoprolol (Extended Release)	0	0.0%	0	0.0%
Hypertension and Metoprolol (Regular)	0	0.0%	0	0.0%
Hypertension and Any Propranolol	0	0.0%	0	0.0%
Hypertension and Propranolol (Extended Release)	0	0.0%	0	0.0%
Hypertension and Propranolol (Regular)	0	0.0%	0	0.0%
Hypertension and Acebutolol	0	0.0%	0	0.0%
Hypertension and Atenolol	0	0.0%	0	0.0%
Hypertension and Betaxolol	0	0.0%	0	0.0%
Hypertension and Bisoprolol	0	0.0%	0	0.0%
Hypertension and Carvedilol	733	18.2%	429	17.8%
Hypertension and Labetalol	****	****	0	0.0%
Hypertension and Nadolol	0	0.0%	0	0.0%
Hypertension and Nebivolol	0	0.0%	0	0.0%
Hypertension and Pindolol	0	0.0%	0	0.0%
Hypertension and Sotalol	0	0.0%	0	0.0%
Hypertension and Timolol	0	0.0%	0	0.0%
Hemangioma and Any Metoprolol	0	0.0%	0	0.0%
Hemangioma and Metoprolol (Extended Release)	0	0.0%	0	0.0%
Hemangioma and Metoprolol (Regular)	0	0.0%	0	0.0%
Hemangioma and Any Propranolol	0	0.0%	0	0.0%
Hemangioma and Propranolol (Extended Release)	0	0.0%	0	0.0%
Hemangioma and Propranolol (Regular)	0	0.0%	0	0.0%
Hemangioma and Propranolol (Hemangeol)	0	0.0%	0	0.0%
Hemangioma and Acebutolol	0	0.0%	0	0.0%
Hemangioma and Atenolol	0	0.0%	0	0.0%
Hemangioma and Betaxolol	0	0.0%	0	0.0%
Hemangioma and Bisoprolol	0	0.0%	0	0.0%
Hemangioma and Carvedilol	****	****	****	****
Hemangioma and Labetalol	0	0.0%	0	0.0%
Hemangioma and Nadolol	0	0.0%	0	0.0%
Hemangioma and Nebivolol	0	0.0%	0	0.0%
Hemangioma and Pindolol	0	0.0%	0	0.0%



	Beta Blockers		Beta Blockers (Post-Index Enrollment Requirement)	
Patient Characteristics ^{1,2}	Number/Mean	Percent/ Standard Deviation ³	Number/Mean	Percent/ Standard Deviation ³
Hemangioma and Sotalol	0	0.0%	0	0.0%
Hemangioma and Timolol	0	0.0%	0	0.0%
Long QT Syndrome and Any Metoprolol	****	****	****	****
Long QT Syndrome and Metoprolol (Extended Long QT Syndrome and Metoprolol (Regular)	0 ****	0.0% ****	0 ****	0.0% ****
Long QT Syndrome and Any Propranolol	0	0.0%	0	0.0%
Long QT Syndrome and Propranolol (Extended	0	0.0%	0	0.0%
Long QT Syndrome and Propranolol (Regular)	0	0.0%	0	0.0%
Long QT Syndrome and Acebutolol	0	0.0%	0	0.0%
Long QT Syndrome and Atenolol	0	0.0%	0	0.0%
Long QT Syndrome and Betaxolol	0	0.0%	0	0.0%
Long QT Syndrome and Bisoprolol	0	0.0%	0	0.0%
Long QT Syndrome and Carvedilol	63	1.6%	33	1.4%
Long QT Syndrome and Labetalol	0	0.0%	0	0.0%
Long QT Syndrome and Nadolol	0	0.0%	0	0.0%
Long QT Syndrome and Nebivolol	0	0.0%	0	0.0%
Long QT Syndrome and Pindolol	0	0.0%	0	0.0%
Long QT Syndrome and Sotalol	0	0.0%	0	0.0%
Long QT Syndrome and Timolol	0	0.0%	0	0.0%

¹All metrics are based on total number of episodes per group, except for sex, race, and Hispanic origin which are based on total number of unique patients.

²Characteristics in blue show a standardized difference greater than 0.1.

³Value represents standard deviation where no % follows the value.

⁴Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

⁵The Charlson/Elixhauser Combined Comorbidity Score is calculated based on comorbidities observed during a requester-defined window around the exposure episode start date. (Gagne JJ, Glynn RJ, Avorn J, Levin R, Schneeweiss S. A combined comorbidity score predicted mortality in elderly patients better than existing scores. J Clin Epidemiol. 2011;64(7):749-759)

*****Data are not presented in these cells due to a small sample size or to assure a small cell cannot be recalculated through the cells presented.



	Beta	Blockers	-	ost-Index Enrollment irement)
		Percent/		Percent/
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation ³
Unique patients	4,852	N/A	2,874	N/A
Episodes	4,991	100.0%	2,952	100.0%
Demographic Characteristics				
Age (years)	14.5	4.4	14.4	4.5
Age				
0-1 years	177	3.5%	117	4.0%
2-5 years	249	5.0%	156	5.3%
6-12 years	670	13.4%	393	13.3%
13-17 years	3,895	78.0%	2,286	77.4%
Sex				
Female	3,715	76.6%	2,180	75.9%
Male	1,137	23.4%	694	24.1%
Race ⁴				
American Indian or Alaska Native	61	1.3%	34	1.2%
Asian	40	0.8%	****	****
Black or African American	1,026	21.1%	578	20.1%
Native Hawaiian or Other Pacific Islander	14	0.3%	****	****
Unknown	2,524	52.0%	1,514	52.7%
White	1,187	24.5%	720	25.1%
Hispanic origin				
Yes	601	12.4%	324	11.3%
No	2,258	46.5%	1,306	45.4%
Unknown	1,993	41.1%	1,244	43.3%
Year				
2008	149	3.0%	108	3.7%
2009	196	3.9%	146	4.9%
2010	192	3.8%	132	4.5%
2011	157	3.1%	116	3.9%
2012	145	2.9%	106	3.6%
2013	126	2.5%	94	3.2%
2014	278	5.6%	210	7.1%
2015	580	11.6%	395	13.4%
2016	862	17.3%	674	22.8%
2017	1,075	21.5%	734	24.9%
2018	909	18.2%	75	2.5%
2019	108	2.2%	89	3.0%
2020	141	2.8%	****	****



	Beta	Blockers	•	st-Index Enrollment rement)
		Percent/		Percent/
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation ³
2021	****	****	* * * *	****
2022	****	****	0	0.0%
Health Characteristics				
Charlson/Elixhauser combined comorbidity score ⁵	0.9	1.8	0.8	1.7
Hypertension	1,938	38.8%	1,179	39.9%
Hemangioma	****	****	****	* * * *
Heart Failure	69	1.4%	43	1.5%
Congenital Heart Disease	248	5.0%	143	4.8%
Atrial Fibrillation	****	****	****	****
Long QT Syndrome	18	0.4%	12	0.4%
Other Cardiac Arrhythmias	493	9.9%	279	9.5%
Cardiac Arrhythmias (Composite)	504	10.1%	288	9.8%
Pulmonary Hypertension	39	0.8%	17	0.6%
Cardiomyopathy	44	0.9%	25	0.8%
Coronary Artery Disease	19	0.4%	13	0.4%
Portal Hypertension	11	0.2%	****	****
Anxiety Disorder	365	7.3%	217	7.4%
Tremor	****	****	****	****
Migraine	128	2.6%	86	2.9%
Thyrotoxicosis	24	0.5%	19	0.6%
Burns	****	****	****	****
Glaucoma	12	0.2%	****	****
Autism	55	1.1%	43	1.5%
Marfan's Syndrome	****	****	****	****
Pheochromocytoma/Paraganglioma	30	0.6%	20	0.7%
Diabetes	127	2.5%	80	2.7%
Any of the above health characteristics (excluding				
combined comorbidity score)	2,359	47.3%	1,427	48.3%
None of the above health characteristics (excluding combined comorbidity score)	2,632	52.7%	1,525	51.7%
Hypoglycemia (Day 0)	****	****	****	****
Hypoglycemia (0-3 Months)	38	0.8%	21	0.7%
Hypoglycemia (3-6 Months)	13	0.3%	****	****
Hypoglycemia (6-12 Months)	15	0.3%	13	0.4%
Hypoglycemia (Day 0) and Diabetes	*****	****	****	****
Hypoglycemia (0-3 Months) and Diabetes	****	****	****	****
Hypoglycemia (3-6 Months) and Diabetes	****	****	****	****
Hypoglycemia (5-0 Months) and Diabetes	****	****	****	****



	Beta	Blockers	-	st-Index Enrollment rement)
		Percent/		Percent/
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation ³
Hypoglycemia (Day 0) and No Diabetes	****	****	****	****
Hypoglycemia (0-3 Months) and No Diabetes	31	0.6%	15	0.5%
Hypoglycemia (3-6 Months) and No Diabetes	****	****	****	****
Hypoglycemia (6-12 Months) and No Diabetes	****	****	****	****
Hypoglycemia (Day 0) and Any Metoprolol	0	0.0%	0	0.0%
Hypoglycemia (0-3 Months) and Any Metoprolol	0	0.0%	0	0.0%
Hypoglycemia (3-6 Months) and Any Metoprolol	0	0.0%	0	0.0%
Hypoglycemia (6-12 Months) and Any Metoprolol	0	0.0%	0	0.0%
Hypoglycemia (Day 0) and Any Propranolol	0	0.0%	0	0.0%
Hypoglycemia (0-3 Months) and Any Propranolol	0	0.0%	0	0.0%
Hypoglycemia (3-6 Months) and Any Propranolol	0	0.0%	0	0.0%
Hypoglycemia (6-12 Months) and Any Propranolol	0	0.0%	0	0.0%
Hypoglycemia (Day 0) and Atenolol	0	0.0%	0	0.0%
Hypoglycemia (0-3 Months) and Atenolol	****	****	****	****
Hypoglycemia (3-6 Months) and Atenolol	0	0.0%	0	0.0%
Hypoglycemia (6-12 Months) and Atenolol	0	0.0%	0	0.0%
Hypoglycemia (Day 0) and Nadolol	0	0.0%	0	0.0%
Hypoglycemia (0-3 Months) and Nadolol	0	0.0%	0	0.0%
Hypoglycemia (3-6 Months) and Nadolol	0	0.0%	0	0.0%
Hypoglycemia (6-12 Months) and Nadolol	0	0.0%	0	0.0%
Selective Beta Blockers	****	****	****	****
Non-Selective Beta Blockers	4,991	100.0%	2,952	100.0%
Any Metoprolol	****	****	0	0.0%
Metoprolol (Extended Release)	****	****	0	0.0%
Metoprolol (Regular)	0	0.0%	0	0.0%
Any Propranolol	0	0.0%	0	0.0%
Propranolol (Extended Release)	0	0.0%	0	0.0%
Propranolol (Regular)	0	0.0%	0	0.0%
Propranolol (Hemangeol)	0	0.0%	0	0.0%
Acebutolol	0	0.0%	0	0.0%
Atenolol	****	****	****	****
Betaxolol	0	0.0%	0	0.0%
Bisoprolol	0	0.0%	0	0.0%
Carvedilol	* * * * *	****	0	0.0%
Labetalol	4,991	100.0%	2,952	100.0%
Nadolol	0	0.0%	0	0.0%
Nebivolol	0	0.0%	0	0.0%



	Beta Blockers		Beta Blockers (Post-Index Enrollment Requirement)	
		Percent/		Percent/
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation
Pindolol	0	0.0%	0	0.0%
Sotalol	0	0.0%	0	0.0%
Timolol	0	0.0%	0	0.0%
Health Characteristics by Beta Blockers				
Hypertension and Any Metoprolol	0	0.0%	0	0.0%
Hypertension and Metoprolol (Extended Release)	0	0.0%	0	0.0%
Hypertension and Metoprolol (Regular)	0	0.0%	0	0.0%
Hypertension and Any Propranolol	0	0.0%	0	0.0%
Hypertension and Propranolol (Extended Release)	0	0.0%	0	0.0%
Hypertension and Propranolol (Regular)	0	0.0%	0	0.0%
Hypertension and Acebutolol	0	0.0%	0	0.0%
Hypertension and Atenolol	****	****	****	****
Hypertension and Betaxolol	0	0.0%	0	0.0%
Hypertension and Bisoprolol	0	0.0%	0	0.0%
Hypertension and Carvedilol	****	****	0	0.0%
Hypertension and Labetalol	1,938	38.8%	1,179	39.9%
Hypertension and Nadolol	0	0.0%	0	0.0%
Hypertension and Nebivolol	0	0.0%	0	0.0%
Hypertension and Pindolol	0	0.0%	0	0.0%
Hypertension and Sotalol	0	0.0%	0	0.0%
Hypertension and Timolol	0	0.0%	0	0.0%
Hemangioma and Any Metoprolol	0	0.0%	0	0.0%
Hemangioma and Metoprolol (Extended Release)	0	0.0%	0	0.0%
Hemangioma and Metoprolol (Regular)	0	0.0%	0	0.0%
Hemangioma and Any Propranolol	0	0.0%	0	0.0%
Hemangioma and Propranolol (Extended Release)	0	0.0%	0	0.0%
Hemangioma and Propranolol (Regular)	0	0.0%	0	0.0%
Hemangioma and Propranolol (Hemangeol)	0	0.0%	0	0.0%
Hemangioma and Acebutolol	0	0.0%	0	0.0%
Hemangioma and Atenolol	0	0.0%	0	0.0%
Hemangioma and Betaxolol	0	0.0%	0	0.0%
Hemangioma and Bisoprolol	0	0.0%	0	0.0%
Hemangioma and Carvedilol	0	0.0%	0	0.0%
Hemangioma and Labetalol	****	****	****	****
Hemangioma and Nadolol	0	0.0%	0	0.0%
Hemangioma and Nebivolol	0	0.0%	0	0.0%
Hemangioma and Pindolol	0	0.0%	0	0.0%



	Beta Blockers		Beta Blockers (Post-Index Enrollment Requirement)	
Patient Characteristics ^{1,2}	Number/Mean	Percent/ Standard Deviation ³	Number/Mean	Percent/ Standard Deviation ³
Hemangioma and Sotalol	0	0.0%	0	0.0%
Hemangioma and Timolol	0	0.0%	0	0.0%
Long QT Syndrome and Any Metoprolol Long QT Syndrome and Metoprolol (Extended Release)	0	0.0% 0.0%	0 0	0.0% 0.0%
Long QT Syndrome and Metoprolol (Regular) Long QT Syndrome and Any Propranolol Long QT Syndrome and Propranolol (Extended Release)	0 0 0	0.0% 0.0% 0.0%	0 0 0	0.0% 0.0% 0.0%
Long QT Syndrome and Propranolol (Regular)	0	0.0%	0	0.0%
Long QT Syndrome and Acebutolol	0	0.0%	0	0.0%
Long QT Syndrome and Atenolol	0	0.0%	0	0.0%
Long QT Syndrome and Betaxolol	0	0.0%	0	0.0%
Long QT Syndrome and Bisoprolol	0	0.0%	0	0.0%
Long QT Syndrome and Carvedilol	0	0.0%	0	0.0%
Long QT Syndrome and Labetalol	18	0.4%	12	0.4%
Long QT Syndrome and Nadolol	0	0.0%	0	0.0%
Long QT Syndrome and Nebivolol	0	0.0%	0	0.0%
Long QT Syndrome and Pindolol	0	0.0%	0	0.0%
Long QT Syndrome and Sotalol	0	0.0%	0	0.0%
Long QT Syndrome and Timolol	0	0.0%	0	0.0%

¹All metrics are based on total number of episodes per group, except for sex, race, and Hispanic origin which are based on total number of unique patients.

²Characteristics in blue show a standardized difference greater than 0.1.

³Value represents standard deviation where no % follows the value.

⁴Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

⁵The Charlson/Elixhauser Combined Comorbidity Score is calculated based on comorbidities observed during a requester-defined window around the exposure episode start date. (Gagne JJ, Glynn RJ, Avorn J, Levin R, Schneeweiss S. A combined comorbidity score predicted mortality in elderly patients better than existing scores. J Clin Epidemiol. 2011;64(7):749-759)

*****Data are not presented in these cells due to a small sample size or to assure a small cell cannot be recalculated through the cells presented.



	Beta	Blockers		ost-Index Enrollment irement)
		Percent/		Percent/
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation ³
Unique patients	5,865	N/A	3,988	N/A
Episodes	6,351	100.0%	4,273	100.0%
Demographic Characteristics				
Age (years)	13.3	3.7	13.4	3.7
Age				
0-1 years	57	0.9%	35	0.8%
2-5 years	296	4.7%	185	4.3%
6-12 years	2,033	32.0%	1,357	31.8%
13-17 years	3,965	62.4%	2,696	63.1%
Sex				
Female	3,389	57.8%	2,342	58.7%
Male	2,476	42.2%	1,646	41.3%
Race ⁴				
American Indian or Alaska Native	38	0.6%	****	****
Asian	52	0.9%	33	0.8%
Black or African American	290	4.9%	168	4.2%
Native Hawaiian or Other Pacific Islander	15	0.3%	****	****
Unknown	4,151	70.8%	2,883	72.3%
White	1,319	22.5%	872	21.9%
Hispanic origin				
Yes	385	6.6%	222	5.6%
No	1,487	25.4%	935	23.4%
Unknown	3,993	68.1%	2,831	71.0%
Year				
2008	270	4.3%	208	4.9%
2009	398	6.3%	314	7.3%
2010	365	5.7%	268	6.3%
2011	350	5.5%	258	6.0%
2012	349	5.5%	272	6.4%
2013	396	6.2%	304	7.1%
2014	424	6.7%	338	7.9%
2015	551	8.7%	435	10.2%
2016	757	11.9%	627	14.7%
2017	932	14.7%	682	16.0%
2018	876	13.8%	216	5.1%
2019	256	4.0%	189	4.4%
2020	212	3.3%	150	3.5%



	Beta	Blockers	Beta Blockers (Post-Index Enrollment Requirement)	
		Percent/		Percent/
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation ³
2021	****	****	12	0.3%
2022	****	****	0	0.0%
Health Characteristics				
Charlson/Elixhauser combined comorbidity score ⁵	0.7	1.0	0.6	1.0
Hypertension	184	2.9%	119	2.8%
Hemangioma	****	****	****	****
Heart Failure	62	1.0%	31	0.7%
Congenital Heart Disease	446	7.0%	280	6.6%
Atrial Fibrillation	45	0.7%	29	0.7%
Long QT Syndrome	1,130	17.8%	711	16.6%
Other Cardiac Arrhythmias	1,748	27.5%	1,113	26.0%
Cardiac Arrhythmias (Composite)	2,543	40.0%	1,612	37.7%
Pulmonary Hypertension	22	0.3%	****	****
Cardiomyopathy	150	2.4%	93	2.2%
Coronary Artery Disease	25	0.4%	15	0.4%
Portal Hypertension	43	0.7%	25	0.6%
Anxiety Disorder	608	9.6%	405	9.5%
Tremor	57	0.9%	36	0.8%
Migraine	1,898	29.9%	1,380	32.3%
Thyrotoxicosis	17	0.3%	12	0.3%
Burns	11	0.2%	****	****
Glaucoma	13	0.2%	****	****
Autism	105	1.7%	67	1.6%
Marfan's Syndrome	11	0.2%	****	****
Pheochromocytoma/Paraganglioma	****	****	****	****
Diabetes	54	0.9%	42	1.0%
Any of the above health characteristics (excluding				
combined comorbidity score)	4,812	75.8%	3,236	75.7%
None of the above health characteristics (excluding combined comorbidity score)	1,539	24.2%	1,037	24.3%
Hypoglycemia (Day 0)	****	****	****	****
Hypoglycemia (0-3 Months)	18	0.3%	13	0.3%
Hypoglycemia (3-6 Months)	15	0.2%	11	0.3%
Hypoglycemia (6-12 Months)	25	0.4%	24	0.6%
Hypoglycemia (Day 0) and Diabetes	0	0.0%	0	0.0%
Hypoglycemia (0-3 Months) and Diabetes	****	****	0	0.0%
Hypoglycemia (3-6 Months) and Diabetes	****	****	****	****
Hypoglycemia (5-0 Months) and Diabetes	****	****	****	****



	Beta	Blockers	Beta Blockers (Post-Index Enrollment Requirement)		
		Percent/		Percent/	
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation ³	
Hypoglycemia (Day 0) and No Diabetes	****	****	****	****	
Hypoglycemia (0-3 Months) and No Diabetes	17	0.3%	****	****	
Hypoglycemia (3-6 Months) and No Diabetes	14	0.2%	****	****	
Hypoglycemia (6-12 Months) and No Diabetes	24	0.4%	23	0.5%	
Hypoglycemia (Day 0) and Any Metoprolol	0	0.0%	0	0.0%	
Hypoglycemia (0-3 Months) and Any Metoprolol	0	0.0%	0	0.0%	
Hypoglycemia (3-6 Months) and Any Metoprolol	0	0.0%	0	0.0%	
Hypoglycemia (6-12 Months) and Any Metoprolol	0	0.0%	0	0.0%	
Hypoglycemia (Day 0) and Any Propranolol	0	0.0%	0	0.0%	
Hypoglycemia (0-3 Months) and Any Propranolol	0	0.0%	0	0.0%	
Hypoglycemia (3-6 Months) and Any Propranolol	0	0.0%	0	0.0%	
Hypoglycemia (6-12 Months) and Any Propranolol	0	0.0%	0	0.0%	
Hypoglycemia (Day 0) and Atenolol	0	0.0%	0	0.0%	
Hypoglycemia (0-3 Months) and Atenolol	0	0.0%	0	0.0%	
Hypoglycemia (3-6 Months) and Atenolol	0	0.0%	0	0.0%	
Hypoglycemia (6-12 Months) and Atenolol	0	0.0%	0	0.0%	
Hypoglycemia (Day 0) and Nadolol	****	****	****	****	
Hypoglycemia (0-3 Months) and Nadolol	18	0.3%	13	0.3%	
Hypoglycemia (3-6 Months) and Nadolol	15	0.2%	11	0.3%	
Hypoglycemia (6-12 Months) and Nadolol	25	0.4%	24	0.6%	
Selective Beta Blockers	****	****	****	****	
Non-Selective Beta Blockers	6,351	100.0%	4,273	100.0%	
Any Metoprolol	0	0.0%	0	0.0%	
Metoprolol (Extended Release)	0	0.0%	0	0.0%	
Metoprolol (Regular)	0	0.0%	0	0.0%	
Any Propranolol	****	****	****	****	
Propranolol (Extended Release)	****	****	****	****	
Propranolol (Regular)	****	****	****	****	
Propranolol (Hemangeol)	0	0.0%	0	0.0%	
Acebutolol	0	0.0%	0	0.0%	
Atenolol	****	****	****	****	
Betaxolol	0	0.0%	0	0.0%	
Bisoprolol	0	0.0%	0	0.0%	
Carvedilol	0	0.0%	0	0.0%	
Labetalol	0	0.0%	0	0.0%	
Nadolol	6,351	100.0%	4,273	100.0%	
Nebivolol	0	0.0%	0	0.0%	



	Beta	Blockers	Beta Blockers (Post-Index Enrollm Requirement)	
		Percent/		Percent/
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation
Pindolol	0	0.0%	0	0.0%
Sotalol	0	0.0%	0	0.0%
Timolol	0	0.0%	0	0.0%
Health Characteristics by Beta Blockers				
Hypertension and Any Metoprolol	0	0.0%	0	0.0%
Hypertension and Metoprolol (Extended Release)	0	0.0%	0	0.0%
Hypertension and Metoprolol (Regular)	0	0.0%	0	0.0%
Hypertension and Any Propranolol	0	0.0%	0	0.0%
Hypertension and Propranolol (Extended Release)	0	0.0%	0	0.0%
Hypertension and Propranolol (Regular)	0	0.0%	0	0.0%
Hypertension and Acebutolol	0	0.0%	0	0.0%
Hypertension and Atenolol	0	0.0%	0	0.0%
Hypertension and Betaxolol	0	0.0%	0	0.0%
Hypertension and Bisoprolol	0	0.0%	0	0.0%
Hypertension and Carvedilol	0	0.0%	0	0.0%
Hypertension and Labetalol	0	0.0%	0	0.0%
Hypertension and Nadolol	184	2.9%	119	2.8%
Hypertension and Nebivolol	0	0.0%	0	0.0%
Hypertension and Pindolol	0	0.0%	0	0.0%
Hypertension and Sotalol	0	0.0%	0	0.0%
Hypertension and Timolol	0	0.0%	0	0.0%
Hemangioma and Any Metoprolol	0	0.0%	0	0.0%
Hemangioma and Metoprolol (Extended Release)	0	0.0%	0	0.0%
Hemangioma and Metoprolol (Regular)	0	0.0%	0	0.0%
Hemangioma and Any Propranolol	0	0.0%	0	0.0%
Hemangioma and Propranolol (Extended Release)	0	0.0%	0	0.0%
Hemangioma and Propranolol (Regular)	0	0.0%	0	0.0%
Hemangioma and Propranolol (Hemangeol)	0	0.0%	0	0.0%
Iemangioma and Acebutolol	0	0.0%	0	0.0%
Hemangioma and Atenolol	0	0.0%	0	0.0%
lemangioma and Betaxolol	0	0.0%	0	0.0%
Hemangioma and Bisoprolol	0	0.0%	0	0.0%
Hemangioma and Carvedilol	0	0.0%	0	0.0%
Hemangioma and Labetalol	0	0.0%	0	0.0%
Hemangioma and Nadolol	****	****	****	****
Hemangioma and Nebivolol	0	0.0%	0	0.0%
Hemangioma and Pindolol	0	0.0%	0	0.0%



	Beta Blockers		Beta Blockers (Post-Index Enrollment Requirement)	
Patient Characteristics ^{1,2}	Number/Mean	Percent/ Standard Deviation ³	Number/Mean	Percent/ Standard Deviation ³
Hemangioma and Sotalol	0	0.0%	0	0.0%
Hemangioma and Timolol	0	0.0%	0	0.0%
Long QT Syndrome and Any Metoprolol Long QT Syndrome and Metoprolol (Extended	0	0.0%	0	0.0%
Release)	0	0.0%	0	0.0%
Long QT Syndrome and Metoprolol (Regular)	0	0.0%	0	0.0%
Long QT Syndrome and Any Propranolol Long QT Syndrome and Propranolol (Extended	0	0.0%	0	0.0%
Release)	0	0.0%	0	0.0%
Long QT Syndrome and Propranolol (Regular)	0	0.0%	0	0.0%
Long QT Syndrome and Acebutolol	0	0.0%	0	0.0%
Long QT Syndrome and Atenolol	0	0.0%	0	0.0%
Long QT Syndrome and Betaxolol	0	0.0%	0	0.0%
Long QT Syndrome and Bisoprolol	0	0.0%	0	0.0%
Long QT Syndrome and Carvedilol	0	0.0%	0	0.0%
Long QT Syndrome and Labetalol	0	0.0%	0	0.0%
Long QT Syndrome and Nadolol	1,130	17.8%	711	16.6%
Long QT Syndrome and Nebivolol	0	0.0%	0	0.0%
Long QT Syndrome and Pindolol	0	0.0%	0	0.0%
Long QT Syndrome and Sotalol	0	0.0%	0	0.0%
Long QT Syndrome and Timolol	0	0.0%	0	0.0%

¹All metrics are based on total number of episodes per group, except for sex, race, and Hispanic origin which are based on total number of unique patients.

²Characteristics in blue show a standardized difference greater than 0.1.

³Value represents standard deviation where no % follows the value.

⁴Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

⁵The Charlson/Elixhauser Combined Comorbidity Score is calculated based on comorbidities observed during a requester-defined window around the exposure episode start date. (Gagne JJ, Glynn RJ, Avorn J, Levin R, Schneeweiss S. A combined comorbidity score predicted mortality in elderly patients better than existing scores. J Clin Epidemiol. 2011;64(7):749-759)

*****Data are not presented in these cells due to a small sample size or to assure a small cell cannot be recalculated through the cells presented.



	Beta	a Blockers	-	ost-Index Enrollment irement)
		Percent/		Percent/
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation ³
Unique patients	530	N/A	382	N/A
Episodes	551	100.0%	397	100.0%
Demographic Characteristics				
Age (years)	14.9	3.5	14.9	3.5
Age				
0-1 years	****	****	****	****
2-5 years	****	****	****	****
6-12 years	96	17.4%	66	16.6%
13-17 years	437	79.3%	318	80.1%
Sex				
Female	261	49.2%	191	50.0%
Male	269	50.8%	191	50.0%
Race ⁴				
American Indian or Alaska Native	****	****	****	****
Asian	0	0.0%	0	0.0%
Black or African American	****	****	****	****
Native Hawaiian or Other Pacific Islander	0	0.0%	0	0.0%
Unknown	441	83.2%	320	83.8%
White	74	14.0%	50	13.1%
Hispanic origin				
Yes	12	2.3%	****	****
No	64	12.1%	****	****
Unknown	454	85.7%	327	85.6%
Year				
2008	****	****	13	3.3%
2009	43	7.8%	30	7.6%
2010	46	8.3%	34	8.6%
2011	35	6.4%	24	6.0%
2012	44	8.0%	34	8.6%
2013	47	8.5%	28	7.1%
2014	57	10.3%	42	10.6%
2015	39	7.1%	31	7.8%
2016	55	10.0%	42	10.6%
2017	77	14.0%	62	15.6%
2018	42	7.6%	26	6.5%
2019	24	4.4%	18	4.5%
2020	21	3.8%	13	3.3%



	Beta	Blockers	-	ost-Index Enrollment irement)
		Percent/		Percent/
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation ³
2021	****	****	0	0.0%
2022	0	0.0%	0	0.0%
Health Characteristics				
Charlson/Elixhauser combined comorbidity score ⁵	0.2	0.9	0.2	0.9
Hypertension	145	26.3%	98	24.7%
lemangioma	0	0.0%	0	0.0%
Heart Failure	****	****	****	****
Congenital Heart Disease	****	****	****	****
Atrial Fibrillation	****	* * * *	****	****
ong QT Syndrome	0	0.0%	0	0.0%
Other Cardiac Arrhythmias	85	15.4%	59	14.9%
Cardiac Arrhythmias (Composite)	86	15.6%	60	15.1%
Pulmonary Hypertension	0	0.0%	0	0.0%
Cardiomyopathy	0	0.0%	0	0.0%
Coronary Artery Disease	****	****	****	****
Portal Hypertension	0	0.0%	0	0.0%
Anxiety Disorder	116	21.1%	83	20.9%
Tremor	****	****	****	****
Vigraine	108	19.6%	80	20.2%
Fhyrotoxicosis	****	****	****	****
Burns	****	****	****	****
Glaucoma	****	****	****	****
Autism	39	7.1%	28	7.1%
Marfan's Syndrome	****	****	0	0.0%
Pheochromocytoma/Paraganglioma	0	0.0%	0	0.0%
Diabetes	16	2.9%	****	****
Any of the above health characteristics <i>(excluding combined comorbidity score)</i> None of the above health characteristics <i>(excluding</i>	380	69.0%	265	66.8%
combined comorbidity score)	171	31.0%	132	33.2%
Hypoglycemia (Day 0)	****	****	****	****
Hypoglycemia (0-3 Months)	****	****	****	****
Hypoglycemia (3-6 Months)	****	****	****	****
Hypoglycemia (6-12 Months)	****	****	****	****
Hypoglycemia (Day 0) and Diabetes	0	0.0%	0	0.0%
Hypoglycemia (0-3 Months) and Diabetes	0	0.0%	0	0.0%
Hypoglycemia (3-6 Months) and Diabetes	****	****	0	0.0%
Hypoglycemia (5-12 Months) and Diabetes	0	0.0%	0	0.0%



Patient Characteristics ^{1,2} Number/Mean Standard Deviation ³ Number/Mean Standard Deviation ³ Hypoglycemia (Day 0) and No Diabetes ******	Percent/
Hypoglycemia (Day 0) and No Diabetes***************Hypoglycemia (0-3 Months) and No Diabetes***************Hypoglycemia (3-6 Months) and No Diabetes***************Hypoglycemia (6-12 Months) and No Diabetes***************Hypoglycemia (Day 0) and Any Metoprolol00.0%0Hypoglycemia (0-3 Months) and Any Metoprolol00.0%0Hypoglycemia (3-6 Months) and Any Metoprolol00.0%0Hypoglycemia (3-6 Months) and Any Metoprolol00.0%0Hypoglycemia (6-12 Months) and Any Metoprolol00.0%0Hypoglycemia (3-6 Months) and Any Propranolol00.0%0Hypoglycemia (3-6 Months) and Any Propranolol00.0%0Hypoglycemia (0-3 Months) and Any Propranolol00.0%0Hypoglycemia (3-6 Months) and Any Propranolol00.0%0Hypoglycemia (3-6 Months) and Any Propranolol00.0%0Hypoglycemia (3-6 Months) and Any Propranolol00.0%0Hypoglycemia (0-3 Months) and Any Propranolol00.0%0Hypoglycemia (0-3 Months) and Atenolol00.0%0Hypoglycemia (3-6 Months) and Atenolol00.0%0Hypoglycemia (3-6 Months) and Atenolol00.0%0Hypoglycemia (3-6 Months) and Atenolol00.0%0Hypoglycemia (6-12 Months) and Atenolol00.0%0Hypoglycemia (6-12 Months) and Atenolol </th <th> 3</th>	3
Hypoglycemia (Day Of allo Polabetes)******************Hypoglycemia (Day Of allo No Diabetes)******************Hypoglycemia (G-12 Months) and No Diabetes)******************Hypoglycemia (Day O) and Any Metoprolol00.0%0Hypoglycemia (G-12 Months) and Any Metoprolol00.0%0Hypoglycemia (G-12 Months) and Any Metoprolol00.0%0Hypoglycemia (Day O) and Any Propranolol00.0%0Hypoglycemia (Day O) and Atenolol00.0%0Hypoglycemia (Day O) and Atenolol00.0%0Hypoglycemia (Day O) and Atenolol00.0%0Hypoglycemia (Day O) and Atenolol00.0%0Hypoglycemia (G-12 Months) and Atenolol00.0%0Hypoglycemia (G-12 Months) and Atenolol00.0%0Hypoglycemia (G-12 Months) and Atenolol00.0%0Hypoglycemia (G-12 Months) and Atenolol00.0%0Hypoglycemia (Day O) and Nadolol00.0%0Hypoglycemia (Day O) and Nado	dard Deviation ³
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Hypoglycemia (Day 0) and Nadolol00.0%0Hypoglycemia (0-3 Months) and Nadolol00.0%0	0.0%
Hypoglycemia (0-3 Months) and Nadolol 0 0.0% 0	0.0%
	0.0%
Hypoglycemia (3-6 Months) and Nadolol 0 0.0% 0	0.0%
	0.0%
Hypoglycemia (6-12 Months) and Nadolol 0 0.0% 0	0.0%
Selective Beta Blockers 551 100.0% 397	100.0%
Non-Selective Beta Blockers 0 0.0% 0	0.0%
Any Metoprolol ***** ***** ****	****
Metoprolol (Extended Release) 0 0.0% 0	0.0%
Metoprolol (Regular) ***** ***** ****	****
Any Propranolol 0 0.0% 0	0.0%
Propranolol (Extended Release) 0 0.0% 0	0.0%
Propranolol (Regular) 0 0.0% 0	0.0%
Propranolol (Hemangeol) 0 0.0% 0	0.0%
Acebutolol 0 0.0% 0	0.0%
Atenolol ***** **** ****	****
Betaxolol 0 0.0% 0	0.0%
Bisoprolol **** **** 0	0.0%
Carvedilol 0 0.0% 0	0.0%
Labetalol 0 0.0% 0	0.0%
Nadolol 0 0.0% 0	
Nebivolol 551 100.0% 397	0.0%



	Beta	a Blockers	-	ost-Index Enrollment irement)
		Percent/		Percent/
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation ³
Pindolol	0	0.0%	0	0.0%
Sotalol	0	0.0%	0	0.0%
Timolol	0	0.0%	0	0.0%
Health Characteristics by Beta Blockers				
Hypertension and Any Metoprolol	0	0.0%	0	0.0%
Hypertension and Metoprolol (Extended Release)	0	0.0%	0	0.0%
Hypertension and Metoprolol (Regular)	0	0.0%	0	0.0%
Hypertension and Any Propranolol	0	0.0%	0	0.0%
Hypertension and Propranolol (Extended Release)	0	0.0%	0	0.0%
Hypertension and Propranolol (Regular)	0	0.0%	0	0.0%
Hypertension and Acebutolol	0	0.0%	0	0.0%
Hypertension and Atenolol	0	0.0%	0	0.0%
Hypertension and Betaxolol	0	0.0%	0	0.0%
Hypertension and Bisoprolol	****	****	0	0.0%
Hypertension and Carvedilol	0	0.0%	0	0.0%
Hypertension and Labetalol	0	0.0%	0	0.0%
Hypertension and Nadolol	0	0.0%	0	0.0%
Hypertension and Nebivolol	145	26.3%	98	24.7%
Hypertension and Pindolol	0	0.0%	0	0.0%
Hypertension and Sotalol	0	0.0%	0	0.0%
Hypertension and Timolol	0	0.0%	0	0.0%
Hemangioma and Any Metoprolol	0	0.0%	0	0.0%
Hemangioma and Metoprolol (Extended Release)	0	0.0%	0	0.0%
Hemangioma and Metoprolol (Regular)	0	0.0%	0	0.0%
Hemangioma and Any Propranolol	0	0.0%	0	0.0%
Hemangioma and Propranolol (Extended Release)	0	0.0%	0	0.0%
Hemangioma and Propranolol (Regular)	0	0.0%	0	0.0%
Hemangioma and Propranolol (Hemangeol)	0	0.0%	0	0.0%
Hemangioma and Acebutolol	0	0.0%	0	0.0%
Hemangioma and Atenolol	0	0.0%	0	0.0%
Hemangioma and Betaxolol	0	0.0%	0	0.0%
Hemangioma and Bisoprolol	0	0.0%	0	0.0%
Hemangioma and Carvedilol	0	0.0%	0	0.0%
Hemangioma and Labetalol	0	0.0%	0	0.0%
Hemangioma and Nadolol	0	0.0%	0	0.0%
Hemangioma and Nebivolol	0	0.0%	0	0.0%
Hemangioma and Pindolol	0	0.0%	0	0.0%



	Beta	Blockers		ost-Index Enrollment irement)
Patient Characteristics ^{1,2}	Number/Mean	Percent/ Standard Deviation ³	Number/Mean	Percent/ Standard Deviation ³
Hemangioma and Sotalol	0	0.0%	0	0.0%
Hemangioma and Timolol	0	0.0%	0	0.0%
Long QT Syndrome and Any Metoprolol Long QT Syndrome and Metoprolol (Extended Long QT Syndrome and Metoprolol (Regular) Long QT Syndrome and Any Propranolol Long QT Syndrome and Propranolol (Extended Long QT Syndrome and Propranolol (Regular) Long QT Syndrome and Acebutolol Long QT Syndrome and Acebutolol	0 0 0 0 0 0 0	0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0%	0 0 0 0 0 0 0	0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0%
Long QT Syndrome and Betaxolol	0	0.0%	0	0.0%
Long QT Syndrome and Bisoprolol	0	0.0%	0	0.0%
Long QT Syndrome and Carvedilol	0	0.0%	0	0.0%
Long QT Syndrome and Labetalol	0	0.0%	0	0.0%
Long QT Syndrome and Nadolol	0	0.0%	0	0.0%
Long QT Syndrome and Nebivolol	0	0.0%	0	0.0%
Long QT Syndrome and Pindolol	0	0.0%	0	0.0%
Long QT Syndrome and Sotalol Long QT Syndrome and Timolol	0 0	0.0% 0.0%	0 0	0.0% 0.0%

¹All metrics are based on total number of episodes per group, except for sex, race, and Hispanic origin which are based on total number of unique patients.

²Characteristics in blue show a standardized difference greater than 0.1.

³Value represents standard deviation where no % follows the value.

⁴Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

⁵The Charlson/Elixhauser Combined Comorbidity Score is calculated based on comorbidities observed during a requester-defined window around the exposure episode start date. (Gagne JJ, Glynn RJ, Avorn J, Levin R, Schneeweiss S. A combined comorbidity score predicted mortality in elderly patients better than existing scores. J Clin Epidemiol. 2011;64(7):749-759)

*****Data are not presented in these cells due to a small sample size or to assure a small cell cannot be recalculated through the cells presented.



		a Blockers	-	ost-Index Enrollment irement)
		Percent/		Percent/
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation ³
Unique patients	264	N/A	186	N/A
Episodes	275	100.0%	193	100.0%
Demographic Characteristics				
Age (years)	15.2	2.6	15.2	2.6
Age				
0-1 years	0	0.0%	0	0.0%
2-5 years	****	****	****	****
6-12 years	****	****	****	****
13-17 years	235	85.5%	165	85.5%
Sex				
Female	171	64.8%	127	68.3%
Male	93	35.2%	59	31.7%
Race ⁴				
American Indian or Alaska Native	****	****	****	****
Asian	0	0.0%	0	0.0%
Black or African American	****	****	****	****
Native Hawaiian or Other Pacific Islander	0	0.0%	0	0.0%
Unknown	177	67.0%	133	71.5%
White	73	27.7%	44	23.7%
Hispanic origin				
Yes	* * * * *	****	****	* * * * *
No	****	****	****	****
Unknown	177	67.0%	135	72.6%
Year				
2008	****	****	****	****
2009	13	4.7%	11	5.7%
2010	11	4.0%	****	****
2011	12	4.4%	11	5.7%
2012	22	8.0%	17	8.8%
2013	16	5.8%	****	****
2014	14	5.1%	13	6.7%
2015	39	14.2%	30	15.5%
2016	30	10.9%	29	15.0%
2017	28	10.2%	23	11.9%
2018	51	18.5%	17	8.8%
2019	17	6.2%	15	7.8%
2020	* * * * *	****	****	* * * *



	Bet	a Blockers	Beta Blockers (Post-Index Enrollme Requirement)	
		Percent/		Percent/
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation ³
2021	****	****	0	0.0%
2022	0	0.0%	0	0.0%
Health Characteristics				
Charlson/Elixhauser combined comorbidity score ⁵	0.8	0.9	0.8	0.9
Hypertension	13	4.7%	****	****
Hemangioma	0	0.0%	0	0.0%
Heart Failure	0	0.0%	0	0.0%
Congenital Heart Disease	****	* * * *	****	****
Atrial Fibrillation	****	* * * *	****	****
Long QT Syndrome	0	0.0%	0	0.0%
Other Cardiac Arrhythmias	63	22.9%	48	24.9%
Cardiac Arrhythmias (Composite)	63	22.9%	48	24.9%
Pulmonary Hypertension	0	0.0%	0	0.0%
Cardiomyopathy	0	0.0%	0	0.0%
Coronary Artery Disease	****	****	****	****
Portal Hypertension	0	0.0%	0	0.0%
Anxiety Disorder	119	43.3%	90	46.6%
Tremor	****	****	****	****
Migraine	20	7.3%	12	6.2%
Thyrotoxicosis	0	0.0%	0	0.0%
Burns	0	0.0%	0	0.0%
Glaucoma	****	****	****	****
Autism	20	7.3%	****	****
Marfan's Syndrome	****	****	0	0.0%
Pheochromocytoma/Paraganglioma	0	0.0%	0	0.0%
Diabetes	****	****	****	****
Any of the above health characteristics (excluding	190	69.1%	135	69.9%
combined comorbidity score) None of the above health characteristics (excluding	190	05.176	155	09.976
combined comorbidity score)	85	30.9%	58	30.1%
Hypoglycemia (Day 0)	0	0.0%	0	0.0%
Hypoglycemia (0-3 Months)	****	****	0	0.0%
Hypoglycemia (3-6 Months)	****	****	****	****
Hypoglycemia (6-12 Months)	****	****	****	****
Hypoglycemia (Day 0) and Diabetes	0	0.0%	0	0.0%
Hypoglycemia (0-3 Months) and Diabetes	0	0.0%	0	0.0%
Hypoglycemia (3-6 Months) and Diabetes	0	0.0%	0	0.0%
Hypoglycemia (6-12 Months) and Diabetes	****	****	****	****



Patient Characteristics 1-2Number/MeanStandard Deviation 3Number/MeanStandardHypoglycemia (Day 0) and No Diabetes00.0%00.0%Hypoglycemia (0-3 Months) and No Diabetes************00.0%Hypoglycemia (3-6 Months) and No Diabetes************************Hypoglycemia (6-12 Months) and No Diabetes************************Hypoglycemia (0-3 Months) and Any Metoprolol00.0%00.0Hypoglycemia (0-3 Months) and Any Metoprolol00.0%00.0Hypoglycemia (3-6 Months) and Any Metoprolol00.0%00.0Hypoglycemia (6-12 Months) and Any Metoprolol00.0%00.0Hypoglycemia (3-6 Months) and Any Metoprolol00.0%00.0Hypoglycemia (3-6 Months) and Any Propranolol00.0%00.0Hypoglycemia (1-3 Months) and Any Propranolol00.0%00.0Hypoglycemia (3-6 Months) and Any Propranolol00.0%00.0Hypoglycemia (3-6 Months) and Any Propranolol00.0%00.0Hypoglycemia (3-6 Months) and Atenolol00.0%00.0Hypoglycemia (3-6 Months) and Atenolol00.0%00.0Hypoglycemia (3-6 Months) and Atenolol00.0%00.0Hypoglycemia (3-6 Months) and Atenolol00.0%00.0Hypoglycemia (3-6 Months) and Atenolol00.0%0	cent/ Deviation ³ .0% .0% .*** .*** .0% .0% .0% .0% .0% .0% .0%
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Propranolol (Regular) ***** ***** ***** ****	***
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Acebutolol 0 0.0% 0 0.	.0%
Atenolol 0 0.0% 0 0.	.0%
Betaxolol 0 0.0% 0 0.	.0%
Bisoprolol 0 0.0% 0 0.	.0%
Carvedilol 0 0.0% 0 0.	.0%
Labetalol 0 0.0% 0 0.	.0%
Nadolol 0 0.0% 0 0.	.0%
Nebivolol 0 0.0% 0 0.	.0%



	Bet	a Blockers	Beta Blockers (Post-Index Enrollmen Requirement)		
		Percent/		Percent/	
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation	
Pindolol	275	100.0%	193	100.0%	
Sotalol	0	0.0%	0	0.0%	
Timolol	0	0.0%	0	0.0%	
Health Characteristics by Beta Blockers					
Hypertension and Any Metoprolol	0	0.0%	0	0.0%	
Hypertension and Metoprolol (Extended Release)	0	0.0%	0	0.0%	
Hypertension and Metoprolol (Regular)	0	0.0%	0	0.0%	
Hypertension and Any Propranolol	0	0.0%	0	0.0%	
Hypertension and Propranolol (Extended Release)	0	0.0%	0	0.0%	
Hypertension and Propranolol (Regular)	0	0.0%	0	0.0%	
Hypertension and Acebutolol	0	0.0%	0	0.0%	
Hypertension and Atenolol	0	0.0%	0	0.0%	
Hypertension and Betaxolol	0	0.0%	0	0.0%	
Hypertension and Bisoprolol	0	0.0%	0	0.0%	
lypertension and Carvedilol	0	0.0%	0	0.0%	
Hypertension and Labetalol	0	0.0%	0	0.0%	
Hypertension and Nadolol	0	0.0%	0	0.0%	
Hypertension and Nebivolol	0	0.0%	0	0.0%	
Aypertension and Pindolol	13	4.7%	****	****	
Hypertension and Sotalol	0	0.0%	0	0.0%	
Hypertension and Timolol	0	0.0%	0	0.0%	
Hemangioma and Any Metoprolol	0	0.0%	0	0.0%	
Hemangioma and Metoprolol (Extended Release)	0	0.0%	0	0.0%	
Iemangioma and Metoprolol (Regular)	0	0.0%	0	0.0%	
Hemangioma and Any Propranolol	0	0.0%	0	0.0%	
Hemangioma and Propranolol (Extended Release)	0	0.0%	0	0.0%	
Hemangioma and Propranolol (Regular)	0	0.0%	0	0.0%	
Hemangioma and Propranolol (Hemangeol)	0	0.0%	0	0.0%	
Hemangioma and Acebutolol	0	0.0%	0	0.0%	
Hemangioma and Atenolol	0	0.0%	0	0.0%	
lemangioma and Betaxolol	0	0.0%	0	0.0%	
Iemangioma and Bisoprolol	0	0.0%	0	0.0%	
Iemangioma and Carvedilol	0	0.0%	0	0.0%	
Hemangioma and Labetalol	0	0.0%	0	0.0%	
Hemangioma and Nadolol	0	0.0%	0	0.0%	
Hemangioma and Nebivolol	0	0.0%	0	0.0%	
Hemangioma and Pindolol	0	0.0%	0	0.0%	



	Bet	a Blockers	•	ost-Index Enrollment irement)
Patient Characteristics ^{1,2}	Number/Mean	Percent/ Standard Deviation ³	Number/Mean	Percent/ Standard Deviation ³
Hemangioma and Sotalol	0	0.0%	0	0.0%
Hemangioma and Timolol	0	0.0%	0	0.0%
Long QT Syndrome and Any Metoprolol Long QT Syndrome and Metoprolol (Extended Long QT Syndrome and Metoprolol (Regular) Long QT Syndrome and Any Propranolol Long QT Syndrome and Propranolol (Extended Long QT Syndrome and Propranolol (Regular) Long QT Syndrome and Acebutolol Long QT Syndrome and Atenolol	0 0 0 0 0 0 0 0	0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0%	0 0 0 0 0 0 0	0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0%
Long QT Syndrome and Betaxolol	0	0.0%	0	0.0%
Long QT Syndrome and Bisoprolol Long QT Syndrome and Carvedilol Long QT Syndrome and Labetalol	0 0 0	0.0% 0.0% 0.0%	0 0 0	0.0% 0.0% 0.0%
Long QT Syndrome and Nadolol	0	0.0%	0	0.0%
Long QT Syndrome and Nebivolol	0	0.0%	0	0.0%
Long QT Syndrome and Pindolol	0	0.0%	0	0.0%
Long QT Syndrome and Sotalol Long QT Syndrome and Timolol	0 0	0.0% 0.0%	0 0	0.0% 0.0%

¹All metrics are based on total number of episodes per group, except for sex, race, and Hispanic origin which are based on total number of unique patients.

²Characteristics in blue show a standardized difference greater than 0.1.

³Value represents standard deviation where no % follows the value.

⁴Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

⁵The Charlson/Elixhauser Combined Comorbidity Score is calculated based on comorbidities observed during a requester-defined window around the exposure episode start date. (Gagne JJ, Glynn RJ, Avorn J, Levin R, Schneeweiss S. A combined comorbidity score predicted mortality in elderly patients better than existing scores. J Clin Epidemiol. 2011;64(7):749-759)

*****Data are not presented in these cells due to a small sample size or to assure a small cell cannot be recalculated through the cells presented.



	Beta	Blockers	Beta Blockers (Post-Index Enrollmo Requirement)	
		Percent/		Percent/
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation ³
Unique patients	1,021	N/A	611	N/A
Episodes	1,049	100.0%	628	100.0%
Demographic Characteristics				
Age (years)	5.1	6.3	5.5	6.4
Age				
0-1 years	583	55.6%	332	52.9%
2-5 years	111	10.6%	69	11.0%
6-12 years	142	13.5%	91	14.5%
13-17 years	213	20.3%	136	21.7%
Sex				
Female	406	39.8%	245	40.1%
Male	615	60.2%	366	59.9%
Race ⁴				
American Indian or Alaska Native	16	1.6%	****	****
Asian	****	****	12	2.0%
Black or African American	84	8.2%	49	8.0%
Native Hawaiian or Other Pacific Islander	****	****	****	****
Unknown	682	66.8%	392	64.2%
White	219	21.4%	146	23.9%
Hispanic origin				
Yes	137	13.4%	85	13.9%
No	317	31.0%	202	33.1%
Unknown	567	55.5%	324	53.0%
Year				
2008	30	2.9%	19	3.0%
2009	26	2.5%	20	3.2%
2010	20	1.9%	****	****
2011	36	3.4%	29	4.6%
2012	****	****	17	2.7%
2013	26	2.5%	19	3.0%
2014	46	4.4%	37	5.9%
2015	117	11.2%	91	14.5%
2016	193	18.4%	150	23.9%
2017	210	20.0%	157	25.0%
2018	214	20.4%	24	3.8%
2019	28	2.7%	26	4.1%
2020	43	4.1%	26	4.1%



	Beta	Blockers	Beta Blockers (Post-Index Enrollmer Requirement)		
		Percent/		Percent/	
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation ³	
2021	39	3.7%	****	****	
2022	****	****	0	0.0%	
Health Characteristics					
Charlson/Elixhauser combined comorbidity score ⁵	2.0	1.7	2.0	1.7	
Hypertension	41	3.9%	28	4.5%	
Hemangioma	****	* * * *	****	****	
Heart Failure	133	12.7%	86	13.7%	
Congenital Heart Disease	629	60.0%	356	56.7%	
Atrial Fibrillation	84	8.0%	54	8.6%	
Long QT Syndrome	62	5.9%	32	5.1%	
Other Cardiac Arrhythmias	860	82.0%	516	82.2%	
Cardiac Arrhythmias (Composite)	868	82.7%	520	82.8%	
Pulmonary Hypertension	69	6.6%	39	6.2%	
Cardiomyopathy	71	6.8%	51	8.1%	
Coronary Artery Disease	20	1.9%	13	2.1%	
Portal Hypertension	****	****	****	****	
Anxiety Disorder	28	2.7%	18	2.9%	
Tremor	****	****	0	0.0%	
Migraine	****	****	****	****	
Thyrotoxicosis	****	****	****	****	
Burns	0	0.0%	0	0.0%	
Glaucoma	****	****	****	****	
Autism	13	1.2%	****	****	
Marfan's Syndrome	****	****	****	****	
Pheochromocytoma/Paraganglioma	0	0.0%	0	0.0%	
Diabetes	****	* * * *	****	****	
Any of the above health characteristics (excluding combined comorbidity score) None of the above health characteristics (excluding	929	88.6%	547	87.1%	
combined comorbidity score)	120	11.4%	81	12.9%	
Hypoglycemia (Day 0)	0	0.0%	0	0.0%	
Hypoglycemia (0-3 Months)	****	****	****	****	
Hypoglycemia (3-6 Months)	****	****	****	****	
Hypoglycemia (6-12 Months)	****	****	****	****	
Hypoglycemia (Day 0) and Diabetes	0	0.0%	0	0.0%	
Hypoglycemia (0-3 Months) and Diabetes	****	****	0	0.0%	
Hypoglycemia (3-6 Months) and Diabetes	0	0.0%	0	0.0%	
Hypoglycemia (6-12 Months) and Diabetes	****	****	0	0.0%	



	Beta	Blockers	•	st-Index Enrollment irement)
		Percent/		Percent/
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation ³
Hypoglycemia (Day 0) and No Diabetes	0	0.0%	0	0.0%
Hypoglycemia (0-3 Months) and No Diabetes	****	****	****	* * * *
Hypoglycemia (3-6 Months) and No Diabetes	****	****	****	****
Hypoglycemia (6-12 Months) and No Diabetes	****	****	****	* * * *
Hypoglycemia (Day 0) and Any Metoprolol	0	0.0%	0	0.0%
Hypoglycemia (0-3 Months) and Any Metoprolol	0	0.0%	0	0.0%
Hypoglycemia (3-6 Months) and Any Metoprolol	0	0.0%	0	0.0%
Hypoglycemia (6-12 Months) and Any Metoprolol	0	0.0%	0	0.0%
Hypoglycemia (Day 0) and Any Propranolol	0	0.0%	0	0.0%
Hypoglycemia (0-3 Months) and Any Propranolol	0	0.0%	0	0.0%
Hypoglycemia (3-6 Months) and Any Propranolol	0	0.0%	0	0.0%
Hypoglycemia (6-12 Months) and Any Propranolol	0	0.0%	0	0.0%
Hypoglycemia (Day 0) and Atenolol	0	0.0%	0	0.0%
Hypoglycemia (0-3 Months) and Atenolol	0	0.0%	0	0.0%
lypoglycemia (3-6 Months) and Atenolol	0	0.0%	0	0.0%
Hypoglycemia (6-12 Months) and Atenolol	0	0.0%	0	0.0%
Hypoglycemia (Day 0) and Nadolol	0	0.0%	0	0.0%
lypoglycemia (0-3 Months) and Nadolol	0	0.0%	0	0.0%
Hypoglycemia (3-6 Months) and Nadolol	0	0.0%	0	0.0%
Hypoglycemia (6-12 Months) and Nadolol	0	0.0%	0	0.0%
Selective Beta Blockers	****	* * * *	****	****
Non-Selective Beta Blockers	1,049	100.0%	628	100.0%
Any Metoprolol	****	* * * *	****	****
Metoprolol (Extended Release)	0	0.0%	0	0.0%
Metoprolol (Regular)	****	* * * *	****	****
Any Propranolol	25	2.4%	17	2.7%
Propranolol (Extended Release)	0	0.0%	0	0.0%
Propranolol (Regular)	25	2.4%	17	2.7%
Propranolol (Hemangeol)	0	0.0%	0	0.0%
Acebutolol	0	0.0%	0	0.0%
Atenolol	****	****	****	****
Betaxolol	0	0.0%	0	0.0%
Bisoprolol	0	0.0%	0	0.0%
Carvedilol	****	****	****	****
abetalol	0	0.0%	0	0.0%
Nadolol	0	0.0%	0	0.0%
Nebivolol	0	0.0%	0	0.0%



	Beta	Blockers	•	st-Index Enrollment rement)
		Percent/		Percent/
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation
Pindolol	0	0.0%	0	0.0%
Sotalol	1,049	100.0%	628	100.0%
Timolol	0	0.0%	0	0.0%
Health Characteristics by Beta Blockers				
Hypertension and Any Metoprolol	0	0.0%	0	0.0%
Hypertension and Metoprolol (Extended Release)	0	0.0%	0	0.0%
Hypertension and Metoprolol (Regular)	0	0.0%	0	0.0%
Hypertension and Any Propranolol	0	0.0%	0	0.0%
Hypertension and Propranolol (Extended Release)	0	0.0%	0	0.0%
Hypertension and Propranolol (Regular)	0	0.0%	0	0.0%
Hypertension and Acebutolol	0	0.0%	0	0.0%
Hypertension and Atenolol	0	0.0%	0	0.0%
Hypertension and Betaxolol	0	0.0%	0	0.0%
Hypertension and Bisoprolol	0	0.0%	0	0.0%
lypertension and Carvedilol	0	0.0%	0	0.0%
Hypertension and Labetalol	0	0.0%	0	0.0%
Hypertension and Nadolol	0	0.0%	0	0.0%
Hypertension and Nebivolol	0	0.0%	0	0.0%
Hypertension and Pindolol	0	0.0%	0	0.0%
Hypertension and Sotalol	41	3.9%	28	4.5%
Hypertension and Timolol	0	0.0%	0	0.0%
Hemangioma and Any Metoprolol	0	0.0%	0	0.0%
Hemangioma and Metoprolol (Extended Release)	0	0.0%	0	0.0%
Hemangioma and Metoprolol (Regular)	0	0.0%	0	0.0%
Hemangioma and Any Propranolol	0	0.0%	0	0.0%
Hemangioma and Propranolol (Extended Release)	0	0.0%	0	0.0%
Hemangioma and Propranolol (Regular)	0	0.0%	0	0.0%
Hemangioma and Propranolol (Hemangeol)	0	0.0%	0	0.0%
Hemangioma and Acebutolol	0	0.0%	0	0.0%
Hemangioma and Atenolol	0	0.0%	0	0.0%
lemangioma and Betaxolol	0	0.0%	0	0.0%
lemangioma and Bisoprolol	0	0.0%	0	0.0%
Hemangioma and Carvedilol	0	0.0%	0	0.0%
Hemangioma and Labetalol	0	0.0%	0	0.0%
Hemangioma and Nadolol	0	0.0%	0	0.0%
Hemangioma and Nebivolol	0	0.0%	0	0.0%
Hemangioma and Pindolol	0	0.0%	0	0.0%



	Beta Blockers		Beta Blockers (Post-Index Enrollment Requirement)	
Patient Characteristics ^{1,2}	Number/Mean	Percent/ Standard Deviation ³	Number/Mean	Percent/ Standard Deviation ³
Hemangioma and Sotalol	****	****	****	****
Hemangioma and Timolol	0	0.0%	0	0.0%
Long QT Syndrome and Any Metoprolol Long QT Syndrome and Metoprolol (Extended Release) Long QT Syndrome and Metoprolol (Regular) Long QT Syndrome and Any Propranolol	0 0 0 *****	0.0% 0.0% 0.0% *****	0 0 0 *****	0.0% 0.0% 0.0% *****
Long QT Syndrome and Propranolol (Extended	0	0.0%	0	0.0%
Long QT Syndrome and Propranolol (Regular)	****	* * * *	****	****
Long QT Syndrome and Acebutolol	0	0.0%	0	0.0%
Long QT Syndrome and Atenolol	0	0.0%	0	0.0%
Long QT Syndrome and Betaxolol	0	0.0%	0	0.0%
Long QT Syndrome and Bisoprolol	0	0.0%	0	0.0%
Long QT Syndrome and Carvedilol	0	0.0%	0	0.0%
Long QT Syndrome and Labetalol	0	0.0%	0	0.0%
Long QT Syndrome and Nadolol	0	0.0%	0	0.0%
Long QT Syndrome and Nebivolol	0	0.0%	0	0.0%
Long QT Syndrome and Pindolol	0	0.0%	0	0.0%
Long QT Syndrome and Sotalol Long QT Syndrome and Timolol	62 0	5.9% 0.0%	32 0	5.1% 0.0%

¹All metrics are based on total number of episodes per group, except for sex, race, and Hispanic origin which are based on total number of unique patients.

²Characteristics in blue show a standardized difference greater than 0.1.

³Value represents standard deviation where no % follows the value.

⁴Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

⁵The Charlson/Elixhauser Combined Comorbidity Score is calculated based on comorbidities observed during a requester-defined window around the exposure episode start date. (Gagne JJ, Glynn RJ, Avorn J, Levin R, Schneeweiss S. A combined comorbidity score predicted mortality in elderly patients better than existing scores. J Clin Epidemiol. 2011;64(7):749-759)

*****Data are not presented in these cells due to a small sample size or to assure a small cell cannot be recalculated through the cells presented.



	Beta	a Blockers		ost-Index Enrollment irement)
		Percent/		Percent/
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation ³
Unique patients	78	N/A	53	N/A
Episodes	81	100.0%	56	100.0%
Demographic Characteristics				
Age (years)	16.0	2.4	16.3	1.5
Age				
0-1 years	****	****	0	0.0%
2-5 years	0	0.0%	0	0.0%
6-12 years	****	****	****	****
13-17 years	****	90.1%	****	****
Sex				
Female	60	76.9%	39	73.6%
Male	18	23.1%	14	26.4%
Race ⁴				
American Indian or Alaska Native	****	****	****	****
Asian	0	0.0%	0	0.0%
Black or African American	0	0.0%	0	0.0%
Native Hawaiian or Other Pacific Islander	0	0.0%	0	0.0%
Unknown	64	82.1%	42	79.2%
White	****	****	****	****
Hispanic origin				
Yes	****	****	0	0.0%
No	****	****	****	****
Unknown	65	83.3%	****	****
Year				
2008	****	****	****	****
2009	****	****	****	****
2010	****	****	****	****
2011	****	****	****	****
2012	****	****	****	****
2013	****	****	****	****
2014	****	****	****	****
2015	****	****	****	****
2016	****	****	****	****
2017	****	****	****	****
2018	****	****	****	****
2019	****	****	0	0.0%
2020	****	****	****	****



	Beta	a Blockers	•	ost-Index Enrollment irement)
		Percent/		Percent/
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation ³
2021	0	0.0%	0	0.0%
2022	0	0.0%	0	0.0%
Health Characteristics				
Charlson/Elixhauser combined comorbidity score ⁵	0.1	0.4	0.2	0.4
Hypertension	0	0.0%	0	0.0%
Hemangioma	****	****	0	0.0%
Heart Failure	0	0.0%	0	0.0%
Congenital Heart Disease	****	****	0	0.0%
Atrial Fibrillation	0	0.0%	0	0.0%
Long QT Syndrome	****	****	****	****
Other Cardiac Arrhythmias	****	****	****	****
Cardiac Arrhythmias (Composite)	****	****	****	****
Pulmonary Hypertension	0	0.0%	0	0.0%
Cardiomyopathy	0	0.0%	0	0.0%
Coronary Artery Disease	0	0.0%	0	0.0%
Portal Hypertension	0	0.0%	0	0.0%
Anxiety Disorder	11	13.6%	****	****
Tremor	****	****	0	0.0%
Migraine	53	65.4%	32	57.1%
Thyrotoxicosis	0	0.0%	0	0.0%
Burns	0	0.0%	0	0.0%
Glaucoma	0	0.0%	0	0.0%
Autism	****	****	****	****
Marfan's Syndrome	0	0.0%	0	0.0%
Pheochromocytoma/Paraganglioma	0	0.0%	0	0.0%
Diabetes	0	0.0%	0	0.0%
Any of the above health characteristics (excluding				
combined comorbidity score)	59	72.8%	37	66.1%
None of the above health characteristics (excluding combined comorbidity score)	22	27.2%	19	33.9%
Hypoglycemia (Day 0)	0	0.0%	0	0.0%
Hypoglycemia (0-3 Months)	0	0.0%	0	0.0%
Hypoglycemia (3-6 Months)	0	0.0%	0	0.0%
Hypoglycemia (6-12 Months)	****	****	****	****
Hypoglycemia (Day 0) and Diabetes	0	0.0%	0	0.0%
Hypoglycemia (0-3 Months) and Diabetes	0	0.0%	0	0.0%
Hypoglycemia (3-6 Months) and Diabetes	0	0.0%	0	0.0%
Hypoglycemia (6-12 Months) and Diabetes	0	0.0%	0	0.0%



	Beta	Blockers		ost-Index Enrollment irement)
		Percent/		Percent/
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation ³
Hypoglycemia (Day 0) and No Diabetes	0	0.0%	0	0.0%
Hypoglycemia (0-3 Months) and No Diabetes	0	0.0%	0	0.0%
Hypoglycemia (3-6 Months) and No Diabetes	0	0.0%	0	0.0%
Hypoglycemia (6-12 Months) and No Diabetes	****	****	****	****
Hypoglycemia (Day 0) and Any Metoprolol	0	0.0%	0	0.0%
Hypoglycemia (0-3 Months) and Any Metoprolol	0	0.0%	0	0.0%
Hypoglycemia (3-6 Months) and Any Metoprolol	0	0.0%	0	0.0%
Hypoglycemia (6-12 Months) and Any Metoprolol	0	0.0%	0	0.0%
Hypoglycemia (Day 0) and Any Propranolol	0	0.0%	0	0.0%
Hypoglycemia (0-3 Months) and Any Propranolol	0	0.0%	0	0.0%
Hypoglycemia (3-6 Months) and Any Propranolol	0	0.0%	0	0.0%
Hypoglycemia (6-12 Months) and Any Propranolol	0	0.0%	0	0.0%
Hypoglycemia (Day 0) and Atenolol	0	0.0%	0	0.0%
Hypoglycemia (0-3 Months) and Atenolol	0	0.0%	0	0.0%
Hypoglycemia (3-6 Months) and Atenolol	0	0.0%	0	0.0%
Hypoglycemia (6-12 Months) and Atenolol	0	0.0%	0	0.0%
Hypoglycemia (Day 0) and Nadolol	0	0.0%	0	0.0%
Hypoglycemia (0-3 Months) and Nadolol	0	0.0%	0	0.0%
Hypoglycemia (3-6 Months) and Nadolol	0	0.0%	0	0.0%
Hypoglycemia (6-12 Months) and Nadolol	0	0.0%	0	0.0%
Selective Beta Blockers	0	0.0%	0	0.0%
Non-Selective Beta Blockers	81	100.0%	56	100.0%
Any Metoprolol	0	0.0%	0	0.0%
Metoprolol (Extended Release)	0	0.0%	0	0.0%
Metoprolol (Regular)	0	0.0%	0	0.0%
Any Propranolol	0	0.0%	0	0.0%
Propranolol (Extended Release)	0	0.0%	0	0.0%
Propranolol (Regular)	0	0.0%	0	0.0%
Propranolol (Hemangeol)	0	0.0%	0	0.0%
Acebutolol	0	0.0%	0	0.0%
Atenolol	0	0.0%	0	0.0%
Betaxolol	0	0.0%	0	0.0%
Bisoprolol	0	0.0%	0	0.0%
Carvedilol	0	0.0%	0	0.0%
Labetalol	0	0.0%	0	0.0%
Nadolol	0	0.0%	0	0.0%
Nebivolol	0	0.0%	0	0.0%



	Beta	Blockers	•	ost-Index Enrollment irement)
		Percent/		Percent/
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation ³
Pindolol	0	0.0%	0	0.0%
Sotalol	0	0.0%	0	0.0%
Timolol	81	100.0%	56	100.0%
Health Characteristics by Beta Blockers				
Hypertension and Any Metoprolol	0	0.0%	0	0.0%
Hypertension and Metoprolol (Extended Release)	0	0.0%	0	0.0%
Hypertension and Metoprolol (Regular)	0	0.0%	0	0.0%
Hypertension and Any Propranolol	0	0.0%	0	0.0%
Hypertension and Propranolol (Extended Release)	0	0.0%	0	0.0%
Hypertension and Propranolol (Regular)	0	0.0%	0	0.0%
Hypertension and Acebutolol	0	0.0%	0	0.0%
Hypertension and Atenolol	0	0.0%	0	0.0%
Hypertension and Betaxolol	0	0.0%	0	0.0%
Hypertension and Bisoprolol	0	0.0%	0	0.0%
Hypertension and Carvedilol	0	0.0%	0	0.0%
Hypertension and Labetalol	0	0.0%	0	0.0%
Hypertension and Nadolol	0	0.0%	0	0.0%
Hypertension and Nebivolol	0	0.0%	0	0.0%
Hypertension and Pindolol	0	0.0%	0	0.0%
Hypertension and Sotalol	0	0.0%	0	0.0%
Hypertension and Timolol	0	0.0%	0	0.0%
Hemangioma and Any Metoprolol	0	0.0%	0	0.0%
Hemangioma and Metoprolol (Extended Release)	0	0.0%	0	0.0%
Hemangioma and Metoprolol (Regular)	0	0.0%	0	0.0%
Hemangioma and Any Propranolol	0	0.0%	0	0.0%
Hemangioma and Propranolol (Extended Release)	0	0.0%	0	0.0%
Hemangioma and Propranolol (Regular)	0	0.0%	0	0.0%
Hemangioma and Propranolol (Hemangeol)	0	0.0%	0	0.0%
Hemangioma and Acebutolol	0	0.0%	0	0.0%
Hemangioma and Atenolol	0	0.0%	0	0.0%
Hemangioma and Betaxolol	0	0.0%	0	0.0%
Hemangioma and Bisoprolol	0	0.0%	0	0.0%
Hemangioma and Carvedilol	0	0.0%	0	0.0%
Hemangioma and Labetalol	0	0.0%	0	0.0%
Hemangioma and Nadolol	0	0.0%	0	0.0%
Hemangioma and Nebivolol	0	0.0%	0	0.0%
Hemangioma and Pindolol	0	0.0%	0	0.0%



	Beta	a Blockers	•	ost-Index Enrollment irement)
Patient Characteristics ^{1,2}	Number/Mean	Percent/ Standard Deviation ³	Number/Mean	Percent/ Standard Deviation ³
Hemangioma and Sotalol	0	0.0%	0	0.0%
Hemangioma and Timolol	****	****	0	0.0%
Long QT Syndrome and Any Metoprolol Long QT Syndrome and Metoprolol (Extended Long QT Syndrome and Metoprolol (Regular) Long QT Syndrome and Any Propranolol Long QT Syndrome and Propranolol (Extended Release)	0 0 0 0	0.0% 0.0% 0.0% 0.0%	0 0 0 0	0.0% 0.0% 0.0% 0.0%
Long QT Syndrome and Propranolol (Regular)	0	0.0%	0	0.0%
Long QT Syndrome and Acebutolol	0	0.0%	0	0.0%
Long QT Syndrome and Atenolol	0	0.0%	0	0.0%
Long QT Syndrome and Betaxolol	0	0.0%	0	0.0%
Long QT Syndrome and Bisoprolol	0	0.0%	0	0.0%
Long QT Syndrome and Carvedilol	0	0.0%	0	0.0%
Long QT Syndrome and Labetalol	0	0.0%	0	0.0%
Long QT Syndrome and Nadolol	0	0.0%	0	0.0%
Long QT Syndrome and Nebivolol	0	0.0%	0	0.0%
Long QT Syndrome and Pindolol	0	0.0%	0	0.0%
Long QT Syndrome and Sotalol Long QT Syndrome and Timolol	0 ****	0.0% ****	0 ****	0.0% ****

¹All metrics are based on total number of episodes per group, except for sex, race, and Hispanic origin which are based on total number of unique patients.

²Characteristics in blue show a standardized difference greater than 0.1.

³Value represents standard deviation where no % follows the value.

⁴Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

⁵The Charlson/Elixhauser Combined Comorbidity Score is calculated based on comorbidities observed during a requester-defined window around the exposure episode start date. (Gagne JJ, Glynn RJ, Avorn J, Levin R, Schneeweiss S. A combined comorbidity score predicted mortality in elderly patients better than existing scores. J Clin Epidemiol. 2011;64(7):749-759)



	Beta	Blockers		Post-Index Enrollment uirement)
		Percent/		Percent/
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation ³
Unique patients	47,055	N/A	31,113	N/A
Episodes	50,195	100.0%	32,999	100.0%
Demographic Characteristics				
Age (years)	13.7	4.1	13.7	4.1
Age				
0-1 years	1,307	2.6%	864	2.6%
2-5 years	2,066	4.1%	1,392	4.2%
6-12 years	11,925	23.8%	7,820	23.7%
13-17 years	34,897	69.5%	22,923	69.5%
Sex				
Female	26,180	55.6%	17,168	55.2%
Male	20,875	44.4%	13,945	44.8%
Race ⁴				
American Indian or Alaska Native	368	0.8%	239	0.8%
Asian	490	1.0%	285	0.9%
Black or African American	3,326	7.1%	2,049	6.6%
Native Hawaiian or Other Pacific Islander	76	0.2%	42	0.1%
Unknown	31,006	65.9%	20,863	67.1%
White	11,789	25.1%	7,635	24.5%
Hispanic origin				
Yes	4,824	10.3%	2,919	9.4%
No	14,635	31.1%	9,247	29.7%
Unknown	27,596	58.6%	18,947	60.9%
/ear				
2008	2,028	4.0%	1,559	4.7%
2009	2,559	5.1%	1,920	5.8%
2010	2,344	4.7%	1,749	5.3%
2011	2,105	4.2%	1,595	4.8%
2012	1,974	3.9%	1,548	4.7%
2013	2,068	4.1%	1,566	4.7%
2014	2,955	5.9%	2,376	7.2%
2015	4,908	9.8%	3,722	11.3%
2016	7,437	14.8%	6,135	18.6%
2017	8,619	17.2%	6,496	19.7%
2018	7,864	15.7%	1,610	4.9%
2019	1,968	3.9%	1,542	4.7%
2020	1,631	3.2%	1,036	3.1%



	Beta	Blockers	•	Post-Index Enrollment uirement)
		Percent/		Percent/
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation
2021	1,576	3.1%	145	0.4%
2022	159	0.3%	0	0.0%
Health Characteristics				
Charlson/Elixhauser combined comorbidity score ⁵	0.7	1.2	0.7	1.2
Hypertension	7,917	15.8%	5,198	15.8%
Hemangioma	254	0.5%	172	0.5%
Heart Failure	744	1.5%	477	1.4%
Congenital Heart Disease	5,605	11.2%	3,764	11.4%
Atrial Fibrillation	350	0.7%	226	0.7%
_ong QT Syndrome	469	0.9%	301	0.9%
Other Cardiac Arrhythmias	17,231	34.3%	11,002	33.3%
Cardiac Arrhythmias (Composite)	17,551	35.0%	11,219	34.0%
Pulmonary Hypertension	276	0.5%	183	0.6%
Cardiomyopathy	1,420	2.8%	891	2.7%
Coronary Artery Disease	446	0.9%	296	0.9%
Portal Hypertension	39	0.1%	21	0.1%
Anxiety Disorder	6,665	13.3%	4,279	13.0%
Fremor	372	0.7%	254	0.8%
Vigraine	6,137	12.2%	4,157	12.6%
Fhyrotoxicosis	3,198	6.4%	2,054	6.2%
Burns	82	0.2%	56	0.2%
Glaucoma	127	0.3%	81	0.2%
Autism	1,050	2.1%	660	2.0%
Marfan's Syndrome	846	1.7%	571	1.7%
Pheochromocytoma/Paraganglioma	25	0.0%	15	0.0%
Diabetes	911	1.8%	597	1.8%
Any of the above health characteristics (excluding combined comorbidity score)	37,085	73.9%	24,252	73.5%
None of the above health characteristics (excluding combined comorbidity score)	13,110	26.1%	8,747	26.5%
Hypoglycemia (Day 0)	29	0.1%	23	0.1%
Hypoglycemia (0-3 Months)	177	0.4%	138	0.4%
Hypoglycemia (3-6 Months)	145	0.3%	107	0.3%
Hypoglycemia (6-12 Months)	183	0.4%	157	0.5%
Hypoglycemia (Day 0) and Diabetes	****	****	****	****
Hypoglycemia (0-3 Months) and Diabetes	33	0.1%	28	0.1%
Hypoglycemia (3-6 Months) and Diabetes	28	0.1%	17	0.1%
Hypoglycemia (6-12 Months) and Diabetes	31	0.1%	25	0.1%



	Beta	a Blockers	Beta Blockers (Post-Index Enrollment Requirement)		
		Percent/		Percent/	
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation ³	
Hypoglycemia (Day 0) and No Diabetes	26	0.1%	21	0.1%	
Hypoglycemia (0-3 Months) and No Diabetes	144	0.3%	110	0.3%	
Hypoglycemia (3-6 Months) and No Diabetes	117	0.2%	90	0.3%	
Hypoglycemia (6-12 Months) and No Diabetes	152	0.3%	132	0.4%	
Hypoglycemia (Day 0) and Any Metoprolol	15	0.0%	11	0.0%	
Hypoglycemia (0-3 Months) and Any Metoprolol	84	0.2%	61	0.2%	
Hypoglycemia (3-6 Months) and Any Metoprolol	65	0.1%	51	0.2%	
Hypoglycemia (6-12 Months) and Any Metoprolol	78	0.2%	66	0.2%	
Hypoglycemia (Day 0) and Any Propranolol	0	0.0%	0	0.0%	
Hypoglycemia (0-3 Months) and Any Propranolol	0	0.0%	0	0.0%	
Hypoglycemia (3-6 Months) and Any Propranolol	0	0.0%	0	0.0%	
Hypoglycemia (6-12 Months) and Any Propranolol	0	0.0%	0	0.0%	
Hypoglycemia (Day 0) and Atenolol	12	0.0%	****	****	
Hypoglycemia (0-3 Months) and Atenolol	85	0.2%	69	0.2%	
Hypoglycemia (3-6 Months) and Atenolol	76	0.2%	53	0.2%	
Hypoglycemia (6-12 Months) and Atenolol	103	0.2%	89	0.3%	
Hypoglycemia (Day 0) and Nadolol	0	0.0%	0	0.0%	
Hypoglycemia (0-3 Months) and Nadolol	0	0.0%	0	0.0%	
Hypoglycemia (3-6 Months) and Nadolol	0	0.0%	0	0.0%	
Hypoglycemia (6-12 Months) and Nadolol	0	0.0%	0	0.0%	
Selective Beta Blockers	50,195	100.0%	32,999	100.0%	
Non-Selective Beta Blockers	48	0.1%	34	0.1%	
Any Metoprolol	18,174	36.2%	11,540	35.0%	
Metoprolol (Extended Release)	10,259	20.4%	6,383	19.3%	
Metoprolol (Regular)	7,962	15.9%	5,194	15.7%	
Any Propranolol	31	0.1%	24	0.1%	
Propranolol (Extended Release)	****	****	****	****	
Propranolol (Regular)	28	0.1%	22	0.1%	
Propranolol (Hemangeol)	0	0.0%	0	0.0%	
Acebutolol	77	0.2%	56	0.2%	
Atenolol	30,660	61.1%	20,520	62.2%	
Betaxolol	173	0.3%	118	0.4%	
Bisoprolol	584	1.2%	386	1.2%	
Carvedilol	****	****	****	****	
Labetalol	****	****	****	****	
Nadolol	****	****	****	****	
Nebivolol	551	1.1%	397	1.2%	



	Beta	Blockers	Beta Blockers (Post-Index Enrollmer Requirement)		
		Percent/		Percent/	
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation	
Pindolol	0	0.0%	0	0.0%	
Sotalol	****	****	****	****	
Timolol	0	0.0%	0	0.0%	
Health Characteristics by Beta Blockers					
Hypertension and Any Metoprolol	3,638	7.2%	2,290	6.9%	
Hypertension and Metoprolol (Extended Release)	2,090	4.2%	1,289	3.9%	
Hypertension and Metoprolol (Regular)	1,568	3.1%	1,018	3.1%	
Hypertension and Any Propranolol	****	****	****	****	
Hypertension and Propranolol (Extended Release)	0	0.0%	0	0.0%	
Hypertension and Propranolol (Regular)	****	****	****	****	
Aypertension and Acebutolol	****	****	****	****	
Hypertension and Atenolol	4,003	8.0%	2,717	8.2%	
Hypertension and Betaxolol	****	****	****	****	
Hypertension and Bisoprolol	126	0.3%	90	0.3%	
lypertension and Carvedilol	0	0.0%	0	0.0%	
lypertension and Labetalol	****	****	****	****	
Aypertension and Nadolol	0	0.0%	0	0.0%	
lypertension and Nebivolol	145	0.3%	98	0.3%	
Aypertension and Pindolol	0	0.0%	0	0.0%	
lypertension and Sotalol	0	0.0%	0	0.0%	
Hypertension and Timolol	0	0.0%	0	0.0%	
lemangioma and Any Metoprolol	14	0.0%	****	****	
lemangioma and Metoprolol (Extended Release)	****	****	****	****	
lemangioma and Metoprolol (Regular)	11	0.0%	****	****	
Hemangioma and Any Propranolol	0	0.0%	0	0.0%	
lemangioma and Propranolol (Extended Release)	0	0.0%	0	0.0%	
Hemangioma and Propranolol (Regular)	0	0.0%	0	0.0%	
Hemangioma and Propranolol (Hemangeol)	0	0.0%	0	0.0%	
Iemangioma and Acebutolol	****	****	* * * *	* * * * *	
lemangioma and Atenolol	238	0.5%	163	0.5%	
lemangioma and Betaxolol	0	0.0%	0	0.0%	
Iemangioma and Bisoprolol	0	0.0%	0	0.0%	
lemangioma and Carvedilol	0	0.0%	0	0.0%	
lemangioma and Labetalol	0	0.0%	0	0.0%	
Iemangioma and Nadolol	0	0.0%	0	0.0%	
lemangioma and Nebivolol	0	0.0%	0	0.0%	
Hemangioma and Pindolol	0	0.0%	0	0.0%	



	Beta Blockers		•	Beta Blockers (Post-Index Enrollment Requirement)	
Patient Characteristics ^{1,2}	Number/Mean	Percent/ Standard Deviation ³	Number/Mean	Percent/ Standard Deviation ³	
Hemangioma and Sotalol	0	0.0%	0	0.0%	
Hemangioma and Timolol	0	0.0%	0	0.0%	
ong QT Syndrome and Any Metoprolol Ong QT Syndrome and Metoprolol (Extended	142	0.3%	86	0.3%	
Release)	61	0.1%	33	0.1%	
ong QT Syndrome and Metoprolol (Regular)	81	0.2%	53	0.2%	
ong QT Syndrome and Any Propranolol .ong QT Syndrome and Propranolol (Extended	0	0.0%	0	0.0%	
Release)	0	0.0%	0	0.0%	
ong QT Syndrome and Propranolol (Regular)	0	0.0%	0	0.0%	
ong QT Syndrome and Acebutolol	0	0.0%	0	0.0%	
ong QT Syndrome and Atenolol	313	0.6%	208	0.6%	
ong QT Syndrome and Betaxolol	****	****	****	****	
ong QT Syndrome and Bisoprolol	11	0.0%	****	****	
ong QT Syndrome and Carvedilol	****	****	****	****	
ong QT Syndrome and Labetalol	0	0.0%	0	0.0%	
ong QT Syndrome and Nadolol	0	0.0%	0	0.0%	
ong QT Syndrome and Nebivolol	0	0.0%	0	0.0%	
ong QT Syndrome and Pindolol	0	0.0%	0	0.0%	
ong QT Syndrome and Sotalol	0	0.0%	0	0.0%	
ong QT Syndrome and Timolol	0	0.0%	0	0.0%	

¹All metrics are based on total number of episodes per group, except for sex, race, and Hispanic origin which are based on total number of unique patients.

²Characteristics in blue show a standardized difference greater than 0.1.

³Value represents standard deviation where no % follows the value.

⁴Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

⁵The Charlson/Elixhauser Combined Comorbidity Score is calculated based on comorbidities observed during a requester-defined window around the exposure episode start date. (Gagne JJ, Glynn RJ, Avorn J, Levin R, Schneeweiss S. A combined comorbidity score predicted mortality in elderly



	Beta	Blockers	Beta Blockers (Post-Index Enrollment Requirement)		
		Percent/		Percent/	
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation ³	
Unique patients	155,040	N/A	97,561	N/A	
Episodes	164,084	100.0%	103,005	100.0%	
Demographic Characteristics					
Age (years)	12.1	6.0	12.2	5.9	
Age					
0-1 years	27,315	16.6%	16,206	15.7%	
2-5 years	4,303	2.6%	2,671	2.6%	
6-12 years	29,463	18.0%	19,197	18.6%	
13-17 years	103,003	62.8%	64,931	63.0%	
Sex					
Female	96,081	62.0%	59,956	61.5%	
Male	58,959	38.0%	37,605	38.5%	
Race ⁴					
American Indian or Alaska Native	1,537	1.0%	960	1.0%	
Asian	1,292	0.8%	751	0.8%	
Black or African American	8,765	5.7%	5,342	5.5%	
Native Hawaiian or Other Pacific Islander	228	0.1%	143	0.1%	
Unknown	100,812	65.0%	64,380	66.0%	
White	42,406	27.4%	25,985	26.6%	
Hispanic origin					
Yes	15,256	9.8%	9,081	9.3%	
No	49,881	32.2%	30,171	30.9%	
Unknown	89,903	58.0%	58,309	59.8%	
Year					
2008	4,002	2.4%	3,059	3.0%	
2009	5,201	3.2%	3,869	3.8%	
2010	5,155	3.1%	3,889	3.8%	
2011	5,176	3.2%	3,899	3.8%	
2012	5,292	3.2%	4,100	4.0%	
2013	5,724	3.5%	4,282	4.2%	
2014	9,343	5.7%	7,343	7.1%	
2015	15,738	9.6%	11,816	11.5%	
2016	24,263	14.8%	19,926	19.3%	
2017	30,341	18.5%	23,024	22.4%	
2018	29,671	18.1%	5,905	5.7%	
2019	8,222	5.0%	6,296	6.1%	
2020	7,351	4.5%	4,998	4.9%	



	Beta	Blockers	Beta Blockers (Post-Index Enrollment Requirement)		
		Percent/		Percent/	
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation	
2021	8,045	4.9%	599	0.6%	
2022	560	0.3%	0	0.0%	
Health Characteristics					
Charlson/Elixhauser combined comorbidity score ⁵	0.5	1.0	0.5	1.0	
Hypertension	6,776	4.1%	4,272	4.1%	
Hemangioma	15,428	9.4%	9,203	8.9%	
Heart Failure	2,491	1.5%	1,499	1.5%	
Congenital Heart Disease	12,548	7.6%	7,523	7.3%	
Atrial Fibrillation	263	0.2%	169	0.2%	
Long QT Syndrome	2,127	1.3%	1,289	1.3%	
Other Cardiac Arrhythmias	18,905	11.5%	11,478	11.1%	
Cardiac Arrhythmias (Composite)	20,209	12.3%	12,264	11.9%	
Pulmonary Hypertension	974	0.6%	530	0.5%	
Cardiomyopathy	2,199	1.3%	1,280	1.2%	
Coronary Artery Disease	456	0.3%	293	0.3%	
Portal Hypertension	278	0.2%	177	0.2%	
Anxiety Disorder	40,033	24.4%	24,220	23.5%	
Fremor	3,623	2.2%	2,271	2.2%	
Migraine	39,214	23.9%	25,978	25.2%	
Thyrotoxicosis	2,446	1.5%	1,560	1.5%	
Burns	405	0.2%	257	0.2%	
Glaucoma	348	0.2%	209	0.2%	
Autism	6,082	3.7%	3,803	3.7%	
Marfan's Syndrome	115	0.1%	70	0.1%	
Pheochromocytoma/Paraganglioma	104	0.1%	69	0.1%	
Diabetes	1,367	0.8%	853	0.8%	
Any of the above health characteristics (excluding					
combined comorbidity score)	117,603	71.7%	73,561	71.4%	
None of the above health characteristics (excluding combined comorbidity score)	46,481	28.3%	29,444	28.6%	
Hypoglycemia (Day 0)	101	0.1%	57	0.1%	
Hypoglycemia (0-3 Months)	561	0.3%	354	0.3%	
Hypoglycemia (3-6 Months)	387	0.2%	275	0.3%	
Hypoglycemia (6-12 Months)	512	0.3%	444	0.4%	
Hypoglycemia (Day 0) and Diabetes	****	****	****	****	
Hypoglycemia (0-3 Months) and Diabetes	61	0.0%	37	0.0%	
Hypoglycemia (3-6 Months) and Diabetes	51	0.0%	40	0.0%	
Hypoglycemia (6-12 Months) and Diabetes	59	0.0%	55	0.1%	



	Beta	Blockers	Beta Blockers (Post-Index Enrollment Requirement)		
		Percent/		Percent/	
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation ³	
Hypoglycemia (Day 0) and No Diabetes	96	0.1%	52	0.1%	
Hypoglycemia (0-3 Months) and No Diabetes	500	0.3%	317	0.3%	
Hypoglycemia (3-6 Months) and No Diabetes	336	0.2%	235	0.2%	
Hypoglycemia (6-12 Months) and No Diabetes	453	0.3%	389	0.4%	
Hypoglycemia (Day 0) and Any Metoprolol	0	0.0%	0	0.0%	
Hypoglycemia (0-3 Months) and Any Metoprolol	0	0.0%	0	0.0%	
Hypoglycemia (3-6 Months) and Any Metoprolol	0	0.0%	0	0.0%	
Hypoglycemia (6-12 Months) and Any Metoprolol	0	0.0%	0	0.0%	
Hypoglycemia (Day 0) and Any Propranolol	88	0.1%	47	0.0%	
Hypoglycemia (0-3 Months) and Any Propranolol	473	0.3%	303	0.3%	
Hypoglycemia (3-6 Months) and Any Propranolol	329	0.2%	235	0.2%	
Hypoglycemia (6-12 Months) and Any Propranolol	427	0.3%	369	0.4%	
Hypoglycemia (Day 0) and Atenolol	0	0.0%	0	0.0%	
Hypoglycemia (0-3 Months) and Atenolol	****	****	****	****	
Hypoglycemia (3-6 Months) and Atenolol	0	0.0%	0	0.0%	
Hypoglycemia (6-12 Months) and Atenolol	0	0.0%	0	0.0%	
Hypoglycemia (Day 0) and Nadolol	****	****	****	****	
Hypoglycemia (0-3 Months) and Nadolol	18	0.0%	13	0.0%	
Hypoglycemia (3-6 Months) and Nadolol	15	0.0%	11	0.0%	
Hypoglycemia (6-12 Months) and Nadolol	25	0.0%	24	0.0%	
Selective Beta Blockers	48	0.0%	34	0.0%	
Non-Selective Beta Blockers	164,084	100.0%	103,005	100.0%	
Any Metoprolol	26	0.0%	19	0.0%	
Metoprolol (Extended Release)	****	****	****	****	
Metoprolol (Regular)	****	****	****	****	
Any Propranolol	147,338	89.8%	92,518	89.8%	
Propranolol (Extended Release)	16,281	9.9%	10,853	10.5%	
Propranolol (Regular)	129,011	78.6%	80,520	78.2%	
Propranolol (Hemangeol)	2,463	1.5%	1,409	1.4%	
Acebutolol	0	0.0%	0	0.0%	
Atenolol	22	0.0%	15	0.0%	
Betaxolol	0	0.0%	0	0.0%	
Bisoprolol	0	0.0%	0	0.0%	
Carvedilol	4,036	2.5%	2,410	2.3%	
Labetalol	4,991	3.0%	2,952	2.9%	
Nadolol	6,351	3.9%	4,273	4.1%	
Nebivolol	0	0.0%	0	0.0%	



	Beta	Blockers	•	ost-Index Enrollment irement)	
		Percent/		Percent/	
Patient Characteristics ^{1,2}	Number/Mean	Standard Deviation ³	Number/Mean	Standard Deviation ³	
Pindolol	275	0.2%	193	0.2%	
Sotalol	1,049	0.6%	628	0.6%	
Timolol	81	0.0%	56	0.1%	
Health Characteristics by Beta Blockers					
Hypertension and Any Metoprolol	****	****	****	****	
Hypertension and Metoprolol (Extended Release)	****	****	****	****	
Hypertension and Metoprolol (Regular)	0	0.0%	0	0.0%	
Hypertension and Any Propranolol	3,869	2.4%	2,507	2.4%	
Hypertension and Propranolol (Extended Release)	476	0.3%	330	0.3%	
Hypertension and Propranolol (Regular)	3,387	2.1%	2,175	2.1%	
Hypertension and Acebutolol	0	0.0%	0	0.0%	
Hypertension and Atenolol	****	****	****	****	
Hypertension and Betaxolol	0	0.0%	0	0.0%	
Hypertension and Bisoprolol	0	0.0%	0	0.0%	
Hypertension and Carvedilol	733	0.4%	429	0.4%	
Hypertension and Labetalol	1,938	1.2%	1,179	1.1%	
Hypertension and Nadolol	184	0.1%	119	0.1%	
Hypertension and Nebivolol	0	0.0%	0	0.0%	
Hypertension and Pindolol	13	0.0%	****	****	
Hypertension and Sotalol	41	0.0%	28	0.0%	
Hypertension and Timolol	0	0.0%	0	0.0%	
Hemangioma and Any Metoprolol	0	0.0%	0	0.0%	
Hemangioma and Metoprolol (Extended Release)	0	0.0%	0	0.0%	
Hemangioma and Metoprolol (Regular)	0	0.0%	0	0.0%	
Hemangioma and Any Propranolol	15,407	9.4%	9,190	8.9%	
Hemangioma and Propranolol (Extended Release)	24	0.0%	16	0.0%	
Hemangioma and Propranolol (Regular)	13,128	8.0%	7,873	7.6%	
Hemangioma and Propranolol (Hemangeol)	2,262	1.4%	1,305	1.3%	
Hemangioma and Acebutolol	0	0.0%	0	0.0%	
Hemangioma and Atenolol	0	0.0%	0	0.0%	
Hemangioma and Betaxolol	0	0.0%	0	0.0%	
Hemangioma and Bisoprolol	0	0.0%	0	0.0%	
Hemangioma and Carvedilol	****	****	****	****	
Hemangioma and Labetalol	****	****	****	****	
Hemangioma and Nadolol	****	****	****	****	
Hemangioma and Nebivolol	0	0.0%	0	0.0%	
Hemangioma and Pindolol	0	0.0%	0	0.0%	



	Beta	Blockers	Beta Blockers (Post-Index Enrollment Requirement)		
Patient Characteristics ^{1,2}	Number/Mean	Percent/ Standard Deviation ³	Number/Mean	Percent/ Standard Deviation ³	
Hemangioma and Sotalol	****	****	****	****	
Hemangioma and Timolol	****	****	0	0.0%	
Long QT Syndrome and Any Metoprolol Long QT Syndrome and Metoprolol (Extended Release) Long QT Syndrome and Metoprolol (Regular)	***** 0 *****	***** 0.0% *****	**** 0 ****	***** 0.0% *****	
Long QT Syndrome and Any Propranolol Long QT Syndrome and Propranolol Long QT Syndrome and Propranolol (Extended	854 42	0.5% 0.0%	501 29	0.5% 0.0%	
Long QT Syndrome and Propranolol (Regular)	809	0.5%	471	0.5%	
Long QT Syndrome and Acebutolol	0	0.0%	0	0.0%	
Long QT Syndrome and Atenolol	0	0.0%	0	0.0%	
Long QT Syndrome and Betaxolol	0	0.0%	0	0.0%	
Long QT Syndrome and Bisoprolol	0	0.0%	0	0.0%	
ong QT Syndrome and Carvedilol	63	0.0%	33	0.0%	
Long QT Syndrome and Labetalol	18	0.0%	12	0.0%	
Long QT Syndrome and Nadolol	1,130	0.7%	711	0.7%	
Long QT Syndrome and Nebivolol	0	0.0%	0	0.0%	
Long QT Syndrome and Pindolol	0	0.0%	0	0.0%	
Long QT Syndrome and Sotalol Long QT Syndrome and Timolol	62 ****	0.0% ****	32 ****	0.0% ****	

¹All metrics are based on total number of episodes per group, except for sex, race, and Hispanic origin which are based on total number of unique patients.

²Characteristics in blue show a standardized difference greater than 0.1.

³Value represents standard deviation where no % follows the value.

⁴Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

⁵The Charlson/Elixhauser Combined Comorbidity Score is calculated based on comorbidities observed during a requester-defined window around the exposure episode start date. (Gagne JJ, Glynn RJ, Avorn J, Levin R, Schneeweiss S. A combined comorbidity score predicted mortality in elderly nations better than existing scores. J Clin Epidemiol. 2011;64(7):749-759)



Table 2a. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2008 to May 31, 2022, Overall

	New Users	New Episodes	Eligible Members ¹	Eligible Member- Days ¹	New Users per 1,000 Eligible Members ¹	Incidence Rate per 10,000 Eligible Members Days ¹
Beta Blockers	200,926	214,231	77,507,621	62,490,794,254	2.59	0.03
Beta Blockers (Post- Index Enrollment Requirement)	127,912	135,970	55,570,100	38,957,749,992	2.30	0.03



					New Users per 1,000	Incidence Rate per 10,000
	New Users	New Episodes	Eligible Members ¹	Eligible Member-Days ¹	Eligible Members ¹	Eligible Members Days ¹
Beta Blockers						
Female	121,477	129,557	37,884,553	30,515,220,446	3.21	0.04
Male	79,449	84,674	39,623,068	31,975,573,808	2.01	0.02
Beta Blockers (Pos	st-Index Enrollment Requ	uirement)				
Female	76,611	81,534	27,150,480	19,021,377,868	2.82	0.04
Male	51,301	54,436	28,419,620	19,936,372,124	1.81	0.03

Table 2b. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2008 to May 31, 2022, by Sex



					New Users per 1,000	Incidence Rate per 10,000
	New Users	New Episodes	Eligible Members ¹	Eligible Member-Days ¹	Eligible Members ¹	Eligible Members Days ¹
Beta Blockers						
0-1 years	28,248	28,621	16,419,503	5,234,414,478	1.72	0.05
2-5 years	6,090	6,366	26,211,253	14,017,078,628	0.23	0.00
6-12 years	39,081	41,380	38,206,540	25,670,876,485	1.02	0.02
13-17 years	129,931	137,864	29,082,673	17,568,424,663	4.47	0.07
Beta Blockers (Post-I	ndex Enrollment Requi	rement)				
0-1 years	16,872	17,070	10,267,075	3,112,200,764	1.64	0.05
2-5 years	3,934	4,062	17,898,292	8,658,071,850	0.22	0.00
6-12 years	25,628	27,012	27,062,600	16,137,311,793	0.95	0.02
13-17 years	82,935	87,826	19,907,759	11,050,165,585	4.17	0.08

Table 2c. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2008 to May 31, 2022, by Age Group



	· ·		· ·		New Users per 1,000	Incidence Rate per 10,000
	New Users	New Episodes	Eligible Members ¹	Eligible Member-Days ¹	Eligible Members ¹	Eligible Members Days ¹
Beta Blockers						
2008	6,000	6,027	9,172,729	1,947,042,843	0.65	0.03
2009	7,718	7,760	9,589,264	2,608,273,613	0.80	0.03
2010	7,447	7,496	8,897,831	2,444,888,271	0.84	0.03
2011	7,252	7,280	8,331,817	2,306,691,207	0.87	0.03
2012	7,208	7,264	7,899,190	2,190,488,597	0.91	0.03
2013	7,740	7,790	8,713,627	2,292,951,161	0.89	0.03
2014	12,239	12,292	15,944,273	3,580,926,674	0.77	0.03
2015	20,554	20,643	24,910,225	6,113,151,520	0.83	0.03
2016	31,533	31,696	37,526,130	9,201,874,997	0.84	0.03
2017	38,738	38,953	41,473,908	11,929,525,427	0.93	0.03
2018	37,312	37,527	36,516,368	10,914,194,562	1.02	0.03
2019	10,122	10,187	8,491,820	2,403,773,247	1.19	0.04
2020	8,915	8,978	8,276,992	2,373,046,594	1.08	0.04
2021	9,570	9,619	7,125,807	2,020,555,461	1.34	0.05
2022	719	719	2,625,678	163,410,080	0.27	0.04
Beta Blockers (Post-	Index Enrollment Requ	uirement)				
2008	4,594	4,617	6,708,666	1,437,802,906	0.68	0.03
2009	5,756	5,789	6,680,854	1,873,716,059	0.86	0.03
2010	5,600	5,636	6,294,656	1,788,108,559	0.89	0.03
2011	5,473	5,493	5,946,983	1,694,430,885	0.92	0.03
2012	5,600	5,646	6,141,514	1,662,441,264	0.91	0.03
2013	5,804	5,846	6,330,425	1,700,165,017	0.92	0.03
2014	9,667	9,713	12,151,502	2,783,695,944	0.80	0.03
2015	15,470	15,536	17,540,804	4,365,668,472	0.88	0.04
2016	25,924	26,057	30,813,160	7,499,743,351	0.84	0.03
2017	29,336	29,513	29,789,339	8,659,946,585	0.98	0.03
2018	7,474	7,514	6,429,036	1,865,896,483	1.16	0.04
2019	7,789	7,835	6,343,703	1,854,443,355	1.23	0.04
2020	5,986	6,031	6,647,248	1,612,295,873	0.90	0.04
2021	744	744	2,807,558	159,395,239	0.26	0.05
2022	0	0	0	0	NaN	NaN

Table 2d. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2008 to May 31, 2022, by Year



	New Users	New Episodes	Eligible Members ¹	Eligible Member-Days ¹	New Users per 1,000 Eligible Members ¹	Incidence Rate per 10,000 Eligible Members Days ¹
Beta Blockers						
Evidence of Any Metoprolol	17,419	18,174	N/A	N/A	N/A	N/A
No evidence of Any Metoprolol	184,129	196,057	N/A	N/A	N/A	N/A
Beta Blockers (Post-Index Enrollment Requirement)					
Evidence of Any Metoprolol	11,084	11,540	N/A	N/A	N/A	N/A
No evidence of Any Metoprolol	117,193	124,430	N/A	N/A	N/A	N/A

Table 2e. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2008 to May 31, 2022, by Any Metoprolol



			1	Eligible Member-	New Users per 1,000	Incidence Rate per 10,000 Eligible
	New Users	New Episodes	Eligible Members ¹	Days	Eligible Members ¹	Members Days ¹
Beta Blockers						
Evidence of Metoprolol (Extended Release)	9,921	10,259	N/A	N/A	N/A	N/A
No evidence of Metoprolol (Extended Release)	191,412	203,972	N/A	N/A	N/A	N/A
Beta Blockers (Post-Index Enrollment Requirement)						
Evidence of Metoprolol (Extended Release)	6,192	6,383	N/A	N/A	N/A	N/A
No evidence of Metoprolol (Extended Release)	121,961	129,587	N/A	N/A	N/A	N/A

Table 2f. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2008 to May 31, 2022, by Metoprolol (Extended Release)



						Incidence Rate per
					New Users per 1,000	10,000 Eligible
	New Users	New Episodes	Eligible Members ¹	Eligible Member-Days ¹	Eligible Members ¹	Members Days ¹
Beta Blockers						
Evidence of Metoprolol (Regular)	7,620	7,962	N/A	N/A	N/A	N/A
No evidence of Metoprolol (Regular)	193,679	206,269	N/A	N/A	N/A	N/A
Beta Blockers (Post-Index Enrollment Requireme	nt)					
Evidence of Metoprolol (Regular)	4,975	5,194	N/A	N/A	N/A	N/A
No evidence of Metoprolol (Regular)	123,160	130,776	N/A	N/A	N/A	N/A

Table 2g. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2008 to May 31, 2022, by Metoprolol (Regular)



	New Users	New Episodes	Eligible Members ¹	Eligible Member-Days ¹	New Users per 1,000 Eligible Members ¹	Incidence Rate per 10,000 Eligible Members Days ¹
Beta Blockers						
Evidence of Any Propranolol	139,518	147,338	N/A	N/A	N/A	N/A
No evidence of Any Propranolol	62,513	66,893	N/A	N/A	N/A	N/A
Beta Blockers (Post-Index Enrollment Require	ement)					
Evidence of Any Propranolol	87,789	92,518	N/A	N/A	N/A	N/A
No evidence of Any Propranolol	40,850	43,452	N/A	N/A	N/A	N/A

Table 2h. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2008 to May 31, 2022, by Any Propranolol



				Eligible Member-	New Users per 1,000	Incidence Rate per 10,000 Eligible
	New Users	New Episodes	Eligible Members ¹	Days	Eligible Members ¹	Members Days ¹
Beta Blockers						
Evidence of Propranolol (Extended Release)	15,680	16,281	N/A	N/A	N/A	N/A
No evidence of Propranolol (Extended Release)	185,912	197,950	N/A	N/A	N/A	N/A
Beta Blockers (Post-Index Enrollment Requirement)						
Evidence of Propranolol (Extended Release)	10,483	10,853	N/A	N/A	N/A	N/A
No evidence of Propranolol (Extended Release)	117,873	125,117	N/A	N/A	N/A	N/A

Table 2i. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2008 to May 31, 2022, by Propranolol (Extended Release)



						Incidence Rate per
					New Users per 1,000	10,000 Eligible
	New Users	New Episodes	Eligible Members ¹	Eligible Member-Days ¹	Eligible Members ¹	Members Days ¹
Beta Blockers						
Evidence of Propranolol (Regular)	122,366	129,011	N/A	N/A	N/A	N/A
No evidence of Propranolol (Regular)	80,097	85,220	N/A	N/A	N/A	N/A
Beta Blockers (Post-Index Enrollment Requireme	nt)					
Evidence of Propranolol (Regular)	76,527	80,520	N/A	N/A	N/A	N/A
No evidence of Propranolol (Regular)	52,390	55,450	N/A	N/A	N/A	N/A

Table 2j. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2008 to May 31, 2022, by Propranolol (Regular)



					New Users per 1,000	Incidence Rate per 10,000 Eligible
	New Users	New Episodes	Eligible Members ¹	Eligible Member-Days ¹	Eligible Members ¹	Members Days ¹
Beta Blockers						
Evidence of Propranolol (Hemangeol)	2,437	2,463	N/A	N/A	N/A	N/A
No evidence of Propranolol (Hemangeol)	198,521	211,768	N/A	N/A	N/A	N/A
Beta Blockers (Post-Index Enrollment Requirement	nt)					
Evidence of Propranolol (Hemangeol)	1,400	1,409	N/A	N/A	N/A	N/A
No evidence of Propranolol (Hemangeol)	126,529	134,561	N/A	N/A	N/A	N/A

Table 2k. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2008 to May 31, 2022, by Propranolol (Hemangeol)



	New Users	New Episodes	Eligible Members ¹	Eligible Member-Days ¹	New Users per 1,000 Eligible Members ¹	Incidence Rate per 10,000 Eligible Members Days ¹
Beta Blockers			0	0		
Evidence of Acebutolol	75	77	N/A	N/A	N/A	N/A
No evidence of Acebutolol	200,854	214,154	N/A	N/A	N/A	N/A
Beta Blockers (Post-Index Enrollment Requirement)						
Evidence of Acebutolol	54	56	N/A	N/A	N/A	N/A
No evidence of Acebutolol	127,860	135,914	N/A	N/A	N/A	N/A

Table 2I. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2008 to May 31, 2022, by Acebutolol



						Incidence Rate per
					New Users per 1,000	10,000 Eligible
	New Users	New Episodes	Eligible Members ¹	Eligible Member-Days ¹	Eligible Members ¹	Members Days ¹
Beta Blockers						
Evidence of Atenolol	28,587	30,660	N/A	N/A	N/A	N/A
No evidence of Atenolol	173,290	183,571	N/A	N/A	N/A	N/A
Beta Blockers (Post-Index Enrollment Requirement)						
Evidence of Atenolol	19,259	20,520	N/A	N/A	N/A	N/A
No evidence of Atenolol	109,244	115,450	N/A	N/A	N/A	N/A

Table 2m. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2008 to May 31, 2022, by Atenolol



	New Users	New Episodes	Eligible Members ¹	Eligible Member-Days ¹	New Users per 1,000 Eligible Members ¹	Incidence Rate per 10,000 Eligible Members Days ¹
Beta Blockers						
Evidence of Betaxolol	168	173	N/A	N/A	N/A	N/A
No evidence of Betaxolol	200,776	214,058	N/A	N/A	N/A	N/A
Beta Blockers (Post-Index Enrollment Requirement)						
Evidence of Betaxolol	115	118	N/A	N/A	N/A	N/A
No evidence of Betaxolol	127,807	135,852	N/A	N/A	N/A	N/A

Table 2n. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2008 to May 31, 2022, by Betaxolol



	New Users	New Episodes	Eligible Members ¹	Eligible Member-Days ¹	New Users per 1,000 Eligible Members ¹	Incidence Rate per 10,000 Eligible Members Days ¹
Beta Blockers						
Evidence of Bisoprolol	568	584	N/A	N/A	N/A	N/A
No evidence of Bisoprolol	200,381	213,647	N/A	N/A	N/A	N/A
Beta Blockers (Post-Index Enrollment Requirement)						
Evidence of Bisoprolol	375	386	N/A	N/A	N/A	N/A
No evidence of Bisoprolol	127,548	135,584	N/A	N/A	N/A	N/A

Table 20. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2008 to May 31, 2022, by Bisoprolol



					New Users per 1,000	Incidence Rate per 10,000 Eligible
	New Users	New Episodes	Eligible Members ¹	Eligible Member-Days ¹	Eligible Members ¹	Members Days ¹
Beta Blockers						
Evidence of Carvedilol	3,730	4,036	N/A	N/A	N/A	N/A
No evidence of Carvedilol	197,286	210,195	N/A	N/A	N/A	N/A
Beta Blockers (Post-Index Enrollment Requirement)						
Evidence of Carvedilol	2,246	2,410	N/A	N/A	N/A	N/A
No evidence of Carvedilol	125,720	133,560	N/A	N/A	N/A	N/A

Table 2p. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2008 to May 31, 2022, by Carvedilol



	New Leave	New Friendes	Eligible Members ¹	Fligible Member Down ¹	New Users per 1,000 Eligible Members ¹	Incidence Rate per 10,000 Eligible Members Days ¹
Beta Blockers	New Users	New Episodes		Eligible Member-Days ¹		wembers Days
Evidence of Labetalol	4,852	4,991	N/A	N/A	N/A	N/A
No evidence of Labetalol	196,167	209,240	N/A	N/A	N/A	N/A
Beta Blockers (Post-Index Enrollment Requirement)						
Evidence of Labetalol	2,874	2,952	N/A	N/A	N/A	N/A
No evidence of Labetalol	125,100	133,018	N/A	N/A	N/A	N/A

Table 2q. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2008 to May 31, 2022, by Labetalol



						Incidence Rate per
					New Users per 1,000	10,000 Eligible
	New Users	New Episodes	Eligible Members ¹	Eligible Member-Days ¹	Eligible Members ¹	Members Days ¹
Beta Blockers						
Evidence of Nadolol	5 <i>,</i> 865	6,351	N/A	N/A	N/A	N/A
No evidence of Nadolol	195,319	207,880	N/A	N/A	N/A	N/A
Beta Blockers (Post-Index Enrollment Requirement)						
Evidence of Nadolol	3,988	4,273	N/A	N/A	N/A	N/A
No evidence of Nadolol	124,085	131,697	N/A	N/A	N/A	N/A

Table 2r. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2008 to May 31, 2022, by Nadolol



						Incidence Rate per
			1	1	New Users per 1,000	10,000 Eligible
	New Users	New Episodes	Eligible Members ¹	Eligible Member-Days ¹	Eligible Members ¹	Members Days ¹
Beta Blockers						
Evidence of Nebivolol	530	551	N/A	N/A	N/A	N/A
No evidence of Nebivolol	200,435	213,680	N/A	N/A	N/A	N/A
Beta Blockers (Post-Index Enrollment Requiremen	nt)					
Evidence of Nebivolol	382	397	N/A	N/A	N/A	N/A
No evidence of Nebivolol	127,556	135,573	N/A	N/A	N/A	N/A

Table 2s. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2008 to May 31, 2022, by Nebivolol



						Incidence Rate per
					New Users per 1,000	10,000 Eligible
	New Users	New Episodes	Eligible Members ¹	Eligible Member-Days ¹	Eligible Members ¹	Members Days ¹
Beta Blockers						
Evidence of Pindolol	264	275	N/A	N/A	N/A	N/A
No evidence of Pindolol	200,678	213,956	N/A	N/A	N/A	N/A
Beta Blockers (Post-Index Enrollment Requirement)						
Evidence of Pindolol	186	193	N/A	N/A	N/A	N/A
No evidence of Pindolol	127,739	135,777	N/A	N/A	N/A	N/A

Table 2t. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2008 to May 31, 2022, by Pindolol



	New Users	New Episodes	Eligible Members ¹	Eligible Member-Days ¹	New Users per 1,000 Eligible Members ¹	Incidence Rate per 10,000 Eligible Members Days ¹
Beta Blockers	New Osers	New Episodes		Eligible Member-Days		Wembers Days
Evidence of Sotalol	1,021	1,049	N/A	N/A	N/A	N/A
No evidence of Sotalol	199,961	213,182	N/A	N/A	N/A	N/A
Beta Blockers (Post-Index Enrollment Requirement)						
Evidence of Sotalol	611	628	N/A	N/A	N/A	N/A
No evidence of Sotalol	127,332	135,342	N/A	N/A	N/A	N/A

Table 2u. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2008 to May 31, 2022, by Sotalol



						Incidence Rate per
					New Users per 1,000	10,000 Eligible
	New Users	New Episodes	Eligible Members ¹	Eligible Member-Days ¹	Eligible Members ¹	Members Days ¹
Beta Blockers						
Evidence of Timolol	78	81	N/A	N/A	N/A	N/A
No evidence of Timolol	200,854	214,150	N/A	N/A	N/A	N/A
Beta Blockers (Post-Index Enrollment Requirement)						
Evidence of Timolol	53	56	N/A	N/A	N/A	N/A
No evidence of Timolol	127,863	135,914	N/A	N/A	N/A	N/A

Table 2v. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2008 to May 31, 2022, by Timolol



					New Users per 1,000	Incidence Rate per 10,000 Eligible
	New Users	New Episodes	Eligible Members ¹	Eligible Member-Days ¹	Eligible Members ¹	Members Days ¹
Beta Blockers						
Evidence of Selective Beta Blockers	47,055	50,195	N/A	N/A	N/A	N/A
No evidence of Selective Beta Blockers	154,997	164,036	N/A	N/A	N/A	N/A
Beta Blockers (Post-Index Enrollment Requireme	nt)					
Evidence of Selective Beta Blockers	31,113	32,999	N/A	N/A	N/A	N/A
No evidence of Selective Beta Blockers	97,530	102,971	N/A	N/A	N/A	N/A

Table 2w. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2008 to May 31, 2022, by Selective Beta Blockers



	New Users	New Episodes	Eligible Members ¹	Eligible Member-Days ¹	New Users per 1,000 Eligible Members ¹	Incidence Rate per 10,000 Eligible Members Days ¹
Beta Blockers						
Evidence of Non-Selective Beta Blockers	155,040	164,084	N/A	N/A	N/A	N/A
No evidence of Non-Selective Beta Blockers	47,013	50,147	N/A	N/A	N/A	N/A
Beta Blockers (Post-Index Enrollment Requirement	t)					
Evidence of Non-Selective Beta Blockers	97,561	103,005	N/A	N/A	N/A	N/A
No evidence of Non-Selective Beta Blockers	31,085	32,965	N/A	N/A	N/A	N/A

Table 2x. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2008 to May 31, 2022, by Non-Selective Beta Blockers



	New Users	New Episodes	Eligible Members ¹	Eligible Member-Days ¹	New Users per 1000 Eligible Members ¹	Incidence Rate per 10,000 Eligible Members Days ¹
Beta Blockers		·		· ·		
2008	6,000	6,027	9,172,729	1,947,042,843	0.65	0.03
2009	7,718	7,760	9,589,264	2,608,273,613	0.80	0.03
2010	7,447	7,496	8,897,831	2,444,888,271	0.84	0.03
2011	7,252	7,280	8,331,817	2,306,691,207	0.87	0.03
2012	7,208	7,264	7,899,190	2,190,488,597	0.91	0.03
2013	7,740	7,790	8,713,627	2,292,951,161	0.89	0.03
2014	12,239	12,292	15,944,273	3,580,926,674	0.77	0.03
2015	20,554	20,643	24,910,225	6,113,151,520	0.83	0.03
2016	31,533	31,696	37,526,130	9,201,874,997	0.84	0.03
2017	38,738	38,953	41,473,908	11,929,525,427	0.93	0.03
2018	37,312	37,527	36,516,368	10,914,194,562	1.02	0.03
2019	10,122	10,187	8,491,820	2,403,773,247	1.19	0.04
2020	8,915	8,978	8,276,992	2,373,046,594	1.08	0.04
2021	9,570	9,619	7,125,807	2,020,555,461	1.34	0.05
2022	719	719	2,625,678	163,410,080	0.27	0.04
Beta Blockers (Post-I	ndex Enrollment Requireme	ent)				
2008	4,594	4,617	6,708,666	1,437,802,906	0.68	0.03
2009	5,756	5,789	6,680,854	1,873,716,059	0.86	0.03
2010	5,600	5,636	6,294,656	1,788,108,559	0.89	0.03
2011	5,473	5,493	5,946,983	1,694,430,885	0.92	0.03
2012	5,600	5,646	6,141,514	1,662,441,264	0.91	0.03
2013	5,804	5,846	6,330,425	1,700,165,017	0.92	0.03
2014	9,667	9,713	12,151,502	2,783,695,944	0.80	0.03
2015	15,470	15,536	17,540,804	4,365,668,472	0.88	0.04
2016	25,924	26,057	30,813,160	7,499,743,351	0.84	0.03
2017	29,336	29,513	29,789,339	8,659,946,585	0.98	0.03
2018	7,474	7,514	6,429,036	1,865,896,483	1.16	0.04

Table 3a. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2008 to May 31, 2022, by Year



	New Users	New Episodes	Eligible Members ¹	Eligible Member-Days ¹	New Users per 1000 Eligible Members ¹	Incidence Rate per 10,000 Eligible Members Days ¹
2019	7,789	7,835	6,343,703	1,854,443,355	1.23	0.04
2020	5,986	6,031	6,647,248	1,612,295,873	0.90	0.04
2021	744	744	2,807,558	159,395,239	0.26	0.05
2022	0	0	0	0	NaN	NaN

Table 3a. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2008 to May 31, 2022, by Year



	New Users	New Episodes	Eligible Members ¹	Eligible Member-Days ¹	New Users per 1000 Eligible Members ¹	Incidence Rate per 10,000 Eligible Members Days ¹
Beta Blockers		•	5		5	
2008	403	404	974,675	149,280,424	0.41	0.03
2009	500	500	1,076,321	195,778,763	0.46	0.03
2010	634	637	975,128	178,520,333	0.65	0.04
2011	669	670	897,490	164,244,322	0.75	0.04
2012	704	704	848,657	156,079,602	0.83	0.05
2013	830	830	915,175	162,381,025	0.91	0.05
2014	1,862	1,865	1,879,830	291,720,406	0.99	0.06
2015	3,345	3,352	3,270,747	552,220,079	1.02	0.06
2016	4,913	4,924	4,941,442	849,324,893	0.99	0.06
2017	5,516	5,528	5,670,300	1,086,137,122	0.97	0.05
2018	5,001	5,012	4,861,366	956,004,192	1.03	0.05
2019	1,320	1,322	922,881	173,541,613	1.43	0.08
2020	1,420	1,420	901,138	170,903,410	1.58	0.08
2021	1,346	1,349	743,301	137,174,592	1.81	0.10
2022	104	104	195,330	11,103,702	0.53	0.09
Beta Blockers (Post-I	ndex Enrollment Requireme	ent)				
2008	278	279	684,096	106,575,860	0.41	0.03
2009	348	348	731,559	136,846,382	0.48	0.03
2010	441	444	670,490	126,219,407	0.66	0.03
2011	477	478	622,519	116,669,274	0.77	0.04
2012	495	495	624,234	113,337,710	0.79	0.04
2013	578	578	643,566	116,796,821	0.90	0.05
2014	1,418	1,421	1,402,545	221,358,653	1.01	0.06
2015	2,484	2,490	2,234,625	381,337,795	1.11	0.07
2016	3,841	3,850	3,883,768	670,576,924	0.99	0.06
2017	3,942	3,953	3,863,130	744,646,081	1.02	0.05
2018	818	818	682,568	129,930,774	1.20	0.06

Table 3b. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2008 to May 31, 2022, by Year (Age Group: 0-1 years)



	New Users	New Episodes	Eligible Members ¹	Eligible Member-Days ¹	New Users per 1000 Eligible Members ¹	Incidence Rate per 10,000 Eligible Members Days ¹
2019	910	911	673,582	130,319,959	1.35	0.07
2020	900	900	655,198	106,977,798	1.37	0.08
2021	105	105	202,322	10,607,326	0.52	0.10
2022	0	0	0	0	NaN	NaN

Table 3b. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2008 to May 31, 2022, by Year (Age Group: 0-1 years)



	New Users	New Episodes	Eligible Members ¹	Eligible Member- Days ¹	New Users per 1000 Eligible Members ¹	Incidence Rate per 10,000 Eligible Members Days ¹
Beta Blockers						
2008	207	207	2,225,858	421,276,026	0.09	0.00
2009	231	231	2,400,776	565,498,093	0.10	0.00
2010	208	208	2,222,205	529,248,744	0.09	0.00
2011	205	206	2,070,767	495,852,133	0.10	0.00
2012	176	177	1,950,319	466,471,552	0.09	0.00
2013	200	200	2,096,642	477,661,988	0.10	0.00
2014	352	352	4,059,701	790,535,946	0.09	0.00
2015	675	677	6,559,866	1,401,023,631	0.10	0.00
2016	1,091	1,094	9,916,956	2,138,619,540	0.11	0.01
2017	1,293	1,299	11,145,265	2,775,522,891	0.12	0.00
2018	1,182	1,187	9,768,348	2,513,204,307	0.12	0.00
2019	195	195	2,064,000	501,067,774	0.09	0.00
2020	177	177	2,019,012	497,207,947	0.09	0.00
2021	****	****	****	****	0.09	0.00
2022	****	****	****	****	0.01	0.00
Beta Blockers (Pos	st-Index Enrollment	Requirement)				
2008	162	162	1,602,956	307,532,604	0.10	0.01
2009	172	172	1,661,522	403,128,759	0.10	0.00
2010	154	154	1,559,144	382,903,568	0.10	0.00
2011	156	157	1,466,099	360,389,242	0.11	0.00
2012	130	131	1,486,692	348,562,569	0.09	0.00
2013	151	151	1,505,782	351,234,824	0.10	0.00
2014	281	281	3,103,297	613,827,782	0.09	0.00
2015	532	533	4,650,913	1,003,360,432	0.11	0.01
2016	915	918	8,178,580	1,756,066,873	0.11	0.01
2017	991	996	8,016,926	2,009,164,400	0.12	0.00
2018	147	147	1,536,709	383,140,173	0.10	0.00
2019	140	140	1,526,464	382,244,004	0.09	0.00
2020	****	****	****	****	0.07	0.00
2021	****	****	****	****	0.02	0.00
2022	0	0	0	0	NaN	NaN

Table 3c. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2008 to May 31, 2022, by Year (Age Group: 2-5 years)

¹Eligible Members and Member-Days are reflective of the number of patients that met all cohort entry criteria on at least one day during the query period.

*****Data are not presented in these cells due to a small sample size or to assure a small cell cannot be recalculated through the cells presented.



Table 3d. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2008 to May 31, 2022, by Year (Age Group: 6-12 years)

	ap. 0-12 yearsy		Eligible	Eligible Member-	New Users per 1000	Incidence Rate per 10,000
	New Users	New Episodes	Members ¹	Days ¹	Eligible Members ¹	Eligible Members Days ¹
Beta Blockers						
2008	1,354	1,363	3,853,669	780,153,955	0.35	0.02
2009	1,672	1,677	4,104,783	1,051,632,308	0.41	0.02
2010	1,542	1,553	3,834,998	992,107,909	0.40	0.02
2011	1,547	1,550	3,608,664	940,599,461	0.43	0.02
2012	1,431	1,441	3,433,558	895,980,686	0.42	0.02
2013	1,498	1,507	3,790,810	941,398,265	0.40	0.02
2014	2,435	2,443	6,856,409	1,469,107,635	0.36	0.02
2015	4,194	4,207	10,818,987	2,524,142,295	0.39	0.02
2016	6,247	6,277	16,310,398	3,808,998,820	0.38	0.02
2017	7,985	8,029	18,170,523	4,938,233,478	0.44	0.02
2018	7,287	7,317	16,058,178	4,518,157,665	0.45	0.02
2019	1,445	1,450	3,663,357	974,610,151	0.39	0.01
2020	1,215	1,224	3,565,407	956,923,336	0.34	0.01
2021	1,237	1,243	3,056,361	813,316,419	0.40	0.02
2022	99	99	1,066,838	65,514,102	0.09	0.02
Beta Blockers (Po	st-Index Enrollme	nt Requirement)				
2008	1,052	1,061	2,833,059	578,180,684	0.37	0.02
2009	1,283	1,287	2,880,393	758,092,141	0.45	0.02
2010	1,155	1,163	2,731,792	728,354,890	0.42	0.02
2011	1,161	1,162	2,594,478	693,739,637	0.45	0.02
2012	1,137	1,144	2,680,032	683,426,075	0.42	0.02
2013	1,132	1,141	2,774,100	701,071,034	0.41	0.02
2014	1,962	1,970	5,279,821	1,149,845,600	0.37	0.02
2015	3,224	3,233	7,734,211	1,820,093,411	0.42	0.02
2016	5,358	5,384	13,584,746	3,150,269,082	0.39	0.02
2017	6,257	6,290	13,285,901	3,640,958,936	0.47	0.02
2018	1,135	1,139	2,796,571	762,317,550	0.41	0.01
2019	1,140	1,143	2,756,978	754,740,524	0.41	0.02
2020	795	801	2,846,079	652,072,892	0.28	0.01
2021	94	94	1,145,853	64,149,337	0.08	0.01
2022	0	0	0	0	NaN	NaN



Table 3e. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2008 to May 31, 2022, by Year (Age Group: 13-17 years)

	New Users	New Episodes	Eligible Members ¹	Eligible Member- Days ¹	New Users per 1000 Eligible Members ¹	10,000 Eligible Members Days ¹
Beta Blockers						
2008	4,037	4,053	3,006,158	596,332,438	1.34	0.07
2009	5,318	5,352	3,204,055	795,364,449	1.66	0.07
2010	5,064	5,098	2,979,464	745,011,285	1.70	0.07
2011	4,832	4,854	2,802,694	705,995,291	1.72	0.07
2012	4,898	4,942	2,658,143	671,956,757	1.84	0.07
2013	5,215	5,253	2,957,420	711,509,883	1.76	0.07
2014	7,592	7,632	4,825,006	1,029,562,687	1.57	0.07
2015	12,348	12,407	7,173,631	1,635,765,515	1.72	0.08
2016	19,285	19,401	10,741,405	2,404,931,744	1.80	0.08
2017	23,958	24,097	12,139,851	3,129,631,936	1.97	0.08
2018	23,850	24,011	10,985,500	2,926,828,398	2.17	0.08
2019	7,165	7,220	2,931,425	754,553,709	2.44	0.09
2020	6,105	6,157	2,875,926	748,011,901	2.12	0.08
2021	6,843	6,876	2,543,579	659,081,211	2.69	0.10
2022	511	511	890,858	53,887,459	0.57	0.09
Beta Blockers (Pos	st-Index Enrollmen	t Requirement)				
2008	3,103	3,115	2,239,729	445,513,758	1.39	0.07
2009	3,956	3,982	2,262,931	575,648,777	1.75	0.07
2010	3,850	3,875	2,142,999	550,630,694	1.80	0.07
2011	3,680	3,696	2,030,274	523,632,732	1.81	0.07
2012	3,838	3,876	2,097,072	517,114,910	1.83	0.07
2013	3,945	3,976	2,179,689	531,062,338	1.81	0.07
2014	6,007	6,041	3,670,262	798,663,909	1.64	0.08
2015	9,235	9,280	4,998,800	1,160,876,834	1.85	0.08
2016	15,813	15,905	8,734,751	1,922,830,472	1.81	0.08
2017	18,157	18,274	8,709,521	2,265,177,168	2.08	0.08
2018	5,375	5,410	2,250,273	590,507,986	2.39	0.09
2019	5,601	5,641	2,222,382	587,138,868	2.52	0.10
2020	4,182	4,219	2,313,418	528,627,868	1.81	0.08
2021	536	536	953,461	52,739,271	0.56	0.10
2022	0	0	0	0	NaN	NaN



			Eligible	Eligible Member-	New Users per 1000	Incidence Rate per 10,000
	New Users	New Episodes	Members ¹	Days ¹	Eligible Members ¹	Eligible Members Days ¹
Beta Blockers						
2008	2,544	2,553	4,692,686	996,269,986	0.54	0.03
2009	3,228	3,246	4,904,910	1,334,605,773	0.66	0.02
2010	3,145	3,161	4,549,675	1,250,216,988	0.69	0.03
2011	2,965	2,972	4,259,162	1,179,133,731	0.70	0.03
2012	3,003	3,019	4,038,509	1,119,653,389	0.74	0.03
2013	3,151	3,179	4,456,260	1,172,578,008	0.71	0.03
2014	4,877	4,897	8,146,410	1,830,566,509	0.60	0.03
2015	8,229	8,265	12,734,346	3,125,999,317	0.65	0.03
2016	12,580	12,644	19,198,466	4,711,376,793	0.66	0.03
2017	15,661	15,748	21,216,962	6,108,878,232	0.74	0.03
2018	14,745	14,807	18,684,586	5,589,438,794	0.79	0.03
2019	3,641	3,654	4,336,226	1,227,825,598	0.84	0.03
2020	3,139	3,155	4,229,392	1,212,718,447	0.74	0.03
2021	3,136	3,154	3,641,210	1,032,715,337	0.86	0.03
2022	220	220	1,343,754	83,596,906	0.16	0.03
Beta Blockers (Po	ost-Index Enrollm	ent Requirement)				
2008	1,977	1,985	3,432,590	735,841,080	0.58	0.03
2009	2,419	2,433	3,417,306	958,457,679	0.71	0.03
2010	2,377	2,390	3,217,849	914,257,793	0.74	0.03
2011	2,232	2,238	3,038,927	865,758,910	0.73	0.03
2012	2,327	2,339	3,139,599	849,805,886	0.74	0.03
2013	2,355	2,380	3,236,619	869,343,547	0.73	0.03
2014	3,942	3,959	6,208,487	1,422,940,929	0.63	0.03
2015	6,250	6,276	8,976,126	2,234,713,018	0.70	0.03
2016	10,462	10,517	15,775,092	3,842,237,159	0.66	0.03
2017	11,958	12,026	15,249,877	4,437,085,951	0.78	0.03
2018	2,727	2,737	3,282,290	953,258,880	0.83	0.03
2019	2,827	2,835	3,240,187	947,439,317	0.87	0.03
2020	2,057	2,066	3,395,992	823,828,019	0.61	0.02
2021	255	255	1,433,971	81,403,956	0.18	0.03
2022	0	0	0	0	NaN	NaN

Table 3f. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2008 to May 31, 2022, by Year (Sex: Male)



Table 3g. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2008 to May 31, 2022, by Year (Sex: Female)

	New Users	New Episodes	Eligible Members ¹	Eligible Member- Days ¹	New Users per 1000 Eligible Members ¹	Incidence Rate per 10,000 Eligible Members Days ¹
Beta Blockers						
2008	3,456	3,474	4,480,043	950,772,857	0.77	0.04
2009	4,490	4,514	4,684,354	1,273,667,840	0.96	0.04
2010	4,302	4,335	4,348,156	1,194,671,283	0.99	0.04
2011	4,287	4,308	4,072,655	1,127,557,476	1.05	0.04
2012	4,205	4,245	3,860,681	1,070,835,208	1.09	0.04
2013	4,589	4,611	4,257,367	1,120,373,153	1.08	0.04
2014	7,362	7,395	7,797,863	1,750,360,165	0.94	0.04
2015	12,325	12,378	12,175,879	2,987,152,203	1.01	0.04
2016	18,953	19,052	18,327,664	4,490,498,204	1.03	0.04
2017	23,077	23,205	20,256,946	5,820,647,195	1.14	0.04
2018	22,567	22,720	17,831,782	5,324,755,768	1.27	0.04
2019	6,481	6,533	4,155,594	1,175,947,649	1.56	0.06
2020	5,776	5,823	4,047,600	1,160,328,147	1.43	0.05
2021	6,434	6,465	3,484,597	987,840,124	1.85	0.07
2022	499	499	1,281,924	79,813,174	0.39	0.06
Beta Blockers (Po	st-Index Enrollmer	nt Requirement)				
2008	2,617	2,632	3,276,076	701,961,826	0.80	0.04
2009	3,337	3,356	3,263,548	915,258,380	1.02	0.04
2010	3,223	3,246	3,076,807	873,850,766	1.05	0.04
2011	3,241	3,255	2,908,056	828,671,975	1.11	0.04
2012	3,273	3,307	3,001,915	812,635,378	1.09	0.04
2013	3,449	3,466	3,093,806	830,821,470	1.11	0.04
2014	5,725	5,754	5,943,015	1,360,755,015	0.96	0.04
2015	9,220	9,260	8,564,678	2,130,955,454	1.08	0.04
2016	15,462	15,540	15,038,068	3,657,506,192	1.03	0.04
2017	17,378	17,487	14,539,462	4,222,860,634	1.20	0.04
2018	4,747	4,777	3,146,746	912,637,603	1.51	0.05
2019	4,962	5,000	3,103,516	907,004,038	1.60	0.05
2020	3,929	3,965	3,251,256	788,467,854	1.21	0.05
2021	489	489	1,373,587	77,991,283	0.36	0.06
2022	0	0	0	0	NaN	NaN



			Eligible	Eligible Member-		10,000 Eligible Members
	New Users	New Episodes	Members ¹	Days ¹	Eligible Members ¹	Days ¹
Beta Blockers						
2008	220	220	499,660	76,580,640	0.44	0.03
2009	246	246	551,729	100,348,707	0.45	0.02
2010	281	282	500,321	91,629,856	0.56	0.03
2011	280	280	460,607	84,254,721	0.61	0.03
2012	315	315	436,199	80,202,944	0.72	0.04
2013	353	353	469,755	83,347,981	0.75	0.04
2014	798	799	961,612	149,374,530	0.83	0.05
2015	1,429	1,432	1,674,258	282,604,896	0.85	0.05
2016	2,072	2,079	2,526,621	434,345,400	0.82	0.05
2017	2,354	2,357	2,899,113	555,253,567	0.81	0.04
2018	2,114	2,119	2,485,652	488,797,448	0.85	0.04
2019	490	490	472,463	88,818,124	1.04	0.06
2020	508	508	461,323	87,451,405	1.10	0.06
2021	497	499	381,604	70,417,669	1.30	0.07
2022	27	27	100,704	5,721,503	0.27	0.05
Beta Blockers (Po	ost-Index Enrollm	nent Requirement)				
2008	155	155	350,885	54,706,693	0.44	0.03
2009	168	168	375,045	70,094,081	0.45	0.02
2010	193	194	343,703	64,747,997	0.56	0.03
2011	186	186	319,250	59,823,844	0.58	0.03
2012	225	225	320,817	58,249,051	0.70	0.04
2013	244	244	330,147	59,873,480	0.74	0.04
2014	623	624	717,578	113,411,869	0.87	0.05
2015	1,045	1,047	1,144,585	195,269,006	0.91	0.05
2016	1,621	1,627	1,986,779	343,082,204	0.82	0.05
2017	1,691	1,693	1,976,146	380,835,792	0.86	0.04
2018	320	320	349,478	66,528,112	0.92	0.05
2019	339	339	344,364	66,627,225	0.98	0.05
2020	312	312	335,461	54,800,594	0.93	0.06
2021	33	33	103,715	5,432,452	0.32	0.06
2022	0	0	0	0	NaN	NaN

Table 3h. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2008 to May 31, 2022, by Year (Age Group: 0-1 years Sex: Male)



	New Users	New Enisodes	Eligible Members ¹	Eligible Member- Days ¹	New Users per 1000 Eligible Members ¹	Incidence Rate per 10,000 Eligible Members Days ¹
Beta Blockers	1100 03013	New Episodes		Days		
2008	183	184	475,015	72,699,784	0.39	0.03
2009	254	254	524,592	95,430,056	0.48	0.03
2010	353	355	474,807	86,890,477	0.74	0.04
2011	389	390	436,883	79,989,601	0.89	0.05
2012	389	389	412,458	75,876,658	0.94	0.05
2013	477	477	445,420	79,033,044	1.07	0.06
2014	1,064	1,066	918,218	142,345,876	1.16	0.07
2015	1,916	1,920	1,596,489	269,615,183	1.20	0.07
2016	2,841	2,845	2,414,821	414,979,493	1.18	0.07
2017	3,162	3,171	2,771,187	530,883,555	1.14	0.06
2018	2,887	2,893	2,375,714	467,206,744	1.22	0.06
2019	830	832	450,418	84,723,489	1.84	0.10
2020	912	912	439,815	83,452,005	2.07	0.11
2021	849	850	361,697	66,756,923	2.35	0.13
2022	77	77	94,626	5,382,199	0.81	0.14
Beta Blockers (Po	st-Index Enrollme	ent Requirement)				
2008	123	124	333,211	51,869,167	0.37	0.02
2009	180	180	356,514	66,752,301	0.50	0.03
2010	248	250	326,787	61,471,410	0.76	0.04
2011	291	292	303,269	56,845,430	0.96	0.05
2012	270	270	303,417	55,088,659	0.89	0.05
2013	334	334	313,419	56,923,341	1.07	0.06
2014	795	797	684,967	107,946,784	1.16	0.07
2015	1,439	1,443	1,090,040	186,068,789	1.32	0.08
2016	2,220	2,223	1,896,989	327,494,720	1.17	0.07
2017	2,251	2,260	1,886,984	363,810,289	1.19	0.06
2018	498	498	333,090	63,402,662	1.50	0.08
2019	571	572	329,218	63,692,734	1.73	0.09
2020	588	588	319,737	52,177,204	1.84	0.11
2021	72	72	98,607	5,174,874	0.73	0.14
2022	0	0	0	0	NaN	NaN

Table 3i. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2008 to May 31, 2022, by Year (Age Group: 0-1 years Sex: Female)



	New Users	New Episodes	Eligible Members ¹	Eligible Member- Days ¹	New Users per 1000 Eligible Members ¹	Incidence Rate per 10,000 Eligible Members Days ¹
Beta Blockers						
2008	90	90	1,139,439	215,695,292	0.08	0.00
2009	127	127	1,228,585	289,584,768	0.10	0.00
2010	123	123	1,137,313	270,813,963	0.11	0.00
2011	108	109	1,060,366	253,861,116	0.10	0.00
2012	98	98	999,149	238,774,649	0.10	0.00
2013	105	105	1,074,421	244,867,220	0.10	0.00
2014	176	176	2,077,587	404,865,699	0.08	0.00
2015	350	351	3,356,915	717,038,416	0.10	0.00
2016	564	566	5,075,107	1,095,179,800	0.11	0.01
2017	688	694	5,704,883	1,421,065,261	0.12	0.00
2018	638	640	5,000,918	1,286,714,021	0.13	0.00
2019	90	90	1,057,134	256,537,056	0.09	0.00
2020	95	95	1,033,544	254,513,329	0.09	0.00
2021	****	****	****	****	0.09	0.00
2022	****	****	****	****	0.01	0.00
Beta Blockers (P	ost-Index Enrolln	nent Requirement)				
2008	80	80	820,378	157,426,422	0.10	0.01
2009	94	94	850,222	206,448,776	0.11	0.00
2010	87	87	798,161	195,927,952	0.11	0.00
2011	84	85	750,122	184,317,227	0.11	0.00
2012	73	73	761,796	178,472,848	0.10	0.00
2013	78	78	771,637	180,025,432	0.10	0.00
2014	139	139	1,588,241	314,287,405	0.09	0.00
2015	279	280	2,382,885	513,994,214	0.12	0.01
2016	477	479	4,189,199	899,970,386	0.11	0.01
2017	537	542	4,107,287	1,029,381,322	0.13	0.01
2018	79	79	786,565	196,150,002	0.10	0.00
2019	65	65	781,502	195,696,575	0.08	0.00
2020	****	****	****	****	0.07	0.00
2021	****	****	****	****	0.01	0.00
2022	0	0	0	0	NaN	NaN

 Table 3j. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2008 to May 31, 2022,

 by Year (Age Group: 2-5 years Sex: Male)

¹Eligible Members and Member-Days are reflective of the number of patients that met all cohort entry criteria on at least one day during the query period.



Table 3k. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2008 to May 31, 2022, by
Year (Age Group: 2-5 years Sex: Female)

	New Users	New Episodes	Eligible Members ¹	Eligible Member- Days ¹	New Users per 1000 Eligible Members ¹	Incidence Rate per 10,000 Eligible Members Days ¹
Beta Blockers						
2008	117	117	1,086,419	205,580,734	0.11	0.01
2009	104	104	1,172,191	275,913,325	0.09	0.00
2010	85	85	1,084,892	258,434,781	0.08	0.00
2011	97	97	1,010,401	241,991,017	0.10	0.00
2012	78	79	951,170	227,696,903	0.08	0.00
2013	95	95	1,022,221	232,794,768	0.09	0.00
2014	176	176	1,982,114	385,670,247	0.09	0.00
2015	325	326	3,202,951	683,985,215	0.10	0.00
2016	527	528	4,841,849	1,043,439,740	0.11	0.01
2017	605	605	5,440,382	1,354,457,630	0.11	0.00
2018	544	547	4,767,430	1,226,490,286	0.11	0.00
2019	105	105	1,006,866	244,530,718	0.10	0.00
2020	82	82	985,468	242,694,618	0.08	0.00
2021	****	****	****	****	0.09	0.00
2022	****	****	****	****	0.01	0.00
Beta Blockers (Po	st-Index Enrollmer	nt Requirement)				
2008	82	82	782,578	150,106,182	0.10	0.01
2009	78	78	811,300	196,679,983	0.10	0.00
2010	67	67	760,983	186,975,616	0.09	0.00
2011	72	72	715,977	176,072,015	0.10	0.00
2012	57	58	724,896	170,089,721	0.08	0.00
2013	73	73	734,145	171,209,392	0.10	0.00
2014	142	142	1,515,056	299,540,377	0.09	0.00
2015	253	253	2,268,028	489,366,218	0.11	0.01
2016	438	439	3,989,381	856,096,487	0.11	0.01
2017	454	454	3,909,639	979,783,078	0.12	0.00
2018	68	68	750,144	186,990,171	0.09	0.00
2019	75	75	744,962	186,547,429	0.10	0.00
2020	****	****	****	****	0.07	0.00
2021	****	****	****	****	0.02	0.00
2022	0	0	0	0	NaN	NaN

¹Eligible Members and Member-Days are reflective of the number of patients that met all cohort entry criteria on at least one day during the query period.



	New Users	New Episodes	Eligible Members ¹	Eligible Member- Days ¹	New Users per 1000 Eligible Members ¹	Incidence Rate per 10,000 Eligible Members Days ¹
Beta Blockers						
2008	758	764	1,970,625	399,007,477	0.38	0.02
2009	881	884	2,099,295	537,861,468	0.42	0.02
2010	807	812	1,960,201	506,972,761	0.41	0.02
2011	807	808	1,842,899	480,438,922	0.44	0.02
2012	767	772	1,753,971	457,615,792	0.44	0.02
2013	779	786	1,936,731	480,891,621	0.40	0.02
2014	1,227	1,232	3,504,371	750,879,433	0.35	0.02
2015	2,096	2,102	5,535,925	1,291,618,413	0.38	0.02
2016	3,216	3,231	8,356,142	1,952,275,130	0.38	0.02
2017	4,162	4,189	9,310,518	2,532,369,898	0.45	0.02
2018	3,654	3,666	8,228,937	2,317,679,160	0.44	0.02
2019	722	725	1,870,783	497,784,557	0.39	0.01
2020	619	625	1,821,975	489,023,611	0.34	0.01
2021	593	596	1,562,043	415,597,277	0.38	0.01
2022	42	42	545,708	33,509,156	0.08	0.01
Beta Blockers (Post-	Index Enrollment	Requirement)				
2008	596	602	1,449,128	295,808,589	0.41	0.02
2009	686	689	1,472,374	387,390,683	0.47	0.02
2010	605	609	1,395,666	372,142,945	0.43	0.02
2011	618	619	1,324,963	354,247,545	0.47	0.02
2012	614	618	1,368,686	349,048,758	0.45	0.02
2013	599	606	1,417,254	358,171,922	0.42	0.02
2014	1,001	1,006	2,700,091	587,945,523	0.37	0.02
2015	1,622	1,626	3,962,979	932,604,116	0.41	0.02
2016	2,773	2,786	6,968,255	1,616,767,160	0.40	0.02
2017	3,269	3,290	6,817,068	1,869,587,066	0.48	0.02
2018	592	593	1,427,918	389,463,247	0.41	0.02
2019	577	578	1,408,620	385,617,086	0.41	0.01
2020	396	399	1,454,264	333,123,742	0.27	0.01
2021	51	51	585,131	32,755,701	0.09	0.02
2022	0	0	0	0	NaN	NaN

Table 3I. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2008 to May 31, 2022, byYear (Age Group: 6-12 years Sex: Male)



	New Heren	No. Patrodos	Eligible	Eligible Member-	New Users per 1000	Incidence Rate per 10,000
	New Users	New Episodes	Members ¹	Days ¹	Eligible Members ¹	Eligible Members Days ¹
Beta Blockers						
2008	596	599	1,883,044	381,146,478	0.32	0.02
2009	791	793	2,005,488	513,770,840	0.39	0.02
2010	735	741	1,874,797	485,135,148	0.39	0.02
2011	740	742	1,765,765	460,160,539	0.42	0.02
2012	664	669	1,679,587	438,364,894	0.40	0.02
2013	719	721	1,854,079	460,506,644	0.39	0.02
2014	1,208	1,211	3,352,038	718,228,202	0.36	0.02
2015	2,098	2,105	5,283,062	1,232,523,882	0.40	0.02
2016	3,031	3,046	7,954,256	1,856,723,690	0.38	0.02
2017	3,823	3,840	8,860,005	2,405,863,580	0.43	0.02
2018	3,633	3,651	7,829,241	2,200,478,505	0.46	0.02
2019	723	725	1,792,574	476,825,594	0.40	0.02
2020	596	599	1,743,432	467,899,725	0.34	0.01
2021	644	647	1,494,318	397,719,142	0.43	0.02
2022	57	57	521,130	32,004,946	0.11	0.02
Beta Blockers (Po	ost-Index Enrollm	ent Requirement)				
2008	456	459	1,383,931	282,372,095	0.33	0.02
2009	597	598	1,408,019	370,701,458	0.42	0.02
2010	550	554	1,336,126	356,211,945	0.41	0.02
2011	543	543	1,269,515	339,492,092	0.43	0.02
2012	523	526	1,311,346	334,377,317	0.40	0.02
2013	533	535	1,356,846	342,899,112	0.39	0.02
2014	961	964	2,579,730	561,900,077	0.37	0.02
2015	1,602	1,607	3,771,232	887,489,295	0.42	0.02
2016	2,585	2,598	6,616,491	1,533,501,922	0.39	0.02
2017	2,988	3,000	6,468,833	1,771,371,870	0.46	0.02
2018	543	546	1,368,653	372,854,303	0.40	0.01
2019	563	565	1,348,358	369,123,438	0.42	0.02
2020	399	402	1,391,815	318,949,150	0.29	0.01
2021	43	43	560,722	31,393,636	0.08	0.01
2022	0	0	0	0	NaN	NaN

Table 3m. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2008 to May 31, 2022, by Year (Age Group: 6-12 years Sex: Female)



			Eligible	Eligible Member-	New Users per 1000	Incidence Rate per 10,000
	New Users	New Episodes	Members ¹	Days ¹	Eligible Members ¹	Eligible Members Days ¹
Beta Blockers						
2008	1,477	1,479	1,537,100	304,986,577	0.96	0.05
2009	1,975	1,989	1,636,976	406,810,830	1.21	0.05
2010	1,934	1,944	1,522,034	380,800,408	1.27	0.05
2011	1,770	1,775	1,430,962	360,578,972	1.24	0.05
2012	1,824	1,834	1,356,996	343,060,004	1.34	0.05
2013	1,916	1,935	1,510,422	363,471,186	1.27	0.05
2014	2,677	2,690	2,459,575	525,446,847	1.09	0.05
2015	4,357	4,380	3,657,778	834,737,592	1.19	0.05
2016	6,730	6,768	5,484,477	1,229,576,463	1.23	0.05
2017	8,462	8,508	6,199,096	1,600,189,506	1.37	0.05
2018	8,341	8,382	5,609,732	1,496,248,165	1.49	0.06
2019	2,340	2,349	1,493,569	384,685,861	1.57	0.06
2020	1,918	1,927	1,466,688	381,730,102	1.31	0.05
2021	1,974	1,982	1,296,750	336,393,247	1.52	0.06
2022	149	149	455,110	27,533,922	0.33	0.05
Beta Blockers (F	ost-Index Enrolln	nent Requirement)				
2008	1,147	1,148	1,145,718	227,899,376	1.00	0.05
2009	1,472	1,482	1,156,480	294,524,139	1.27	0.05
2010	1,492	1,500	1,094,671	281,438,899	1.36	0.05
2011	1,344	1,348	1,036,623	267,370,294	1.30	0.05
2012	1,415	1,423	1,070,431	264,035,229	1.32	0.05
2013	1,436	1,452	1,112,534	271,272,713	1.29	0.05
2014	2,179	2,190	1,869,381	407,296,132	1.17	0.05
2015	3,306	3,323	2,550,278	592,845,682	1.30	0.06
2016	5,593	5,625	4,458,759	982,417,409	1.25	0.06
2017	6,464	6,501	4,445,406	1,157,281,771	1.45	0.06
2018	1,736	1,745	1,145,988	301,117,519	1.51	0.06
2019	1,846	1,853	1,132,960	299,498,431	1.63	0.06
2020	1,294	1,299	1,179,750	269,813,353	1.10	0.05
2021	167	167	486,376	26,910,083	0.34	0.06
2022	0	0	0	0	NaN	NaN

Table 3n. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2008 to May 31, 2022, by Year (Age Group: 13-17 years Sex: Male)



			Eligible	Eligible Member-	New Users per 1000	Incidence Rate per 10,000
_	New Users	New Episodes	Members ¹	Days ¹	Eligible Members ¹	Eligible Members Days ¹
Beta Blockers						
2008	2,560	2,574	1,469,058	291,345,861	1.74	0.09
2009	3,343	3,363	1,567,079	388,553,619	2.13	0.09
2010	3,130	3,154	1,457,430	364,210,877	2.15	0.09
2011	3,062	3,079	1,371,732	345,416,319	2.23	0.09
2012	3,074	3,108	1,301,147	328,896,753	2.36	0.09
2013	3,299	3,318	1,446,998	348,038,697	2.28	0.09
2014	4,915	4,942	2,365,431	504,115,840	2.08	0.10
2015	7,991	8,027	3,515,853	801,027,923	2.27	0.10
2016	12,555	12,633	5,256,928	1,175,355,281	2.39	0.11
2017	15,496	15,589	5,940,755	1,529,442,430	2.61	0.10
2018	15,509	15,629	5,375,768	1,430,580,233	2.88	0.11
2019	4,825	4,871	1,437,856	369,867,848	3.36	0.13
2020	4,187	4,230	1,409,238	366,281,799	2.97	0.11
2021	4,869	4,894	1,246,829	322,687,964	3.91	0.15
2022	362	362	435,748	26,353,537	0.83	0.14
Beta Blockers (P	ost-Index Enrollr	ment Requirement)				
2008	1,956	1,967	1,094,011	217,614,382	1.79	0.09
2009	2,484	2,500	1,106,451	281,124,638	2.25	0.09
2010	2,358	2,375	1,048,328	269,191,795	2.25	0.09
2011	2,336	2,348	993,651	256,262,438	2.35	0.09
2012	2,423	2,453	1,026,641	253,079,681	2.36	0.10
2013	2,509	2,524	1,067,155	259,789,625	2.35	0.10
2014	3,828	3,851	1,800,881	391,367,777	2.13	0.10
2015	5,929	5,957	2,448,522	568,031,152	2.42	0.10
2016	10,220	10,280	4,275,992	940,413,063	2.39	0.11
2017	11,693	11,773	4,264,115	1,107,895,397	2.74	0.11
2018	3,639	3,665	1,104,285	289,390,467	3.30	0.13
2019	3,755	3,788	1,089,422	287,640,437	3.45	0.13
2020	2,888	2,920	1,133,668	258,814,515	2.55	0.11
2021	369	369	467,085	25,829,188	0.79	0.14
2022	0	0	0	0	NaN	NaN

Table 3o. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2008 to May 31, 2022, by Year (Age Group: 13-17 years Sex: Female)



Table 3p. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2008 to May 31, 2022, by Year (Any Metoprolol)

	New Users	New Episodes	Eligible Members ¹	Eligible Member- Days ¹	New Users per 1000 Eligible Members ¹	Incidence Rate per 10,000 Eligible Members Days ¹
Beta Blockers						
2008	703	706	N/A	N/A	N/A	N/A
2009	764	767	N/A	N/A	N/A	N/A
2010	749	753	N/A	N/A	N/A	N/A
2011	679	683	N/A	N/A	N/A	N/A
2012	648	650	N/A	N/A	N/A	N/A
2013	653	660	N/A	N/A	N/A	N/A
2014	977	979	N/A	N/A	N/A	N/A
2015	1,631	1,640	N/A	N/A	N/A	N/A
2016	2,451	2,460	N/A	N/A	N/A	N/A
2017	3,435	3,443	N/A	N/A	N/A	N/A
2018	3,258	3,270	N/A	N/A	N/A	N/A
2019	794	796	N/A	N/A	N/A	N/A
2020	663	666	N/A	N/A	N/A	N/A
2021	637	638	N/A	N/A	N/A	N/A
2022	63	63	N/A	N/A	N/A	N/A
Beta Blockers (Po	ost-Index Enrollme	nt Requirement)				
2008	536	539	N/A	N/A	N/A	N/A
2009	578	580	N/A	N/A	N/A	N/A
2010	566	568	N/A	N/A	N/A	N/A
2011	520	524	N/A	N/A	N/A	N/A
2012	494	496	N/A	N/A	N/A	N/A
2013	486	491	N/A	N/A	N/A	N/A
2014	767	768	N/A	N/A	N/A	N/A
2015	1,220	1,227	N/A	N/A	N/A	N/A
2016	1,978	1,984	N/A	N/A	N/A	N/A
2017	2,614	2,618	N/A	N/A	N/A	N/A
2018	649	653	N/A	N/A	N/A	N/A
2019	608	609	N/A	N/A	N/A	N/A
2020	418	419	N/A	N/A	N/A	N/A
2021	64	64	N/A	N/A	N/A	N/A
2022	0	0	N/A	N/A	N/A	N/A



	New Users	New Episodes	Eligible Members ¹	Eligible Member- Days ¹	New Users per 1000 Eligible Members ¹	Incidence Rate per 10,000 Eligible Members Days ¹
Beta Blockers						
2008	442	442	N/A	N/A	N/A	N/A
2009	386	387	N/A	N/A	N/A	N/A
2010	391	392	N/A	N/A	N/A	N/A
2011	355	356	N/A	N/A	N/A	N/A
2012	357	357	N/A	N/A	N/A	N/A
2013	372	377	N/A	N/A	N/A	N/A
2014	544	545	N/A	N/A	N/A	N/A
2015	887	891	N/A	N/A	N/A	N/A
2016	1,295	1,297	N/A	N/A	N/A	N/A
2017	1,941	1,945	N/A	N/A	N/A	N/A
2018	1,891	1,894	N/A	N/A	N/A	N/A
2019	477	478	N/A	N/A	N/A	N/A
2020	413	414	N/A	N/A	N/A	N/A
2021	441	442	N/A	N/A	N/A	N/A
2022	42	42	N/A	N/A	N/A	N/A
Beta Blockers (Po	ost-Index Enrollme	ent Requirement)				
2008	334	334	N/A	N/A	N/A	N/A
2009	296	297	N/A	N/A	N/A	N/A
2010	290	290	N/A	N/A	N/A	N/A
2011	253	254	N/A	N/A	N/A	N/A
2012	264	264	N/A	N/A	N/A	N/A
2013	267	270	N/A	N/A	N/A	N/A
2014	416	416	N/A	N/A	N/A	N/A
2015	671	674	N/A	N/A	N/A	N/A
2016	1,053	1,054	N/A	N/A	N/A	N/A
2017	1,468	1,471	N/A	N/A	N/A	N/A
2018	371	371	N/A	N/A	N/A	N/A
2019	354	355	N/A	N/A	N/A	N/A
2020	292	293	N/A	N/A	N/A	N/A
2021	40	40	N/A	N/A	N/A	N/A
2022	0	0	N/A	N/A	N/A	N/A

Table 3q. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2008 to May 31, 2022, by Year (Metoprolol (Extended Release))



Table 3r. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2008 to May 31, 2022, by Year (Metoprolol (Regular))

			Eligible	Eligible Member-	New Users per 1000	Incidence Rate per 10,000
_	New Users	New Episodes	Members ¹	Days ¹	Eligible Members ¹	Eligible Members Days ¹
Beta Blockers						
2008	272	275	N/A	N/A	N/A	N/A
2009	383	383	N/A	N/A	N/A	N/A
2010	359	362	N/A	N/A	N/A	N/A
2011	324	327	N/A	N/A	N/A	N/A
2012	291	293	N/A	N/A	N/A	N/A
2013	285	286	N/A	N/A	N/A	N/A
2014	434	435	N/A	N/A	N/A	N/A
2015	751	755	N/A	N/A	N/A	N/A
2016	1,164	1,170	N/A	N/A	N/A	N/A
2017	1,502	1,506	N/A	N/A	N/A	N/A
2018	1,371	1,379	N/A	N/A	N/A	N/A
2019	317	318	N/A	N/A	N/A	N/A
2020	252	254	N/A	N/A	N/A	N/A
2021	198	198	N/A	N/A	N/A	N/A
2022	21	21	N/A	N/A	N/A	N/A
Beta Blockers (Po	ost-Index Enrollm	nent Requirement)				
2008	210	213	N/A	N/A	N/A	N/A
2009	286	286	N/A	N/A	N/A	N/A
2010	277	279	N/A	N/A	N/A	N/A
2011	267	270	N/A	N/A	N/A	N/A
2012	230	232	N/A	N/A	N/A	N/A
2013	223	224	N/A	N/A	N/A	N/A
2014	351	352	N/A	N/A	N/A	N/A
2015	556	559	N/A	N/A	N/A	N/A
2016	933	937	N/A	N/A	N/A	N/A
2017	1,153	1,154	N/A	N/A	N/A	N/A
2018	279	283	N/A	N/A	N/A	N/A
2019	254	254	N/A	N/A	N/A	N/A
2020	127	127	N/A	N/A	N/A	N/A
2021	24	24	N/A	N/A	N/A	N/A
2022	0	0	N/A	N/A	N/A	N/A



	New Users	New Episodes	Eligible Members ¹	Eligible Member- Days ¹	New Users per 1000 Eligible Members ¹	Incidence Rate per 10,000 Eligible Members Days ¹
Beta Blockers	New 03er3	New Lpisodes	Weinbers	Days	Ligible Members	
2008	3,417	3,434	N/A	N/A	N/A	N/A
2009	4,422	4,441	N/A	N/A	N/A	N/A
2010	4,415	4,444	N/A	N/A	N/A	N/A
2011	4,492	4,506	N/A	N/A	N/A	N/A
2012	4,588	4,620	N/A	N/A	N/A	N/A
2013	4,995	5,023	N/A	N/A	N/A	N/A
2014	8,337	8,376	N/A	N/A	N/A	N/A
2015	14,000	14,060	N/A	N/A	N/A	N/A
2016	21,639	21,739	N/A	N/A	N/A	N/A
2017	27,021	27,173	N/A	N/A	N/A	N/A
2018	26,666	26,815	N/A	N/A	N/A	N/A
2019	7,632	7,688	N/A	N/A	N/A	N/A
2020	6,793	6,840	N/A	N/A	N/A	N/A
2021	7,600	7,639	N/A	N/A	N/A	N/A
2022	540	540	N/A	N/A	N/A	N/A
Beta Blockers (Po	st-Index Enrollm	ent Requirement)				
2008	2,620	2,635	N/A	N/A	N/A	N/A
2009	3,273	3,290	N/A	N/A	N/A	N/A
2010	3,357	3,381	N/A	N/A	N/A	N/A
2011	3,384	3,392	N/A	N/A	N/A	N/A
2012	3,564	3,590	N/A	N/A	N/A	N/A
2013	3,742	3,766	N/A	N/A	N/A	N/A
2014	6,543	6,577	N/A	N/A	N/A	N/A
2015	10,548	10,592	N/A	N/A	N/A	N/A
2016	17,804	17,888	N/A	N/A	N/A	N/A
2017	20,645	20,776	N/A	N/A	N/A	N/A
2018	5,457	5,481	N/A	N/A	N/A	N/A
2019	5,839	5,877	N/A	N/A	N/A	N/A
2020	4,666	4,699	N/A	N/A	N/A	N/A
2021	574	574	N/A	N/A	N/A	N/A
2022	0	0	N/A	N/A	N/A	N/A

Table 3s. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2008 to May 31, 2022, by Year (Any Propranolol)



	New Users	New Episodes	Eligible Members ¹	Eligible Member- Days ¹	1000 Eligible Members ¹	Incidence Rate per 10,000 Eligible Members Days ¹
Beta Blockers						
2008	649	651	N/A	N/A	N/A	N/A
2009	882	882	N/A	N/A	N/A	N/A
2010	850	851	N/A	N/A	N/A	N/A
2011	825	826	N/A	N/A	N/A	N/A
2012	776	777	N/A	N/A	N/A	N/A
2013	809	812	N/A	N/A	N/A	N/A
2014	1,078	1,085	N/A	N/A	N/A	N/A
2015	1,517	1,521	N/A	N/A	N/A	N/A
2016	2,282	2,290	N/A	N/A	N/A	N/A
2017	2,612	2,626	N/A	N/A	N/A	N/A
2018	2,284	2,289	N/A	N/A	N/A	N/A
2019	616	619	N/A	N/A	N/A	N/A
2020	488	489	N/A	N/A	N/A	N/A
2021	503	506	N/A	N/A	N/A	N/A
2022	57	57	N/A	N/A	N/A	N/A
eta Blockers (Po	st-Index Enrollme	ent Requirement)				
2008	490	492	N/A	N/A	N/A	N/A
2009	639	639	N/A	N/A	N/A	N/A
2010	647	647	N/A	N/A	N/A	N/A
2011	622	623	N/A	N/A	N/A	N/A
2012	603	604	N/A	N/A	N/A	N/A
2013	613	616	N/A	N/A	N/A	N/A
2014	814	819	N/A	N/A	N/A	N/A
2015	1,214	1,217	N/A	N/A	N/A	N/A
2016	1,916	1,923	N/A	N/A	N/A	N/A
2017	1,919	1,930	N/A	N/A	N/A	N/A
2018	502	502	N/A	N/A	N/A	N/A
2019	461	463	N/A	N/A	N/A	N/A
2020	344	345	N/A	N/A	N/A	N/A
2021	33	33	N/A	N/A	N/A	N/A
2022	0	0	N/A	N/A	N/A	N/A

Table 3t. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2008 to May 31, 2022, by Year (Propranolol (Extended Release))



Table 3u. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2008 to May 31, 2022, by Year (Propranolol (Regular))

	New	New Esterate	Eligible Members ¹	Eligible Member-	New Users per 1000	Incidence Rate per 10,000
Beta Blockers	New Users	New Episodes	Members	Days ¹	Eligible Members ¹	Eligible Members Days ¹
2008	2,780	2,792	N/A	N/A	N/A	N/A
2008	3,552		N/A	N/A N/A	N/A	N/A N/A
		3,569				
2010	3,578	3,605	N/A	N/A	N/A	N/A
2011	3,677	3,690	N/A	N/A	N/A	N/A
2012	3,829	3,859	N/A	N/A	N/A	N/A
2013	4,200	4,225	N/A	N/A	N/A	N/A
2014	7,237	7,269	N/A	N/A	N/A	N/A
2015	12,301	12,355	N/A	N/A	N/A	N/A
2016	18,965	19,052	N/A	N/A	N/A	N/A
2017	23,942	24,078	N/A	N/A	N/A	N/A
2018	23,963	24,102	N/A	N/A	N/A	N/A
2019	6,867	6,917	N/A	N/A	N/A	N/A
2020	6,084	6,128	N/A	N/A	N/A	N/A
2021	6,868	6,902	N/A	N/A	N/A	N/A
2022	468	468	N/A	N/A	N/A	N/A
Beta Blockers (P	ost-Index Enroll	ment Requirement	t)			
2008	2,141	2,151	N/A	N/A	N/A	N/A
2009	2,644	2,660	N/A	N/A	N/A	N/A
2010	2,721	2,744	N/A	N/A	N/A	N/A
2011	2,771	2,778	N/A	N/A	N/A	N/A
2012	2,973	2,997	N/A	N/A	N/A	N/A
2013	3,141	3,162	N/A	N/A	N/A	N/A
2014	5,709	5,738	N/A	N/A	N/A	N/A
2015	9,200	9,239	N/A	N/A	N/A	N/A
2016	15,572	15,645	N/A	N/A	N/A	N/A
2017	18,405	18,524	N/A	N/A	N/A	N/A
2018	4,846	4,870	N/A	N/A	N/A	N/A
2019	5,274	5,307	N/A	N/A	N/A	N/A
2020	4,148	4,180	, N/A	, N/A	, N/A	, N/A
2021	525	525	, N/A	, N/A	, N/A	, N/A
2022	0	0	N/A	N/A	N/A	N/A



	New Users	New Episodes	Eligible Members ¹	Eligible Member- Days ¹	New Users per 1000 Eligible Members ¹	Incidence Rate per 10,000 Eligible Members Days ¹
Beta Blockers						
2008	0	0	N/A	N/A	N/A	N/A
2009	0	0	N/A	N/A	N/A	N/A
2010	0	0	N/A	N/A	N/A	N/A
2011	0	0	N/A	N/A	N/A	N/A
2012	0	0	N/A	N/A	N/A	N/A
2013	0	0	N/A	N/A	N/A	N/A
2014	52	52	N/A	N/A	N/A	N/A
2015	235	235	N/A	N/A	N/A	N/A
2016	458	459	N/A	N/A	N/A	N/A
2017	535	535	N/A	N/A	N/A	N/A
2018	492	493	N/A	N/A	N/A	N/A
2019	174	174	N/A	N/A	N/A	N/A
2020	241	241	N/A	N/A	N/A	N/A
2021	256	256	N/A	N/A	N/A	N/A
2022	18	18	N/A	N/A	N/A	N/A
eta Blockers (Post-Index Enroll	ment Requirer	nent)			
2008	0	0	N/A	N/A	N/A	N/A
2009	0	0	N/A	N/A	N/A	N/A
2010	0	0	N/A	N/A	N/A	N/A
2011	0	0	N/A	N/A	N/A	N/A
2012	0	0	N/A	N/A	N/A	N/A
2013	0	0	N/A	N/A	N/A	N/A
2014	44	44	N/A	N/A	N/A	N/A
2015	174	174	N/A	N/A	N/A	N/A
2016	364	365	N/A	N/A	N/A	N/A
2017	365	365	N/A	N/A	N/A	N/A
2018	134	134	N/A	N/A	N/A	N/A
2019	123	123	N/A	N/A	N/A	N/A
2020	185	185	N/A	N/A	N/A	N/A
2021	19	19	N/A	N/A	N/A	N/A
2022	0	0	N/A	N/A	N/A	N/A

Table 3v. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2008 to May 31, 2022, by Year (Propranolol (Hemangeol))



Table 3w. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2008 to May 31, 2022, by Year (Acebutolol)

	New Users	New Episodes	Eligible Members ¹	Eligible Member-Days ¹	New Users per 1000 Eligible Members ¹	Incidence Rate per 10,000 Eligible Members Days ¹
Beta Blockers				•		
2008	****	****	N/A	N/A	N/A	N/A
2009	15	15	N/A	N/A	N/A	N/A
2010	****	****	N/A	N/A	N/A	N/A
2011	****	****	N/A	N/A	N/A	N/A
2012	****	****	N/A	N/A	N/A	N/A
2013	****	****	N/A	N/A	N/A	N/A
2014	11	11	N/A	N/A	N/A	N/A
2015	****	****	N/A	N/A	N/A	N/A
2016	* * * * *	****	N/A	N/A	N/A	N/A
2017	* * * * *	****	N/A	N/A	N/A	N/A
2018	****	****	N/A	N/A	N/A	N/A
2019	****	****	N/A	N/A	N/A	N/A
2020	0	0	N/A	N/A	N/A	N/A
2021	****	****	N/A	N/A	N/A	N/A
2022	0	0	N/A	N/A	N/A	N/A
Beta Blockers (Post-Index Enrol	Iment Requiremen	it)			
2008	****	****	N/A	N/A	N/A	N/A
2009	****	****	N/A	N/A	N/A	N/A
2010	****	****	N/A	N/A	N/A	N/A
2011	****	****	N/A	N/A	N/A	N/A
2012	****	****	N/A	N/A	N/A	N/A
2013	****	****	N/A	N/A	N/A	N/A
2014	****	****	N/A	N/A	N/A	N/A
2015	****	****	N/A	N/A	N/A	N/A
2016	****	****	N/A	N/A	N/A	N/A
2017	****	****	N/A	N/A	N/A	N/A
2018	****	****	N/A	N/A	N/A	N/A
2019	****	****	N/A	N/A	N/A	N/A
2020	0	0	N/A	N/A	N/A	N/A
2021	0	0	N/A	N/A	N/A	N/A
2022	0	0	N/A	N/A	N/A	N/A

¹Eligible Members and Member-Days are reflective of the number of patients that met all cohort entry criteria on at least one day during the query period.



			Eligible	Eligible	New Users per 1000	Incidence Rate per 10,000
	New Users	New Episodes	Members ¹	Member-Days ¹	Eligible Members ¹	Eligible Members Days ¹
Beta Blockers						
2008	1,261	1,266	N/A	N/A	N/A	N/A
2009	1,665	1,680	N/A	N/A	N/A	N/A
2010	1,481	1,488	N/A	N/A	N/A	N/A
2011	1,346	1,349	N/A	N/A	N/A	N/A
2012	1,225	1,236	N/A	N/A	N/A	N/A
2013	1,328	1,330	N/A	N/A	N/A	N/A
2014	1,855	1,863	N/A	N/A	N/A	N/A
2015	3,142	3,151	N/A	N/A	N/A	N/A
2016	4,815	4,841	N/A	N/A	N/A	N/A
2017	4,960	4,989	N/A	N/A	N/A	N/A
2018	4,418	4,443	N/A	N/A	N/A	N/A
2019	1,117	1,120	N/A	N/A	N/A	N/A
2020	920	924	N/A	N/A	N/A	N/A
2021	885	889	N/A	N/A	N/A	N/A
2022	91	91	N/A	N/A	N/A	N/A
Beta Blockers (Po	ost-Index Enrollm	ent Requirement)				
2008	970	973	N/A	N/A	N/A	N/A
2009	1,252	1,263	N/A	N/A	N/A	N/A
2010	1,096	1,100	N/A	N/A	N/A	N/A
2011	1,016	1,018	N/A	N/A	N/A	N/A
2012	974	985	N/A	N/A	N/A	N/A
2013	1,021	1,022	N/A	N/A	N/A	N/A
2014	1,509	1,516	N/A	N/A	N/A	N/A
2015	2,404	2,410	N/A	N/A	N/A	N/A
2016	4,028	4,049	N/A	N/A	N/A	N/A
2017	3,704	3,724	N/A	N/A	N/A	N/A
2018	893	898	N/A	N/A	N/A	N/A
2019	891	894	N/A	N/A	N/A	N/A
2020	587	590	N/A	N/A	N/A	N/A
2021	78	78	N/A	N/A	N/A	N/A
2022	0	0	N/A	N/A	N/A	N/A

Table 3x. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2008 to May 31, 2022, by Year (Atenolol)



	New Users	New Episodes	Eligible Members ¹	Eligible Member- Days ¹	New Users per 1000 Eligible Members ¹	Incidence Rate per 10,000 Eligible Members Days ¹
Beta Blockers						
2008	****	****	N/A	N/A	N/A	N/A
2009	****	****	N/A	N/A	N/A	N/A
2010	17	17	N/A	N/A	N/A	N/A
2011	****	****	N/A	N/A	N/A	N/A
2012	12	12	N/A	N/A	N/A	N/A
2013	****	****	N/A	N/A	N/A	N/A
2014	20	20	N/A	N/A	N/A	N/A
2015	17	17	N/A	N/A	N/A	N/A
2016	19	19	N/A	N/A	N/A	N/A
2017	20	20	N/A	N/A	N/A	N/A
2018	18	18	N/A	N/A	N/A	N/A
2019	****	****	N/A	N/A	N/A	N/A
2020	****	****	N/A	N/A	N/A	N/A
2021	****	****	N/A	N/A	N/A	N/A
2022	****	****	N/A	N/A	N/A	N/A
Beta Blockers (Pos	st-Index Enrollme	nt Requirement)				
2008	****	****	N/A	N/A	N/A	N/A
2009	****	****	N/A	N/A	N/A	N/A
2010	13	13	N/A	N/A	N/A	N/A
2011	****	****	N/A	N/A	N/A	N/A
2012	****	****	N/A	N/A	N/A	N/A
2013	****	****	N/A	N/A	N/A	N/A
2014	18	18	N/A	N/A	N/A	N/A
2015	****	****	N/A	N/A	N/A	N/A
2016	14	14	N/A	N/A	N/A	N/A
2017	18	18	N/A	N/A	N/A	N/A
2018	****	****	N/A	N/A	N/A	N/A
2019	****	****	N/A	N/A	N/A	N/A
2020	****	****	N/A	N/A	N/A	N/A
2021	****	****	N/A	N/A	N/A	N/A
2022	0	0	N/A	N/A	N/A	N/A

Table 3y. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2008 to May 31, 2022, by Year (Betaxolol)

¹Eligible Members and Member-Days are reflective of the number of patients that met all cohort entry criteria on at least one day during the query period.



			Eligible	Eligible	New Users per 1000	Incidence Rate per 10,000
_	New Users	New Episodes	Members ¹	Member-Days ¹	Eligible Members ¹	Eligible Members Days ¹
Beta Blockers						
2008	30	30	N/A	N/A	N/A	N/A
2009	46	46	N/A	N/A	N/A	N/A
2010	34	34	N/A	N/A	N/A	N/A
2011	28	28	N/A	N/A	N/A	N/A
2012	29	29	N/A	N/A	N/A	N/A
2013	21	21	N/A	N/A	N/A	N/A
2014	25	25	N/A	N/A	N/A	N/A
2015	55	55	N/A	N/A	N/A	N/A
2016	63	64	N/A	N/A	N/A	N/A
2017	90	90	N/A	N/A	N/A	N/A
2018	87	87	N/A	N/A	N/A	N/A
2019	19	19	N/A	N/A	N/A	N/A
2020	****	****	N/A	N/A	N/A	N/A
2021	35	35	N/A	N/A	N/A	N/A
2022	****	****	N/A	N/A	N/A	N/A
Beta Blockers (P	ost-Index Enroll	ment Requirement)				
2008	25	25	N/A	N/A	N/A	N/A
2009	33	33	N/A	N/A	N/A	N/A
2010	30	30	N/A	N/A	N/A	N/A
2011	20	20	N/A	N/A	N/A	N/A
2012	23	23	N/A	N/A	N/A	N/A
2013	17	17	N/A	N/A	N/A	N/A
2014	23	23	N/A	N/A	N/A	N/A
2015	41	41	N/A	N/A	N/A	N/A
2016	48	49	N/A	N/A	N/A	N/A
2017	75	75	N/A	N/A	N/A	N/A
2018	21	21	N/A	N/A	N/A	N/A
2019	16	16	N/A	N/A	N/A	N/A
2020	****	****	N/A	N/A	N/A	N/A
2021	****	****	N/A	N/A	N/A	N/A
2022	0	0	N/A	N/A	N/A	N/A

Table 3z. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2008 to May 31, 2022, by Year (Bisoprolol)

¹Eligible Members and Member-Days are reflective of the number of patients that met all cohort entry criteria on at least one day during the query period.



			Eligible	Eligible Member-	New Users per 1000	Incidence Rate per 10,000
	New Users	New Episodes	Members ¹	Days ¹	Eligible Members ¹	Eligible Members Days ¹
Beta Blockers						
2008	102	102	N/A	N/A	N/A	N/A
2009	122	122	N/A	N/A	N/A	N/A
2010	114	115	N/A	N/A	N/A	N/A
2011	112	112	N/A	N/A	N/A	N/A
2012	128	129	N/A	N/A	N/A	N/A
2013	132	133	N/A	N/A	N/A	N/A
2014	199	199	N/A	N/A	N/A	N/A
2015	388	389	N/A	N/A	N/A	N/A
2016	673	680	N/A	N/A	N/A	N/A
2017	922	927	N/A	N/A	N/A	N/A
2018	801	802	N/A	N/A	N/A	N/A
2019	124	124	N/A	N/A	N/A	N/A
2020	108	110	N/A	N/A	N/A	N/A
2021	****	****	N/A	N/A	N/A	N/A
2022	****	****	N/A	N/A	N/A	N/A
Beta Blockers (Po	ost-Index Enrollm	ent Requirement)				
2008	78	78	N/A	N/A	N/A	N/A
2009	84	84	N/A	N/A	N/A	N/A
2010	81	82	N/A	N/A	N/A	N/A
2011	92	92	N/A	N/A	N/A	N/A
2012	95	95	N/A	N/A	N/A	N/A
2013	90	91	N/A	N/A	N/A	N/A
2014	164	164	N/A	N/A	N/A	N/A
2015	271	271	N/A	N/A	N/A	N/A
2016	547	552	N/A	N/A	N/A	N/A
2017	650	655	N/A	N/A	N/A	N/A
2018	88	88	N/A	N/A	N/A	N/A
2019	100	100	N/A	N/A	N/A	N/A
2020	****	****	N/A	N/A	N/A	N/A
2021	****	****	N/A	N/A	N/A	N/A
2022	0	0	N/A	N/A	N/A	N/A

Table 3aa. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2008 to May 31, 2022, by Year (Carvedilol)

¹Eligible Members and Member-Days are reflective of the number of patients that met all cohort entry criteria on at least one day during the query period.



	New Users	New Episodes	Eligible Members ¹	Eligible Member- Days ¹	New Users per 1000 Eligible Members ¹	Incidence Rate per 10,000 Eligible Members Days ¹
Beta Blockers				2010		
2008	149	149	N/A	N/A	N/A	N/A
2009	196	196	N/A	N/A	N/A	N/A
2010	192	192	N/A	N/A	N/A	N/A
2011	157	157	N/A	N/A	N/A	N/A
2012	145	145	N/A	N/A	N/A	N/A
2013	126	126	N/A	N/A	N/A	N/A
2014	278	278	N/A	N/A	N/A	N/A
2015	578	580	N/A	N/A	N/A	N/A
2016	859	862	N/A	N/A	N/A	N/A
2017	1,072	1,075	N/A	N/A	N/A	N/A
2018	904	909	N/A	N/A	N/A	N/A
2019	108	108	N/A	N/A	N/A	N/A
2020	139	141	N/A	N/A	N/A	N/A
2021	****	****	N/A	N/A	N/A	N/A
2022	****	****	N/A	N/A	N/A	N/A
Beta Blockers (P	ost-Index Enroll	ment Requirement)				
2008	108	108	N/A	N/A	N/A	N/A
2009	146	146	N/A	N/A	N/A	N/A
2010	132	132	N/A	N/A	N/A	N/A
2011	116	116	N/A	N/A	N/A	N/A
2012	106	106	N/A	N/A	N/A	N/A
2013	94	94	N/A	N/A	N/A	N/A
2014	210	210	N/A	N/A	N/A	N/A
2015	393	395	N/A	N/A	N/A	N/A
2016	671	674	N/A	N/A	N/A	N/A
2017	731	734	N/A	N/A	N/A	N/A
2018	75	75	N/A	N/A	N/A	N/A
2019	89	89	N/A	N/A	N/A	N/A
2020	****	****	N/A	N/A	N/A	N/A
2021	****	****	N/A	N/A	N/A	N/A
2022	0	0	N/A	N/A	N/A	N/A

Table 3ab. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2008 to May 31, 2022, by Year (Labetalol)

¹Eligible Members and Member-Days are reflective of the number of patients that met all cohort entry criteria on at least one day during the query period.



	New Users	New Episodes	Eligible Members ¹	Eligible Member- Days ¹	New Users per 1000 Eligible Members ¹	Incidence Rate per 10,000 Eligible Members Days ¹
eta Blockers						
2008	270	270	N/A	N/A	N/A	N/A
2009	398	398	N/A	N/A	N/A	N/A
2010	364	365	N/A	N/A	N/A	N/A
2011	348	350	N/A	N/A	N/A	N/A
2012	346	349	N/A	N/A	N/A	N/A
2013	391	396	N/A	N/A	N/A	N/A
2014	423	424	N/A	N/A	N/A	N/A
2015	551	551	N/A	N/A	N/A	N/A
2016	750	757	N/A	N/A	N/A	N/A
2017	926	932	N/A	N/A	N/A	N/A
2018	868	876	N/A	N/A	N/A	N/A
2019	254	256	N/A	N/A	N/A	N/A
2020	210	212	N/A	N/A	N/A	N/A
2021	****	****	N/A	N/A	N/A	N/A
2022	****	****	N/A	N/A	N/A	N/A
eta Blockers (I	Post-Index Enro	ollment Requireme	nt)			
2008	208	208	N/A	N/A	N/A	N/A
2009	314	314	N/A	N/A	N/A	N/A
2010	268	268	N/A	N/A	N/A	N/A
2011	256	258	N/A	N/A	N/A	N/A
2012	269	272	N/A	N/A	N/A	N/A
2013	299	304	N/A	N/A	N/A	N/A
2014	337	338	N/A	N/A	N/A	N/A
2015	435	435	N/A	N/A	N/A	N/A
2016	623	627	N/A	N/A	N/A	N/A
2017	678	682	N/A	N/A	N/A	N/A
2018	213	216	N/A	N/A	N/A	N/A
2019	187	189	N/A	N/A	N/A	N/A
2020	148	150	N/A	N/A	N/A	N/A
2021	12	12	N/A	N/A	N/A	N/A
2022	0	0	N/A	N/A	N/A	N/A

Table 3ac. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2008 to May 31, 2022, by Year (Nadolol)

¹Eligible Members and Member-Days are reflective of the number of patients that met all cohort entry criteria on at least one day during the query period.



	New Users	New Episodes	Eligible Members ¹	Eligible Member- Days ¹	New Users per 1000 Eligible Members ¹	Incidence Rate per 10,000 Eligible Members Days ¹
Beta Blockers						
2008	****	****	N/A	N/A	N/A	N/A
2009	43	43	N/A	N/A	N/A	N/A
2010	46	46	N/A	N/A	N/A	N/A
2011	35	35	N/A	N/A	N/A	N/A
2012	44	44	N/A	N/A	N/A	N/A
2013	47	47	N/A	N/A	N/A	N/A
2014	57	57	N/A	N/A	N/A	N/A
2015	38	39	N/A	N/A	N/A	N/A
2016	54	55	N/A	N/A	N/A	N/A
2017	77	77	N/A	N/A	N/A	N/A
2018	42	42	N/A	N/A	N/A	N/A
2019	24	24	N/A	N/A	N/A	N/A
2020	20	21	N/A	N/A	N/A	N/A
2021	****	****	N/A	N/A	N/A	N/A
2022	0	0	N/A	N/A	N/A	N/A
Beta Blockers (P	ost-Index Enrol	lment Requireme	nt)			
2008	13	13	N/A	N/A	N/A	N/A
2009	30	30	N/A	N/A	N/A	N/A
2010	34	34	N/A	N/A	N/A	N/A
2011	24	24	N/A	N/A	N/A	N/A
2012	34	34	N/A	N/A	N/A	N/A
2013	28	28	N/A	N/A	N/A	N/A
2014	42	42	N/A	N/A	N/A	N/A
2015	30	31	N/A	N/A	N/A	N/A
2016	41	42	N/A	N/A	N/A	N/A
2017	62	62	N/A	N/A	N/A	N/A
2018	26	26	N/A	N/A	N/A	N/A
2019	18	18	N/A	N/A	N/A	N/A
2020	13	13	N/A	N/A	N/A	N/A
2021	0	0	N/A	N/A	N/A	N/A
2022	0	0	N/A	N/A	N/A	N/A

Table 3ad. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2008 to May 31, 2022, by Year (Nebivolol)

¹Eligible Members and Member-Days are reflective of the number of patients that met all cohort entry criteria on at least one day during the query period.



	New Users	New Episodes	Eligible Members ¹	Eligible Member- Days ¹	New Users per 1000 Eligible Members ¹	Incidence Rate per 10,000 Eligible Members Days ¹
Beta Blockers				•	0	,
2008	****	****	N/A	N/A	N/A	N/A
2009	13	13	N/A	N/A	N/A	N/A
2010	11	11	N/A	N/A	N/A	N/A
2011	12	12	N/A	N/A	N/A	N/A
2012	22	22	N/A	N/A	N/A	N/A
2013	16	16	N/A	N/A	N/A	N/A
2014	14	14	N/A	N/A	N/A	N/A
2015	39	39	N/A	N/A	N/A	N/A
2016	30	30	N/A	N/A	N/A	N/A
2017	28	28	N/A	N/A	N/A	N/A
2018	51	51	N/A	N/A	N/A	N/A
2019	17	17	N/A	N/A	N/A	N/A
2020	****	****	N/A	N/A	N/A	N/A
2021	****	****	N/A	N/A	N/A	N/A
2022	0	0	N/A	N/A	N/A	N/A
eta Blockers (P	ost-Index Enro	llment Requiremer	nt)			
2008	****	****	N/A	N/A	N/A	N/A
2009	11	11	N/A	N/A	N/A	N/A
2010	****	****	N/A	N/A	N/A	N/A
2011	11	11	N/A	N/A	N/A	N/A
2012	17	17	N/A	N/A	N/A	N/A
2013	****	****	N/A	N/A	N/A	N/A
2014	13	13	N/A	N/A	N/A	N/A
2015	30	30	N/A	N/A	N/A	N/A
2016	29	29	N/A	N/A	N/A	N/A
2017	23	23	N/A	N/A	N/A	N/A
2018	17	17	N/A	N/A	N/A	N/A
2019	15	15	N/A	N/A	N/A	N/A
2020	****	****	N/A	N/A	N/A	N/A
2021	0	0	N/A	N/A	N/A	N/A
2022	0	0	N/A	N/A	N/A	N/A

Table 3ae. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2008 to May 31, 2022, by Year (Pindolol)

¹Eligible Members and Member-Days are reflective of the number of patients that met all cohort entry criteria on at least one day during the query period.



Table 3af. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2008 to May 31, 2022, by Year (Sotalol)

	New Users	New Episodes	Eligible Members ¹	Eligible Member- Days ¹	New Users per 1000 Eligible Members ¹	Incidence Rate per 10,000 Eligible Members Days ¹
Beta Blockers		•				
2008	29	30	N/A	N/A	N/A	N/A
2009	26	26	N/A	N/A	N/A	N/A
2010	****	****	N/A	N/A	N/A	N/A
2011	36	36	N/A	N/A	N/A	N/A
2012	20	20	N/A	N/A	N/A	N/A
2013	26	26	N/A	N/A	N/A	N/A
2014	46	46	N/A	N/A	N/A	N/A
2015	117	117	N/A	N/A	N/A	N/A
2016	193	193	N/A	N/A	N/A	N/A
2017	210	210	N/A	N/A	N/A	N/A
2018	213	214	N/A	N/A	N/A	N/A
2019	27	28	N/A	N/A	N/A	N/A
2020	43	43	N/A	N/A	N/A	N/A
2021	39	39	N/A	N/A	N/A	N/A
2022	****	****	N/A	N/A	N/A	N/A
Beta Blockers (Post-Index Enrol	llment Requirement	:)			
2008	18	19	N/A	N/A	N/A	N/A
2009	20	20	N/A	N/A	N/A	N/A
2010	12	12	N/A	N/A	N/A	N/A
2011	29	29	N/A	N/A	N/A	N/A
2012	17	17	N/A	N/A	N/A	N/A
2013	19	19	N/A	N/A	N/A	N/A
2014	37	37	N/A	N/A	N/A	N/A
2015	91	91	N/A	N/A	N/A	N/A
2016	150	150	N/A	N/A	N/A	N/A
2017	157	157	N/A	N/A	N/A	N/A
2018	24	24	N/A	N/A	N/A	N/A
2019	25	26	N/A	N/A	N/A	N/A
2020	26	26	N/A	N/A	N/A	N/A
2021	****	****	N/A	N/A	N/A	N/A
2022	0	0	N/A	N/A	N/A	N/A

¹Eligible Members and Member-Days are reflective of the number of patients that met all cohort entry criteria on at least one day during the query period.



Table 3ag. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2008 to May 31, 2022, by Year (Timolol)

	New Users	New Episodes	Eligible Members ¹	Eligible Member- Days ¹	New Users per 1000 Eligible Members ¹	Incidence Rate per 10,000 Eligible Members Days ¹
Beta Blockers				.,.	0.00	
2008	****	****	N/A	N/A	N/A	N/A
2009	****	****	N/A	N/A	N/A	N/A
2010	****	****	N/A	N/A	N/A	N/A
2011	****	****	N/A	N/A	N/A	N/A
2012	****	****	N/A	N/A	N/A	N/A
2013	****	****	N/A	N/A	N/A	N/A
2014	****	****	N/A	N/A	N/A	N/A
2015	****	****	N/A	N/A	N/A	N/A
2016	****	****	N/A	N/A	N/A	N/A
2017	****	****	N/A	N/A	N/A	N/A
2018	****	****	N/A	N/A	N/A	N/A
2019	****	****	N/A	N/A	N/A	N/A
2020	****	****	N/A	N/A	N/A	N/A
2021	0	0	N/A	N/A	N/A	N/A
2022	0	0	N/A	N/A	N/A	N/A
Beta Blockers	(Post-Index Enr	ollment Requireme	ent)			
2008	****	****	N/A	N/A	N/A	N/A
2009	****	****	N/A	N/A	N/A	N/A
2010	****	****	N/A	N/A	N/A	N/A
2011	****	****	N/A	N/A	N/A	N/A
2012	****	****	N/A	N/A	N/A	N/A
2013	****	****	N/A	N/A	N/A	N/A
2014	****	****	N/A	N/A	N/A	N/A
2015	****	****	N/A	N/A	N/A	N/A
2016	****	****	N/A	N/A	N/A	N/A
2017	****	****	N/A	N/A	N/A	N/A
2018	****	****	N/A	N/A	N/A	N/A
2019	0	0	N/A	N/A	N/A	N/A
2020	****	****	N/A	N/A	N/A	N/A
2021	0	0	N/A	N/A	N/A	N/A
2022	0	0	N/A	N/A	N/A	N/A

¹Eligible Members and Member-Days are reflective of the number of patients that met all cohort entry criteria on at least one day during the query period.



	New Users	New Episodes	Eligible Members ¹	Eligible Member- Days ¹	New Users per 1000 Eligible Members ¹	Incidence Rate per 10,000 Eligible Members Days ¹
Beta Blockers				2473		
2008	2,020	2,028	N/A	N/A	N/A	N/A
2009	2,539	2,559	N/A	N/A	N/A	N/A
2010	2,330	2,344	N/A	N/A	N/A	N/A
2011	2,097	2,105	N/A	N/A	N/A	N/A
2012	1,961	1,974	N/A	N/A	N/A	N/A
2013	2,059	2,068	N/A	N/A	N/A	N/A
2014	2,945	2,955	N/A	N/A	N/A	N/A
2015	4,889	4,908	N/A	N/A	N/A	N/A
2016	7,398	7,437	N/A	N/A	N/A	N/A
2017	8,580	8,619	N/A	N/A	N/A	N/A
2018	7,826	7,864	N/A	N/A	N/A	N/A
2019	1,963	1,968	N/A	N/A	N/A	N/A
2020	1,623	1,631	N/A	N/A	N/A	N/A
2021	1,570	1,576	N/A	N/A	N/A	N/A
2022	159	159	N/A	N/A	N/A	N/A
eta Blockers (Po	ost-Index Enrollr	ment Requirement	:)			
2008	1,553	1,559	N/A	N/A	N/A	N/A
2009	1,906	1,920	N/A	N/A	N/A	N/A
2010	1,741	1,749	N/A	N/A	N/A	N/A
2011	1,589	1,595	N/A	N/A	N/A	N/A
2012	1,535	1,548	N/A	N/A	N/A	N/A
2013	1,560	1,566	N/A	N/A	N/A	N/A
2014	2,368	2,376	N/A	N/A	N/A	N/A
2015	3,708	3,722	N/A	N/A	N/A	N/A
2016	6,104	6,135	N/A	N/A	N/A	N/A
2017	6,471	6,496	N/A	N/A	N/A	N/A
2018	1,601	1,610	N/A	N/A	N/A	N/A
2019	1,538	1,542	N/A	N/A	N/A	N/A
2020	1,032	1,036	N/A	N/A	N/A	N/A
2021	145	145	N/A	N/A	N/A	N/A
2022	0	0	N/A	N/A	N/A	N/A

Table 3ah. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2008 to May 31, 2022,by Year (Selective Beta Blockers)



Table 3ai. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2008 to May 31, 2022, by Year (Non-Selective Beta Blockers)

			Eligible	Eligible Member-	New Users per 1000	Incidence Rate per 10,000
_	New Users	New Episodes	Members ¹	Days ¹	Eligible Members ¹	Eligible Members Days ¹
Beta Blockers						
2008	3,983	4,002	N/A	N/A	N/A	N/A
2009	5,181	5,201	N/A	N/A	N/A	N/A
2010	5,122	5,155	N/A	N/A	N/A	N/A
2011	5,160	5,176	N/A	N/A	N/A	N/A
2012	5,253	5,292	N/A	N/A	N/A	N/A
2013	5,690	5,724	N/A	N/A	N/A	N/A
2014	9,302	9,343	N/A	N/A	N/A	N/A
2015	15,673	15,738	N/A	N/A	N/A	N/A
2016	24,145	24,263	N/A	N/A	N/A	N/A
2017	30,175	30,341	N/A	N/A	N/A	N/A
2018	29,506	29,671	N/A	N/A	N/A	N/A
2019	8,163	8,222	N/A	N/A	N/A	N/A
2020	7,298	7,351	N/A	N/A	N/A	N/A
2021	8,004	8,045	N/A	N/A	N/A	N/A
2022	560	560	N/A	N/A	N/A	N/A
Beta Blockers (F	Post-Index Enro	llment Requiremen	it)			
2008	3,042	3,059	N/A	N/A	N/A	N/A
2009	3,851	3,869	N/A	N/A	N/A	N/A
2010	3,863	3,889	N/A	N/A	N/A	N/A
2011	3,889	3,899	N/A	N/A	N/A	N/A
2012	4,069	4,100	N/A	N/A	N/A	N/A
2013	4,252	4,282	N/A	N/A	N/A	N/A
2014	7,307	7,343	N/A	N/A	N/A	N/A
2015	11,768	11,816	N/A	N/A	N/A	N/A
2016	19,829	19,926	N/A	N/A	N/A	N/A
2017	22,881	23,024	N/A	N/A	N/A	N/A
2018	5,878	5,905	N/A	N/A	N/A	N/A
2019	6,255	6,296	N/A	N/A	N/A	N/A
2020	4,959	4,998	N/A	N/A	N/A	N/A
2021	599	599	N/A	N/A	N/A	N/A
2022	0	0	N/A	N/A	N/A	N/A



			Number of Episodes by Episode Length										
			0-90	days	91-183	days	184-27	5 days	276-36	5 days	366+	days	
	Total Number of Episodes	Episodes Where Patient Switched to Another Beta Blocker	Number of Episodes	Percent of Episodes	Number of Episodes	Percent of Episodes	Number of Episodes	Percent of Episodes	Number of Episodes	Percent of Episodes	Number of Episodes	Percent of Episodes	
Beta Blockers	214,231	4,895	213,751	99.8%	369	0.2%	52	0.0%	****	****	****	****	
Beta Blockers (Post-Index Enrollment Requirement)	135,970	3,638	135,688	99.8%	234	0.2%	****	****	36	0.0%	****	****	
Beta Blockers (25% Overlap)	214,231	7,928	166,926	77.9%	23,982	11.2%	9,372	4.4%	5,086	2.4%	8,865	4.1%	
Beta Blockers (25% Overlap and Post-Index Enrollment Requirement) Beta Blockers (50%	135,970	5,832	102,852	75.6%	14,782	10.9%	6,047	4.4%	3,424	2.5%	8,865	6.5%	
Overlap)	214,231	8,435	155,840	72.7%	27,991	13.1%	11,729	5.5%	6,658	3.1%	12,013	5.6%	
Beta Blockers (50% Overlap and Post-Index Enrollment Requirement)	135,970	6,224	94,988	69.9%	17,025	12.5%	7,503	5.5%	4,441	3.3%	12,013	8.8%	
Beta Blockers (100% Overlap)	214,231	9,130	143,864	67.2%	30,537	14.3%	14,575	6.8%	8,619	4.0%	16,636	7.8%	
Beta Blockers (100% Overlap and Post-Index Enrollment Requirement)	135,970	6,798	86,417	63.6%	18,063	13.3%	9,189	6.8%	5,665	4.2%	16,636	12.2%	

Table 4a. Summary of Time to End of At-Risk Period for Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2008 to May 31, 2022



			Distribution	of At-Risk Time ir	n Days, by Episode		
	Minimum	Q1	Median	Q3	Maximum	Mean	Standard Deviation
Beta Blockers	1	30	30	30	441	29.8	13.7
Beta Blockers (Post-Index Enrollment Requirement)	1	30	30	30	441	30.1	13.2
Beta Blockers (25% Overlap)	1	30	30	90	4,524	87.6	155.5
Beta Blockers (25% Overlap and Post-Index Enrollment Requirement)	1	30	30	90	4,524	103.0	187.5
Beta Blockers (50% Overlap)	1	30	30	99	4,788	104.0	182.2
Beta Blockers (50% Overlap and Post-Index Enrollment Requirement)	1	30	30	120	4,788	124.9	219.9
Beta Blockers (100% Overlap)	1	30	51	131	4,788	126.7	217.7
Beta Blockers (100% Overlap and Post-Index Enrollment Requirement)	1	30	60	167	4,788	155.9	262.7

Table 4a. Summary of Time to End of At-Risk Period for Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2008 to May 31, 2022



Table 4b. Summary of Time to End of At-Risk Period for Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2008 to May 31, 2022, by Age Group

			Number of Episodes by Episode Length									
			0-90	days	91-18	3 days	184-27	'5 days	276-36	5 days	366+	days
	Total Number of Episodes	Episodes Where Patient Switched to Another Beta Blocker	Number of Episodes	Percent of Episodes	Number of Episodes	Percent of Episodes	Number of Episodes	Percent of Episodes	Number of Episodes	Percent of Episodes	Number of Episodes	Percent of Episodes
Beta Blockers												
0-1 years	28,621	260	28,545	99.7%	61	0.2%	****	****	****	****	0	0.0%
2-5 years	6,366	373	6,339	99.6%	****	****	****	****	****	****	0	0.0%
6-12 years	41,380	1,158	41,268	99.7%	86	0.2%	12	0.0%	14	0.0%	0	0.0%
13-17 years	137,864	3,104	137,599	99.8%	204	0.1%	****	****	34	0.0%	****	****
Beta Blockers (Po	st-Index Enrollme	ent Requirement)										
0-1 years	17,070	204	17,020	99.7%	****	****	****	****	****	****	0	0.0%
2-5 years	4,062	264	4,047	99.6%	****	****	****	****	****	****	0	0.0%
6-12 years	27,012	876	26,949	99.8%	52	0.2%	****	****	****	****	0	0.0%
13-17 years	87,826	2,294	87,672	99.8%	127	0.1%	****	****	****	****	****	****
Beta Blockers (25	% Overlap)											
0-1 years	28,621	561	17,214	60.1%	5,174	18.1%	2,723	9.5%	1,667	5.8%	1,843	6.4%
2-5 years	6,366	522	4,486	70.5%	838	13.2%	359	5.6%	202	3.2%	481	7.6%
6-12 years	41,380	1,721	31,955	77.2%	4,672	11.3%	1,731	4.2%	952	2.3%	2,070	5.0%
13-17 years	137,864	5,124	113,271	82.2%	13,298	9.6%	4,559	3.3%	2,265	1.6%	4,471	3.2%
Beta Blockers (25	% Overlap and Po	ost-Index Enrollmei	nt Requiremer	nt)								
0-1 years	17,070	410	9,323	54.6%	2,958	17.3%	1,737	10.2%	1,209	7.1%	1,843	10.8%
2-5 years	4,062	376	2,731	67.2%	496	12.2%	228	5.6%	126	3.1%	481	11.8%
6-12 years	27,012	1,295	20,280	75.1%	2,916	10.8%	1,142	4.2%	604	2.2%	2,070	7.7%
13-17 years	87,826	3,751	70,518	80.3%	8,412	9.6%	2,940	3.3%	1,485	1.7%	4,471	5.1%
Beta Blockers (50	% Overlap)											
0-1 years	28,621	602	14,951	52.2%	5,831	20.4%	3,384	11.8%	2,130	7.4%	2,325	8.1%
2-5 years	6,366	551	4,115	64.6%	925	14.5%	397	6.2%	268	4.2%	661	10.4%
6-12 years	41,380	1,821	29,698	71.8%	5,426	13.1%	2,220	5.4%	1,199	2.9%	2,837	6.9%



Table 4b. Summary of Time to End of At-Risk Period for Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2008 to May 31, 2022, by Age Group

						Num	per of Episode	s by Episode L	ength			
			0-90	days	91-183	3 days	184-27	'5 days	276-36	5 days	366+	days
	Total Number of Episodes	Episodes Where Patient Switched to Another Beta Blocker	Number of Episodes	Percent of Episodes								
13-17 years	137,864	5,461	107,076	77.7%	15,809	11.5%	5,728	4.2%	3,061	2.2%	6,190	4.5%
Beta Blockers (5	0% Overlap and Po	ost-Index Enrollme	nt Requiremer	nt)								
0-1 years	17,070	443	7,786	45.6%	3,263	19.1%	2,146	12.6%	1,550	9.1%	2,325	13.6%
2-5 years	4,062	400	2,468	60.8%	533	13.1%	241	5.9%	159	3.9%	661	16.3%
6-12 years	27,012	1,376	18,635	69.0%	3,358	12.4%	1,432	5.3%	750	2.8%	2,837	10.5%
13-17 years	87,826	4,005	66,099	75.3%	9,871	11.2%	3,684	4.2%	1,982	2.3%	6,190	7.0%
Beta Blockers (1	00% Overlap)											
0-1 years	28,621	666	12,516	43.7%	6,134	21.4%	4,115	14.4%	2,798	9.8%	3,058	10.7%
2-5 years	6,366	582	3,698	58.1%	985	15.5%	472	7.4%	337	5.3%	874	13.7%
6-12 years	41,380	1,963	27,333	66.1%	5,881	14.2%	2,701	6.5%	1,506	3.6%	3,959	9.6%
13-17 years	137,864	5,919	100,317	72.8%	17,537	12.7%	7,287	5.3%	3,978	2.9%	8,745	6.3%
Beta Blockers (1	00% Overlap and F	Post-Index Enrollmo	ent Requireme	ent)								
0-1 years	17,070	497	6,153	36.0%	3,267	19.1%	2,565	15.0%	2,027	11.9%	3,058	17.9%
2-5 years	4,062	426	2,172	53.5%	543	13.4%	277	6.8%	196	4.8%	874	21.5%
6-12 years	27,012	1,490	16,909	62.6%	3,527	13.1%	1,705	6.3%	912	3.4%	3,959	14.7%
13-17 years	87,826	4,385	61,183	69.7%	10,726	12.2%	4,642	5.3%	2,530	2.9%	8,745	10.0%



						Num	per of Episodes	s by Episode L	ength			
			0-90	days	91-18	3 days	184-27	5 days	276-36	5 days	366+ days	
	Total Number of Episodes	Episodes Where Patient Switched to Another Beta Blocker	Number of Episodes	Percent of Episodes								
Beta Blockers	S											
Female	129,557	3,103	129,264	99.8%	219	0.2%	****	****	41	0.0%	****	****
Male	84,674	1,792	84,487	99.8%	150	0.2%	21	0.0%	16	0.0%	0	0.0%
Beta Blockers	s (Post-Index Enrolli	ment Requirement)										
Female	81,534	2,322	81,366	99.8%	****	****	****	****	25	0.0%	****	****
Male	54,436	1,316	54,322	99.8%	99	0.2%	****	****	****	****	0	0.0%
Beta Blockers	s (25% Overlap)											
Female	129,557	4,842	102,785	79.3%	14,071	10.9%	5,312	4.1%	2,849	2.2%	4,540	3.5%
Male	84,674	3,086	64,141	75.8%	9,911	11.7%	4,060	4.8%	2,237	2.6%	4,325	5.1%
Beta Blockers	s (25% Overlap and	Post-Index Enrollme	nt Requireme	nt)								
Female	81,534	3,559	62,920	77.2%	8,673	10.6%	3,451	4.2%	1,950	2.4%	4,540	5.6%
Male	54,436	2,273	39,932	73.4%	6,109	11.2%	2,596	4.8%	1,474	2.7%	4,325	7.9%
Beta Blockers	s (50% Overlap)											
Female	129,557	5,138	96,414	74.4%	16,522	12.8%	6,682	5.2%	3,778	2.9%	6,161	4.8%
Male	84,674	3,297	59,426	70.2%	11,469	13.5%	5,047	6.0%	2,880	3.4%	5,852	6.9%
Beta Blockers	s (50% Overlap and	Post-Index Enrollme	nt Requireme	nt)								
Female	81,534	3,776	58,427	71.7%	10,093	12.4%	4,296	5.3%	2,557	3.1%	6,161	7.6%
Male	54,436	2,448	36,561	67.2%	6,932	12.7%	3,207	5.9%	1,884	3.5%	5,852	10.8%
Beta Blockers	s (100% Overlap)											
Female	129,557	5,568	89,250	68.9%	18,202	14.0%	8,469	6.5%	4,900	3.8%	8,736	6.7%
Male	84,674	3,562	54,614	64.5%	12,335	14.6%	6,106	7.2%	3,719	4.4%	7,900	9.3%
Beta Blockers	s (100% Overlap and	d Post-Index Enrollm	ent Requireme	ent)								
Female	81,534	4,126	53 <i>,</i> 334	65.4%	10,827	13.3%	5,380	6.6%	3,257	4.0%	8,736	10.7%
Male	54,436	2,672	33,083	60.8%	7,236	13.3%	3,809	7.0%	2,408	4.4%	7,900	14.5%

Table 4c. Summary of Time to End of At-Risk Period for Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2008 to May 31, 2022, by Sex



	Beta Blockers		Beta Blockers (Post-Index Enrollment Requirement)		Beta Blockers (25% Overlap)		Beta Blockers (25% Overlap and Post- Index Enrollment Requirement)	
	Remaining	Excluded	Remaining	Excluded	Remaining	Excluded	Remaining	Excluded
Members meeting enrollment and dem requirements	nographic							
Enrolled at any point during the query period	369,188,000	N/A	369,188,000	N/A	369,188,000	N/A	369,188,000	N/A
Had required coverage type (medical and/or drug coverage)	293,274,605 273,556,345	75,913,395 19,718,260	293,274,605 273,556,345	75,913,395 19,718,260	293,274,605 273,556,345	75,913,395 19,718,260	293,274,605 273,556,345	75,913,395 19,718,260
	273,214,646	341,699	273,214,646	341,699	273,214,646	341,699	273,214,646	341,699
Enrolled during specified age range	119,159,837	154,054,809	119,159,837	154,054,809	119,159,837	154,054,809	119,159,837	154,054,809
Had requestable medical charts	119,159,837	0	119,159,837	0	119,159,837	0	119,159,837	0
Met demographic requirements (sex, race, and Hispanic origin)	119,104,523	55,314	119,104,523	55,314	119,104,523	55,314	119,104,523	55,314
Members with a valid index event								
Had any cohort-defining claim during the query period	994,369	118,110,154	994,369	118,110,154	994,369	118,110,154	994,369	118,110,154
Cohort episodes with a valid index date	2							
Total number of claims with cohort- identifying codes during the query period	5,149,302	N/A	5,149,302	N/A	5,149,302	N/A	5,149,302	N/A
Claim recorded during specified age range	1,598,641	3,550,661	1,598,641	3,550,661	1,598,641	3,550,661	1,598,641	3,550,661
Episode defining index claim recorded during the query period	299,409	1,299,232	299,409	1,299,232	299,409	1,299,232	299,409	1,299,232

Table 5. Summary of Episode Level Cohort Attrition in the Sentinel Distributed Database (SDD) from January 1, 2008 to May 31, 2022



Table 5. Summary of Episode Level	Beta Blockers		Beta Blockers (Post-Index Enrollment Requirement)		Beta Blockers (25% Overlag		Beta Blockers (25% Overlap and Index Enrollment Requiremen	
Ī	Remaining	Excluded	Remaining	Excluded	Remaining	Excluded	Remaining	Excluded
Members meeting enrollment and dem requirements	ographic							
Met exposure incidence criteria	299,409	0	299,409	0	299,409	0	299,409	0
Cohort episodes with required pre-inde	x history							
Had sufficient pre-index continuous enrollment	214,231	85,178	214,231	85,178	214,231	85,178	214,231	85,178
Met inclusion and exclusion criteria	214,231	0	214,231	0	214,231	0	214,231	0
Met event incidence criteria	214,231	0	214,231	0	214,231	0	214,231	0
Cohort episodes with required post-ind	ex follow-up							
Had sufficient post-index continuous enrollment	214,231	0	135,970	78,261	214,231	0	135,970	78,261
Met minimum days' supply criteria	214,231	0	135,970	0	214,231	0	135,970	0
Met minimum episode duration criteria	214,231	0	135,970	0	214,231	0	135,970	0
Episode duration was longer than blackout period	214,231	0	135,970	0	214,231	0	135,970	0
Did not have an event during blackout period	214,231	0	135,970	0	214,231	0	135,970	0
Final cohort								
Number of members	200,926	N/A	127,912	N/A	200,926	N/A	127,912	N/A
Number of episodes	214,231	N/A	135,970	N/A	214,231	N/A	135,970	N/A

Table 5. Summary of Episode Level Cohort Attrition in the Sentinel Distributed Database (SDD) from January 1, 2008 to May 31, 2022



	Beta Blockers	(50% Overlap)		6 Overlap and Post- nt Requirement)	Beta Blockers (1	L00% Overlap)		% Overlap and Post- nt Requirement)
	Remaining	Excluded	Remaining	Excluded	Remaining	Excluded	Remaining	Excluded
Members meeting enrollment and requirements	l demographic							
Enrolled at any point during the query period	369,188,000	N/A	369,188,000	N/A	369,188,000	N/A	369,188,000	N/A
Had required coverage type (medical and/or drug coverage)	293,274,605 273,556,345	75,913,395 19,718,260	293,274,605 273,556,345	75,913,395 19,718,260	293,274,605 273,556,345	75,913,395 19,718,260	293,274,605 273,556,345	75,913,395 19,718,260
	273,214,646	341,699	273,214,646	341,699	273,214,646	341,699	273,214,646	341,699
Enrolled during specified age range	119,159,837	154,054,809	119,159,837	154,054,809	119,159,837	154,054,809	119,159,837	154,054,809
Had requestable medical charts	119,159,837	0	119,159,837	0	119,159,837	0	119,159,837	0
Met demographic requirements (sex, race, and Hispanic origin)	119,104,523	55,314	119,104,523	55,314	119,104,523	55,314	119,104,523	55,314
Had any cohort-defining claim during the query period	994,369	118,110,154	994,369	118,110,154	994,369	118,110,154	994,369	118,110,154
Total number of claims with cohort-identifying codes during the query period Claim recorded during specified age range	5,149,302 1,598,641	N/A 3,550,661	5,149,302 1,598,641	N/A 3,550,661	5,149,302 1,598,641	N/A 3,550,661	5,149,302 1,598,641	N/A 3,550,661
Episode defining index claim recorded during the query period	299,409	1,299,232	299,409	1,299,232	299,409	1,299,232	299,409	1,299,232

Table 5. Summary of Episode Level Cohort Attrition in the Sentinel Distributed Database (SDD) from January 1, 2008 to May 31, 2022



	Beta Blockers (50% Overlap)	Beta Blockers (50% Index Enrollmer	•	Beta Blockers (1	00% Overlap)	Beta Blockers (100% Overlap and Index Enrollment Requirement	
	Remaining	Excluded	Remaining	Excluded	Remaining	Excluded	Remaining	Excluded
Members meeting enrollment and requirements	demographic		•					
Met exposure incidence criteria	299,409	0	299,409	0	299,409	0	299,409	0
	214 221	05 170	24.4.224	05 170	214 221	05 170	214 224	05 170
Had sufficient pre-index continuous enrollment	214,231	85,178	214,231	85,178	214,231	85,178	214,231	85,178
Met inclusion and exclusion criteria	214,231	0	214,231	0	214,231	0	214,231	0
Met event incidence criteria	214,231	0	214,231	0	214,231	0	214,231	0
Had sufficient post-index continuous enrollment	214,231	0	135,970	78,261	214,231	0	135,970	78,261
Met minimum days' supply criteria	214,231	0	135,970	0	214,231	0	135,970	0
Met minimum episode duration criteria	214,231	0	135,970	0	214,231	0	135,970	0
Episode duration was longer than plackout period	214,231	0	135,970	0	214,231	0	135,970	0
Did not have an event during blackout period	214,231	0	135,970	0	214,231	0	135,970	0
Number of members	200,926	N/A	127,912	N/A	200,926	N/A	127,912	N/A
Number of episodes	214,231	N/A	135,970	N/A	214,231	N/A	135,970	N/A

Table 5. Summary of Episode Level Cohort Attrition in the Sentinel Distributed Database (SDD) from January 1, 2008 to May 31, 2022



Masked DP ID	DP Start Date	DP End Date ¹
DP01	01/01/2008	12/31/2021
DP02	01/01/2000	12/31/2020
DP03	01/01/2014	12/31/2018
DP04	01/01/2000	06/30/2020
DP05	01/01/2000	05/31/2022
DP06	01/01/2006	02/28/2022
DP07	01/01/2008	12/31/2021
DP08	01/01/2007	01/31/2022

Appendix A. Dates of Available Data for Each Data Partner (DP) as of Request Distribution Date (September 27, 2022)

¹End Date represents the earliest of: (1) query end date, or (2) last day of the most recent month for which all of a Data Partner's data tables (enrollment, dispensing, etc.) have at least 80% of the record count relative to the prior month.



Appendix B. List of Generic and Brand Names of Medical Products Used to Define Exposures in this Request

Generic Name	Brand Name
	Metoprolol
metoprolol succinate	Kapspargo Sprinkle
netoprolol succinate	Toprol XL
netoprolol succinate	metoprolol succinate
netoprolol succinate/hydrochlorothiazide	Dutoprol
netoprolol succinate/hydrochlorothiazide	metoprolol su-hydrochlorothiaz
netoprolol tartrate	Lopressor
netoprolol tartrate	metoprolol tartrate
netoprolol tartrate/dietary supplement,comb.10	Hypertensolol
netoprolol tartrate/hydrochlorothiazide	Lopressor HCT
netoprolol tartrate/hydrochlorothiazide	metoprolol ta-hydrochlorothiaz
	toprolol (Extended Release)
netoprolol succinate	Kapspargo Sprinkle
netoprolol succinate	Toprol XL
netoprolol succinate	metoprolol succinate
netoprolol succinate/hydrochlorothiazide	Dutoprol
netoprolol succinate/hydrochlorothiazide	metoprolol su-hydrochlorothiaz
	Metoprolol (Regular)
netoprolol tartrate	Lopressor
netoprolol tartrate	metoprolol tartrate
netoprolol tartrate/dietary supplement,comb.10	Hypertensolol
netoprolol tartrate/hydrochlorothiazide	Lopressor HCT
netoprolol tartrate/hydrochlorothiazide	metoprolol ta-hydrochlorothiaz
	Propranolol
ropranolol HCl	Hemangeol
propranolol HCl	Inderal
propranolol HCl	Inderal LA
propranolol HCl	Inderal XL
propranolol HCl	InnoPran XL
propranolol HCl	propranolol
propranolol HCl	propranolol (bulk)
propranolol HCl/hydrochlorothiazide	Inderide
propranolol HCl/hydrochlorothiazide	propranolol-hydrochlorothiazid
	pranolol (Extended Release)
propranolol HCl	Inderal LA
propranolol HCl	Inderal XL
propranolol HCl	InnoPran XL
propranolol HCl	propranolol
	Propranolol (Regular)
propranolol HCl	Hemangeol
propranolol HCl	Inderal
propranolol HCl	propranolol
propranolol HCl	propranolol (bulk)
propranolol HCl/hydrochlorothiazide	Inderide
propranolol HCl/hydrochlorothiazide	propranolol-hydrochlorothiazid
	Propranolol (Hemangeol)
propranolol HCl	Hemangeol
	Acebutolol
cebutolol HCl	Sectral
icebutolol HCl	acebutolol
	Atenolol
tenolol	Tenormin
itenolol	atenolol
atenolol/chlorthalidone	Tenoretic 100
atenolol/chlorthalidone	Tenoretic 50
atenolol/chlorthalidone	atenolol-chlorthalidone



Appendix B. List of Generic and Brand Names of Medical Products Used to Define Exposures in this Request

Generic Name	Brand Name
	Betaxolol
betaxolol HCl	Kerlone
betaxolol HCl	betaxolol
	Carvedilol
carvedilol	Coreg
carvedilol	carvedilol
carvedilol phosphate	Coreg CR
carvedilol phosphate	carvedilol phosphate
	Labetalol
labetalol HCl	Normodyne
labetalol HCl	Trandate
labetalol HCl	labetalol
labetalol HCl in dextrose, iso-osmotic	labetalol in dextrose,iso-osm
labetalol HCl in sodium chloride, iso-osmotic	labetalol in NaCl (iso-osmot)
labetalol in dextrose 5 % in water	labetalol in dextrose 5 %
	Nadolol
nadolol	Corgard
nadolol	nadolol
nadolol/bendroflumethiazide	Corzide
nadolol/bendroflumethiazide	nadolol-bendroflumethiazide
	Nebivolol
nebivolol HCl	Bystolic
nebivolol HCl	nebivolol
nebivolol HCl/valsartan	Byvalson
	Pindolol
pindolol	pindolol
	Sotalol
sotalol HCl	Betapace
sotalol HCl	Betapace AF
sotalol HCI	Sorine
sotalol HCl	Sotalol AF
sotalol HCI	Sotylize
sotalol HCl	sotalol
	Timolol
timolol maleate	timolol maleate



Appendix C. List of Generic and Brand Names of Medical Products Used to Define Covariates in this Request

Generic Name	Brand Name
	Metoprolol
metoprolol succinate	Kapspargo Sprinkle
netoprolol succinate	Toprol XL
netoprolol succinate	metoprolol succinate
netoprolol succinate/hydrochlorothiazide	Dutoprol
netoprolol succinate/hydrochlorothiazide	metoprolol su-hydrochlorothiaz
netoprolol tartrate	Lopressor
netoprolol tartrate	metoprolol tartrate
netoprolol tartrate/dietary supplement,comb.10	Hypertensolol
netoprolol tartrate/hydrochlorothiazide	Lopressor HCT
netoprolol tartrate/hydrochlorothiazide	metoprolol ta-hydrochlorothiaz
	oprolol (Extended Release)
netoprolol succinate	Kapspargo Sprinkle
netoprolol succinate	Toprol XL
netoprolol succinate	metoprolol succinate
netoprolol succinate/hydrochlorothiazide	Dutoprol
netoprolol succinate/hydrochlorothiazide	metoprolol su-hydrochlorothiaz
	Metoprolol (Regular)
netoprolol tartrate	Lopressor
netoprolol tartrate	metoprolol tartrate
netoprolol tartrate/dietary supplement,comb.10	Hypertensolol
netoprolol tartrate/hydrochlorothiazide	Lopressor HCT
netoprolol tartrate/hydrochlorothiazide	
netoproior tartrate/hydrochlorothlazide	metoprolol ta-hydrochlorothiaz Propranolol
prograpolol HCI	•
propranolol HCl	Hemangeol
propranolol HCl	Inderal Inderal I
propranolol HCl	Inderal LA
propranolol HCl	Inderal XL
propranolol HCl	InnoPran XL
propranolol HCI	propranolol
propranolol HCl	propranolol (bulk)
propranolol HCl/hydrochlorothiazide	Inderide
propranolol HCl/hydrochlorothiazide	propranolol-hydrochlorothiazid
	ranolol (Extended Release)
propranolol HCI	Inderal LA
propranolol HCl	Inderal XL
propranolol HCI	InnoPran XL
propranolol HCI	propranolol
	Propranolol (Regular)
propranolol HCl	Hemangeol
propranolol HCl	Inderal
propranolol HCl	propranolol
propranolol HCl	propranolol (bulk)
propranolol HCl/hydrochlorothiazide	Inderide
propranolol HCl/hydrochlorothiazide	propranolol-hydrochlorothiazid
	opranolol (Hemangeol)
propranolol HCI	Hemangeol
	Acebutolol
acebutolol HCl	Sectral
acebutolol HCl	acebutolol
	Atenolol
atenolol	Tenormin
atenolol	atenolol
atenolol/chlorthalidone	Tenoretic 100
atenolol/chlorthalidone	Tenoretic 50



Appendix C. List of Generic and Brand Names of Medical Products Used to Define Covariates in this Request

Generic Name	Brand Name
	Betaxolol
betaxolol HCl	Kerlone
betaxolol HCl	betaxolol
	Carvedilol
carvedilol	Coreg
carvedilol	carvedilol
carvedilol phosphate	Coreg CR
carvedilol phosphate	carvedilol phosphate
	Labetalol
labetalol HCl	Normodyne
labetalol HCl	Trandate
labetalol HCl	labetalol
labetalol HCl in dextrose, iso-osmotic	labetalol in dextrose, iso-osm
labetalol HCl in sodium chloride, iso-osmotic	labetalol in NaCl (iso-osmot)
labetalol in dextrose 5 % in water	labetalol in dextrose 5 %
	Nadolol
nadolol	Corgard
nadolol	nadolol
nadolol/bendroflumethiazide	Corzide
nadolol/bendroflumethiazide	nadolol-bendroflumethiazide
	Nebivolol
nebivolol HCl	Bystolic
nebivolol HCl	nebivolol
nebivolol HCI/valsartan	Byvalson
	Pindolol
pindolol	pindolol
	Sotalol
sotalol HCl	Betapace
sotalol HCl	Betapace AF
sotalol HCl	Sorine
sotalol HCl	Sotalol AF
sotalol HCl	Sotylize
sotalol HCl	sotalol
	Timolol
timolol maleate	timolol maleate



Code	Description	Code Category	Code Type
262.44	Hypertension		
362.11	Hypertensive retinopathy	Diagnosis	ICD-9-CM
401.0	Essential hypertension, malignant	Diagnosis	ICD-9-CM
401.1	Essential hypertension, benign	Diagnosis	ICD-9-CM
401.9	Unspecified essential hypertension	Diagnosis	ICD-9-CM
402.00	Malignant hypertensive heart disease without heart failure	Diagnosis	ICD-9-CM
402.01	Malignant hypertensive heart disease with heart failure	Diagnosis	ICD-9-CM
402.10	Benign hypertensive heart disease without heart failure	Diagnosis	ICD-9-CM
402.11	Benign hypertensive heart disease with heart failure	Diagnosis	ICD-9-CM
402.90	Unspecified hypertensive heart disease without heart failure	Diagnosis	ICD-9-CM
402.91	Hypertensive heart disease, unspecified, with heart failure	Diagnosis	ICD-9-CM
403.00	Hypertensive chronic kidney disease, malignant, with chronic kidney disease stage I through stage IV, or unspecified	-	
		Diagnosis	ICD-9-CM
403.01	Hypertensive chronic kidney disease, malignant, with chronic kidney disease stage V or end stage renal disease		
		Diagnosis	ICD-9-CM
403.10	Hypertensive chronic kidney disease, benign, with chronic kidney disease stage I through stage IV, or unspecified		
102.11		Diagnosis	ICD-9-CM
403.11	Hypertensive chronic kidney disease, benign, with chronic kidney disease stage V or end stage renal disease		
403.90	Hypertensive chronic kidney disease, unspecified, with chronic kidney disease stage I through stage IV, or unspecified	Diagnosis	ICD-9-CM
403.90	Hypertensive enrolle kulley disease, dispectified, with enrolle kulley disease stage i through stage iv, or dispectified	Diagnosis	ICD-9-CM
403.91	Hypertensive chronic kidney disease, unspecified, with chronic kidney disease stage V or end stage renal disease	Diagnosis	ICD-9-CIVI
		Diagnosis	ICD-9-CM
404.00	Hypertensive heart and chronic kidney disease, malignant, without heart failure and with chronic kidney disease stage I through stage IV, or	2108.0000	
	unspecified	Diagnosis	ICD-9-CM
404.01	Hypertensive heart and chronic kidney disease, malignant, with heart failure and with chronic kidney disease stage I through stage IV, or unspecified	Diagnosis	
		Diagnosis	
		Diagnosis	ICD-9-CM



Code	Description	Code Category	Code Type
404.02	Hypertensive heart and chronic kidney disease, malignant, without heart failure and with chronic kidney disease stage V or end stage renal disease		
404.03	Hypertensive heart and chronic kidney disease, malignant, with heart failure and with chronic kidney disease stage V or end stage renal disease	Diagnosis	ICD-9-CM
404.10	Hypertensive heart and chronic kidney disease, benign, without heart failure and with chronic kidney disease stage I through stage IV, or unspecified	Diagnosis	ICD-9-CM
404.11	Hypertensive heart and chronic kidney disease, benign, with heart failure and with chronic kidney disease stage I through stage IV, or unspecified	Diagnosis	ICD-9-CM
404.12	Hypertensive heart and chronic kidney disease, benign, without heart failure and with chronic kidney disease stage V or end stage renal disease	Diagnosis	ICD-9-CM
404.13	Hypertensive heart and chronic kidney disease, benign, with heart failure and chronic kidney disease stage V or end stage renal disease	Diagnosis	ICD-9-CM
404.90	Hypertensive heart and chronic kidney disease, unspecified, without heart failure and with chronic kidney disease stage I through stage IV, or	Diagnosis	ICD-9-CM
404.91	unspecified Hypertensive heart and chronic kidney disease, unspecified, with heart failure and with chronic kidney disease stage I through stage IV, or unspecified	Diagnosis	ICD-9-CM
404.92	Hypertensive heart and chronic kidney disease, unspecified, without heart failure and with chronic kidney disease stage V or end stage renal disease	Diagnosis	ICD-9-CM
404.93	Hypertensive heart and chronic kidney disease, unspecified, with heart failure and chronic kidney disease stage V or end stage renal disease	Diagnosis	ICD-9-CM
		Diagnosis	ICD-9-CM
405.01	Secondary renovascular hypertension, malignant	Diagnosis	ICD-9-CM
405.09	Other secondary hypertension, malignant	Diagnosis	ICD-9-CM
405.11	Secondary renovascular hypertension, benign	Diagnosis	ICD-9-CM
405.19	Other secondary hypertension, benign	Diagnosis	ICD-9-CM
405.91	Secondary renovascular hypertension, unspecified	Diagnosis	ICD-9-CM
405.99	Other secondary hypertension, unspecified	Diagnosis	ICD-9-CM
437.2	Hypertensive encephalopathy	Diagnosis	ICD-9-CM



Code	Description	Code Category	Code Type
H35.031	Hypertensive retinopathy, right eye	Diagnosis	ICD-10-CM
H35.032	Hypertensive retinopathy, left eye	Diagnosis	ICD-10-CM
H35.033	Hypertensive retinopathy, bilateral	Diagnosis	ICD-10-CM
H35.039	Hypertensive retinopathy, unspecified eye	Diagnosis	ICD-10-CM
110	Essential (primary) hypertension	Diagnosis	ICD-10-CM
111.0	Hypertensive heart disease with heart failure	Diagnosis	ICD-10-CM
111.9	Hypertensive heart disease without heart failure	Diagnosis	ICD-10-CM
112.0	Hypertensive chronic kidney disease with stage 5 chronic kidney disease or end stage renal disease		
		Diagnosis	ICD-10-CM
112.9	Hypertensive chronic kidney disease with stage 1 through stage 4 chronic kidney disease, or unspecified chronic kidney disease		
		Diagnosis	ICD-10-CM
113.0	Hypertensive heart and chronic kidney disease with heart failure and stage 1 through stage 4 chronic kidney disease, or unspecified chronic kidney		
	disease	Diagnosis	ICD-10-CM
113.10	Hypertensive heart and chronic kidney disease without heart failure, with stage 1 through stage 4 chronic kidney disease, or unspecified chronic kidney	4	
	disease	Diagnosis	ICD-10-CM
113.11	Hypertensive heart and chronic kidney disease without heart failure, with stage 5 chronic kidney disease, or end stage renal disease		
		Diagnosis	ICD-10-CM
113.2	Hypertensive heart and chronic kidney disease with heart failure and with stage 5 chronic kidney disease, or end stage renal disease		
		Diagnosis	ICD-10-CM
115.0	Renovascular hypertension	Diagnosis	ICD-10-CM
115.1	Hypertension secondary to other renal disorders	Diagnosis	ICD-10-CM
115.2	Hypertension secondary to endocrine disorders	Diagnosis	ICD-10-CM
115.8	Other secondary hypertension	Diagnosis	ICD-10-CM
115.9	Secondary hypertension, unspecified	Diagnosis	ICD-10-CM
167.4	Hypertensive encephalopathy	Diagnosis	ICD-10-CM
N26.2	Page kidney	Diagnosis	ICD-10-CM
		5	



Code	Description	Code Category	Code Type
	Hemangioma		
228	Hemangioma and lymphangioma, any site	Diagnosis	ICD-9-CM
228.0	Hemangioma, any site	Diagnosis	ICD-9-CM
228.00	Hemangioma of unspecified site	Diagnosis	ICD-9-CM
228.01	Hemangioma of skin and subcutaneous tissue	Diagnosis	ICD-9-CM
228.02	Hemangioma of intracranial structures	Diagnosis	ICD-9-CM
228.03	Hemangioma of retina	Diagnosis	ICD-9-CM
228.04	Hemangioma of intra-abdominal structures	Diagnosis	ICD-9-CM
228.09	Hemangioma of other sites	Diagnosis	ICD-9-CM
D18	Hemangioma and lymphangioma, any site	Diagnosis	ICD-10-CM
D18.0	Hemangioma	Diagnosis	ICD-10-CM
D18.00	Hemangioma unspecified site	Diagnosis	ICD-10-CM
D18.01	Hemangioma of skin and subcutaneous tissue	Diagnosis	ICD-10-CM
D18.02	Hemangioma of intracranial structures	Diagnosis	ICD-10-CM
D18.03	Hemangioma of intra-abdominal structures	Diagnosis	ICD-10-CM
D18.09	Hemangioma of other sites	Diagnosis	ICD-10-CM
	Heart Failure		
398.91	Rheumatic heart failure (congestive)	Diagnosis	ICD-9-CM
402.01	Malignant hypertensive heart disease with heart failure	Diagnosis	ICD-9-CM
402.11	Benign hypertensive heart disease with heart failure	Diagnosis	ICD-9-CM
402.91	Hypertensive heart disease, unspecified, with heart failure	C C	
		Diagnosis	ICD-9-CM
404.01	Hypertensive heart and chronic kidney disease, malignant, with heart failure and with chronic kidney disease stage I through stage IV, or unspecified	0	
		Diagnosis	ICD-9-CM
404.03	Hypertensive heart and chronic kidney disease, malignant, with heart failure and with chronic kidney disease stage V or end stage renal disease		
		Diagnosis	ICD-9-CM
		BigBigBig	



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Code 404.11	Description Hypertensive heart and chronic kidney disease, benign, with heart failure and with chronic kidney disease stage I through stage IV, or unspecified	Code Category	Code Type
404.11	Hypertensive heart and chronic kidney disease, benign, with heart failure and chronic kidney disease stage V or end stage renal disease	Diagnosis	ICD-9-CM
404.91	Hypertensive heart and chronic kidney disease, unspecified, with heart failure and with chronic kidney disease stage I through stage IV, or unspecified	Diagnosis	ICD-9-CM
404.93 415.0	Hypertensive heart and chronic kidney disease, unspecified, with heart failure and chronic kidney disease stage V or end stage renal disease Acute cor pulmonale	Diagnosis Diagnosis	ICD-9-CM ICD-9-CM
428.0	Congestive heart failure, unspecified	Diagnosis Diagnosis	ICD-9-CM ICD-9-CM
428.20	Unspecified systolic heart failure	Diagnosis	ICD-9-CM
428.21	Acute systolic heart failure	Diagnosis	ICD-9-CM
428.22	Chronic systolic heart failure	Diagnosis	ICD-9-CM
428.23	Acute on chronic systolic heart failure	Diagnosis	ICD-9-CM
428.30	Unspecified diastolic heart failure	Diagnosis	ICD-9-CM
428.31	Acute diastolic heart failure	Diagnosis	ICD-9-CM
428.32	Chronic diastolic heart failure	Diagnosis	ICD-9-CM
428.33	Acute on chronic diastolic heart failure	Diagnosis	ICD-9-CM
428.40	Unspecified combined systolic and diastolic heart failure	Diagnosis	ICD-9-CM
428.41	Acute combined systolic and diastolic heart failure	Diagnosis	ICD-9-CM
428.42	Chronic combined systolic and diastolic heart failure	Diagnosis	ICD-9-CM
428.43	Acute on chronic combined systolic and diastolic heart failure	Diagnosis	ICD-9-CM
428.9	Unspecified heart failure	Diagnosis	ICD-9-CM
G8451	Beta-blocker therapy for lvef < 40% not prescribed for reasons documented by the clinician (e.g., low blood pressure, fluid overload, asthma, patients	Procedure	HCPCS
G8694	Left ventricular ejection fraction (lvef) < 40%	Procedure	HCPCS
G8738	Left ventricular ejection fraction (lvef) < 40% or documentation of severely or moderately depressed left ventricular systolic function	Procedure	HCPCS



Code	Description	Code Category	Code Type
G8923	Left ventricular ejection fraction (lvef) < 40% or documentation of moderately or severely depressed left ventricular systolic function		
		Procedure	HCPCS
G8934	Left ventricular ejection fraction (lvef) <40% or documentation of moderately or severely depressed left ventricular systolic function	Procedure	HCPCS
109.81	Rheumatic heart failure	Diagnosis	ICD-10-CM
111.0	Hypertensive heart disease with heart failure		
		Diagnosis	ICD-10-CM
113.0	Hypertensive heart and chronic kidney disease with heart failure and stage 1 through stage 4 chronic kidney disease, or unspecified chronic kidney		
	disease	Diagnosis	ICD-10-CM
113.2	Hypertensive heart and chronic kidney disease with heart failure and with stage 5 chronic kidney disease, or end stage renal disease	Diagnosis	ICD-10-CM
126.01	Septic pulmonary embolism with acute cor pulmonale	Diagnosis	ICD-10-CM
126.02	Saddle embolus of pulmonary artery with acute cor pulmonale	Diagnosis	ICD-10-CM
126.09	Other pulmonary embolism with acute cor pulmonale	Diagnosis	ICD-10-CM
127.81	Cor pulmonale (chronic)	Diagnosis	ICD-10-CM
127.83	Eisenmenger's syndrome	Diagnosis	ICD-10-CM
150.2	Systolic (congestive) heart failure	Diagnosis	ICD-10-CM
150.20	Unspecified systolic (congestive) heart failure	Diagnosis	ICD-10-CM
150.21	Acute systolic (congestive) heart failure	Diagnosis	ICD-10-CM
150.22	Chronic systolic (congestive) heart failure	Diagnosis	ICD-10-CM
150.23	Acute on chronic systolic (congestive) heart failure	Diagnosis	ICD-10-CM
150.3	Diastolic (congestive) heart failure	Diagnosis	ICD-10-CM
150.30	Unspecified diastolic (congestive) heart failure	Diagnosis	ICD-10-CM
150.31	Acute diastolic (congestive) heart failure	Diagnosis	ICD-10-CM
150.32	Chronic diastolic (congestive) heart failure	Diagnosis	ICD-10-CM
150.33	Acute on chronic diastolic (congestive) heart failure	Diagnosis	ICD-10-CM
150.4	Combined systolic (congestive) and diastolic (congestive) heart failure	Diagnosis	ICD-10-CM
150.40	Unspecified combined systolic (congestive) and diastolic (congestive) heart failure	Diagnosis	ICD-10-CM
150.41	Acute combined systolic (congestive) and diastolic (congestive) heart failure	Diagnosis	ICD-10-CM
		Diagnosis	



Code 150.42	Description Chronic combined systolic (congestive) and diastolic (congestive) heart failure	Code Category	Code Type
130.42	Chronic combined systolic (congestive) and diastolic (congestive) field (fallule	Diagnosis	ICD-10-CM
150.43	Acute on chronic combined systolic (congestive) and diastolic (congestive) heart failure	Diagnosis	ICD-10-CM
150.81	Right heart failure	Diagnosis	ICD-10-CM
150.810	Right heart failure, unspecified	Diagnosis	ICD-10-CM
150.811	Acute right heart failure	Diagnosis	ICD-10-CM
150.812	Chronic right heart failure	Diagnosis	ICD-10-CM
150.813	Acute on chronic right heart failure	Diagnosis	ICD-10-CM
150.814	Right heart failure due to left heart failure	Diagnosis	ICD-10-CM
150.82	Biventricular heart failure	Diagnosis	ICD-10-CM
150.83	High output heart failure	Diagnosis	ICD-10-CM
150.84	End stage heart failure	Diagnosis	ICD-10-CM
150.89	Other heart failure	Diagnosis	ICD-10-CM
150.9	Heart failure, unspecified	Diagnosis	ICD-10-CM
	Congenital Heart Disease		
745	Bulbus cordis anomalies and anomalies of cardiac septal closure	Diagnosis	ICD-9-CM
745.0	Bulbus cordis anomalies and anomalies of cardiac septal closure, common truncus	Diagnosis	ICD-9-CM
745.1	Transposition of great vessels	Diagnosis	ICD-9-CM
745.10	Complete transposition of great vessels	Diagnosis	ICD-9-CM
745.11	Transposition of great vessels, double outlet right ventricle	Diagnosis	ICD-9-CM
745.12	Corrected transposition of great vessels	Diagnosis	ICD-9-CM
745.19	Other transposition of great vessels	Diagnosis	ICD-9-CM
745.2	Tetralogy of Fallot	Diagnosis	ICD-9-CM
745.3	Bulbus cordis anomalies and anomalies of cardiac septal closure, common ventricle	Diagnosis	ICD-9-CM
745.4	Ventricular septal defect	Diagnosis	ICD-9-CM
745.5	Ostium secundum type atrial septal defect	Diagnosis	ICD-9-CM
745.6	Endocardial cushion defects	Diagnosis	ICD-9-CM
		-	



Code	Description	Code Category	Code Type
745.60	Unspecified type congenital endocardial cushion defect	Diagnosis	ICD-9-CM
745.61	Ostium primum defect	Diagnosis	ICD-9-CM
745.69	Other congenital endocardial cushion defect	Diagnosis	ICD-9-CM
745.7	Cor biloculare	Diagnosis	ICD-9-CM
745.8	Other bulbus cordis anomalies and anomalies of cardiac septal closure	Diagnosis	ICD-9-CM
745.9	Unspecified congenital defect of septal closure	Diagnosis	ICD-9-CM
746	Other congenital anomalies of heart	Diagnosis	ICD-9-CM
746.0	Congenital anomalies of pulmonary valve	Diagnosis	ICD-9-CM
746.00	Unspecified congenital pulmonary valve anomaly	Diagnosis	ICD-9-CM
746.01	Congenital atresia of pulmonary valve	Diagnosis	ICD-9-CM
746.02	Congenital stenosis of pulmonary valve	Diagnosis	ICD-9-CM
746.09	Other congenital anomalies of pulmonary valve	Diagnosis	ICD-9-CM
746.1	Congenital tricuspid atresia and stenosis	Diagnosis	ICD-9-CM
746.2	Ebstein's anomaly	Diagnosis	ICD-9-CM
746.3	Congenital stenosis of aortic valve	Diagnosis	ICD-9-CM
746.4	Congenital insufficiency of aortic valve	Diagnosis	ICD-9-CM
746.5	Congenital mitral stenosis	Diagnosis	ICD-9-CM
746.6	Congenital mitral insufficiency	Diagnosis	ICD-9-CM
746.7	Hypoplastic left heart syndrome	Diagnosis	ICD-9-CM
746.8	Other specified congenital anomaly of heart	Diagnosis	ICD-9-CM
746.81	Congenital subaortic stenosis	Diagnosis	ICD-9-CM
746.82	Cor triatriatum	Diagnosis	ICD-9-CM
746.83	Congenital infundibular pulmonic stenosis	Diagnosis	ICD-9-CM
746.84	Congenital obstructive anomalies of heart, not elsewhere classified	Diagnosis	ICD-9-CM
746.85	Congenital coronary artery anomaly	Diagnosis	ICD-9-CM
746.86	Congenital heart block	Diagnosis	ICD-9-CM
	-	Diagnosis	



Code	Description	Code Category	Code Type
746.87	Congenital malposition of heart and cardiac apex	Diagnosis	ICD-9-CM
746.89	Other specified congenital anomaly of heart	Diagnosis	ICD-9-CM
746.9	Unspecified congenital anomaly of heart	Diagnosis	ICD-9-CM
747	Other congenital anomalies of circulatory system	Diagnosis	ICD-9-CM
747.0	Patent ductus arteriosus	Diagnosis	ICD-9-CM
747.1	Coarctation of aorta	Diagnosis	ICD-9-CM
747.10	Coarctation of aorta (preductal) (postductal)	Diagnosis	ICD-9-CM
747.11	Congenital interruption of aortic arch	Diagnosis	ICD-9-CM
747.2	Other congenital anomaly of aorta	Diagnosis	ICD-9-CM
747.20	Unspecified congenital anomaly of aorta	Diagnosis	ICD-9-CM
747.21	Congenital anomaly of aortic arch	Diagnosis	ICD-9-CM
747.22	Congenital atresia and stenosis of aorta	Diagnosis	ICD-9-CM
747.29	Other congenital anomaly of aorta	Diagnosis	ICD-9-CM
747.3	Anomalies of pulmonary artery	Diagnosis	ICD-9-CM
747.31	Pulmonary artery coarctation and atresia	Diagnosis	ICD-9-CM
747.32	Pulmonary arteriovenous malformation	Diagnosis	ICD-9-CM
747.39	Other anomalies of pulmonary artery and pulmonary circulation	Diagnosis	ICD-9-CM
747.4	Congenital anomalies of great veins	Diagnosis	ICD-9-CM
747.40	Congenital anomaly of great veins unspecified	Diagnosis	ICD-9-CM
747.41	Total congenital anomalous pulmonary venous connection	Diagnosis	ICD-9-CM
747.42	Partial congenital anomalous pulmonary venous connection	Diagnosis	ICD-9-CM
747.49	Other congenital anomalies of great veins	Diagnosis	ICD-9-CM
747.89	Other specified congenital anomaly of circulatory system	Diagnosis	ICD-9-CM
747.9	Unspecified congenital anomaly of circulatory system	Diagnosis	ICD-9-CM
127.83	Eisenmenger's syndrome	Diagnosis	ICD-10-CM
P09.5	Abnormal findings on neonatal screening for critical congenital heart disease	Diagnosis	ICD-10-CM
		0	



Code	Description	Code Category	Code Type
Q20	Congenital malformations of cardiac chambers and connections	Diagnosis	ICD-10-CM
Q20.0	Common arterial trunk	Diagnosis	ICD-10-CM
Q20.1	Double outlet right ventricle	Diagnosis	ICD-10-CM
Q20.2	Double outlet left ventricle	Diagnosis	ICD-10-CM
Q20.3	Discordant ventriculoarterial connection	Diagnosis	ICD-10-CM
Q20.4	Double inlet ventricle	Diagnosis	ICD-10-CM
Q20.5	Discordant atrioventricular connection	Diagnosis	ICD-10-CM
Q20.6	Isomerism of atrial appendages	Diagnosis	ICD-10-CM
Q20.8	Other congenital malformations of cardiac chambers and connections	Diagnosis	ICD-10-CM
Q20.9	Congenital malformation of cardiac chambers and connections, unspecified	Diagnosis	ICD-10-CM
Q21	Congenital malformations of cardiac septa	Diagnosis	ICD-10-CM
Q21.0	Ventricular septal defect	Diagnosis	ICD-10-CM
Q21.1	Atrial septal defect	Diagnosis	ICD-10-CM
Q21.2	Atrioventricular septal defect	Diagnosis	ICD-10-CM
Q21.3	Tetralogy of Fallot	Diagnosis	ICD-10-CM
Q21.4	Aortopulmonary septal defect	Diagnosis	ICD-10-CM
Q21.8	Other congenital malformations of cardiac septa	Diagnosis	ICD-10-CM
Q21.9	Congenital malformation of cardiac septum, unspecified	Diagnosis	ICD-10-CM
Q22	Congenital malformations of pulmonary and tricuspid valves	Diagnosis	ICD-10-CM
Q22.0	Pulmonary valve atresia	Diagnosis	ICD-10-CM
Q22.1	Congenital pulmonary valve stenosis	Diagnosis	ICD-10-CM
Q22.2	Congenital pulmonary valve insufficiency	Diagnosis	ICD-10-CM
Q22.3	Other congenital malformations of pulmonary valve	Diagnosis	ICD-10-CM
Q22.4	Congenital tricuspid stenosis	Diagnosis	ICD-10-CM
Q22.5	Ebstein's anomaly	Diagnosis	ICD-10-CM
Q22.6	Hypoplastic right heart syndrome	Diagnosis	ICD-10-CM
		Diagnosis	



Code	Description	Code Category	Code Type
Q22.8	Other congenital malformations of tricuspid valve	Diagnosis	ICD-10-CM
Q22.9	Congenital malformation of tricuspid valve, unspecified	Diagnosis	ICD-10-CM
Q23	Congenital malformations of aortic and mitral valves	Diagnosis	ICD-10-CM
Q23.0	Congenital stenosis of aortic valve	Diagnosis	ICD-10-CM
Q23.1	Congenital insufficiency of aortic valve	Diagnosis	ICD-10-CM
Q23.2	Congenital mitral stenosis	Diagnosis	ICD-10-CM
Q23.3	Congenital mitral insufficiency	Diagnosis	ICD-10-CM
Q23.4	Hypoplastic left heart syndrome	Diagnosis	ICD-10-CM
Q23.8	Other congenital malformations of aortic and mitral valves	Diagnosis	ICD-10-CM
Q23.9	Congenital malformation of aortic and mitral valves, unspecified	Diagnosis	ICD-10-CM
Q24	Other congenital malformations of heart	Diagnosis	ICD-10-CM
Q24.0	Dextrocardia	Diagnosis	ICD-10-CM
Q24.1	Levocardia	Diagnosis	ICD-10-CM
Q24.2	Cor triatriatum	Diagnosis	ICD-10-CM
Q24.3	Pulmonary infundibular stenosis	Diagnosis	ICD-10-CM
Q24.4	Congenital subaortic stenosis	Diagnosis	ICD-10-CM
Q24.5	Malformation of coronary vessels	Diagnosis	ICD-10-CM
Q24.6	Congenital heart block	Diagnosis	ICD-10-CM
Q24.8	Other specified congenital malformations of heart	Diagnosis	ICD-10-CM
Q24.9	Congenital malformation of heart, unspecified	Diagnosis	ICD-10-CM
Q25	Congenital malformations of great arteries	Diagnosis	ICD-10-CM
Q25.0	Patent ductus arteriosus	Diagnosis	ICD-10-CM
Q25.1	Coarctation of aorta	Diagnosis	ICD-10-CM
Q25.2	Atresia of aorta	Diagnosis	ICD-10-CM
Q25.21	Interruption of aortic arch	Diagnosis	ICD-10-CM
Q25.29	Other atresia of aorta	Diagnosis	ICD-10-CM
		5/06/105/5	



Code	Description	Code Category	Code Type
Q25.3	Supravalvular aortic stenosis	Diagnosis	ICD-10-CM
Q25.4	Other congenital malformations of aorta	Diagnosis	ICD-10-CM
Q25.40	Congenital malformation of aorta unspecified	Diagnosis	ICD-10-CM
Q25.41	Absence and aplasia of aorta	Diagnosis	ICD-10-CM
Q25.42	Hypoplasia of aorta	Diagnosis	ICD-10-CM
Q25.43	Congenital aneurysm of aorta	Diagnosis	ICD-10-CM
Q25.44	Congenital dilation of aorta	Diagnosis	ICD-10-CM
Q25.45	Double aortic arch	Diagnosis	ICD-10-CM
Q25.46	Tortuous aortic arch	Diagnosis	ICD-10-CM
Q25.47	Right aortic arch	Diagnosis	ICD-10-CM
Q25.48	Anomalous origin of subclavian artery	Diagnosis	ICD-10-CM
Q25.49	Other congenital malformations of aorta	Diagnosis	ICD-10-CM
Q25.5	Atresia of pulmonary artery	Diagnosis	ICD-10-CM
Q25.6	Stenosis of pulmonary artery	Diagnosis	ICD-10-CM
Q25.7	Other congenital malformations of pulmonary artery	Diagnosis	ICD-10-CM
Q25.71	Coarctation of pulmonary artery	Diagnosis	ICD-10-CM
Q25.72	Congenital pulmonary arteriovenous malformation	Diagnosis	ICD-10-CM
Q25.79	Other congenital malformations of pulmonary artery	Diagnosis	ICD-10-CM
Q25.8	Other congenital malformations of other great arteries	Diagnosis	ICD-10-CM
Q25.9	Congenital malformation of great arteries, unspecified	Diagnosis	ICD-10-CM
Q26	Congenital malformations of great veins	Diagnosis	ICD-10-CM
Q26.0	Congenital stenosis of vena cava	Diagnosis	ICD-10-CM
Q26.1	Persistent left superior vena cava	Diagnosis	ICD-10-CM
Q26.2	Total anomalous pulmonary venous connection	Diagnosis	ICD-10-CM
Q26.3	Partial anomalous pulmonary venous connection	Diagnosis	ICD-10-CM
Q26.4	Anomalous pulmonary venous connection, unspecified	Diagnosis	ICD-10-CM
		2.0010	



Code	Description	Code Category	Code Type
Q26.8	Other congenital malformations of great veins	Diagnosis	ICD-10-CM
Q26.9	Congenital malformation of great vein, unspecified	Diagnosis	ICD-10-CM
	Atrial Fibrillation		
427.3	Atrial fibrillation and flutter	Diagnosis	ICD-9-CM
427.31	Atrial fibrillation	Diagnosis	ICD-9-CM
148.0	Paroxysmal atrial fibrillation	Diagnosis	ICD-10-CM
148.1	Persistent atrial fibrillation	Diagnosis	ICD-10-CM
148.11	Longstanding persistent atrial fibrillation	Diagnosis	ICD-10-CM
148.19	Other persistent atrial fibrillation	Diagnosis	ICD-10-CM
148.2	Chronic atrial fibrillation	Diagnosis	ICD-10-CM
148.20	Chronic atrial fibrillation, unspecified	Diagnosis	ICD-10-CM
148.21	Permanent atrial fibrillation	Diagnosis	ICD-10-CM
148.91	Unspecified atrial fibrillation	Diagnosis	ICD-10-CM
	Long QT Syndrome		
426.82	Long QT syndrome	Diagnosis	ICD-9-CM
145.81	Long QT syndrome	Diagnosis	ICD-10-CM
	Other Cardiac Arrhythmias		
426	Conduction disorders	Diagnosis	ICD-9-CM
426.0	Atrioventricular block, complete	Diagnosis	ICD-9-CM
426.1	Atrioventricular block, other and unspecified	Diagnosis	ICD-9-CM
426.10	Unspecified atrioventricular block	Diagnosis	ICD-9-CM
426.11	First degree atrioventricular block	Diagnosis	ICD-9-CM
426.12	Mobitz (type) II atrioventricular block	Diagnosis	ICD-9-CM
426.13	Other second degree atrioventricular block	Diagnosis	ICD-9-CM
426.2	Left bundle branch hemiblock	Diagnosis	ICD-9-CM
426.3	Other left bundle branch block	Diagnosis	ICD-9-CM



Code	Description	Code Category	Code Type
426.4	Right bundle branch block	Diagnosis	ICD-9-CM
426.5	Bundle branch block, other and unspecified	Diagnosis	ICD-9-CM
426.50	Unspecified bundle branch block	Diagnosis	ICD-9-CM
426.51	Right bundle branch block and left posterior fascicular block	Diagnosis	ICD-9-CM
426.52	Right bundle branch block and left anterior fascicular block	Diagnosis	ICD-9-CM
426.53	Other bilateral bundle branch block	Diagnosis	ICD-9-CM
426.54	Trifascicular block	Diagnosis	ICD-9-CM
426.6	Other heart block	Diagnosis	ICD-9-CM
426.7	Anomalous atrioventricular excitation	Diagnosis	ICD-9-CM
426.8	Other specified conduction disorders	Diagnosis	ICD-9-CM
426.81	Lown-Ganong-Levine syndrome	Diagnosis	ICD-9-CM
426.89	Other specified conduction disorder	Diagnosis	ICD-9-CM
426.9	Unspecified conduction disorder	Diagnosis	ICD-9-CM
427.0	Paroxysmal supraventricular tachycardia	Diagnosis	ICD-9-CM
427.1	Paroxysmal ventricular tachycardia	Diagnosis	ICD-9-CM
427.2	Unspecified paroxysmal tachycardia	Diagnosis	ICD-9-CM
427.32	Atrial flutter	Diagnosis	ICD-9-CM
427.4	Ventricular fibrillation and flutter	Diagnosis	ICD-9-CM
427.41	Ventricular fibrillation	Diagnosis	ICD-9-CM
427.42	Ventricular flutter	Diagnosis	ICD-9-CM
427.5	Cardiac arrest	Diagnosis	ICD-9-CM
427.6	Premature beats	Diagnosis	ICD-9-CM
427.60	Unspecified premature beats	Diagnosis	ICD-9-CM
427.61	Supraventricular premature beats	Diagnosis	ICD-9-CM
427.69	Other premature beats	0	ICD-9-CM
427.8	Other specified cardiac dysrhythmias	Diagnosis	
,.0		Diagnosis	ICD-9-CM



Code	Description	Code Category	Code Type
427.81	Sinoatrial node dysfunction	Diagnosis	ICD-9-CM
427.89	Other specified cardiac dysrhythmias	Diagnosis	ICD-9-CM
427.9	Unspecified cardiac dysrhythmia	Diagnosis	ICD-9-CM
144	Atrioventricular and left bundle-branch block	Diagnosis	ICD-10-CM
144.0	Atrioventricular block, first degree	Diagnosis	ICD-10-CM
144.1	Atrioventricular block, second degree	Diagnosis	ICD-10-CM
144.2	Atrioventricular block, complete	Diagnosis	ICD-10-CM
144.3	Other and unspecified atrioventricular block	Diagnosis	ICD-10-CM
144.30	Unspecified atrioventricular block	Diagnosis	ICD-10-CM
144.39	Other atrioventricular block	Diagnosis	ICD-10-CM
144.4	Left anterior fascicular block	Diagnosis	ICD-10-CM
144.5	Left posterior fascicular block	Diagnosis	ICD-10-CM
144.6	Other and unspecified fasicular block	Diagnosis	ICD-10-CM
144.60	Unspecified fascicular block	Diagnosis	ICD-10-CM
144.69	Other fascicular block	Diagnosis	ICD-10-CM
144.7	Left bundle-branch block, unspecified	Diagnosis	ICD-10-CM
145	Other conduction disorders	Diagnosis	ICD-10-CM
145.0	Right fascicular block	Diagnosis	ICD-10-CM
145.1	Other and unspecified right bundle-branch block	Diagnosis	ICD-10-CM
145.10	Unspecified right bundle-branch block	Diagnosis	ICD-10-CM
145.19	Other right bundle-branch block	Diagnosis	ICD-10-CM
145.2	Bifascicular block	Diagnosis	ICD-10-CM
145.3	Trifascicular block	Diagnosis	ICD-10-CM
145.4	Nonspecific intraventricular block	Diagnosis	ICD-10-CM
145.5	Other specified heart block	Diagnosis	ICD-10-CM
145.6	Pre-excitation syndrome	Diagnosis	ICD-10-CM
		DiagilOSIS	



Code	Description	Code Category	Code Type
145.8	Other specified conduction disorders	Diagnosis	ICD-10-CM
145.89	Other specified conduction disorders	Diagnosis	ICD-10-CM
145.9	Conduction disorder, unspecified	Diagnosis	ICD-10-CM
146	Cardiac arrest	Diagnosis	ICD-10-CM
146.2	Cardiac arrest due to underlying cardiac condition	Diagnosis	ICD-10-CM
146.8	Cardiac arrest due to other underlying condition	Diagnosis	ICD-10-CM
146.9	Cardiac arrest, cause unspecified	Diagnosis	ICD-10-CM
147	Paroxysmal tachycardia	Diagnosis	ICD-10-CM
147.0	Re-entry ventricular arrhythmia	Diagnosis	ICD-10-CM
147.1	Supraventricular tachycardia	Diagnosis	ICD-10-CM
147.2	Ventricular tachycardia	Diagnosis	ICD-10-CM
147.9	Paroxysmal tachycardia, unspecified	Diagnosis	ICD-10-CM
148	Atrial fibrillation and flutter	Diagnosis	ICD-10-CM
148.3	Typical atrial flutter	Diagnosis	ICD-10-CM
148.4	Atypical atrial flutter	Diagnosis	ICD-10-CM
148.9	Unspecified atrial fibrillation and atrial flutter	Diagnosis	ICD-10-CM
148.92	Unspecified atrial flutter	Diagnosis	ICD-10-CM
149	Other cardiac arrhythmias	Diagnosis	ICD-10-CM
149.0	Ventricular fibrillation and flutter	Diagnosis	ICD-10-CM
149.01	Ventricular fibrillation	Diagnosis	ICD-10-CM
149.02	Ventricular flutter	Diagnosis	ICD-10-CM
149.1	Atrial premature depolarization	Diagnosis	ICD-10-CM
149.2	Junctional premature depolarization	Diagnosis	ICD-10-CM
149.3	Ventricular premature depolarization	Diagnosis	ICD-10-CM
149.4	Other and unspecified premature depolarization	Diagnosis	ICD-10-CM
149.40	Unspecified premature depolarization	6	ICD-10-CM
		Diagnosis	



Code	Description	Code Category	Code Type
149.49	Other premature depolarization	Diagnosis	ICD-10-CM
149.5	Sick sinus syndrome	Diagnosis	ICD-10-CM
149.8	Other specified cardiac arrhythmias	Diagnosis	ICD-10-CM
149.9	Cardiac arrhythmia, unspecified	Diagnosis	ICD-10-CM
R00	Abnormalities of heart beat	Diagnosis	ICD-10-CM
R00.0	Tachycardia, unspecified	Diagnosis	ICD-10-CM
R00.1	Bradycardia, unspecified	Diagnosis	ICD-10-CM
R00.2	Palpitations	Diagnosis	ICD-10-CM
R00.8	Other abnormalities of heart beat	Diagnosis	ICD-10-CM
R00.9	Unspecified abnormalities of heart beat	Diagnosis	ICD-10-CM
	Composite Cardiac Arrhythmias		
426	Conduction disorders	Diagnosis	ICD-9-CM
426.0	Atrioventricular block, complete	Diagnosis	ICD-9-CM
426.1	Atrioventricular block, other and unspecified	Diagnosis	ICD-9-CM
426.10	Unspecified atrioventricular block	Diagnosis	ICD-9-CM
426.11	First degree atrioventricular block	Diagnosis	ICD-9-CM
426.12	Mobitz (type) II atrioventricular block	Diagnosis	ICD-9-CM
426.13	Other second degree atrioventricular block	Diagnosis	ICD-9-CM
426.2	Left bundle branch hemiblock	Diagnosis	ICD-9-CM
426.3	Other left bundle branch block	Diagnosis	ICD-9-CM
426.4	Right bundle branch block	Diagnosis	ICD-9-CM
426.5	Bundle branch block, other and unspecified	Diagnosis	ICD-9-CM
426.50	Unspecified bundle branch block	Diagnosis	ICD-9-CM
426.51	Right bundle branch block and left posterior fascicular block	Diagnosis	ICD-9-CM
426.52	Right bundle branch block and left anterior fascicular block	Diagnosis	ICD-9-CM
426.53	Other bilateral bundle branch block	Diagnosis	ICD-9-CM
426.54	Trifascicular block	Diagnosis	ICD-9-CM
		Diagnosis	



Code	Description	Code Category	Code Type
426.6	Other heart block	Diagnosis	ICD-9-CM
426.7	Anomalous atrioventricular excitation	Diagnosis	ICD-9-CM
426.8	Other specified conduction disorders	Diagnosis	ICD-9-CM
426.81	Lown-Ganong-Levine syndrome	Diagnosis	ICD-9-CM
426.82	Long QT syndrome	Diagnosis	ICD-9-CM
426.89	Other specified conduction disorder	Diagnosis	ICD-9-CM
426.9	Unspecified conduction disorder	Diagnosis	ICD-9-CM
427.0	Paroxysmal supraventricular tachycardia	Diagnosis	ICD-9-CM
427.1	Paroxysmal ventricular tachycardia	Diagnosis	ICD-9-CM
427.2	Unspecified paroxysmal tachycardia	Diagnosis	ICD-9-CM
427.3	Atrial fibrillation and flutter	Diagnosis	ICD-9-CM
427.31	Atrial fibrillation	Diagnosis	ICD-9-CM
427.32	Atrial flutter	Diagnosis	ICD-9-CM
427.4	Ventricular fibrillation and flutter	Diagnosis	ICD-9-CM
427.41	Ventricular fibrillation	Diagnosis	ICD-9-CM
427.42	Ventricular flutter	Diagnosis	ICD-9-CM
427.5	Cardiac arrest	Diagnosis	ICD-9-CM
427.6	Premature beats	Diagnosis	ICD-9-CM
427.60	Unspecified premature beats	Diagnosis	ICD-9-CM
427.61	Supraventricular premature beats	Diagnosis	ICD-9-CM
427.69	Other premature beats	Diagnosis	ICD-9-CM
427.8	Other specified cardiac dysrhythmias	Diagnosis	ICD-9-CM
427.81	Sinoatrial node dysfunction	Diagnosis	ICD-9-CM
427.89	Other specified cardiac dysrhythmias	Diagnosis	ICD-9-CM
427.9	Unspecified cardiac dysrhythmia	Diagnosis	ICD-9-CM
144	Atrioventricular and left bundle-branch block	Diagnosis	ICD-10-CM
		DiagilUSIS	



Code	Description	Code Category	Code Type
144.0	Atrioventricular block, first degree	Diagnosis	ICD-10-CM
144.1	Atrioventricular block, second degree	Diagnosis	ICD-10-CM
144.2	Atrioventricular block, complete	Diagnosis	ICD-10-CM
144.3	Other and unspecified atrioventricular block	Diagnosis	ICD-10-CM
144.30	Unspecified atrioventricular block	Diagnosis	ICD-10-CM
144.39	Other atrioventricular block	Diagnosis	ICD-10-CM
144.4	Left anterior fascicular block	Diagnosis	ICD-10-CM
144.5	Left posterior fascicular block	Diagnosis	ICD-10-CM
144.6	Other and unspecified fasicular block	Diagnosis	ICD-10-CM
144.60	Unspecified fascicular block	Diagnosis	ICD-10-CM
144.69	Other fascicular block	Diagnosis	ICD-10-CM
144.7	Left bundle-branch block, unspecified	Diagnosis	ICD-10-CM
145	Other conduction disorders	Diagnosis	ICD-10-CM
145.0	Right fascicular block	Diagnosis	ICD-10-CM
145.1	Other and unspecified right bundle-branch block	Diagnosis	ICD-10-CM
145.10	Unspecified right bundle-branch block	Diagnosis	ICD-10-CM
145.19	Other right bundle-branch block	Diagnosis	ICD-10-CM
145.2	Bifascicular block	Diagnosis	ICD-10-CM
145.3	Trifascicular block	Diagnosis	ICD-10-CM
145.4	Nonspecific intraventricular block	Diagnosis	ICD-10-CM
145.5	Other specified heart block	Diagnosis	ICD-10-CM
145.6	Pre-excitation syndrome	Diagnosis	ICD-10-CM
145.8	Other specified conduction disorders	Diagnosis	ICD-10-CM
145.81	Long QT syndrome	Diagnosis	ICD-10-CM
145.89	Other specified conduction disorders	Diagnosis	ICD-10-CM
145.9	Conduction disorder, unspecified	Diagnosis	ICD-10-CIVI
		Diagnosis	



Code	Description	Code Category	Code Type
146	Cardiac arrest	Diagnosis	ICD-10-CM
146.2	Cardiac arrest due to underlying cardiac condition	Diagnosis	ICD-10-CM
146.8	Cardiac arrest due to other underlying condition	Diagnosis	ICD-10-CM
146.9	Cardiac arrest, cause unspecified	Diagnosis	ICD-10-CM
147	Paroxysmal tachycardia	Diagnosis	ICD-10-CM
147.0	Re-entry ventricular arrhythmia	Diagnosis	ICD-10-CM
147.1	Supraventricular tachycardia	Diagnosis	ICD-10-CM
147.2	Ventricular tachycardia	Diagnosis	ICD-10-CM
147.9	Paroxysmal tachycardia, unspecified	Diagnosis	ICD-10-CM
148	Atrial fibrillation and flutter	Diagnosis	ICD-10-CM
148.0	Paroxysmal atrial fibrillation	Diagnosis	ICD-10-CM
148.1	Persistent atrial fibrillation	Diagnosis	ICD-10-CM
148.11	Longstanding persistent atrial fibrillation	Diagnosis	ICD-10-CM
148.19	Other persistent atrial fibrillation	Diagnosis	ICD-10-CM
148.2	Chronic atrial fibrillation	Diagnosis	ICD-10-CM
148.20	Chronic atrial fibrillation, unspecified	Diagnosis	ICD-10-CM
148.21	Permanent atrial fibrillation	Diagnosis	ICD-10-CM
148.3	Typical atrial flutter	Diagnosis	ICD-10-CM
148.4	Atypical atrial flutter	Diagnosis	ICD-10-CM
148.9	Unspecified atrial fibrillation and atrial flutter	Diagnosis	ICD-10-CM
148.91	Unspecified atrial fibrillation	Diagnosis	ICD-10-CM
148.92	Unspecified atrial flutter	Diagnosis	ICD-10-CM
149	Other cardiac arrhythmias	Diagnosis	ICD-10-CM
149.0	Ventricular fibrillation and flutter	Diagnosis	ICD-10-CM
149.01	Ventricular fibrillation	Diagnosis	ICD-10-CM
149.02	Ventricular flutter		ICD-10-CM
-		Diagnosis	



Code	Description	Code Category	Code Type
149.1	Atrial premature depolarization	Diagnosis	ICD-10-CM
149.2	Junctional premature depolarization	Diagnosis	ICD-10-CM
149.3	Ventricular premature depolarization	Diagnosis	ICD-10-CM
149.4	Other and unspecified premature depolarization	Diagnosis	ICD-10-CM
149.40	Unspecified premature depolarization	Diagnosis	ICD-10-CM
149.49	Other premature depolarization	Diagnosis	ICD-10-CM
149.5	Sick sinus syndrome	Diagnosis	ICD-10-CM
149.8	Other specified cardiac arrhythmias	Diagnosis	ICD-10-CM
149.9	Cardiac arrhythmia, unspecified	Diagnosis	ICD-10-CM
R00	Abnormalities of heart beat	Diagnosis	ICD-10-CM
R00.0	Tachycardia, unspecified	Diagnosis	ICD-10-CM
R00.1	Bradycardia, unspecified	Diagnosis	ICD-10-CM
R00.2	Palpitations	Diagnosis	ICD-10-CM
R00.8	Other abnormalities of heart beat	Diagnosis	ICD-10-CM
R00.9	Unspecified abnormalities of heart beat	Diagnosis	ICD-10-CM
Pulmonary	y Hypertension		
416.0	Primary pulmonary hypertension	Diagnosis	ICD-9-CM
416.8	Other chronic pulmonary heart diseases	Diagnosis	ICD-9-CM
416.9	Unspecified chronic pulmonary heart disease	Diagnosis	ICD-9-CM
127.0	Primary pulmonary hypertension	Diagnosis	ICD-10-CM
127.2	Other secondary pulmonary hypertension	Diagnosis	ICD-10-CM
127.20	Pulmonary hypertension, unspecified	Diagnosis	ICD-10-CM
127.21	Secondary pulmonary arterial hypertension	Diagnosis	ICD-10-CM
127.22	Pulmonary hypertension due to left heart disease	Diagnosis	ICD-10-CM
127.23	Pulmonary hypertension due to lung diseases and hypoxia	Diagnosis	ICD-10-CM
127.24	Chronic thromboembolic pulmonary hypertension	Diagnosis	ICD-10-CM
		0	



Code	Description	Code Category	Code Type
127.29	Other secondary pulmonary hypertension	Diagnosis	ICD-10-CM
127.81	Cor pulmonale (chronic)	Diagnosis	ICD-10-CM
127.89	Other specified pulmonary heart diseases	Diagnosis	ICD-10-CM
127.9	Pulmonary heart disease, unspecified	Diagnosis	ICD-10-CM
P29.30	Pulmonary hypertension of newborn	Diagnosis	ICD-10-CM
	Cardiomyopathy		
425	Cardiomyopathy	Diagnosis	ICD-9-CM
425.1	Hypertrophic cardiomyopathy	Diagnosis	ICD-9-CM
425.11	Hypertrophic obstructive cardiomyopathy	Diagnosis	ICD-9-CM
425.18	Other hypertrophic cardiomyopathy	Diagnosis	ICD-9-CM
425.2	Obscure cardiomyopathy of Africa	Diagnosis	ICD-9-CM
425.5	Alcoholic cardiomyopathy	Diagnosis	ICD-9-CM
425.7	Nutritional and metabolic cardiomyopathy	Diagnosis	ICD-9-CM
425.8	Cardiomyopathy in other diseases classified elsewhere	Diagnosis	ICD-9-CM
425.9	Unspecified secondary cardiomyopathy	Diagnosis	ICD-9-CM
674.5	Peripartum cardiomyopathy	Diagnosis	ICD-9-CM
674.50	Peripartum cardiomyopathy, unspecified as to episode of care or not applicable	-	
		Diagnosis	ICD-9-CM
674.51	Peripartum cardiomyopathy, delivered, with or without mention of antepartum condition	Diagnosis	ICD-9-CM
674.52	Peripartum cardiomyopathy, delivered, with mention of postpartum condition	Diagnosis	ICD-9-CM
674.53	Peripartum cardiomyopathy, antepartum condition or complication	Diagnosis	ICD-9-CM
674.54	Peripartum cardiomyopathy, postpartum condition or complication	Diagnosis	ICD-9-CM
A36.81	Diphtheritic cardiomyopathy	Diagnosis	ICD-10-CM
B33.24	Viral cardiomyopathy	Diagnosis	ICD-10-CM
125.5	Ischemic cardiomyopathy	Diagnosis	ICD-10-CM
142	Cardiomyopathy	Diagnosis	ICD-10-CM
142.0	Dilated cardiomyopathy	Diagnosis	ICD-10-CM
		2.2810010	



Code	Description	Code Category	Code Type
142.1	Obstructive hypertrophic cardiomyopathy	Diagnosis	ICD-10-CM
142.2	Other hypertrophic cardiomyopathy	Diagnosis	ICD-10-CM
142.3	Endomyocardial (eosinophilic) disease	Diagnosis	ICD-10-CM
142.4	Endocardial fibroelastosis	Diagnosis	ICD-10-CM
142.5	Other restrictive cardiomyopathy	Diagnosis	ICD-10-CM
142.6	Alcoholic cardiomyopathy	Diagnosis	ICD-10-CM
142.7	Cardiomyopathy due to drug and external agent	Diagnosis	ICD-10-CM
142.8	Other cardiomyopathies	Diagnosis	ICD-10-CM
142.9	Cardiomyopathy, unspecified	Diagnosis	ICD-10-CM
143	Cardiomyopathy in diseases classified elsewhere	Diagnosis	ICD-10-CM
090.3	Peripartum cardiomyopathy	Diagnosis	ICD-10-CM
	Coronary Artery Disease		
410	Acute myocardial infarction	Diagnosis	ICD-9-CM
410.0	Acute myocardial infarction of anterolateral wall	Diagnosis	ICD-9-CM
410.00	Acute myocardial infarction of anterolateral wall, episode of care unspecified	Diagnosis	ICD-9-CM
410.01	Acute myocardial infarction of anterolateral wall, initial episode of care	Diagnosis	ICD-9-CM
410.02	Acute myocardial infarction of anterolateral wall, subsequent episode of care	Diagnosis	ICD-9-CM
410.1	Acute myocardial infarction of other anterior wall	Diagnosis	ICD-9-CM
410.10	Acute myocardial infarction of other anterior wall, episode of care unspecified	Diagnosis	ICD-9-CM
410.11	Acute myocardial infarction of other anterior wall, initial episode of care	Diagnosis	ICD-9-CM
410.12	Acute myocardial infarction of other anterior wall, subsequent episode of care	Diagnosis	ICD-9-CM
410.2	Acute myocardial infarction of inferolateral wall	Diagnosis	ICD-9-CM
410.20	Acute myocardial infarction of inferolateral wall, episode of care unspecified	Diagnosis	ICD-9-CM
410.21	Acute myocardial infarction of inferolateral wall, initial episode of care	Diagnosis	ICD-9-CM
410.22	Acute myocardial infarction of inferolateral wall, subsequent episode of care	Diagnosis	ICD-9-CM
410.3	Acute myocardial infarction of inferoposterior wall	Diagnosis	ICD-9-CM



Code	Description	Code Category	Code Type
410.30	Acute myocardial infarction of inferoposterior wall, episode of care unspecified	Diagnosis	ICD-9-CM
410.31	Acute myocardial infarction of inferoposterior wall, initial episode of care	Diagnosis	ICD-9-CM
410.32	Acute myocardial infarction of inferoposterior wall, subsequent episode of care	Diagnosis	ICD-9-CM
410.4	Acute myocardial infarction of other inferior wall	Diagnosis	ICD-9-CM
410.40	Acute myocardial infarction of other inferior wall, episode of care unspecified	Diagnosis	ICD-9-CM
410.41	Acute myocardial infarction of other inferior wall, initial episode of care	Diagnosis	ICD-9-CM
410.42	Acute myocardial infarction of other inferior wall, subsequent episode of care	Diagnosis	ICD-9-CM
410.5	Acute myocardial infarction of other lateral wall	Diagnosis	ICD-9-CM
410.50	Acute myocardial infarction of other lateral wall, episode of care unspecified	Diagnosis	ICD-9-CM
410.51	Acute myocardial infarction of other lateral wall, initial episode of care	Diagnosis	ICD-9-CM
410.52	Acute myocardial infarction of other lateral wall, subsequent episode of care	Diagnosis	ICD-9-CM
410.6	Acute myocardial infarction, true posterior wall infarction	-	
		Diagnosis	ICD-9-CM
410.60	Acute myocardial infarction, true posterior wall infarction, episode of care unspecified	Diagnosis	ICD-9-CM
410.61	Acute myocardial infarction, true posterior wall infarction, initial episode of care		
		Diagnosis	ICD-9-CM
410.62	Acute myocardial infarction, true posterior wall infarction, subsequent episode of care	Diagnosis	ICD-9-CM
410.7	Acute myocardial infarction, subendocardial infarction	Diagnosis	ICD-9-CM
410.70	Acute myocardial infarction, subendocardial infarction, episode of care unspecified	Diagnosis	ICD-9-CM
410.71	Acute myocardial infarction, subendocardial infarction, initial episode of care	Diagnosis	ICD-9-CM
410.72	Acute myocardial infarction, subendocardial infarction, subsequent episode of care	Diagnosis	ICD-9-CM
410.8	Acute myocardial infarction of other specified sites	Diagnosis	ICD-9-CM
410.80	Acute myocardial infarction of other specified sites, episode of care unspecified	Diagnosis	ICD-9-CM
410.81	Acute myocardial infarction of other specified sites, initial episode of care	Diagnosis	ICD-9-CM
410.82	Acute myocardial infarction of other specified sites, subsequent episode of care	Diagnosis	ICD-9-CM
410.9	Acute myocardial infarction, unspecified site	Diagnosis	ICD-9-CM
410.90	Acute myocardial infarction, unspecified site, episode of care unspecified	Diagnosis	ICD-9-CM
		0	



Code	Description	Code Category	Code Type
410.91	Acute myocardial infarction, unspecified site, initial episode of care	Diagnosis	ICD-9-CM
410.92	Acute myocardial infarction, unspecified site, subsequent episode of care	Diagnosis	ICD-9-CM
411	Other acute and subacute forms of ischemic heart disease	Diagnosis	ICD-9-CM
411.0	Postmyocardial infarction syndrome	Diagnosis	ICD-9-CM
411.1	Intermediate coronary syndrome	Diagnosis	ICD-9-CM
411.8	Other acute and subacute forms of ischemic heart disease	Diagnosis	ICD-9-CM
411.81	Acute coronary occlusion without myocardial infarction	Diagnosis	ICD-9-CM
411.89	Other acute and subacute form of ischemic heart disease	Diagnosis	ICD-9-CM
412	Old myocardial infarction	Diagnosis	ICD-9-CM
413	Angina pectoris	Diagnosis	ICD-9-CM
413.0	Angina decubitus	Diagnosis	ICD-9-CM
413.1	Prinzmetal angina	Diagnosis	ICD-9-CM
413.9	Other and unspecified angina pectoris	Diagnosis	ICD-9-CM
414	Other forms of chronic ischemic heart disease	Diagnosis	ICD-9-CM
414.0	Coronary atherosclerosis	Diagnosis	ICD-9-CM
414.00	Coronary atherosclerosis of unspecified type of vessel, native or graft	Diagnosis	ICD-9-CM
414.01	Coronary atherosclerosis of native coronary artery	Diagnosis	ICD-9-CM
414.02	Coronary atherosclerosis of autologous vein bypass graft	Diagnosis	ICD-9-CM
414.03	Coronary atherosclerosis of nonautologous biological bypass graft	Diagnosis	ICD-9-CM
414.04	Coronary atherosclerosis of artery bypass graft	Diagnosis	ICD-9-CM
414.05	Coronary atherosclerosis of unspecified type of bypass graft	Diagnosis	ICD-9-CM
414.06	Coronary atherosclerosis, of native coronary artery of transplanted heart	Diagnosis	ICD-9-CM
414.07	Coronary atherosclerosis, of bypass graft (artery) (vein) of transplanted heart	Diagnosis	ICD-9-CM
414.1	Aneurysm and dissection of heart	Diagnosis	ICD-9-CM
414.10	Aneurysm of heart	Diagnosis	ICD-9-CM
414.11	Aneurysm of coronary vessels	Diagnosis	ICD-9-CM
		2.00.0010	



Code	Description	Code Category	Code Type
414.12	Dissection of coronary artery	Diagnosis	ICD-9-CM
414.19	Other aneurysm of heart	Diagnosis	ICD-9-CM
414.2	Chronic total occlusion of coronary artery	Diagnosis	ICD-9-CM
414.3	Coronary atherosclerosis due to lipid rich plaque	Diagnosis	ICD-9-CM
414.4	Coronary atherosclerosis due to calcified coronary lesion	Diagnosis	ICD-9-CM
414.8	Other specified forms of chronic ischemic heart disease	Diagnosis	ICD-9-CM
414.9	Unspecified chronic ischemic heart disease	Diagnosis	ICD-9-CM
120	Angina pectoris	Diagnosis	ICD-10-CM
120.0	Unstable angina	Diagnosis	ICD-10-CM
120.1	Angina pectoris with documented spasm	Diagnosis	ICD-10-CM
120.8	Other forms of angina pectoris	Diagnosis	ICD-10-CM
120.9	Angina pectoris, unspecified	Diagnosis	ICD-10-CM
121	Acute myocardial infarction	Diagnosis	ICD-10-CM
121.0	ST elevation (STEMI) myocardial infarction of anterior wall	Diagnosis	ICD-10-CM
121.01	ST elevation (STEMI) myocardial infarction involving left main coronary artery	C C	
		Diagnosis	ICD-10-CM
121.02	ST elevation (STEMI) myocardial infarction involving left anterior descending coronary artery	Diagnosis	ICD-10-CM
121.09	ST elevation (STEMI) myocardial infarction involving other coronary artery of anterior wall	5	
121.1	ST elevation (STEMI) myocardial infarction of inferior wall	Diagnosis	ICD-10-CM
121.11	ST elevation (STEMI) myocardial infarction involving right coronary artery	Diagnosis	ICD-10-CM
		Diagnosis	ICD-10-CM
121.19	ST elevation (STEMI) myocardial infarction involving other coronary artery of inferior wall	Diagnosis	ICD-10-CM
121.2	ST elevation (STEMI) myocardial infarction of other sites	Diagnosis	ICD-10-CM
121.21	ST elevation (STEMI) myocardial infarction involving left circumflex coronary artery	Diagnosis	ICD-10-CM
121.29	ST elevation (STEMI) myocardial infarction involving other sites	Diagnosis	ICD-10-CM
121.3	ST elevation (STEMI) myocardial infarction of unspecified site	Diagnosis	ICD-10-CM
121.4	Non-ST elevation (NSTEMI) myocardial infarction	Diagnosis	ICD-10-CM



Code	Description	Code Category	Code Type
121.9	Acute myocardial infarction, unspecified	Diagnosis	ICD-10-CM
I21.A	Other type of myocardial infarction	Diagnosis	ICD-10-CM
I21.A1	Myocardial infarction type 2	Diagnosis	ICD-10-CM
I21.A9	Other myocardial infarction type		
		Diagnosis	ICD-10-CM
122	Subsequent ST elevation (STEMI) and non-ST elevation (NSTEMI) myocardial infarction	Diagnosis	ICD-10-CM
122.0	Subsequent ST elevation (STEMI) myocardial infarction of anterior wall	Diagnosis	ICD-10-CM
122.1	Subsequent ST elevation (STEMI) myocardial infarction of inferior wall	Diagnosis	ICD-10-CM
122.2	Subsequent non-ST elevation (NSTEMI) myocardial infarction	Diagnosis	ICD-10-CM
122.8	Subsequent ST elevation (STEMI) myocardial infarction of other sites	Diagnosis	ICD-10-CM
122.9	Subsequent ST elevation (STEMI) myocardial infarction of unspecified site	Diagnosis	ICD-10-CM
123	Certain current complications following ST elevation (STEMI) and non-ST elevation (NSTEMI) myocardial infarction (within the 28 day period)	Diagnosis	ICD-10-CM
123.0	Hemopericardium as current complication following acute myocardial infarction	Diagnosis	ICD-10-CM
123.1	Atrial septal defect as current complication following acute myocardial infarction	Diagnosis	ICD-10-CM
123.2	Ventricular septal defect as current complication following acute myocardial infarction	Diagnosis	ICD-10-CM
123.3	Rupture of cardiac wall without hemopericardium as current complication following acute myocardial infarction	Diagnosis	ICD-10-CM
123.4	Rupture of chordae tendineae as current complication following acute myocardial infarction	Diagnosis	ICD-10-CM
123.5	Rupture of papillary muscle as current complication following acute myocardial infarction	Diagnosis	ICD-10-CM
123.6	Thrombosis of atrium, auricular appendage, and ventricle as current complications following acute myocardial infarction	Diagnosis	ICD-10-CM
123.7	Postinfarction angina	Diagnosis	ICD-10-CM
123.8	Other current complications following acute myocardial infarction	Diagnosis	ICD-10-CM
124	Other acute ischemic heart diseases	Diagnosis	ICD-10-CM
124.0	Acute coronary thrombosis not resulting in myocardial infarction	Diagnosis	ICD-10-CM
124.1	Dressler's syndrome	Diagnosis	ICD-10-CM
124.8	Other forms of acute ischemic heart disease	Diagnosis	ICD-10-CM
124.9	Acute ischemic heart disease, unspecified	C	
		Diagnosis	ICD-10-CM



Code	Description	Code Category	Code Type
125	Chronic ischemic heart disease	Diagnosis	ICD-10-CM
125.1	Atherosclerotic heart disease of native coronary artery	Diagnosis	ICD-10-CM
125.10	Atherosclerotic heart disease of native coronary artery without angina pectoris	Diagnosis	ICD-10-CM
125.11	Atherosclerotic heart disease of native coronary artery with angina pectoris	Diagnosis	ICD-10-CM
125.110	Atherosclerotic heart disease of native coronary artery with unstable angina pectoris	Diagnosis	ICD-10-CIVI
125.111	Atherosclerotic heart disease of native coronary artery with angina pectoris with documented spasm	Diagnosis	ICD-10-CIVI
125.118	Atherosclerotic heart disease of native coronary artery with other forms of angina pectoris	Diagnosis	ICD-10-CM
125.119	Atherosclerotic heart disease of native coronary artery with unspecified angina pectoris	Diagnosis	ICD-10-CM
125.2	Old myocardial infarction	Diagnosis	ICD-10-CM
125.3	Aneurysm of heart	Diagnosis	ICD-10-CM
125.4	Coronary artery aneurysm and dissection	Diagnosis	ICD-10-CM
125.41	Coronary artery aneurysm	C C	ICD-10-CIVI
125.42	Coronary artery dissection	Diagnosis	
125.5	Ischemic cardiomyopathy	Diagnosis	ICD-10-CM
125.6	Silent myocardial ischemia	Diagnosis	ICD-10-CM
125.7	Atherosclerosis of coronary artery bypass graft(s) and coronary artery of transplanted heart with angina pectoris	Diagnosis	ICD-10-CM
125.70	Atherosclerosis of coronary artery bypass graft(s), unspecified, with angina pectoris	Diagnosis	ICD-10-CM ICD-10-CM
125.700	Atherosclerosis of coronary artery bypass graft(s), unspecified, with unstable angina pectoris	Diagnosis Diagnosis	ICD-10-CM
125.701	Atherosclerosis of coronary artery bypass graft(s), unspecified, with angina pectoris with documented spasm	Diagnosis	ICD-10-CIVI
125.708	Atherosclerosis of coronary artery bypass graft(s), unspecified, with other forms of angina pectoris	Diagnosis	ICD-10-CM
125.709	Atherosclerosis of coronary artery bypass graft(s), unspecified, with unspecified angina pectoris	Diagnosis	ICD-10-CM
125.71	Atherosclerosis of autologous vein coronary artery bypass graft(s) with angina pectoris	Diagnosis	ICD-10-CM
125.710	Atherosclerosis of autologous vein coronary artery bypass graft(s) with unstable angina pectoris	Diagnosis	ICD-10-CM
125.711	Atherosclerosis of autologous vein coronary artery bypass graft(s) with angina pectoris with documented spasm	Diagnosis	ICD-10-CM
125.718	Atherosclerosis of autologous vein coronary artery bypass graft(s) with other forms of angina pectoris	Diagnosis	ICD-10-CM
125.719	Atherosclerosis of autologous vein coronary artery bypass graft(s) with unspecified angina pectoris	Diagnosis	ICD-10-CM
125.72	Atherosclerosis of autologous artery coronary artery bypass graft(s) with angina pectoris	U	
		Diagnosis	

Diagnosis ICD-10-CM



Code	Description	Code Category	Code Type
125.720	Atherosclerosis of autologous artery coronary artery bypass graft(s) with unstable angina pectoris	Diagnosis	ICD-10-CM
125.721	Atherosclerosis of autologous artery coronary artery bypass graft(s) with angina pectoris with documented spasm	Diagnosis	ICD-10-CM
125.728	Atherosclerosis of autologous artery coronary artery bypass graft(s) with other forms of angina pectoris	Diagnosis	ICD-10-CM
125.729	Atherosclerosis of autologous artery coronary artery bypass graft(s) with unspecified angina pectoris	Diagnosis	ICD-10-CM
125.73	Atherosclerosis of nonautologous biological coronary artery bypass graft(s) with angina pectoris	Diagnosis	ICD-10-CM
125.730	Atherosclerosis of nonautologous biological coronary artery bypass graft(s) with unstable angina pectoris	Diagnosis	ICD-10-CM
125.731	Atherosclerosis of nonautologous biological coronary artery bypass graft(s) with angina pectoris with documented spasm	Diagnosis	ICD-10-CM
125.738	Atherosclerosis of nonautologous biological coronary artery bypass graft(s) with other forms of angina pectoris	Diagnosis	ICD-10-CM
125.739	Atherosclerosis of nonautologous biological coronary artery bypass graft(s) with unspecified angina pectoris	Diagnosis	ICD-10-CM
125.75	Atherosclerosis of native coronary artery of transplanted heart with angina pectoris	Diagnosis	ICD-10-CM
125.750	Atherosclerosis of native coronary artery of transplanted heart with unstable angina	Diagnosis	ICD-10-CM
125.751	Atherosclerosis of native coronary artery of transplanted heart with angina pectoris with documented spasm	Diagnosis	ICD-10-CM
125.758	Atherosclerosis of native coronary artery of transplanted heart with other forms of angina pectoris	Diagnosis	ICD-10-CM
125.759	Atherosclerosis of native coronary artery of transplanted heart with unspecified angina pectoris	Diagnosis	ICD-10-CM
125.76	Atherosclerosis of bypass graft of coronary artery of transplanted heart with angina pectoris	Diagnosis	ICD-10-CM
125.760	Atherosclerosis of bypass graft of coronary artery of transplanted heart with unstable angina	Diagnosis	ICD-10-CM
I25.761	Atherosclerosis of bypass graft of coronary artery of transplanted heart with angina pectoris with documented spasm	Diagnosis	ICD-10-CM
125.768	Atherosclerosis of bypass graft of coronary artery of transplanted heart with other forms of angina pectoris	Diagnosis	ICD-10-CM
125.769	Atherosclerosis of bypass graft of coronary artery of transplanted heart with unspecified angina pectoris	Diagnosis	ICD-10-CM
125.79	Atherosclerosis of other coronary artery bypass graft(s) with angina pectoris	Diagnosis	ICD-10-CM
125.790	Atherosclerosis of other coronary artery bypass graft(s) with unstable angina pectoris	Diagnosis	ICD-10-CM
125.791	Atherosclerosis of other coronary artery bypass graft(s) with angina pectoris with documented spasm	Diagnosis	ICD-10-CM
125.798	Atherosclerosis of other coronary artery bypass graft(s) with other forms of angina pectoris	Diagnosis	ICD-10-CM
125.799	Atherosclerosis of other coronary artery bypass graft(s) with unspecified angina pectoris	Diagnosis	ICD-10-CM
125.8	Other forms of chronic ischemic heart disease	Diagnosis	ICD-10-CM
125.81	Atherosclerosis of other coronary vessels without angina pectoris	Diagnosis	ICD-10-CM
125.810	Atherosclerosis of coronary artery bypass graft(s) without angina pectoris	Diagnosis	ICD-10-CM
125.811	Atherosclerosis of native coronary artery of transplanted heart without angina pectoris	Diagnosis	ICD-10-CM
125.812	Atherosclerosis of bypass graft of coronary artery of transplanted heart without angina pectoris	Diagnosis	ICD-10-CM
125.82	Chronic total occlusion of coronary artery	Diagnosis	ICD-10-CM



Code	Description	Code Category	Code Type			
125.83	Coronary atherosclerosis due to lipid rich plaque	Diagnosis	ICD-10-CM			
125.84	Coronary atherosclerosis due to calcified coronary lesion	Diagnosis	ICD-10-CM			
125.89	Other forms of chronic ischemic heart disease	Diagnosis	ICD-10-CM			
125.9	Chronic ischemic heart disease, unspecified	Diagnosis	ICD-10-CM			
	Portal Hypertension					
572.3	Portal hypertension	Diagnosis	ICD-9-CM			
K76.6	Portal hypertension	Diagnosis	ICD-10-CM			
	Anxiety Disorder					
293.84	Anxiety disorder in conditions classified elsewhere					
300.00		Diagnosis	ICD-9-CM			
	Anxiety state, unspecified	Diagnosis	ICD-9-CM			
300.01	Panic disorder without agoraphobia	Diagnosis	ICD-9-CM			
300.02	Generalized anxiety disorder	Diagnosis	ICD-9-CM			
300.09	Other anxiety states	Diagnosis	ICD-9-CM			
300.10	Hysteria, unspecified	Diagnosis	ICD-9-CM			
300.20	Phobia, unspecified	Diagnosis	ICD-9-CM			
300.21	Agoraphobia with panic disorder	Diagnosis	ICD-9-CM			
300.22	Agoraphobia without mention of panic attacks	Diagnosis	ICD-9-CM			
300.23	Social phobia	Diagnosis	ICD-9-CM			
300.29	Other isolated or specific phobias	Diagnosis	ICD-9-CM			
300.3	Obsessive-compulsive disorders	Diagnosis	ICD-9-CM			
308.0	Predominant disturbance of emotions	Diagnosis	ICD-9-CM			
308.1	Predominant disturbance of consciousness as reaction to stress	Diagnosis	ICD-9-CM			
308.2	Predominant psychomotor disturbance as reaction to stress	Diagnosis	ICD-9-CM			
308.3	Other acute reactions to stress	Diagnosis	ICD-9-CM			
308.4	Mixed disorders as reaction to stress	Diagnosis	ICD-9-CM			
308.9	Unspecified acute reaction to stress	-	ICD-9-CM			
308.9	Unspecified acute reaction to stress	Diagnosis	ICD-9			



Code	Description	Code Category	Code Type
309.21	Separation Anxiety Disorder	Diagnosis	ICD-9-CM
309.81	Posttraumatic stress disorder	Diagnosis	ICD-9-CM
313.0	Overanxious disorder specific to childhood and adolescence	Diagnosis	ICD-9-CM
313.21	Shyness disorder of childhood	Diagnosis	ICD-9-CM
313.22	Introverted disorder of childhood	Diagnosis	ICD-9-CM
F06.4	Anxiety disorder due to known physiological condition	Diagnosis	ICD-10-CM
F40.00	Agoraphobia, unspecified	Diagnosis	ICD-10-CM
F40.01	Agoraphobia with panic disorder	Diagnosis	ICD-10-CM
F40.02	Agoraphobia without panic disorder	Diagnosis	ICD-10-CM
F40.10	Social phobia, unspecified	Diagnosis	ICD-10-CM
F40.11	Social phobia, generalized	Diagnosis	ICD-10-CM
F40.210	Arachnophobia	Diagnosis	ICD-10-CM
F40.218	Other animal type phobia	Diagnosis	ICD-10-CM
F40.220	Fear of thunderstorms	Diagnosis	ICD-10-CM
F40.228	Other natural environment type phobia	Diagnosis	ICD-10-CM
F40.230	Fear of blood	Diagnosis	ICD-10-CM
F40.231	Fear of injections and transfusions	Diagnosis	ICD-10-CM
F40.232	Fear of other medical care	Diagnosis	ICD-10-CM
F40.233	Fear of injury	Diagnosis	ICD-10-CM
F40.240	Claustrophobia	Diagnosis	ICD-10-CM
F40.241	Acrophobia	Diagnosis	ICD-10-CM
F40.242	Fear of bridges	Diagnosis	ICD-10-CM
F40.243	Fear of flying	Diagnosis	ICD-10-CM
F40.248	Other situational type phobia	Diagnosis	ICD-10-CM
F40.290	Androphobia	Diagnosis	ICD-10-CM
F40.291	Gynephobia	Diagnosis	ICD-10-CM
		Diagnosis	



Code	Description	Code Category	Code Type
F40.298	Other specified phobia	Diagnosis	ICD-10-CM
F40.8	Other phobic anxiety disorders	Diagnosis	ICD-10-CM
F40.9	Phobic anxiety disorder, unspecified	Diagnosis	ICD-10-CM
F41.0	Panic disorder [episodic paroxysmal anxiety]	Diagnosis	ICD-10-CM
F41.1	Generalized anxiety disorder	Diagnosis	ICD-10-CM
F41.3	Other mixed anxiety disorders	Diagnosis	ICD-10-CM
F41.8	Other specified anxiety disorders	Diagnosis	ICD-10-CM
F41.9	Anxiety disorder, unspecified	Diagnosis	ICD-10-CM
F42	Obsessive-compulsive disorder	Diagnosis	ICD-10-CM
F42.2	Mixed obsessional thoughts and acts	Diagnosis	ICD-10-CM
F42.3	Hoarding disorder	Diagnosis	ICD-10-CM
F42.4	Excoriation (skin-picking) disorder	Diagnosis	ICD-10-CM
F42.8	Other obsessive-compulsive disorder	Diagnosis	ICD-10-CM
F42.9	Obsessive-compulsive disorder, unspecified	Diagnosis	ICD-10-CM
F43.0	Acute stress reaction	Diagnosis	ICD-10-CM
F43.10	Post-traumatic stress disorder, unspecified	Diagnosis	ICD-10-CM
F43.11	Post-traumatic stress disorder, acute	Diagnosis	ICD-10-CM
F43.12	Post-traumatic stress disorder, chronic	Diagnosis	ICD-10-CM
F44.9	Dissociative and conversion disorder, unspecified	Diagnosis	ICD-10-CM
F93.0	Separation anxiety disorder of childhood	Diagnosis	ICD-10-CM
	Tremor		
333.1	Essential and other specified forms of tremor	Diagnosis	ICD-9-CM
G25.0	Essential tremor	Diagnosis	ICD-10-CM
G25.1	Drug-induced tremor	Diagnosis	ICD-10-CM
G25.2	Other specified forms of tremor	Diagnosis	ICD-10-CM
R25.1	Tremor, unspecified	Diagnosis	ICD-10-CM



Code	Description	Codo Cotorer	Codo Turo
Code	Description Migraine	Code Category	Code Type
339	Other headache syndromes	Diagnosis	ICD-9-CM
339.0	Cluster headaches and other trigeminal autonomic cephalgias	Diagnosis	ICD-9-CM
339.00	Cluster headache syndrome, unspecified	Diagnosis	ICD-9-CM
339.01	Episodic cluster headache	Diagnosis	ICD-9-CM
339.02	Chronic cluster headache	Diagnosis	ICD-9-CM
339.03	Episodic paroxysmal hemicrania	Diagnosis	ICD-9-CM
339.04	Chronic paroxysmal hemicrania	Diagnosis	ICD-9-CM
339.05	Short lasting unilateral neuralgiform headache with conjunctival injection and tearing	Diagnosis	ICD-9-CM
339.09	Other trigeminal autonomic cephalgias	Diagnosis	ICD-9-CM
339.1	Tension type headache	Diagnosis	ICD-9-CM
339.10	Tension type headache, unspecified	Diagnosis	ICD-9-CM
339.11	Episodic tension type headache	Diagnosis	ICD-9-CM
339.12	Chronic tension type headache	Diagnosis	ICD-9-CM
339.2	Post-traumatic headache	Diagnosis	ICD-9-CM
339.20	Post-traumatic headache, unspecified	Diagnosis	ICD-9-CM
339.21	Acute post-traumatic headache	Diagnosis	ICD-9-CM
339.22	Chronic post-traumatic headache	Diagnosis	ICD-9-CM
339.3	Drug induced headache, not elsewhere classified	Diagnosis	ICD-9-CM
339.4	Complicated headache syndromes	Diagnosis	ICD-9-CM
339.41	Hemicrania continua	Diagnosis	ICD-9-CM
339.42	New daily persistent headache	Diagnosis	ICD-9-CM
339.43	Primary thunderclap headache	Diagnosis	ICD-9-CM
339.44	Other complicated headache syndrome	Diagnosis	ICD-9-CM
339.8	Other specified headache syndromes	Diagnosis	ICD-9-CM
339.81	Hypnic headache	Diagnosis	ICD-9-CM
		-	



Code	Description	Code Category	Code Type
339.82	Headache associated with sexual activity	Diagnosis	ICD-9-CM
339.83	Primary cough headache	Diagnosis	ICD-9-CM
339.84	Primary exertional headache	Diagnosis	ICD-9-CM
339.85	Primary stabbing headache	Diagnosis	ICD-9-CM
339.89	Other specified headache syndromes	Diagnosis	ICD-9-CM
346	Migraine	Diagnosis	ICD-9-CM
346.0	Migraine with aura	-	
		Diagnosis	ICD-9-CM
346.00	Migraine with aura, without mention of intractable migraine without mention of status migrainosus		
		Diagnosis	ICD-9-CM
346.01	Migraine with aura, with intractable migraine, so stated, without mention of status migrainosus	Diagnosis	ICD-9-CM
346.02	Migraine with aura, without mention of intractable migraine with status migrainosus	Diagnosis	ICD-9-CM
346.03	Migraine with aura, with intractable migraine, so stated, with status migrainosus	Diagnosis	ICD-9-CM
346.1	Migraine without aura	Diagnosis	ICD-9-CM
346.10	Migraine without aura, without mention of intractable migraine without mention of status migrainosus	Diagnosis	ICD-9-CM
346.11	Migraine without aura, with intractable migraine, so stated, without mention of status migrainosus	Diagnosis	ICD-9-CM
346.12	Migraine without aura, without mention of intractable migraine with status migrainosus	Diagnosis	ICD-9-CM
346.13	Migraine without aura, with intractable migraine, so stated, with status migrainosus	Diagnosis	ICD-9-CM
346.2	Variants of migraine, not elsewhere classified	Diagnosis	ICD-9-CM
346.20	Variants of migraine, not elsewhere classified, without mention of intractable migraine without mention of status migrainosus	Diagnosis	ICD-9-CM
346.21	Variants of migraine, not elsewhere classified, with intractable migraine, so stated, without mention of status migrainosus	Diagnosis	ICD-9-CM
346.22	Variants of migraine, not elsewhere classified, without mention of intractable migraine with status migrainosus		
		Diagnosis	ICD-9-CM
346.23	Variants of migraine, not elsewhere classified, with intractable migraine, so stated, with status migrainosus	Diagnosis	ICD-9-CM
346.3	Hemiplegic migraine		
		Diagnosis	ICD-9-CM
346.30	Hemiplegic migraine, without mention of intractable migraine without mention of status migrainosus		
		Diagnosis	ICD-9-CM



Code	Description	Code Category	Code Type
346.31	Hemiplegic migraine, with intractable migraine, so stated, without mention of status migrainosus	Diagnosis	ICD-9-CM
346.32	Hemiplegic migraine, without mention of intractable migraine with status migrainosus	Diagnosis	ICD-9-CM
346.33	Hemiplegic migraine, with intractable migraine, so stated, with status migrainosus	Diagnosis	ICD-9-CM
346.4	Menstrual migraine	Diagnosis	ICD-9-CM
346.40	Menstrual migraine, without mention of intractable migraine without mention of status migrainosus	Diagnosis	ICD-9-CM
346.41	Menstrual migraine, with intractable migraine, so stated, without mention of status migrainosus	Diagnosis	ICD-9-CM
346.42	Menstrual migraine, without mention of intractable migraine with status migrainosus	Diagnosis	ICD-9-CM
346.43	Menstrual migraine, with intractable migraine, so stated, with status migrainosus	Diagnosis	ICD-9-CM
346.5	Persistent migraine aura without cerebral infarction	Diagnosis	ICD-9-CM
346.50	Persistent migraine aura without cerebral infarction, without mention of intractable migraine without mention of status migrainosus	Diagnosis	ICD-9-CM
346.51	Persistent migraine aura without cerebral infarction, with intractable migraine, so stated, without mention of status migrainosus	Diagnosis	ICD-9-CM
346.52	Persistent migraine aura without cerebral infarction, without mention of intractable migraine with status migrainosus	Diagnosis	ICD-9-CM
346.53	Persistent migraine aura without cerebral infarction, with intractable migraine, so stated, with status migrainosus	Diagnosis	ICD-9-CM
346.6	Persistent migraine aura with cerebral infarction	Diagnosis	ICD-9-CM
346.60	Persistent migraine aura with cerebral infarction, without mention of intractable migraine without mention of status migrainosus	Diagnosis	ICD-9-CM
346.61	Persistent migraine aura with cerebral infarction, with intractable migraine, so stated, without mention of status migrainosus	Diagnosis	ICD-9-CM
346.62	Persistent migraine aura with cerebral infarction, without mention of intractable migraine with status migrainosus	Diagnosis	ICD-9-CM
346.63	Persistent migraine aura with cerebral infarction, with intractable migraine, so stated, with status migrainosus	Diagnosis	ICD-9-CM
346.7	Chronic migraine without aura	-	
		Diagnosis	ICD-9-CM
346.70	Chronic migraine without aura, without mention of intractable migraine without mention of status migrainosus	Diagnosis	ICD-9-CM
346.71	Chronic migraine without aura, with intractable migraine, so stated, without mention of status migrainosus	Diagnosis	ICD-9-CM
346.72	Chronic migraine without aura, without mention of intractable migraine with status migrainosus	Diagnosis	ICD-9-CM
346.73	Chronic migraine without aura, with intractable migraine, so stated, with status migrainosus	Diagnosis	ICD-9-CM
346.8	Other forms of migraine	Diagnosis	ICD-9-CM
346.80	Other forms of migraine, without mention of intractable migraine without mention of status migrainosus	Diagnosis	ICD-9-CM
346.81	Other forms of migraine, with intractable migraine, so stated, without mention of status migrainosus	Diagnosis	ICD-9-CM
346.82	Other forms of migraine, without mention of intractable migraine with status migrainosus	Diagnosis	ICD-9-CM
		Diagnosis	100-3-0101



Code	Description	Code Category	Code Type
346.83	Other forms of migraine, with intractable migraine, so stated, with status migrainosus	Diagnosis	ICD-9-CM
346.9	Migraine, unspecified	Diagnosis	ICD-9-CM
346.90	Migraine, unspecified without mention of intractable migraine without mention of status migrainosus	Diagnosis	ICD-9-CM
346.91	Migraine, unspecified, with intractable migraine, so stated, without mention of status migrainosus	Diagnosis	ICD-9-CM
346.92	Migraine, unspecified, without mention of intractable migraine with status migrainosus	Diagnosis	ICD-9-CM
346.93	Migraine, unspecified, with intractable migraine, so stated, with status migrainosus	Diagnosis	ICD-9-CM
G43.001	Migraine without aura, not intractable, with status migrainosus	Diagnosis	ICD-10-CM
G43.009	Migraine without aura, not intractable, without status migrainosus	Diagnosis	ICD-10-CM
G43.011	Migraine without aura, intractable, with status migrainosus	Diagnosis	ICD-10-CM
G43.019	Migraine without aura, intractable, without status migrainosus	Diagnosis	ICD-10-CM
G43.101	Migraine with aura, not intractable, with status migrainosus	Diagnosis	ICD-10-CM
G43.109	Migraine with aura, not intractable, without status migrainosus	Diagnosis	ICD-10-CM
G43.111	Migraine with aura, intractable, with status migrainosus	Diagnosis	ICD-10-CM
G43.119	Migraine with aura, intractable, without status migrainosus	Diagnosis	ICD-10-CM
G43.401	Hemiplegic migraine, not intractable, with status migrainosus	Diagnosis	ICD-10-CM
G43.409	Hemiplegic migraine, not intractable, without status migrainosus	Diagnosis	ICD-10-CM
G43.411	Hemiplegic migraine, intractable, with status migrainosus	Diagnosis	ICD-10-CM
G43.419	Hemiplegic migraine, intractable, without status migrainosus	Diagnosis	ICD-10-CM
G43.501	Persistent migraine aura without cerebral infarction, not intractable, with status migrainosus	Diagnosis	ICD-10-CM
G43.509	Persistent migraine aura without cerebral infarction, not intractable, without status migrainosus	Diagnosis	ICD-10-CM
G43.511	Persistent migraine aura without cerebral infarction, intractable, with status migrainosus	Diagnosis	ICD-10-CM
G43.519	Persistent migraine aura without cerebral infarction, intractable, without status migrainosus	Diagnosis	ICD-10-CM
G43.601	Persistent migraine aura with cerebral infarction, not intractable, with status migrainosus	Diagnosis	ICD-10-CM
G43.609	Persistent migraine aura with cerebral infarction, not intractable, without status migrainosus	Diagnosis	ICD-10-CM
G43.611	Persistent migraine aura with cerebral infarction, intractable, with status migrainosus	Diagnosis	ICD-10-CM
G43.619	Persistent migraine aura with cerebral infarction, intractable, without status migrainosus	Diagnosis	ICD-10-CM
		2.00.0000	



Code	Description	Code Category	Code Type
G43.701	Chronic migraine without aura, not intractable, with status migrainosus	Diagnosis	ICD-10-CM
G43.709	Chronic migraine without aura, not intractable, without status migrainosus	Diagnosis	ICD-10-CM
G43.711	Chronic migraine without aura, intractable, with status migrainosus	Diagnosis	ICD-10-CM
G43.719	Chronic migraine without aura, intractable, without status migrainosus	Diagnosis	ICD-10-CM
G43.801	Other migraine, not intractable, with status migrainosus	Diagnosis	ICD-10-CM
G43.809	Other migraine, not intractable, without status migrainosus	Diagnosis	ICD-10-CM
G43.811	Other migraine, intractable, with status migrainosus	Diagnosis	ICD-10-CM
G43.819	Other migraine, intractable, without status migrainosus	Diagnosis	ICD-10-CM
G43.821	Menstrual migraine, not intractable, with status migrainosus	Diagnosis	ICD-10-CM
G43.829	Menstrual migraine, not intractable, without status migrainosus	Diagnosis	ICD-10-CM
G43.831	Menstrual migraine, intractable, with status migrainosus	Diagnosis	ICD-10-CM
G43.839	Menstrual migraine, intractable, without status migrainosus	Diagnosis	ICD-10-CM
G43.901	Migraine, unspecified, not intractable, with status migrainosus	Diagnosis	ICD-10-CM
G43.909	Migraine, unspecified, not intractable, without status migrainosus	Diagnosis	ICD-10-CM
G43.911	Migraine, unspecified, intractable, with status migrainosus	Diagnosis	ICD-10-CM
G43.919	Migraine, unspecified, intractable, without status migrainosus	Diagnosis	ICD-10-CM
G43.A0	Cyclical vomiting, in migraine, not intractable	Diagnosis	ICD-10-CM
G43.A1	Cyclical vomiting, in migraine, intractable	Diagnosis	ICD-10-CM
G43.B0	Ophthalmoplegic migraine, not intractable	Diagnosis	ICD-10-CM
G43.B1	Ophthalmoplegic migraine, intractable	Diagnosis	ICD-10-CM
G43.C0	Periodic headache syndromes in child or adult, not intractable	Diagnosis	ICD-10-CM
G43.C1	Periodic headache syndromes in child or adult, intractable	Diagnosis	ICD-10-CM
G43.D0	Abdominal migraine, not intractable	Diagnosis	ICD-10-CM
G43.D1	Abdominal migraine, intractable	Diagnosis	ICD-10-CM
G44.001	Cluster headache syndrome, unspecified, intractable	Diagnosis	ICD-10-CM
G44.009	Cluster headache syndrome, unspecified, not intractable	Diagnosis	ICD-10-CM
		-	



Code	Description	Code Category	Code Type
G44.011	Episodic cluster headache, intractable	Diagnosis	ICD-10-CM
G44.019	Episodic cluster headache, not intractable	Diagnosis	ICD-10-CM
G44.021	Chronic cluster headache, intractable	Diagnosis	ICD-10-CM
G44.029	Chronic cluster headache, not intractable	Diagnosis	ICD-10-CM
G44.031	Episodic paroxysmal hemicrania, intractable	Diagnosis	ICD-10-CM
G44.039	Episodic paroxysmal hemicrania, not intractable	Diagnosis	ICD-10-CM
G44.041	Chronic paroxysmal hemicrania, intractable	Diagnosis	ICD-10-CM
G44.049	Chronic paroxysmal hemicrania, not intractable	Diagnosis	ICD-10-CM
G44.051	Short lasting unilateral neuralgiform headache with conjunctival injection and tearing (SUNCT), intractable	Diagnosis	ICD-10-CM
G44.059	Short lasting unilateral neuralgiform headache with conjunctival injection and tearing (SUNCT), not intractable	Diagnosis	ICD-10-CM
G44.091	Other trigeminal autonomic cephalgias (TAC), intractable	Diagnosis	ICD-10-CM
G44.099	Other trigeminal autonomic cephalgias (TAC), not intractable	Diagnosis	ICD-10-CM
G44.1	Vascular headache, not elsewhere classified	Diagnosis	ICD-10-CM
G44.201	Tension-type headache, unspecified, intractable	Diagnosis	ICD-10-CM
G44.209	Tension-type headache, unspecified, not intractable	Diagnosis	ICD-10-CM
G44.211	Episodic tension-type headache, intractable	Diagnosis	ICD-10-CM
G44.219	Episodic tension-type headache, not intractable	Diagnosis	ICD-10-CM
G44.221	Chronic tension-type headache, intractable	Diagnosis	ICD-10-CM
G44.229	Chronic tension-type headache, not intractable	Diagnosis	ICD-10-CM
G44.301	Post-traumatic headache, unspecified, intractable	Diagnosis	ICD-10-CM
G44.309	Post-traumatic headache, unspecified, not intractable	Diagnosis	ICD-10-CM
G44.311	Acute post-traumatic headache, intractable	Diagnosis	ICD-10-CM
G44.319	Acute post-traumatic headache, not intractable	Diagnosis	ICD-10-CM
G44.321	Chronic post-traumatic headache, intractable	Diagnosis	ICD-10-CM
G44.329	Chronic post-traumatic headache, not intractable	Diagnosis	ICD-10-CM
G44.40	Drug-induced headache, not elsewhere classified, not intractable	Diagnosis	ICD-10-CM
		2.0010	



Code	Description	Code Category	Code Type
G44.41	Drug-induced headache, not elsewhere classified, intractable	Diagnosis	ICD-10-CM
G44.51	Hemicrania continua	Diagnosis	ICD-10-CM
G44.52	New daily persistent headache (NDPH)	Diagnosis	ICD-10-CM
G44.53	Primary thunderclap headache	Diagnosis	ICD-10-CM
G44.59	Other complicated headache syndrome	Diagnosis	ICD-10-CM
G44.81	Hypnic headache	Diagnosis	ICD-10-CM
G44.82	Headache associated with sexual activity	Diagnosis	ICD-10-CM
G44.83	Primary cough headache	Diagnosis	ICD-10-CM
G44.84	Primary exertional headache	Diagnosis	ICD-10-CM
G44.85	Primary stabbing headache	Diagnosis	ICD-10-CM
G44.89	Other headache syndrome	Diagnosis	ICD-10-CM
	Thyrotoxicosis		
242	Thyrotoxicosis with or without goiter	Diagnosis	ICD-9-CM
242.4	Thyrotoxicosis from ectopic thyroid nodule	Diagnosis	ICD-9-CM
242.40	Thyrotoxicosis from ectopic thyroid nodule without mention of thyrotoxic crisis or storm	Diagnosis	ICD-9-CM
242.41	Thyrotoxicosis from ectopic thyroid nodule with mention of thyrotoxic crisis or storm	Diagnosis	ICD-9-CM
242.8	Thyrotoxicosis of other specified origin	Diagnosis	ICD-9-CM
242.80	Thyrotoxicosis of other specified origin without mention of thyrotoxic crisis or storm	Diagnosis	ICD-9-CM
242.81	Thyrotoxicosis of other specified origin with mention of thyrotoxic crisis or storm	Diagnosis	ICD-9-CM
242.9	Thyrotoxicosis without mention of goiter or other cause	Diagnosis	ICD-9-CM
242.90	Thyrotoxicosis without mention of goiter or other cause, without mention of thyrotoxic crisis or storm	Diagnosis	ICD-9-CM
242.91	Thyrotoxicosis without mention of goiter or other cause, with mention of thyrotoxic crisis or storm	Diagnosis	ICD-9-CM
775.3	Neonatal thyrotoxicosis	Diagnosis	ICD-9-CM
E05	Thyrotoxicosis [hyperthyroidism]	Diagnosis	ICD-10-CM
E05.0	Thyrotoxicosis with diffuse goiter	Diagnosis	ICD-10-CM
E05.00	Thyrotoxicosis with diffuse goiter without thyrotoxic crisis or storm	Diagnosis	ICD-10-CM
		213210313	



Code	Description	Code Category	Code Type
E05.01	Thyrotoxicosis with diffuse goiter with thyrotoxic crisis or storm	Diagnosis	ICD-10-CM
E05.1	Thyrotoxicosis with toxic single thyroid nodule	Diagnosis	ICD-10-CM
E05.10	Thyrotoxicosis with toxic single thyroid nodule without thyrotoxic crisis or storm	Diagnosis	ICD-10-CM
E05.11	Thyrotoxicosis with toxic single thyroid nodule with thyrotoxic crisis or storm	Diagnosis	ICD-10-CM
E05.2	Thyrotoxicosis with toxic multinodular goiter	Diagnosis	ICD-10-CM
E05.20	Thyrotoxicosis with toxic multinodular goiter without thyrotoxic crisis or storm	Diagnosis	ICD-10-CM
E05.21	Thyrotoxicosis with toxic multinodular goiter with thyrotoxic crisis or storm	Diagnosis	ICD-10-CM
E05.3	Thyrotoxicosis from ectopic thyroid tissue	Diagnosis	ICD-10-CM
E05.30	Thyrotoxicosis from ectopic thyroid tissue without thyrotoxic crisis or storm	Diagnosis	ICD-10-CM
E05.31	Thyrotoxicosis from ectopic thyroid tissue with thyrotoxic crisis or storm	Diagnosis	ICD-10-CM
E05.4	Thyrotoxicosis factitia	Diagnosis	ICD-10-CM
E05.40	Thyrotoxicosis factitia without thyrotoxic crisis or storm	Diagnosis	ICD-10-CM
E05.41	Thyrotoxicosis factitia with thyrotoxic crisis or storm	Diagnosis	ICD-10-CM
E05.8	Other thyrotoxicosis	Diagnosis	ICD-10-CM
E05.80	Other thyrotoxicosis without thyrotoxic crisis or storm	Diagnosis	ICD-10-CM
E05.81	Other thyrotoxicosis with thyrotoxic crisis or storm	Diagnosis	ICD-10-CM
E05.9	Thyrotoxicosis, unspecified	Diagnosis	ICD-10-CM
E05.90	Thyrotoxicosis, unspecified without thyrotoxic crisis or storm	Diagnosis	ICD-10-CM
E05.91	Thyrotoxicosis, unspecified with thyrotoxic crisis or storm	Diagnosis	ICD-10-CM
E06.2	Chronic thyroiditis with transient thyrotoxicosis	Diagnosis	ICD-10-CM
P72.1	Transitory neonatal hyperthyroidism	Diagnosis	ICD-10-CM
	Burns		

906.5	Late effect of burn of eye, face, head, and neck	Diagnosis	ICD-9-CM
906.6	Late effect of burn of wrist and hand	Diagnosis	ICD-9-CM
906.7	Late effect of burn of other extremities	Diagnosis	ICD-9-CM
906.8	Late effect of burns of other specified sites	Diagnosis	ICD-9-CM



Code	Description	Code Category	Code Type
906.9	Late effect of burn of unspecified site	Diagnosis	ICD-9-CM
940	Burn confined to eye and adnexa	Diagnosis	ICD-9-CM
940.1	Other burns of eyelids and periocular area	Diagnosis	ICD-9-CM
940.4	Other burn of cornea and conjunctival sac	Diagnosis	ICD-9-CM
940.5	Burn with resulting rupture and destruction of eyeball	Diagnosis	ICD-9-CM
940.9	Unspecified burn of eye and adnexa	Diagnosis	ICD-9-CM
941	Burn of face, head, and neck	Diagnosis	ICD-9-CM
941.0	Burn of face, head, and neck, unspecified degree	Diagnosis	ICD-9-CM
941.00	Burn of unspecified degree of unspecified site of face and head	Diagnosis	ICD-9-CM
941.01	Burn of unspecified degree of ear (any part)	Diagnosis	ICD-9-CM
941.02	Burn of unspecified degree of eye (with other parts of face, head, and neck)	Diagnosis	ICD-9-CM
941.03	Burn of unspecified degree of lip(s)	Diagnosis	ICD-9-CM
941.04	Burn of unspecified degree of chin	Diagnosis	ICD-9-CM
941.05	Burn of unspecified degree of nose (septum)	Diagnosis	ICD-9-CM
941.06	Burn of unspecified degree of scalp (any part)	Diagnosis	ICD-9-CM
941.07	Burn of unspecified degree of forehead and cheek	Diagnosis	ICD-9-CM
941.08	Burn of unspecified degree of neck	Diagnosis	ICD-9-CM
941.09	Burn of unspecified degree of multiple sites (except with eye) of face, head, and neck	Diagnosis	ICD-9-CM
941.1	Erythema due to burn (first degree) of face, head, and neck	Diagnosis	ICD-9-CM
941.10	Erythema due to burn (first degree) of unspecified site of face and head	Diagnosis	ICD-9-CM
941.11	Erythema due to burn (first degree) of ear (any part)	Diagnosis	ICD-9-CM
941.12	Erythema due to burn (first degree) of eye (with other parts face, head, and neck)	Diagnosis	ICD-9-CM
941.13	Erythema due to burn (first degree) of lip(s)	Diagnosis	ICD-9-CM
941.14	Erythema due to burn (first degree) of chin	Diagnosis	ICD-9-CM
941.15	Erythema due to burn (first degree) of nose (septum)	Diagnosis	ICD-9-CM
941.16	Erythema due to burn (first degree) of scalp (any part)	Diagnosis	ICD-9-CM
		2.381000	



Code	Description	Code Category	Code Type
941.17	Erythema due to burn (first degree) of forehead and cheek	Diagnosis	ICD-9-CM
941.18	Erythema due to burn (first degree) of neck	Diagnosis	ICD-9-CM
941.19	Erythema due to burn (first degree) of multiple sites (except with eye) of face, head, and neck	Diagnosis	ICD-9-CM
941.2	Blisters with epidermal loss due to burn (second degree) of face, head, and neck	Diagnosis	ICD-9-CM
941.20	Blisters, with epidermal loss due to burn (second degree) of face and head, unspecified site	Diagnosis	ICD-9-CM
941.21	Blisters, with epidermal loss due to burn (second degree) of ear (any part)	Diagnosis	ICD-9-CM
941.22	Blisters, with epidermal loss due to burn (second degree) of eye (with other parts of face, head, and neck)	Diagnosis	ICD-9-CM
941.23	Blisters, with epidermal loss due to burn (second degree) of lip(s)	Diagnosis	ICD-9-CM
941.24	Blisters, with epidermal loss due to burn (second degree) of chin	Diagnosis	ICD-9-CM
941.25	Blisters, with epidermal loss due to burn (second degree) of nose (septum)	Diagnosis	ICD-9-CM
941.26	Blisters, with epidermal loss due to burn (second degree) of scalp (any part)	Diagnosis	ICD-9-CM
941.27	Blisters, with epidermal loss due to burn (second degree) of forehead and cheek	Diagnosis	ICD-9-CM
941.28	Blisters, with epidermal loss due to burn (second degree) of neck	-	
941.29	Blisters, with epidermal loss due to burn (second degree) of multiple sites (except with eye) of face, head, and neck	Diagnosis	ICD-9-CM
		Diagnosis	ICD-9-CM
941.3	Full-thickness skin loss due to burn (third degree NOS) of face, head, and neck	Diagnosis	ICD-9-CM
941.30	Full-thickness skin loss due to burn (third degree NOS) of unspecified site of face and head	Diagnosis	ICD-9-CM
941.31	Full-thickness skin loss due to burn (third degree NOS) of ear (any part)	Diagnosis	ICD-9-CM
941.32	Full-thickness skin loss due to burn (third degree NOS) of eye (with other parts of face, head, and neck)	Diagnosis	ICD-9-CM
941.33	Full-thickness skin loss due to burn (third degree NOS) of lip(s)	Diagnosis	ICD-9-CM
941.34	Full-thickness skin loss due to burn (third degree NOS) of chin	Diagnosis	ICD-9-CM
941.35	Full-thickness skin loss due to burn (third degree NOS) of nose (septum)	Diagnosis	ICD-9-CM
941.36	Full-thickness skin loss due to burn (third degree NOS) of scalp (any part)	Diagnosis	ICD-9-CM
941.37	Full-thickness skin loss due to burn (third degree NOS) of forehead and cheek	Diagnosis	ICD-9-CM
941.38	Full-thickness skin loss due to burn (third degree NOS) of neck		
		Diagnosis	ICD-9-CM
941.39	Full-thickness skin loss due to burn (third degree NOS) of multiple sites (except with eye) of face, head, and neck	Diagnosis	ICD-9-CM



Code	Description	Code Category	Code Type
941.4	Deep necrosis of underlying tissues due to burn (deep third degree) of face, head, and neck without mention of loss of a body part	Diagnosis	ICD-9-CM
941.40	Deep necrosis of underlying tissues due to burn (deep third degree) of unspecified site of face and head, without mention of loss of a body part	Diagnosis	ICD-9-CM
941.41	Deep necrosis of underlying tissues due to burn (deep third degree) of ear (any part), without mention of loss of a body part	Diagnosis	ICD-9-CM
941.42	Deep necrosis of underlying tissues due to burn (deep third degree) of eye (with other parts of face, head, and neck), without mention of loss of a body part	Diagnosis	ICD-9-CM
941.43	Deep necrosis of underlying tissues due to burn (deep third degree) of lip(s), without mention of loss of a body part	Diagnosis	ICD-9-CM
941.44	Deep necrosis of underlying tissues due to burn (deep third degree) of chin, without mention of loss of a body part	Diagnosis	ICD-9-CM
941.45	Deep necrosis of underlying tissues due to burn (deep third degree) of nose (septum), without mention of loss of a body part	Diagnosis	ICD-9-CM
941.46	Deep necrosis of underlying tissues due to burn (deep third degree) of scalp (any part), without mention of loss of a body part	Diagnosis	ICD-9-CM
941.47	Deep necrosis of underlying tissues due to burn (deep third degree) of forehead and cheek, without mention of loss of a body part	Diagnosis	ICD-9-CM
941.48	Deep necrosis of underlying tissues due to burn (deep third degree) of neck, without mention of loss of a body part	Diagnosis	ICD-9-CM
941.49	Deep necrosis of underlying tissues due to burn (deep third degree) of multiple sites (except with eye) of face, head, and neck, without mention of loss of a body part	s Diagnosis	ICD-9-CM
941.5	Deep necrosis of underlying tissues due to burn (deep third degree) of face, head, and neck with loss of a body part	Diagnosis	ICD-9-CM
941.50	Deep necrosis of underlying tissues due to burn (deep third degree) of face and head, unspecified site, with loss of a body part	0	ICD-9-CM
941.51	Deep necrosis of underlying tissues due to burn (deep third degree) of ear (any part), with loss of a body part	Diagnosis	ICD-9-CIVI
044 50		Diagnosis	ICD-9-CM
941.52	Deep necrosis of underlying tissues due to burn (deep third degree) of eye (with other parts of face, head, and neck), with loss of a body part	Diagnosis	ICD-9-CM
941.53	Deep necrosis of underlying tissues due to burn (deep third degree) of lip(s), with loss of a body part	Diagnosis	ICD-9-CM
941.54	Deep necrosis of underlying tissues due to burn (deep third degree) of chin, with loss of a body part	Diagnosis	ICD-9-CM
941.55	Deep necrosis of underlying tissues due to burn (deep third degree) of nose (septum), with loss of a body part		
941.56	Deep necrosis of underlying tissues due to burn (deep third degree) of scalp (any part), with loss of a body part	Diagnosis	ICD-9-CM
511.50		Diagnosis	ICD-9-CM
941.57	Deep necrosis of underlying tissues due to burn (deep third degree) of forehead and cheek, with loss of a body part	Diagnosis	ICD-9-CM
941.58	Deep necrosis of underlying tissues due to burn (deep third degree) of neck, with loss of a body part	-	
044 50		Diagnosis	ICD-9-CM
941.59	Deep necrosis of underlying tissues due to burn (deep third degree) of multiple sites (except eye) of face, head, and neck, with loss of a body part	Diagnosis	ICD-9-CM



Code	Description	Code Category	Code Type
942	Burn of trunk	Diagnosis	ICD-9-CM
942.0	Burn of trunk, unspecified degree	Diagnosis	ICD-9-CM
942.00	Burn of unspecified degree of trunk, unspecified site	Diagnosis	ICD-9-CM
942.01	Burn of trunk, unspecified degree of breast	Diagnosis	ICD-9-CM
942.02	Burn of trunk, unspecified degree of chest wall, excluding breast and nipple	Diagnosis	ICD-9-CM
942.03	Burn of trunk, unspecified degree of abdominal wall	Diagnosis	ICD-9-CM
942.04	Burn of trunk, unspecified degree of back (any part)	Diagnosis	ICD-9-CM
942.05	Burn of trunk, unspecified degree of genitalia	Diagnosis	ICD-9-CM
942.09	Burn of trunk, unspecified degree of other and multiple sites	Diagnosis	ICD-9-CM
942.1	Erythema due to burn (first degree) of trunk	Diagnosis	ICD-9-CM
942.10	Erythema due to burn (first degree) of unspecified site of trunk	Diagnosis	ICD-9-CM
942.11	Erythema due to burn (first degree) of breast	Diagnosis	ICD-9-CM
942.12	Erythema due to burn (first degree) of chest wall, excluding breast and nipple	Diagnosis	ICD-9-CM
942.13	Erythema due to burn (first degree) of abdominal wall	Diagnosis	ICD-9-CM
942.14	Erythema due to burn (first degree) of back (any part)	Diagnosis	ICD-9-CM
942.15	Erythema due to burn (first degree) of genitalia	Diagnosis	ICD-9-CM
942.19	Erythema due to burn (first degree) of other and multiple sites of trunk	Diagnosis	ICD-9-CM
942.2	Blisters with epidermal loss due to burn (second degree) of trunk	Diagnosis	ICD-9-CM
942.20	Blisters with epidermal loss due to burn (second degree) of unspecified site of trunk	Diagnosis	ICD-9-CM
942.21	Blisters with epidermal loss due to burn (second degree) of breast	Diagnosis	ICD-9-CM
942.22	Blisters with epidermal loss due to burn (second degree) of chest wall, excluding breast and nipple	Diagnosis	ICD-9-CM
942.23	Blisters with epidermal loss due to burn (second degree) of abdominal wall	Diagnosis	ICD-9-CM
942.24	Blisters with epidermal loss due to burn (second degree) of back (any part)	Diagnosis	ICD-9-CM
942.25	Blisters with epidermal loss due to burn (second degree) of genitalia	Diagnosis	ICD-9-CM
942.29	Blisters with epidermal loss due to burn (second degree) of other and multiple sites of trunk	Diagnosis	ICD-9-CM
942.3	Full-thickness skin loss due to burn (third degree NOS) of trunk	Diagnosis	ICD-9-CM
		516510515	



Codo	Description	Codo Cotogory	Codo Turos
Code 942.30	Full-thickness skin loss due to burn (third degree NOS) of unspecified site of trunk	Code Category	Code Type
942.31	Full-thickness skin loss due to burn (third degree NOS) of breast	Diagnosis	ICD-9-CM
942.31	Full-thickness skin loss due to burn (third degree NOS) of chest wall, excluding breast and nipple	Diagnosis	ICD-9-CM
		Diagnosis	ICD-9-CM
942.33	Full-thickness skin loss due to burn (third degree NOS) of abdominal wall	Diagnosis	ICD-9-CM
942.34	Full-thickness skin loss due to burn (third degree NOS) of back (any part)	Diagnosis	ICD-9-CM
942.35	Full-thickness skin loss due to burn (third degree NOS) of genitalia	Diagnosis	ICD-9-CM
942.39	Full-thickness skin loss due to burn (third degree NOS) of other and multiple sites of trunk	Diagnosis	ICD-9-CM
942.4	Deep necrosis of underlying tissues due to burn (deep third degree) of trunk without mention of loss of a body part	Diagnosis	ICD-9-CM
942.40	Deep necrosis of underlying tissues due to burn (deep third degree) of trunk, unspecified site, without mention of loss of a body part	Diagnosis	ICD-9-CM
942.41	Deep necrosis of underlying tissues due to burn (deep third degree) of breast, without mention of loss of a body part	Diagnosis	ICD-9-CM
942.42	Deep necrosis of underlying tissues due to burn (deep third degree) of chest wall, excluding breast and nipple, without mention of loss of a body part		
		Diagnosis	ICD-9-CM
942.43	Deep necrosis of underlying tissues due to burn (deep third degree) of abdominal wall, without mention of loss of a body part	Diagnosis	ICD-9-CM
942.44	Deep necrosis of underlying tissues due to burn (deep third degree) of back (any part), without mention of loss of a body part	Diagnosis	ICD-9-CM
942.45	Deep necrosis of underlying tissues due to burn (deep third degree) of genitalia, without mention of loss of a body part	Diagnosis	ICD-9-CM
942.49	Deep necrosis of underlying tissues due to burn (deep third degree) of other and multiple sites of trunk, without mention of loss of a body part	Diagnosis	ICD-9-CM
942.5	Deep necrosis of underlying tissues due to burn (deep third degree) of trunk with loss of a body part	Diagnosis	ICD-9-CM
942.50	Deep necrosis of underlying tissues due to burn (deep third degree) of unspecified site of trunk, with loss of a body part	Diagnosis	ICD-9-CM
942.51	Deep necrosis of underlying tissues due to burn (deep third degree) of breast, with loss of a body part	Diagnosis	ICD-9-CM
942.52	Deep necrosis of underlying tissues due to burn (deep third degree) of chest wall, excluding breast and nipple, with loss of a body part	Diagnosis	ICD-9-CM
942.53	Deep necrosis of underlying tissues due to burn (deep third degree) of abdominal wall with loss of a body part	Diagnosis	ICD-9-CM
942.54	Deep necrosis of underlying tissues due to burn (deep third degree) of back (any part), with loss of a body part	Diagnosis	ICD-9-CM
942.55	Deep necrosis of underlying tissues due to burn (deep third degree) of genitalia, with loss of a body part		
		Diagnosis	ICD-9-CM
942.59	Deep necrosis of underlying tissues due to burn (deep third degree) of other and multiple sites of trunk, with loss of a body part	Diagnosis	ICD-9-CM
943	Burn of upper limb, except wrist and hand	Diagnosis	ICD-9-CM
943.0	Burn of upper limb, except wrist and hand, unspecified degree	Diagnosis	ICD-9-CM



Code	Description	Code Category	Code Type
943.00	Burn of unspecified degree of unspecified site of upper limb	Diagnosis	ICD-9-CM
943.01	Burn of unspecified degree of forearm	Diagnosis	ICD-9-CM
943.02	Burn of unspecified degree of elbow	Diagnosis	ICD-9-CM
943.03	Burn of unspecified degree of upper arm	Diagnosis	ICD-9-CM
943.04	Burn of unspecified degree of axilla	Diagnosis	ICD-9-CM
943.05	Burn of unspecified degree of shoulder	Diagnosis	ICD-9-CM
943.06	Burn of unspecified degree of scapular region	Diagnosis	ICD-9-CM
943.09	Burn of unspecified degree multiple sites of upper limb, except wrist and hand	Diagnosis	ICD-9-CM
943.1	Erythema due to burn (first degree) of upper limb, except wrist and hand	Diagnosis	ICD-9-CM
943.10	Erythema due to burn (first degree) of unspecified site of upper limb	Diagnosis	ICD-9-CM
943.11	Erythema due to burn (first degree) of forearm	Diagnosis	ICD-9-CM
943.12	Erythema due to burn (first degree) of elbow	Diagnosis	ICD-9-CM
943.13	Erythema due to burn (first degree) of upper arm	Diagnosis	ICD-9-CM
943.14	Erythema due to burn (first degree) of axilla	Diagnosis	ICD-9-CM
943.15	Erythema due to burn (first degree) of shoulder	Diagnosis	ICD-9-CM
943.16	Erythema due to burn (first degree) of scapular region	Diagnosis	ICD-9-CM
943.19	Erythema due to burn (first degree) of multiple sites of upper limb, except wrist and hand	Diagnosis	ICD-9-CM
943.2	Blisters with epidermal loss due to burn (second degree) of upper limb, except wrist and hand	Diagnosis	ICD-9-CM
943.20	Blisters with epidermal loss due to burn (second degree) of unspecified site of upper limb	Diagnosis	ICD-9-CM
943.21	Blisters with epidermal loss due to burn (second degree) of forearm	Diagnosis	ICD-9-CM
943.22	Blisters with epidermal loss due to burn (second degree) of elbow	Diagnosis	ICD-9-CM
943.23	Blisters with epidermal loss due to burn (second degree) of upper arm	Diagnosis	ICD-9-CM
943.24	Blisters with epidermal loss due to burn (second degree) of axilla	Diagnosis	ICD-9-CM
943.25	Blisters with epidermal loss due to burn (second degree) of shoulder	Diagnosis	ICD-9-CM
943.26	Blisters with epidermal loss due to burn (second degree) of scapular region	2.6510313	
		Diagnosis	ICD-9-CM
		Diagnosis	



Code	Description	Code Category	Code Type
943.29	Blisters with epidermal loss due to burn (second degree) of multiple sites of upper limb, except wrist and hand	Diagnosis	ICD-9-CM
943.3	Full-thickness skin loss due to burn (third degree NOS) of upper limb, except wrist and hand	Diagnosis	ICD-9-CM
943.30	Full-thickness skin loss due to burn (third degree NOS) of unspecified site of upper limb	Diagnosis	ICD-9-CM
943.31	Full-thickness skin loss due to burn (third degree NOS) of forearm	Diagnosis	ICD-9-CM
943.32	Full-thickness skin loss due to burn (third degree NOS) of elbow	Diagnosis	ICD-9-CM
943.33	Full-thickness skin loss due to burn (third degree NOS) of upper arm	Diagnosis	ICD-9-CM
943.34	Full-thickness skin loss due to burn (third degree NOS) of axilla	Diagnosis	ICD-9-CM
943.35	Full-thickness skin loss due to burn (third degree NOS) of shoulder	Diagnosis	ICD-9-CM
943.36	Full-thickness skin loss due to burn (third degree NOS) of scapular region	Diagnosis	ICD-9-CM
943.39	Full-thickness skin loss due to burn (third degree NOS) of multiple sites of upper limb, except wrist and hand		
		Diagnosis	ICD-9-CM
943.4	Deep necrosis of underlying tissues due to burn (deep third degree) of upper limb, except wrist and hand, without mention of loss of a body part	Diagnosis	ICD-9-CM
943.40	Deep necrosis of underlying tissues due to burn (deep third degree) of unspecified site of upper limb, without mention of loss of a body part	Diagnosis	ICD-9-CM
943.41	Deep necrosis of underlying tissues due to burn (deep third degree) of forearm, without mention of loss of a body part	Diagnosis	ICD-9-CM
943.42	Deep necrosis of underlying tissues due to burn (deep third degree) of elbow, without mention of loss of a body part	Diagnosis	ICD-9-CM
943.43	Deep necrosis of underlying tissues due to burn (deep third degree) of upper arm, without mention of loss of a body part	Diagnosis	ICD-9-CM
943.44	Deep necrosis of underlying tissues due to burn (deep third degree) of axilla, without mention of loss of a body part	Diagnosis	ICD-9-CM
943.45	Deep necrosis of underlying tissues due to burn (deep third degree) of shoulder, without mention of loss of a body part	Diagnosis	ICD-9-CM
943.46	Deep necrosis of underlying tissues due to burn (deep third degree) of scapular region, without mention of loss of a body part	Diagnosis	ICD-9-CM
943.49	Deep necrosis of underlying tissues due to burn (deep third degree) of multiple sites of upper limb, except wrist and hand, without mention of loss of a		
	body part	Diagnosis	ICD-9-CM
943.5	Deep necrosis of underlying tissues due to burn (deep third degree) of upper limb, except wrist and hand, with loss of a body part		
		Diagnosis	ICD-9-CM
943.50	Deep necrosis of underlying tissues due to burn (deep third degree) of unspecified site of upper limb, with loss of a body part	Diagnosis	ICD-9-CM
943.51	Deep necrosis of underlying tissues due to burn (deep third degree) of forearm, with loss of a body part	Diagnosis	ICD-9-CM
943.52	Deep necrosis of underlying tissues due to burn (deep third degree) of elbow, with loss of a body part	C	
		Diagnosis	ICD-9-CM
943.53	Deep necrosis of underlying tissues due to burn (deep third degree) of upper arm, with loss of upper a body part	Diagnosis	ICD-9-CM



Code 943.54	Description Deep necrosis of underlying tissues due to burn (deep third degree) of axilla, with loss of a body part	Code Category	Code Type
		Diagnosis	ICD-9-CM
943.55	Deep necrosis of underlying tissues due to burn (deep third degree) of shoulder, with loss of a body part	Diagnosis	ICD-9-CM
943.56	Deep necrosis of underlying tissues due to burn (deep third degree) of scapular region, with loss of a body part	C	
		Diagnosis	ICD-9-CM
943.59	Deep necrosis of underlying tissues due to burn (deep third degree) of multiple sites of upper limb, except wrist and hand, with loss of a body part	Diagnosis	ICD-9-CM
944	Burn of wrist(s) and hand(s)	Diagnosis	ICD-9-CM
944.0	Burn of wrist(s) and hand(s), unspecified degree	Diagnosis	ICD-9-CM
944.00	Burn of unspecified degree of unspecified site of hand	Diagnosis	ICD-9-CM
944.01	Burn of unspecified degree of single digit [finger (nail)] other than thumb	Diagnosis	ICD-9-CM
944.02	Burn of unspecified degree of thumb (nail)	Diagnosis	ICD-9-CM
944.03	Burn of unspecified degree of two or more digits of hand, not including thumb	Diagnosis	ICD-9-CM
944.04	Burn of unspecified degree of two or more digits of hand, including thumb	Diagnosis	ICD-9-CM
944.05	Burn of unspecified degree of palm of hand	Diagnosis	ICD-9-CM
944.06	Burn of unspecified degree of back of hand	Diagnosis	ICD-9-CM
944.07	Burn of unspecified degree of wrist	Diagnosis	ICD-9-CM
944.08	Burn of unspecified degree of multiple sites of wrist(s) and hand(s)	Diagnosis	ICD-9-CM
944.1	Erythema due to burn (first degree) of wrist(s) and hand(s)	Diagnosis	ICD-9-CM
944.10	Erythema due to burn (first degree) of unspecified site of hand	Diagnosis	ICD-9-CM
944.11	Erythema due to burn (first degree) of single digit [finger (nail)] other than thumb	Diagnosis	ICD-9-CM
944.12	Erythema due to burn (first degree) of thumb (nail)	Diagnosis	ICD-9-CM
944.13	Erythema due to burn (first degree) of two or more digits of hand, not including thumb	Diagnosis	ICD-9-CM
944.14	Erythema due to burn (first degree) of two or more digits of hand including thumb	Diagnosis	ICD-9-CM
944.15	Erythema due to burn (first degree) of palm of hand	Diagnosis	ICD-9-CM
944.16	Erythema due to burn (first degree) of back of hand	Diagnosis	ICD-9-CM
944.17	Erythema due to burn (first degree) of wrist	Diagnosis	ICD-9-CM
944.18	Erythema due to burn (first degree) of multiple sites of wrist(s) and hand(s)	Diagnosis	ICD-9-CM
		5	



Code	Description	Code Category	Code Type
944.2	Blisters with epidermal loss due to burn (second degree) of wrist(s) and hand(s)	Diagnosis	ICD-9-CM
944.20	Blisters with epidermal loss due to burn (second degree) of unspecified site of hand	Diagnosis	ICD-9-CM
944.21	Blisters with epidermal loss due to burn (second degree) of single digit [finger (nail)] other than thumb	Diagnosis	ICD-9-CM
944.22	Blisters with epidermal loss due to burn of (second degree) of thumb (nail)	Diagnosis	ICD-9-CM
944.23	Blisters with epidermal loss due to burn (second degree) of two or more digits of hand, not including thumb	Diagnosis	ICD-9-CM
944.24	Blisters with epidermal loss due to burn (second degree) of two or more digits of hand including thumb	Diagnosis	ICD-9-CM
944.25	Blisters with epidermal loss due to burn (second degree) of palm of hand	Diagnosis	ICD-9-CM
944.26	Blisters with epidermal loss due to burn (second degree) of back of hand	Diagnosis	ICD-9-CM
944.27	Blisters with epidermal loss due to burn (second degree) of wrist	Diagnosis	ICD-9-CM
944.28	Blisters with epidermal loss due to burn (second degree) of multiple sites of wrist(s) and hand(s)	Diagnosis	ICD-9-CM
944.3	Full-thickness skin loss due to burn (third degree NOS) of wrist(s) and hand(s)	Diagnosis	ICD-9-CM
944.30	Full-thickness skin loss due to burn (third degree NOS) of unspecified site of hand	Diagnosis	ICD-9-CM
944.31	Full-thickness skin loss due to burn (third degree NOS) of single digit [finger (nail)] other than thumb	Diagnosis	ICD-9-CM
944.32	Full-thickness skin loss due to burn (third degree NOS) of thumb (nail)	Diagnosis	ICD-9-CM
944.33	Full-thickness skin loss due to burn (third degree NOS) of two or more digits of hand, not including thumb	Diagnosis	ICD-9-CM
944.34	Full-thickness skin loss due to burn (third degree NOS) of two or more digits of hand including thumb	Diagnosis	ICD-9-CM
944.35	Full-thickness skin loss due to burn (third degree NOS) of palm of hand	Diagnosis	ICD-9-CM
944.36	Full-thickness skin loss due to burn (third degree NOS) of back of hand	Diagnosis	ICD-9-CM
944.37	Full-thickness skin loss due to burn (third degree NOS) of wrist	Diagnosis	ICD-9-CM
944.38	Full-thickness skin loss due to burn (third degree NOS) of multiple sites of wrist(s) and hand(s)		
		Diagnosis	ICD-9-CM
944.4	Deep necrosis of underlying tissues due to burn (deep third degree) of wrist(s) and hand(s), without mention of loss of a body part		
		Diagnosis	ICD-9-CM
944.40	Deep necrosis of underlying tissues due to burn (deep third degree) of unspecified site of hand, without mention of loss of a body part		
		Diagnosis	ICD-9-CM
944.41	Deep necrosis of underlying tissues due to burn (deep third degree) of single digit [finger (nail)] other than thumb, without mention of loss of a body	2.00.0000	
	part	Diagnosis	ICD-9-CM
		Diagnosis	



Code	Description	Code Category	Code Type
944.42	Deep necrosis of underlying tissues due to burn (deep third degree) of thumb (nail), without mention of loss of a body part		
		Diagnosis	ICD-9-CM
944.43	Deep necrosis of underlying tissues due to burn (deep third degree) of two or more digits of hand, not including thumb, without mention of loss of a		
	body part	Diagnosis	ICD-9-CM
944.44	Deep necrosis of underlying tissues due to burn (deep third degree) of two or more digits of hand including thumb, without mention of loss of a body		
	part	Diagnosis	ICD-9-CM
944.45	Deep necrosis of underlying tissues due to burn (deep third degree) of palm of hand, without mention of loss of a body part	Diagnosis	ICD-9-CM
944.46	Deep necrosis of underlying tissues due to burn (deep third degree) of back of hand, without mention of loss of a body part	Diagnosis	ICD-9-CM
944.47	Deep necrosis of underlying tissues due to burn (deep third degree) of wrist, without mention of loss of a body part	Diagnosis	ICD-9-CM
944.48	Deep necrosis of underlying tissues due to burn (deep third degree) of multiple sites of wrist(s) and hand(s), without mention of loss of a body part	Diagnosis	ICD-9-CM
944.5	Deep necrosis of underlying tissues due to burn (deep third degree) of wrist(s) and hand(s), with loss of a body part	Diagnosis	ICD-9-CM
944.50	Deep necrosis of underlying tissues due to burn (deep third degree) of unspecified site of hand, with loss of a body part	Diagnosis	ICD-9-CM
944.51	Deep necrosis of underlying tissues due to burn (deep third degree) of single digit (finger (nail)) other than thumb, with loss of a body part	Diagnosis	ICD-9-CM
944.52	Deep necrosis of underlying tissues due to burn (deep third degree) of thumb (nail), with loss of a body part	Diagnosis	ICD-9-CM
944.53	Deep necrosis of underlying tissues due to burn (deep third degree) of two or more digits of hand, not including thumb, with loss of a body part		
		Diagnosis	ICD-9-CM
944.54	Deep necrosis of underlying tissues due to burn (deep third degree) of two or more digits of hand including thumb, with loss of a body part	Diagnosis	ICD-9-CM
944.55	Deep necrosis of underlying tissues due to burn (deep third degree) of palm of hand, with loss of a body part	Diagnosis	ICD-9-CM
944.56	Deep necrosis of underlying tissues due to burn (deep third degree) of back of hand, with loss of a body part	Diagnosis	ICD-9-CM
944.57	Deep necrosis of underlying tissues due to burn (deep third degree) of wrist, with loss of a body part	C	
		Diagnosis	ICD-9-CM
944.58	Deep necrosis of underlying tissues due to burn (deep third degree) of multiple sites of wrist(s) and hand(s), with loss of a body part	Diagnosis	ICD-9-CM
945	Burn of lower limb(s)	Diagnosis	ICD-9-CM
945.0	Burn of lower limb(s), unspecified degree	Diagnosis	ICD-9-CM
945.00	Burn of unspecified degree of unspecified site of lower limb (leg)	0	ICD-9-CM
945.01	Burn of unspecified degree of toe(s) (nail)	Diagnosis	
945.02	Burn of unspecified degree of foot	Diagnosis	ICD-9-CM
545.02		Diagnosis	ICD-9-CM



Code	Description	Code Category	Code Type
945.03	Burn of unspecified degree of ankle	Diagnosis	ICD-9-CM
945.04	Burn of unspecified degree of lower leg	Diagnosis	ICD-9-CM
945.05	Burn of unspecified degree of knee	Diagnosis	ICD-9-CM
945.06	Burn of unspecified degree of thigh (any part)	Diagnosis	ICD-9-CM
945.09	Burn of unspecified degree of multiple sites of lower limb(s)	Diagnosis	ICD-9-CM
945.1	Erythema due to burn (first degree) of lower limb(s)	Diagnosis	ICD-9-CM
945.10	Erythema due to burn (first degree) of unspecified site of lower limb (leg)	Diagnosis	ICD-9-CM
945.11	Erythema due to burn (first degree) of toe(s) (nail)	Diagnosis	ICD-9-CM
945.12	Erythema due to burn (first degree) of foot	Diagnosis	ICD-9-CM
945.13	Erythema due to burn (first degree) of ankle	Diagnosis	ICD-9-CM
945.14	Erythema due to burn (first degree) of lower leg	Diagnosis	ICD-9-CM
945.15	Erythema due to burn (first degree) of knee	Diagnosis	ICD-9-CM
945.16	Erythema due to burn (first degree) of thigh (any part)	Diagnosis	ICD-9-CM
945.19	Erythema due to burn (first degree) of multiple sites of lower limb(s)	Diagnosis	ICD-9-CM
945.2	Blisters with epidermal loss due to burn (second degree) of lower limb(s)	Diagnosis	ICD-9-CM
945.20	Blisters with epidermal loss due to burn (second degree) of unspecified site of lower limb (leg)	Diagnosis	ICD-9-CM
945.21	Blisters with epidermal loss due to burn (second degree) of toe(s) (nail)	Diagnosis	ICD-9-CM
945.22	Blisters with epidermal loss due to burn (second degree) of foot	Diagnosis	ICD-9-CM
945.23	Blisters with epidermal loss due to burn (second degree) of ankle	Diagnosis	ICD-9-CM
945.24	Blisters with epidermal loss due to burn (second degree) of lower leg	Diagnosis	ICD-9-CM
945.25	Blisters with epidermal loss due to burn (second degree) of knee	Diagnosis	ICD-9-CM
945.26	Blisters with epidermal loss due to burn (second degree) of thigh (any part)	Diagnosis	ICD-9-CM
945.29	Blisters with epidermal loss due to burn (second degree) of multiple sites of lower limb(s)	Diagnosis	ICD-9-CM
945.3	Full-thickness skin loss due to burn (third degree NOS) of lower limb(s)	Diagnosis	ICD-9-CM
945.30	Full-thickness skin loss due to burn (third degree NOS) of unspecified site of lower limb	Diagnosis	ICD-9-CM
945.31	Full-thickness skin loss due to burn (third degree NOS) of toe(s) (nail)	Diagnosis	ICD-9-CM



Code	Description	Code Category	Code Type
945.32	Full-thickness skin loss due to burn (third degree NOS) of foot	Diagnosis	ICD-9-CM
945.33	Full-thickness skin loss due to burn (third degree NOS) of ankle	Diagnosis	ICD-9-CM
945.34	Full-thickness skin loss due to burn (third degree NOS) of lower leg	Diagnosis	ICD-9-CM
945.35	Full-thickness skin loss due to burn (third degree NOS) of knee	Diagnosis	ICD-9-CM
945.36	Full-thickness skin loss due to burn (third degree NOS) of thigh (any part)	Diagnosis	ICD-9-CM
945.39	Full-thickness skin loss due to burn (third degree NOS) of multiple sites of lower limb(s)	-	
		Diagnosis	ICD-9-CM
945.4	Deep necrosis of underlying tissues due to burn (deep third degree) of lower limb(s) without mention of loss of a body part	Diagnosis	ICD-9-CM
945.40	Deep necrosis of underlying tissues due to burn (deep third degree) of unspecified site of lower limb (leg), without mention of loss of a body part	Diagnosis	ICD-9-CM
945.41	Deep necrosis of underlying tissues due to burn (deep third degree) of toe(s) (nail), without mention of loss of a body part	Diagnosis	ICD-9-CM
945.42	Deep necrosis of underlying tissues due to burn (deep third degree) of foot, without mention of loss of a body part	Diagnosis	ICD-9-CM
945.43	Deep necrosis of underlying tissues due to burn (deep third degree) of ankle, without mention of loss of a body part	Diagnosis	ICD-9-CM
945.44	Deep necrosis of underlying tissues due to burn (deep third degree) of lower leg, without mention of loss of a body part	Diagnosis	ICD-9-CM
945.45	Deep necrosis of underlying tissues due to burn (deep third degree) of knee, without mention of loss of a body part	Diagnosis	ICD-9-CM
945.46	Deep necrosis of underlying tissues due to burn (deep third degree) of thigh (any part), without mention of loss of a body part	Diagnosis	ICD-9-CM
945.49	Deep necrosis of underlying tissues due to burn (deep third degree) of multiple sites of lower limb(s), without mention of loss of a body part	Diagnosis	ICD-9-CM
945.5	Deep necrosis of underlying tissues due to burn (deep third degree) of lower limb(s) with loss of a body part	Diagnosis	ICD-9-CM
945.50	Deep necrosis of underlying tissues due to burn (deep third degree) of unspecified site lower limb (leg), with loss of a body part	Diagnosis	ICD-9-CM
945.51	Deep necrosis of underlying tissues due to burn (deep third degree) of toe(s) (nail), with loss of a body part	Diagnosis	ICD-9-CM
945.52	Deep necrosis of underlying tissues due to burn (deep third degree) of foot, with loss of a body part	Diagnosis	ICD-9-CM
945.53	Deep necrosis of underlying tissues due to burn (deep third degree) of ankle, with loss of a body part	Diagnosis	ICD-9-CM
945.54	Deep necrosis of underlying tissues due to burn (deep third degree) of lower leg, with loss of a body part	Diagnosis	ICD-9-CM
945.55	Deep necrosis of underlying tissues due to burn (deep third degree) of knee, with loss of a body part	Ū	
		Diagnosis	ICD-9-CM
945.56	Deep necrosis of underlying tissues due to burn (deep third degree) of thigh (any part), with loss of a body part	<u> </u>	
		Diagnosis	ICD-9-CM
945.59	Deep necrosis of underlying tissues due to burn (deep third degree) of multiple sites of lower limb(s), with loss of a body part	Diagnosis	ICD-9-CM



Code	Description	Code Category	Code Type
946	Burns of multiple specified sites	Diagnosis	ICD-9-CM
946.0	Burns of multiple specified sites, unspecified degree	Diagnosis	ICD-9-CM
946.1	Erythema due to burn (first degree) of multiple specified sites	Diagnosis	ICD-9-CM
946.2	Blisters with epidermal loss due to burn (second degree) of multiple specified sites	Diagnosis	ICD-9-CM
946.3	Full-thickness skin loss due to burn (third degree NOS) of multiple specified sites		
		Diagnosis	ICD-9-CM
946.4	Deep necrosis of underlying tissues due to burn (deep third degree) of multiple specified sites, without mention of loss of a body part	Diagnosis	ICD-9-CM
946.5	Deep necrosis of underlying tissues due to burn (deep third degree) of multiple specified sites, with loss of a body part	Diagnosis	ICD-9-CM
948	Burns classified according to extent of body surface involved	Diagnosis	ICD-9-CM
948.0	Burn (any degree) involving less than 10% of body surface	Diagnosis	ICD-9-CM
948.00	Burn (any degree) involving less than 10% of body surface with third degree burn of less than 10% or unspecified amount	Diagnosis	ICD-9-CM
948.1	Burn (any degree) involving 10-19% of body surface	Diagnosis	ICD-9-CM
948.10	Burn (any degree) involving 10-19% of body surface with third degree burn of less than 10% or unspecified amount	Diagnosis	ICD-9-CM
948.11	Burn (any degree) involving 10-19% of body surface with third degree burn of 10-19%	Diagnosis	ICD-9-CM
948.2	Burn (any degree) involving 20-29% of body surface	Diagnosis	ICD-9-CM
948.20	Burn (any degree) involving 20-29% of body surface with third degree burn of less than 10% or unspecified amount	Diagnosis	ICD-9-CM
948.21	Burn (any degree) involving 20-29% of body surface with third degree burn of 10-19%	Diagnosis	ICD-9-CM
948.22	Burn (any degree) involving 20-29% of body surface with third degree burn of 20-29%	Diagnosis	ICD-9-CM
948.3	Burn (any degree) involving 30-39% of body surface	Diagnosis	ICD-9-CM
948.30	Burn (any degree) involving 30-39% of body surface with third degree burn of less than 10% or unspecified amount	Diagnosis	ICD-9-CM
948.31	Burn (any degree) involving 30-39% of body surface with third degree burn of 10-19%	Diagnosis	ICD-9-CM
948.32	Burn (any degree) involving 30-39% of body surface with third degree burn of 20-29%	Diagnosis	ICD-9-CM
948.33	Burn (any degree) involving 30-39% of body surface with third degree burn of 30-39%	Diagnosis	ICD-9-CM
948.4	Burn (any degree) involving 40-49% of body surface	Diagnosis	
		Diagnosis	ICD-9-CM
948.40	Burn (any degree) involving 40-49% of body surface with third degree burn of less than 10% or unspecified amount	Diagnosis	ICD-9-CM
948.41	Burn (any degree) involving 40-49% of body surface with third degree burn of 10-19%	Diagnosis	ICD-9-CM
948.42	Burn (any degree) involving 40-49% of body surface with third degree burn of 20-29%	Diagnosis	ICD-9-CM



Code	Description	Code Category	Code Type
948.43	Burn (any degree) involving 40-49% of body surface with third degree burn of 30-39%	Diagnosis	ICD-9-CM
948.44	Burn (any degree) involving 40-49% of body surface with third degree burn of 40-49%	Diagnosis	ICD-9-CM
948.5	Burn (any degree) involving 50-59% of body surface	Diagnosis	ICD-9-CM
948.50	Burn (any degree) involving 50-59% of body surface with third degree burn of less than 10% or unspecified amount	Diagnosis	ICD-9-CM
948.51	Burn (any degree) involving 50-59% of body surface with third degree burn of 10-19%	Diagnosis	ICD-9-CM
948.52	Burn (any degree) involving 50-59% of body surface with third degree burn of 20-29%	Diagnosis	ICD-9-CM
948.53	Burn (any degree) involving 50-59% of body surface with third degree burn of 30-39%	Diagnosis	ICD-9-CM
948.54	Burn (any degree) involving 50-59% of body surface with third degree burn of 40-49%	Diagnosis	ICD-9-CM
948.55	Burn (any degree) involving 50-59% of body surface with third degree burn of 50-59%	Diagnosis	ICD-9-CM
948.6	Burn (any degree) involving 60-69% of body surface	Diagnosis	ICD-9-CM
948.60	Burn (any degree) involving 60-69% of body surface with third degree burn of less than 10% or unspecified amount	Diagnosis	ICD-9-CM
948.61	Burn (any degree) involving 60-69% of body surface with third degree burn of 10-19%	Diagnosis	ICD-9-CM
948.62	Burn (any degree) involving 60-69% of body surface with third degree burn of 20-29%	Diagnosis	ICD-9-CM
948.63	Burn (any degree) involving 60-69% of body surface with third degree burn of 30-39%	Diagnosis	ICD-9-CM
948.64	Burn (any degree) involving 60-69% of body surface with third degree burn of 40-49%	Diagnosis	ICD-9-CM
948.65	Burn (any degree) involving 60-69% of body surface with third degree burn of 50-59%	Diagnosis	ICD-9-CM
948.66	Burn (any degree) involving 60-69% of body surface with third degree burn of 60-69%	Diagnosis	ICD-9-CM
948.7	Burn (any degree) involving 70-79% of body surface	Diagnosis	ICD-9-CM
948.70	Burn (any degree) involving 70-79% of body surface with third degree burn of less than 10% or unspecified amount	Diagnosis	ICD-9-CM
948.71	Burn (any degree) involving 70-79% of body surface with third degree burn of 10-19%	Diagnosis	ICD-9-CM
948.72	Burn (any degree) involving 70-79% of body surface with third degree burn of 20-29%	Diagnosis	ICD-9-CM
948.73	Burn (any degree) involving 70-79% of body surface with third degree burn of 30-39%	Diagnosis	ICD-9-CM
948.74	Burn (any degree) involving 70-79% of body surface with third degree burn of 40-49%	Diagnosis	ICD-9-CM
948.75	Burn (any degree) involving 70-79% of body surface with third degree burn of 50-59%	Diagnosis	ICD-9-CM
948.76	Burn (any degree) involving 70-79% of body surface with third degree burn of 60-69%	Diagnosis	ICD-9-CM
948.77	Burn (any degree) involving 70-79% of body surface with third degree burn of 70-79%	Diagnosis	ICD-9-CM



Code 948.8	Description Burn (any degree) involving 80-89% of body surface	Code Category	Code Type
		Diagnosis	ICD-9-CM
948.80	Burn (any degree) involving 80-89% of body surface with third degree burn of less than 10% or unspecified amount	Diagnosis	ICD-9-CM
948.81	Burn (any degree) involving 80-89% of body surface with third degree burn of 10-19%	Diagnosis	ICD-9-CM
948.82	Burn (any degree) involving 80-89% of body surface with third degree burn of 20-29%	Diagnosis	ICD-9-CM
948.83	Burn (any degree) involving 80-89% of body surface with third degree burn of 30-39%	Diagnosis	ICD-9-CM
948.84	Burn (any degree) involving 80-89% of body surface with third degree burn of 40-49%	Diagnosis	ICD-9-CM
948.85	Burn (any degree) involving 80-89% of body surface with third degree burn of 50-59%	Diagnosis	ICD-9-CM
948.86	Burn (any degree) involving 80-89% of body surface with third degree burn of 60-69%	Diagnosis	ICD-9-CM
948.87	Burn (any degree) involving 80-89% of body surface with third degree burn of 70-79%	Diagnosis	ICD-9-CM
948.88	Burn (any degree) involving 80-89% of body surface with third degree burn of 80-89%	Diagnosis	ICD-9-CM
948.9	Burn (any degree) involving 90% or more of body surface		
		Diagnosis	ICD-9-CM
948.90	Burn (any degree) involving 90% or more of body surface with third degree burn of less than 10% or unspecified amount	Diagnosis	ICD-9-CM
948.91	Burn (any degree) involving 90% or more of body surface with third degree burn of 10-19%	Diagnosis	ICD-9-CM
948.92	Burn (any degree) involving 90% or more of body surface with third degree burn of 20-29%	Diagnosis	ICD-9-CM
948.93	Burn (any degree) involving 90% or more of body surface with third degree burn of 30-39%	Diagnosis	ICD-9-CM
948.94	Burn (any degree) involving 90% or more of body surface with third degree burn of 40-49%	Diagnosis	ICD-9-CM
948.95	Burn (any degree) involving 90% or more of body surface with third degree burn of 50-59%	Diagnosis	ICD-9-CM
948.96	Burn (any degree) involving 90% or more of body surface with third degree burn of 60-69%	Diagnosis	ICD-9-CM
948.97	Burn (any degree) involving 90% or more of body surface with third degree burn of 70-79%	Diagnosis	ICD-9-CM
948.98	Burn (any degree) involving 90% or more of body surface with third degree burn of 80-89%	Diagnosis	ICD-9-CM
948.99	Burn (any degree) involving 90% or more of body surface with third degree burn of 90% or more of body surface	Diagnosis	ICD-9-CM
949	Burn, unspecified site	Diagnosis	ICD-9-CM
949.0	Burn of unspecified site, unspecified degree	Diagnosis	ICD-9-CM
949.1	Erythema due to burn (first degree), unspecified site	Diagnosis	ICD-9-CM
949.2	Blisters with epidermal loss due to burn (second degree), unspecified site	Diagnosis	ICD-9-CM



Code	Description	Code Category	Code Type
949.3	Full-thickness skin loss due to burn (third degree NOS), unspecified site		
		Diagnosis	ICD-9-CM
949.4	Deep necrosis of underlying tissue due to burn (deep third degree), unspecified site without mention of loss of body part	Diagnosis	ICD-9-CM
949.5	Deep necrosis of underlying tissues due to burn (deep third degree, unspecified site with loss of body part	Diagnosis	ICD-9-CM
E803	Railway accident involving explosion, fire, or burning	Diagnosis	ICD-9-CM
E803.0	Railway accident involving explosion, fire, or burning, injuring railway employee	Diagnosis	ICD-9-CM
E803.1	Railway accident involving explosion, fire, or burning, injuring passenger on railway	Diagnosis	ICD-9-CM
E803.2	Railway accident involving explosion, fire, or burning, injuring pedestrian	Diagnosis	ICD-9-CM
E803.3	Railway accident involving explosion, fire, or burning, injuring pedal cyclist	Diagnosis	ICD-9-CM
E803.8	Railway accident involving explosion, fire, or burning, injuring other specified person	Diagnosis	ICD-9-CM
E803.9	Railway accident involving explosion, fire, or burning, injuring unspecified person	Diagnosis	ICD-9-CM
E837	Explosion, fire, or burning in watercraft	Diagnosis	ICD-9-CM
E837.0	Explosion, fire, or burning in watercraft injuring occupant of small unpowered boat	Diagnosis	ICD-9-CM
E837.1	Explosion, fire, or burning in watercraft injuring occupant of small powered boat	Diagnosis	ICD-9-CM
E837.2	Explosion, fire, or burning in watercraft injuring occupant of other watercraft, crew	Diagnosis	ICD-9-CM
E837.3	Explosion, fire, or burning in watercraft injuring occupant of other watercraft, other than crew	Diagnosis	ICD-9-CM
E837.4	Explosion, fire, or burning in watercraft injuring water skier	Diagnosis	ICD-9-CM
E837.5	Explosion, fire, or burning in watercraft injuring swimmer	Diagnosis	ICD-9-CM
E837.6	Explosion, fire, or burning in watercraft injuring dockers, stevedores	Diagnosis	ICD-9-CM
E837.7	Explosion, fire, or burning in watercraft, occupant of military watercraft, any type	Diagnosis	ICD-9-CM
E837.8	Explosion, fire, or burning in watercraft injuring other specified person	Diagnosis	ICD-9-CM
E837.9	Explosion, fire, or burning in watercraft injuring unspecified person	Diagnosis	ICD-9-CM
E890.3	Burning caused by conflagration in private dwelling	Diagnosis	ICD-9-CM
E891.3	Burning caused by conflagration in other and unspecified building or structure	Diagnosis	ICD-9-CM
E898.0	Accident caused by burning bedclothes	Diagnosis	ICD-9-CM
E898.1	Accident caused by other burning materials	Diagnosis	ICD-9-CM



Code	Description	Code Category	Code Type
E958.1	Suicide and self-inflicted injury by burns, fire	Diagnosis	ICD-9-CM
E988.1	Injury by burns or fire, undetermined whether accidentally or purposely inflicted	Diagnosis	ICD-9-CM
M61.3	Calcification and ossification of muscles associated with burns	Diagnosis	ICD-10-CM
M61.30	Calcification and ossification of muscles associated with burns, unspecified site	Diagnosis	ICD-10-CM
M61.31	Calcification and ossification of muscles associated with burns, shoulder	Diagnosis	ICD-10-CM
M61.311	Calcification and ossification of muscles associated with burns, right shoulder	Diagnosis	ICD-10-CM
M61.312	Calcification and ossification of muscles associated with burns, left shoulder	Diagnosis	ICD-10-CM
M61.319	Calcification and ossification of muscles associated with burns, unspecified shoulder	Diagnosis	ICD-10-CM
M61.32	Calcification and ossification of muscles associated with burns, upper arm	Diagnosis	ICD-10-CM
M61.321	Calcification and ossification of muscles associated with burns, right upper arm	Diagnosis	ICD-10-CM
M61.322	Calcification and ossification of muscles associated with burns, left upper arm	Diagnosis	ICD-10-CM
M61.329	Calcification and ossification of muscles associated with burns, unspecified upper arm	Diagnosis	ICD-10-CM
M61.33	Calcification and ossification of muscles associated with burns, forearm	Diagnosis	ICD-10-CM
M61.331	Calcification and ossification of muscles associated with burns, right forearm	Diagnosis	ICD-10-CM
M61.332	Calcification and ossification of muscles associated with burns, left forearm	Diagnosis	ICD-10-CM
M61.339	Calcification and ossification of muscles associated with burns, unspecified forearm	Diagnosis	ICD-10-CM
M61.34	Calcification and ossification of muscles associated with burns, hand	Diagnosis	ICD-10-CM
M61.341	Calcification and ossification of muscles associated with burns, right hand	Diagnosis	ICD-10-CM
M61.342	Calcification and ossification of muscles associated with burns, left hand	Diagnosis	ICD-10-CM
M61.349	Calcification and ossification of muscles associated with burns, unspecified hand	Diagnosis	ICD-10-CM
M61.35	Calcification and ossification of muscles associated with burns, thigh	Diagnosis	ICD-10-CM
M61.351	Calcification and ossification of muscles associated with burns, right thigh	Diagnosis	ICD-10-CM
M61.352	Calcification and ossification of muscles associated with burns, left thigh	Diagnosis	ICD-10-CM
M61.359	Calcification and ossification of muscles associated with burns, unspecified thigh	Diagnosis	ICD-10-CM
M61.36	Calcification and ossification of muscles associated with burns, lower leg	Diagnosis	ICD-10-CM
M61.361	Calcification and ossification of muscles associated with burns, right lower leg	C	ICD-10-CM
		Diagnosis	



Code	Description	Code Category	Code Type
M61.362	Calcification and ossification of muscles associated with burns, left lower leg	Diagnosis	ICD-10-CM
M61.369	Calcification and ossification of muscles associated with burns, unspecified lower leg	Diagnosis	ICD-10-CM
M61.37	Calcification and ossification of muscles associated with burns, ankle and foot	Diagnosis	ICD-10-CM
M61.371	Calcification and ossification of muscles associated with burns, right ankle and foot	Diagnosis	ICD-10-CM
M61.372	Calcification and ossification of muscles associated with burns, left ankle and foot	Diagnosis	ICD-10-CM
M61.379	Calcification and ossification of muscles associated with burns, unspecified ankle and foot	Diagnosis	ICD-10-CM
M61.38	Calcification and ossification of muscles associated with burns, other site	Diagnosis	ICD-10-CM
M61.39	Calcification and ossification of muscles associated with burns, multiple sites	Diagnosis	ICD-10-CM
T20	Burn and corrosion of head, face, and neck	Diagnosis	ICD-10-CM
T20.0	Burn of unspecified degree of head, face, and neck	Diagnosis	ICD-10-CM
T20.00	Burn of unspecified degree of head, face, and neck, unspecified site	Diagnosis	ICD-10-CM
T20.00XA	Burn of unspecified degree of head, face, and neck, unspecified site, initial encounter	Diagnosis	ICD-10-CM
T20.00XD	Burn of unspecified degree of head, face, and neck, unspecified site, subsequent encounter	Diagnosis	ICD-10-CM
T20.00XS	Burn of unspecified degree of head, face, and neck, unspecified site, sequela	Diagnosis	ICD-10-CM
T20.01	Burn of unspecified degree of ear [any part, except ear drum]	Diagnosis	ICD-10-CM
T20.011	Burn of unspecified degree of right ear [any part, except ear drum]	Diagnosis	ICD-10-CM
T20.011A	Burn of unspecified degree of right ear [any part, except ear drum], initial encounter	Diagnosis	ICD-10-CM
T20.011D	Burn of unspecified degree of right ear [any part, except ear drum], subsequent encounter	Diagnosis	ICD-10-CM
T20.011S	Burn of unspecified degree of right ear [any part, except ear drum], sequela	Diagnosis	ICD-10-CM
T20.012	Burn of unspecified degree of left ear [any part, except ear drum]	Diagnosis	ICD-10-CM
T20.012A	Burn of unspecified degree of left ear [any part, except ear drum], initial encounter	Diagnosis	ICD-10-CM
T20.012D	Burn of unspecified degree of left ear [any part, except ear drum], subsequent encounter	Diagnosis	ICD-10-CM
T20.012S	Burn of unspecified degree of left ear [any part, except ear drum], sequela	Diagnosis	ICD-10-CM
T20.019	Burn of unspecified degree of unspecified ear [any part, except ear drum]	Diagnosis	ICD-10-CM
T20.019A	Burn of unspecified degree of unspecified ear [any part, except ear drum], initial encounter	Diagnosis	ICD-10-CM
T20.019D	Burn of unspecified degree of unspecified ear [any part, except ear drum], subsequent encounter	Diagnosis	ICD-10-CM
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Code	Description	Code Category	Code Type
T20.019S	Burn of unspecified degree of unspecified ear [any part, except ear drum], sequela	Diagnosis	ICD-10-CM
T20.02	Burn of unspecified degree of lip(s)	Diagnosis	ICD-10-CM
T20.02XA	Burn of unspecified degree of lip(s), initial encounter	Diagnosis	ICD-10-CM
T20.02XD	Burn of unspecified degree of lip(s), subsequent encounter	Diagnosis	ICD-10-CM
T20.02XS	Burn of unspecified degree of lip(s), sequela	Diagnosis	ICD-10-CM
T20.03	Burn of unspecified degree of chin	Diagnosis	ICD-10-CM
T20.03XA	Burn of unspecified degree of chin, initial encounter	Diagnosis	ICD-10-CM
T20.03XD	Burn of unspecified degree of chin, subsequent encounter	Diagnosis	ICD-10-CM
T20.03XS	Burn of unspecified degree of chin, sequela	Diagnosis	ICD-10-CM
T20.04	Burn of unspecified degree of nose (septum)	Diagnosis	ICD-10-CM
T20.04XA	Burn of unspecified degree of nose (septum), initial encounter	Diagnosis	ICD-10-CM
T20.04XD	Burn of unspecified degree of nose (septum), subsequent encounter	Diagnosis	ICD-10-CM
T20.04XS	Burn of unspecified degree of nose (septum), sequela	Diagnosis	ICD-10-CM
T20.05	Burn of unspecified degree of scalp [any part]	Diagnosis	ICD-10-CM
T20.05XA	Burn of unspecified degree of scalp [any part], initial encounter	Diagnosis	ICD-10-CM
T20.05XD	Burn of unspecified degree of scalp [any part], subsequent encounter	Diagnosis	ICD-10-CM
T20.05XS	Burn of unspecified degree of scalp [any part], sequela	Diagnosis	ICD-10-CM
T20.06	Burn of unspecified degree of forehead and cheek	Diagnosis	ICD-10-CM
T20.06XA	Burn of unspecified degree of forehead and cheek, initial encounter	Diagnosis	ICD-10-CM
T20.06XD	Burn of unspecified degree of forehead and cheek, subsequent encounter	Diagnosis	ICD-10-CM
T20.06XS	Burn of unspecified degree of forehead and cheek, sequela	Diagnosis	ICD-10-CM
T20.07	Burn of unspecified degree of neck	Diagnosis	ICD-10-CM
T20.07XA	Burn of unspecified degree of neck, initial encounter	Diagnosis	ICD-10-CM
T20.07XD	Burn of unspecified degree of neck, subsequent encounter	Diagnosis	ICD-10-CM
T20.07XS	Burn of unspecified degree of neck, sequela	Diagnosis	ICD-10-CM
T20.09	Burn of unspecified degree of multiple sites of head, face, and neck	Diagnosis	ICD-10-CM
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Code	Description	Code Category	Code Type
T20.09XA	Burn of unspecified degree of multiple sites of head, face, and neck, initial encounter	Diagnosis	ICD-10-CM
T20.09XD	Burn of unspecified degree of multiple sites of head, face, and neck, subsequent encounter	Diagnosis	ICD-10-CM
T20.09XS	Burn of unspecified degree of multiple sites of head, face, and neck, sequela	Diagnosis	ICD-10-CM
T20.1	Burn of first degree of head, face, and neck	Diagnosis	ICD-10-CM
T20.10	Burn of first degree of head, face, and neck, unspecified site	Diagnosis	ICD-10-CM
T20.10XA	Burn of first degree of head, face, and neck, unspecified site, initial encounter	Diagnosis	ICD-10-CM
T20.10XD	Burn of first degree of head, face, and neck, unspecified site, subsequent encounter	Diagnosis	ICD-10-CM
T20.10XS	Burn of first degree of head, face, and neck, unspecified site, sequela	Diagnosis	ICD-10-CM
T20.11	Burn of first degree of ear [any part, except ear drum]	Diagnosis	ICD-10-CM
T20.111	Burn of first degree of right ear [any part, except ear drum]	Diagnosis	ICD-10-CM
T20.111A	Burn of first degree of right ear [any part, except ear drum], initial encounter	Diagnosis	ICD-10-CM
T20.111D	Burn of first degree of right ear [any part, except ear drum], subsequent encounter	Diagnosis	ICD-10-CM
T20.111S	Burn of first degree of right ear [any part, except ear drum], sequela	Diagnosis	ICD-10-CM
T20.112	Burn of first degree of left ear [any part, except ear drum]	Diagnosis	ICD-10-CM
T20.112A	Burn of first degree of left ear [any part, except ear drum], initial encounter	Diagnosis	ICD-10-CM
T20.112D	Burn of first degree of left ear [any part, except ear drum], subsequent encounter	Diagnosis	ICD-10-CM
T20.112S	Burn of first degree of left ear [any part, except ear drum], sequela	Diagnosis	ICD-10-CM
T20.119	Burn of first degree of unspecified ear [any part, except ear drum]	Diagnosis	ICD-10-CM
T20.119A	Burn of first degree of unspecified ear [any part, except ear drum], initial encounter	Diagnosis	ICD-10-CM
T20.119D	Burn of first degree of unspecified ear [any part, except ear drum], subsequent encounter	Diagnosis	ICD-10-CM
T20.119S	Burn of first degree of unspecified ear [any part, except ear drum], sequela	Diagnosis	ICD-10-CM
T20.12	Burn of first degree of lip(s)	Diagnosis	ICD-10-CM
T20.12XA	Burn of first degree of lip(s), initial encounter	Diagnosis	ICD-10-CM
T20.12XD	Burn of first degree of lip(s), subsequent encounter	Diagnosis	ICD-10-CM
T20.12XS	Burn of first degree of lip(s), sequela	Diagnosis	ICD-10-CM
T20.13	Burn of first degree of chin	Diagnosis	ICD-10-CM
		0	



Code	Description	Code Category	Code Type
T20.13XA	Burn of first degree of chin, initial encounter	Diagnosis	ICD-10-CM
T20.13XD	Burn of first degree of chin, subsequent encounter	Diagnosis	ICD-10-CM
T20.13XS	Burn of first degree of chin, sequela	Diagnosis	ICD-10-CM
T20.14	Burn of first degree of nose (septum)	Diagnosis	ICD-10-CM
T20.14XA	Burn of first degree of nose (septum), initial encounter	Diagnosis	ICD-10-CM
T20.14XD	Burn of first degree of nose (septum), subsequent encounter	Diagnosis	ICD-10-CM
T20.14XS	Burn of first degree of nose (septum), sequela	Diagnosis	ICD-10-CM
T20.15	Burn of first degree of scalp [any part]	Diagnosis	ICD-10-CM
T20.15XA	Burn of first degree of scalp [any part], initial encounter	Diagnosis	ICD-10-CM
T20.15XD	Burn of first degree of scalp [any part], subsequent encounter	Diagnosis	ICD-10-CM
T20.15XS	Burn of first degree of scalp [any part], sequela	Diagnosis	ICD-10-CM
T20.16	Burn of first degree of forehead and cheek	Diagnosis	ICD-10-CM
T20.16XA	Burn of first degree of forehead and cheek, initial encounter	Diagnosis	ICD-10-CM
T20.16XD	Burn of first degree of forehead and cheek, subsequent encounter	Diagnosis	ICD-10-CM
T20.16XS	Burn of first degree of forehead and cheek, sequela	Diagnosis	ICD-10-CM
T20.17	Burn of first degree of neck	Diagnosis	ICD-10-CM
T20.17XA	Burn of first degree of neck, initial encounter	Diagnosis	ICD-10-CM
T20.17XD	Burn of first degree of neck, subsequent encounter	Diagnosis	ICD-10-CM
T20.17XS	Burn of first degree of neck, sequela	Diagnosis	ICD-10-CM
T20.19	Burn of first degree of multiple sites of head, face, and neck	Diagnosis	ICD-10-CM
T20.19XA	Burn of first degree of multiple sites of head, face, and neck, initial encounter	Diagnosis	ICD-10-CM
T20.19XD	Burn of first degree of multiple sites of head, face, and neck, subsequent encounter	Diagnosis	ICD-10-CM
T20.19XS	Burn of first degree of multiple sites of head, face, and neck, sequela	Diagnosis	ICD-10-CM
T20.2	Burn of second degree of head, face, and neck	Diagnosis	ICD-10-CM
T20.20	Burn of second degree of head, face, and neck, unspecified site	Diagnosis	ICD-10-CM
T20.20XA	Burn of second degree of head, face, and neck, unspecified site, initial encounter	Diagnosis	ICD-10-CM
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Code	Description	Code Category	Code Type
T20.20XD	Burn of second degree of head, face, and neck, unspecified site, subsequent encounter	Diagnosis	ICD-10-CM
T20.20XS	Burn of second degree of head, face, and neck, unspecified site, sequela	Diagnosis	ICD-10-CM
T20.21	Burn of second degree of ear [any part, except ear drum]	Diagnosis	ICD-10-CM
T20.211	Burn of second degree of right ear [any part, except ear drum]	Diagnosis	ICD-10-CM
T20.211A	Burn of second degree of right ear [any part, except ear drum], initial encounter	Diagnosis	ICD-10-CM
T20.211D	Burn of second degree of right ear [any part, except ear drum], subsequent encounter	Diagnosis	ICD-10-CM
T20.211S	Burn of second degree of right ear [any part, except ear drum], sequela	Diagnosis	ICD-10-CM
T20.212	Burn of second degree of left ear [any part, except ear drum]	Diagnosis	ICD-10-CM
T20.212A	Burn of second degree of left ear [any part, except ear drum], initial encounter	Diagnosis	ICD-10-CM
T20.212D	Burn of second degree of left ear [any part, except ear drum], subsequent encounter	Diagnosis	ICD-10-CM
T20.212S	Burn of second degree of left ear [any part, except ear drum], sequela	Diagnosis	ICD-10-CM
T20.219	Burn of second degree of unspecified ear [any part, except ear drum]	Diagnosis	ICD-10-CM
T20.219A	Burn of second degree of unspecified ear [any part, except ear drum], initial encounter	Diagnosis	ICD-10-CM
T20.219D	Burn of second degree of unspecified ear [any part, except ear drum], subsequent encounter	Diagnosis	ICD-10-CM
T20.219S	Burn of second degree of unspecified ear [any part, except ear drum], sequela	Diagnosis	ICD-10-CM
T20.22	Burn of second degree of lip(s)	Diagnosis	ICD-10-CM
T20.22XA	Burn of second degree of lip(s), initial encounter	Diagnosis	ICD-10-CM
T20.22XD	Burn of second degree of lip(s), subsequent encounter	Diagnosis	ICD-10-CM
T20.22XS	Burn of second degree of lip(s), sequela	Diagnosis	ICD-10-CM
T20.23	Burn of second degree of chin	Diagnosis	ICD-10-CM
T20.23XA	Burn of second degree of chin, initial encounter	Diagnosis	ICD-10-CM
T20.23XD	Burn of second degree of chin, subsequent encounter	Diagnosis	ICD-10-CM
T20.23XS	Burn of second degree of chin, sequela	Diagnosis	ICD-10-CM
T20.24	Burn of second degree of nose (septum)	Diagnosis	ICD-10-CM
T20.24XA	Burn of second degree of nose (septum), initial encounter	Diagnosis	ICD-10-CM
T20.24XD	Burn of second degree of nose (septum), subsequent encounter	Diagnosis	ICD-10-CM



Code	Description	Code Category	Code Type
T20.24XS	Burn of second degree of nose (septum), sequela	Diagnosis	ICD-10-CM
T20.25	Burn of second degree of scalp [any part]	Diagnosis	ICD-10-CM
T20.25XA	Burn of second degree of scalp [any part], initial encounter	Diagnosis	ICD-10-CM
T20.25XD	Burn of second degree of scalp [any part], subsequent encounter	Diagnosis	ICD-10-CM
T20.25XS	Burn of second degree of scalp [any part], sequela	Diagnosis	ICD-10-CM
T20.26	Burn of second degree of forehead and cheek	Diagnosis	ICD-10-CM
T20.26XA	Burn of second degree of forehead and cheek, initial encounter	Diagnosis	ICD-10-CM
T20.26XD	Burn of second degree of forehead and cheek, subsequent encounter	Diagnosis	ICD-10-CM
T20.26XS	Burn of second degree of forehead and cheek, sequela	Diagnosis	ICD-10-CM
T20.27	Burn of second degree of neck	Diagnosis	ICD-10-CM
T20.27XA	Burn of second degree of neck, initial encounter	Diagnosis	ICD-10-CM
T20.27XD	Burn of second degree of neck, subsequent encounter	Diagnosis	ICD-10-CM
T20.27XS	Burn of second degree of neck, sequela	Diagnosis	ICD-10-CM
T20.29	Burn of second degree of multiple sites of head, face, and neck	Diagnosis	ICD-10-CM
T20.29XA	Burn of second degree of multiple sites of head, face, and neck, initial encounter	Diagnosis	ICD-10-CM
T20.29XD	Burn of second degree of multiple sites of head, face, and neck, subsequent encounter	Diagnosis	ICD-10-CM
T20.29XS	Burn of second degree of multiple sites of head, face, and neck, sequela	Diagnosis	ICD-10-CM
T20.3	Burn of third degree of head, face, and neck	Diagnosis	ICD-10-CM
T20.30	Burn of third degree of head, face, and neck, unspecified site	Diagnosis	ICD-10-CM
T20.30XA	Burn of third degree of head, face, and neck, unspecified site, initial encounter	Diagnosis	ICD-10-CM
T20.30XD	Burn of third degree of head, face, and neck, unspecified site, subsequent encounter	Diagnosis	ICD-10-CM
T20.30XS	Burn of third degree of head, face, and neck, unspecified site, sequela	Diagnosis	ICD-10-CM
T20.31	Burn of third degree of ear [any part, except ear drum]	Diagnosis	ICD-10-CM
T20.311	Burn of third degree of right ear [any part, except ear drum]	Diagnosis	ICD-10-CM
T20.311A	Burn of third degree of right ear [any part, except ear drum], initial encounter	Diagnosis	ICD-10-CM
T20.311D	Burn of third degree of right ear [any part, except ear drum], subsequent encounter	Diagnosis	ICD-10-CM
		Diagnosis	



Code	Description	Code Category	Code Type
T20.311S	Burn of third degree of right ear [any part, except ear drum], sequela	Diagnosis	ICD-10-CM
T20.312	Burn of third degree of left ear [any part, except ear drum]	Diagnosis	ICD-10-CM
T20.312A	Burn of third degree of left ear [any part, except ear drum], initial encounter	Diagnosis	ICD-10-CM
T20.312D	Burn of third degree of left ear [any part, except ear drum], subsequent encounter	Diagnosis	ICD-10-CM
T20.312S	Burn of third degree of left ear [any part, except ear drum], sequela	Diagnosis	ICD-10-CM
T20.319	Burn of third degree of unspecified ear [any part, except ear drum]	Diagnosis	ICD-10-CM
T20.319A	Burn of third degree of unspecified ear [any part, except ear drum], initial encounter	Diagnosis	ICD-10-CM
T20.319D	Burn of third degree of unspecified ear [any part, except ear drum], subsequent encounter	Diagnosis	ICD-10-CM
T20.319S	Burn of third degree of unspecified ear [any part, except ear drum], sequela	Diagnosis	ICD-10-CM
T20.32	Burn of third degree of lip(s)	Diagnosis	ICD-10-CM
T20.32XA	Burn of third degree of lip(s), initial encounter	Diagnosis	ICD-10-CM
T20.32XD	Burn of third degree of lip(s), subsequent encounter	Diagnosis	ICD-10-CM
T20.32XS	Burn of third degree of lip(s), sequela	Diagnosis	ICD-10-CM
T20.33	Burn of third degree of chin	Diagnosis	ICD-10-CM
T20.33XA	Burn of third degree of chin, initial encounter	Diagnosis	ICD-10-CM
T20.33XD	Burn of third degree of chin, subsequent encounter	Diagnosis	ICD-10-CM
T20.33XS	Burn of third degree of chin, sequela	Diagnosis	ICD-10-CM
T20.34	Burn of third degree of nose (septum)	Diagnosis	ICD-10-CM
T20.34XA	Burn of third degree of nose (septum), initial encounter	Diagnosis	ICD-10-CM
T20.34XD	Burn of third degree of nose (septum), subsequent encounter	Diagnosis	ICD-10-CM
T20.34XS	Burn of third degree of nose (septum), sequela	Diagnosis	ICD-10-CM
T20.35	Burn of third degree of scalp [any part]	Diagnosis	ICD-10-CM
T20.35XA	Burn of third degree of scalp [any part], initial encounter	Diagnosis	ICD-10-CM
T20.35XD	Burn of third degree of scalp [any part], subsequent encounter	Diagnosis	ICD-10-CM
T20.35XS	Burn of third degree of scalp [any part], sequela	Diagnosis	ICD-10-CM
T20.36	Burn of third degree of forehead and cheek	Diagnosis	ICD-10-CM



Code	Description	Code Category	Code Type
T20.36XA	Burn of third degree of forehead and cheek, initial encounter	Diagnosis	ICD-10-CM
T20.36XD	Burn of third degree of forehead and cheek, subsequent encounter	Diagnosis	ICD-10-CM
T20.36XS	Burn of third degree of forehead and cheek, sequela	Diagnosis	ICD-10-CM
T20.37	Burn of third degree of neck	Diagnosis	ICD-10-CM
T20.37XA	Burn of third degree of neck, initial encounter	Diagnosis	ICD-10-CM
T20.37XD	Burn of third degree of neck, subsequent encounter	Diagnosis	ICD-10-CM
T20.37XS	Burn of third degree of neck, sequela	Diagnosis	ICD-10-CM
T20.39	Burn of third degree of multiple sites of head, face, and neck	Diagnosis	ICD-10-CM
T20.39XA	Burn of third degree of multiple sites of head, face, and neck, initial encounter	Diagnosis	ICD-10-CM
T20.39XD	Burn of third degree of multiple sites of head, face, and neck, subsequent encounter	Diagnosis	ICD-10-CM
T20.39XS	Burn of third degree of multiple sites of head, face, and neck, sequela	Diagnosis	ICD-10-CM
T21	Burn and corrosion of trunk	Diagnosis	ICD-10-CM
T21.0	Burn of unspecified degree of trunk	Diagnosis	ICD-10-CM
T21.00	Burn of unspecified degree of trunk, unspecified site	Diagnosis	ICD-10-CM
T21.00XA	Burn of unspecified degree of trunk, unspecified site, initial encounter	Diagnosis	ICD-10-CM
T21.00XD	Burn of unspecified degree of trunk, unspecified site, subsequent encounter	Diagnosis	ICD-10-CM
T21.00XS	Burn of unspecified degree of trunk, unspecified site, sequela	Diagnosis	ICD-10-CM
T21.01	Burn of unspecified degree of chest wall	Diagnosis	ICD-10-CM
T21.01XA	Burn of unspecified degree of chest wall, initial encounter	Diagnosis	ICD-10-CM
T21.01XD	Burn of unspecified degree of chest wall, subsequent encounter	Diagnosis	ICD-10-CM
T21.01XS	Burn of unspecified degree of chest wall, sequela	Diagnosis	ICD-10-CM
T21.02	Burn of unspecified degree of abdominal wall	Diagnosis	ICD-10-CM
T21.02XA	Burn of unspecified degree of abdominal wall, initial encounter	Diagnosis	ICD-10-CM
T21.02XD	Burn of unspecified degree of abdominal wall, subsequent encounter	Diagnosis	ICD-10-CM
T21.02XS	Burn of unspecified degree of abdominal wall, sequela	Diagnosis	ICD-10-CM
T21.03	Burn of unspecified degree of upper back	Diagnosis	ICD-10-CM



Code	Description	Code Category	Code Type
T21.03XA	Burn of unspecified degree of upper back, initial encounter	Diagnosis	ICD-10-CM
T21.03XD	Burn of unspecified degree of upper back, subsequent encounter	Diagnosis	ICD-10-CM
T21.03XS	Burn of unspecified degree of upper back, sequela	Diagnosis	ICD-10-CM
T21.04	Burn of unspecified degree of lower back	Diagnosis	ICD-10-CM
T21.04XA	Burn of unspecified degree of lower back, initial encounter	Diagnosis	ICD-10-CM
T21.04XD	Burn of unspecified degree of lower back, subsequent encounter	Diagnosis	ICD-10-CM
T21.04XS	Burn of unspecified degree of lower back, sequela	Diagnosis	ICD-10-CM
T21.05	Burn of unspecified degree of buttock	Diagnosis	ICD-10-CM
T21.05XA	Burn of unspecified degree of buttock, initial encounter	Diagnosis	ICD-10-CM
T21.05XD	Burn of unspecified degree of buttock, subsequent encounter	Diagnosis	ICD-10-CM
T21.05XS	Burn of unspecified degree of buttock, sequela	Diagnosis	ICD-10-CM
T21.06	Burn of unspecified degree of male genital region	Diagnosis	ICD-10-CM
T21.06XA	Burn of unspecified degree of male genital region, initial encounter	Diagnosis	ICD-10-CM
T21.06XD	Burn of unspecified degree of male genital region, subsequent encounter	Diagnosis	ICD-10-CM
T21.06XS	Burn of unspecified degree of male genital region, sequela	Diagnosis	ICD-10-CM
T21.07	Burn of unspecified degree of female genital region	Diagnosis	ICD-10-CM
T21.07XA	Burn of unspecified degree of female genital region, initial encounter	Diagnosis	ICD-10-CM
T21.07XD	Burn of unspecified degree of female genital region, subsequent encounter	Diagnosis	ICD-10-CM
T21.07XS	Burn of unspecified degree of female genital region, sequela	Diagnosis	ICD-10-CM
T21.09	Burn of unspecified degree of other site of trunk	Diagnosis	ICD-10-CM
T21.09XA	Burn of unspecified degree of other site of trunk, initial encounter	Diagnosis	ICD-10-CM
T21.09XD	Burn of unspecified degree of other site of trunk, subsequent encounter	Diagnosis	ICD-10-CM
T21.09XS	Burn of unspecified degree of other site of trunk, sequela	Diagnosis	ICD-10-CM
T21.1	Burn of first degree of trunk	Diagnosis	ICD-10-CM
T21.10	Burn of first degree of trunk, unspecified site	Diagnosis	ICD-10-CM
T21.10XA	Burn of first degree of trunk, unspecified site, initial encounter	Diagnosis	ICD-10-CM
		0	



Code	Description	Code Category	Code Type
T21.10XD	Burn of first degree of trunk, unspecified site, subsequent encounter	Diagnosis	ICD-10-CM
T21.10XS	Burn of first degree of trunk, unspecified site, sequela	Diagnosis	ICD-10-CM
T21.11	Burn of first degree of chest wall	Diagnosis	ICD-10-CM
T21.11XA	Burn of first degree of chest wall, initial encounter	Diagnosis	ICD-10-CM
T21.11XD	Burn of first degree of chest wall, subsequent encounter	Diagnosis	ICD-10-CM
T21.11XS	Burn of first degree of chest wall, sequela	Diagnosis	ICD-10-CM
T21.12	Burn of first degree of abdominal wall	Diagnosis	ICD-10-CM
T21.12XA	Burn of first degree of abdominal wall, initial encounter	Diagnosis	ICD-10-CM
T21.12XD	Burn of first degree of abdominal wall, subsequent encounter	Diagnosis	ICD-10-CM
T21.12XS	Burn of first degree of abdominal wall, sequela	Diagnosis	ICD-10-CM
T21.13	Burn of first degree of upper back	Diagnosis	ICD-10-CM
T21.13XA	Burn of first degree of upper back, initial encounter	Diagnosis	ICD-10-CM
T21.13XD	Burn of first degree of upper back, subsequent encounter	Diagnosis	ICD-10-CM
T21.13XS	Burn of first degree of upper back, sequela	Diagnosis	ICD-10-CM
T21.14	Burn of first degree of lower back	Diagnosis	ICD-10-CM
T21.14XA	Burn of first degree of lower back, initial encounter	Diagnosis	ICD-10-CM
T21.14XD	Burn of first degree of lower back, subsequent encounter	Diagnosis	ICD-10-CM
T21.14XS	Burn of first degree of lower back, sequela	Diagnosis	ICD-10-CM
T21.15	Burn of first degree of buttock	Diagnosis	ICD-10-CM
T21.15XA	Burn of first degree of buttock, initial encounter	Diagnosis	ICD-10-CM
T21.15XD	Burn of first degree of buttock, subsequent encounter	Diagnosis	ICD-10-CM
T21.15XS	Burn of first degree of buttock, sequela	Diagnosis	ICD-10-CM
T21.16	Burn of first degree of male genital region	Diagnosis	ICD-10-CM
T21.16XA	Burn of first degree of male genital region, initial encounter	Diagnosis	ICD-10-CM
T21.16XD	Burn of first degree of male genital region, subsequent encounter	Diagnosis	ICD-10-CM
T21.16XS	Burn of first degree of male genital region, sequela	Diagnosis	ICD-10-CM
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Code	Description	Code Category	Code Type
T21.17	Burn of first degree of female genital region	Diagnosis	ICD-10-CM
T21.17XA	Burn of first degree of female genital region, initial encounter	Diagnosis	ICD-10-CM
T21.17XD	Burn of first degree of female genital region, subsequent encounter	Diagnosis	ICD-10-CM
T21.17XS	Burn of first degree of female genital region, sequela	Diagnosis	ICD-10-CM
T21.19	Burn of first degree of other site of trunk	Diagnosis	ICD-10-CM
T21.19XA	Burn of first degree of other site of trunk, initial encounter	Diagnosis	ICD-10-CM
T21.19XD	Burn of first degree of other site of trunk, subsequent encounter	Diagnosis	ICD-10-CM
T21.19XS	Burn of first degree of other site of trunk, sequela	Diagnosis	ICD-10-CM
T21.2	Burn of second degree of trunk	Diagnosis	ICD-10-CM
T21.20	Burn of second degree of trunk, unspecified site	Diagnosis	ICD-10-CM
T21.20XA	Burn of second degree of trunk, unspecified site, initial encounter	Diagnosis	ICD-10-CM
T21.20XD	Burn of second degree of trunk, unspecified site, subsequent encounter	Diagnosis	ICD-10-CM
T21.20XS	Burn of second degree of trunk, unspecified site, sequela	Diagnosis	ICD-10-CM
T21.21	Burn of second degree of chest wall	Diagnosis	ICD-10-CM
T21.21XA	Burn of second degree of chest wall, initial encounter	Diagnosis	ICD-10-CM
T21.21XD	Burn of second degree of chest wall, subsequent encounter	Diagnosis	ICD-10-CM
T21.21XS	Burn of second degree of chest wall, sequela	Diagnosis	ICD-10-CM
T21.22	Burn of second degree of abdominal wall	Diagnosis	ICD-10-CM
T21.22XA	Burn of second degree of abdominal wall, initial encounter	Diagnosis	ICD-10-CM
T21.22XD	Burn of second degree of abdominal wall, subsequent encounter	Diagnosis	ICD-10-CM
T21.22XS	Burn of second degree of abdominal wall, sequela	Diagnosis	ICD-10-CM
T21.23	Burn of second degree of upper back	Diagnosis	ICD-10-CM
T21.23XA	Burn of second degree of upper back, initial encounter	Diagnosis	ICD-10-CM
T21.23XD	Burn of second degree of upper back, subsequent encounter	Diagnosis	ICD-10-CM
T21.23XS	Burn of second degree of upper back, sequela	Diagnosis	ICD-10-CM
T21.24	Burn of second degree of lower back	Diagnosis	ICD-10-CM
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Code	Description	Code Category	Code Type
T21.24XA	Burn of second degree of lower back, initial encounter	Diagnosis	ICD-10-CM
T21.24XD	Burn of second degree of lower back, subsequent encounter	Diagnosis	ICD-10-CM
T21.24XS	Burn of second degree of lower back, sequela	Diagnosis	ICD-10-CM
T21.25	Burn of second degree of buttock	Diagnosis	ICD-10-CM
T21.25XA	Burn of second degree of buttock, initial encounter	Diagnosis	ICD-10-CM
T21.25XD	Burn of second degree of buttock, subsequent encounter	Diagnosis	ICD-10-CM
T21.25XS	Burn of second degree of buttock, sequela	Diagnosis	ICD-10-CM
T21.26	Burn of second degree of male genital region	Diagnosis	ICD-10-CM
T21.26XA	Burn of second degree of male genital region, initial encounter	Diagnosis	ICD-10-CM
T21.26XD	Burn of second degree of male genital region, subsequent encounter	Diagnosis	ICD-10-CM
T21.26XS	Burn of second degree of male genital region, sequela	Diagnosis	ICD-10-CM
T21.27	Burn of second degree of female genital region	Diagnosis	ICD-10-CM
T21.27XA	Burn of second degree of female genital region, initial encounter	Diagnosis	ICD-10-CM
T21.27XD	Burn of second degree of female genital region, subsequent encounter	Diagnosis	ICD-10-CM
T21.27XS	Burn of second degree of female genital region, sequela	Diagnosis	ICD-10-CM
T21.29	Burn of second degree of other site of trunk	Diagnosis	ICD-10-CM
T21.29XA	Burn of second degree of other site of trunk, initial encounter	Diagnosis	ICD-10-CM
T21.29XD	Burn of second degree of other site of trunk, subsequent encounter	Diagnosis	ICD-10-CM
T21.29XS	Burn of second degree of other site of trunk, sequela	Diagnosis	ICD-10-CM
T21.3	Burn of third degree of trunk	Diagnosis	ICD-10-CM
T21.30	Burn of third degree of trunk, unspecified site	Diagnosis	ICD-10-CM
T21.30XA	Burn of third degree of trunk, unspecified site, initial encounter	Diagnosis	ICD-10-CM
T21.30XD	Burn of third degree of trunk, unspecified site, subsequent encounter	Diagnosis	ICD-10-CM
T21.30XS	Burn of third degree of trunk, unspecified site, sequela	Diagnosis	ICD-10-CM
T21.31	Burn of third degree of chest wall	Diagnosis	ICD-10-CM
T21.31XA	Burn of third degree of chest wall, initial encounter	Diagnosis	ICD-10-CM
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Code	Description	Code Category	Code Type
T21.31XD	Burn of third degree of chest wall, subsequent encounter	Diagnosis	ICD-10-CM
T21.31XS	Burn of third degree of chest wall, sequela	Diagnosis	ICD-10-CM
T21.32	Burn of third degree of abdominal wall	Diagnosis	ICD-10-CM
T21.32XA	Burn of third degree of abdominal wall, initial encounter	Diagnosis	ICD-10-CM
T21.32XD	Burn of third degree of abdominal wall, subsequent encounter	Diagnosis	ICD-10-CM
T21.32XS	Burn of third degree of abdominal wall, sequela	Diagnosis	ICD-10-CM
T21.33	Burn of third degree of upper back	Diagnosis	ICD-10-CM
T21.33XA	Burn of third degree of upper back, initial encounter	Diagnosis	ICD-10-CM
T21.33XD	Burn of third degree of upper back, subsequent encounter	Diagnosis	ICD-10-CM
T21.33XS	Burn of third degree of upper back, sequela	Diagnosis	ICD-10-CM
T21.34	Burn of third degree of lower back	Diagnosis	ICD-10-CM
T21.34XA	Burn of third degree of lower back, initial encounter	Diagnosis	ICD-10-CM
T21.34XD	Burn of third degree of lower back, subsequent encounter	Diagnosis	ICD-10-CM
T21.34XS	Burn of third degree of lower back, sequela	Diagnosis	ICD-10-CM
T21.35	Burn of third degree of buttock	Diagnosis	ICD-10-CM
T21.35XA	Burn of third degree of buttock, initial encounter	Diagnosis	ICD-10-CM
T21.35XD	Burn of third degree of buttock, subsequent encounter	Diagnosis	ICD-10-CM
T21.35XS	Burn of third degree of buttock, sequela	Diagnosis	ICD-10-CM
T21.36	Burn of third degree of male genital region	Diagnosis	ICD-10-CM
T21.36XA	Burn of third degree of male genital region, initial encounter	Diagnosis	ICD-10-CM
T21.36XD	Burn of third degree of male genital region, subsequent encounter	Diagnosis	ICD-10-CM
T21.36XS	Burn of third degree of male genital region, sequela	Diagnosis	ICD-10-CM
T21.37	Burn of third degree of female genital region	Diagnosis	ICD-10-CM
T21.37XA	Burn of third degree of female genital region, initial encounter	Diagnosis	ICD-10-CM
T21.37XD	Burn of third degree of female genital region, subsequent encounter	Diagnosis	ICD-10-CM
T21.37XS	Burn of third degree of female genital region, sequela	Diagnosis	ICD-10-CM
		Diagnosis	



Code	Description	Code Category	Code Type
T21.39	Burn of third degree of other site of trunk	Diagnosis	ICD-10-CM
T21.39XA	Burn of third degree of other site of trunk, initial encounter	Diagnosis	ICD-10-CM
T21.39XD	Burn of third degree of other site of trunk, subsequent encounter	Diagnosis	ICD-10-CM
T21.39XS	Burn of third degree of other site of trunk, sequela	Diagnosis	ICD-10-CM
T22	Burn and corrosion of shoulder and upper limb, except wrist and hand	Diagnosis	ICD-10-CM
T22.0	Burn of unspecified degree of shoulder and upper limb, except wrist and hand	Diagnosis	ICD-10-CM
T22.00	Burn of unspecified degree of shoulder and upper limb, except wrist and hand, unspecified site		
		Diagnosis	ICD-10-CM
T22.00XA	Burn of unspecified degree of shoulder and upper limb, except wrist and hand, unspecified site, initial encounter		
		Diagnosis	ICD-10-CM
T22.00XD	Burn of unspecified degree of shoulder and upper limb, except wrist and hand, unspecified site, subsequent encounter	Diagnosis	ICD-10-CM
T22.00XS	Burn of unspecified degree of shoulder and upper limb, except wrist and hand, unspecified site, sequela	Diagnosis	ICD-10-CM
T22.01	Burn of unspecified degree of forearm	Diagnosis	ICD-10-CM
T22.011	Burn of unspecified degree of right forearm	Diagnosis	ICD-10-CM
T22.011A	Burn of unspecified degree of right forearm, initial encounter	Diagnosis	ICD-10-CM
T22.011D	Burn of unspecified degree of right forearm, subsequent encounter	Diagnosis	ICD-10-CM
T22.011S	Burn of unspecified degree of right forearm, sequela	Diagnosis	ICD-10-CM
T22.012	Burn of unspecified degree of left forearm	Diagnosis	ICD-10-CM
T22.012A	Burn of unspecified degree of left forearm, initial encounter	Diagnosis	ICD-10-CM
T22.012D	Burn of unspecified degree of left forearm, subsequent encounter	Diagnosis	ICD-10-CM
T22.012S	Burn of unspecified degree of left forearm, sequela	Diagnosis	ICD-10-CM
T22.019	Burn of unspecified degree of unspecified forearm	Diagnosis	ICD-10-CM
T22.019A	Burn of unspecified degree of unspecified forearm, initial encounter	Diagnosis	ICD-10-CM
T22.019D	Burn of unspecified degree of unspecified forearm, subsequent encounter	Diagnosis	ICD-10-CM
T22.019S	Burn of unspecified degree of unspecified forearm, sequela	Diagnosis	ICD-10-CM
T22.02	Burn of unspecified degree of elbow	Diagnosis	ICD-10-CM
T22.021	Burn of unspecified degree of right elbow	Diagnosis	ICD-10-CM
		Diagnosis	



Code	Description	Code Category	Code Type
T22.021A	Burn of unspecified degree of right elbow, initial encounter	Diagnosis	ICD-10-CM
T22.021D	Burn of unspecified degree of right elbow, subsequent encounter	Diagnosis	ICD-10-CM
T22.021S	Burn of unspecified degree of right elbow, sequela	Diagnosis	ICD-10-CM
T22.022	Burn of unspecified degree of left elbow	Diagnosis	ICD-10-CM
T22.022A	Burn of unspecified degree of left elbow, initial encounter	Diagnosis	ICD-10-CM
T22.022D	Burn of unspecified degree of left elbow, subsequent encounter	Diagnosis	ICD-10-CM
T22.022S	Burn of unspecified degree of left elbow, sequela	Diagnosis	ICD-10-CM
T22.029	Burn of unspecified degree of unspecified elbow	Diagnosis	ICD-10-CM
T22.029A	Burn of unspecified degree of unspecified elbow, initial encounter	Diagnosis	ICD-10-CM
T22.029D	Burn of unspecified degree of unspecified elbow, subsequent encounter	Diagnosis	ICD-10-CM
T22.029S	Burn of unspecified degree of unspecified elbow, sequela	Diagnosis	ICD-10-CM
T22.03	Burn of unspecified degree of upper arm	Diagnosis	ICD-10-CM
T22.031	Burn of unspecified degree of right upper arm	Diagnosis	ICD-10-CM
T22.031A	Burn of unspecified degree of right upper arm, initial encounter	Diagnosis	ICD-10-CM
T22.031D	Burn of unspecified degree of right upper arm, subsequent encounter	Diagnosis	ICD-10-CM
T22.031S	Burn of unspecified degree of right upper arm, sequela	Diagnosis	ICD-10-CM
T22.032	Burn of unspecified degree of left upper arm	Diagnosis	ICD-10-CM
T22.032A	Burn of unspecified degree of left upper arm, initial encounter	Diagnosis	ICD-10-CM
T22.032D	Burn of unspecified degree of left upper arm, subsequent encounter	Diagnosis	ICD-10-CM
T22.032S	Burn of unspecified degree of left upper arm, sequela	Diagnosis	ICD-10-CM
T22.039	Burn of unspecified degree of unspecified upper arm	Diagnosis	ICD-10-CM
T22.039A	Burn of unspecified degree of unspecified upper arm, initial encounter	Diagnosis	ICD-10-CM
T22.039D	Burn of unspecified degree of unspecified upper arm, subsequent encounter	Diagnosis	ICD-10-CM
T22.039S	Burn of unspecified degree of unspecified upper arm, sequela	Diagnosis	ICD-10-CM
T22.04	Burn of unspecified degree of axilla	Diagnosis	ICD-10-CM
T22.041	Burn of unspecified degree of right axilla	Diagnosis	ICD-10-CM
		0	



Code	Description	Code Category	Code Type
T22.041A	Burn of unspecified degree of right axilla, initial encounter	Diagnosis	ICD-10-CM
T22.041D	Burn of unspecified degree of right axilla, subsequent encounter	Diagnosis	ICD-10-CM
T22.041S	Burn of unspecified degree of right axilla, sequela	Diagnosis	ICD-10-CM
T22.042	Burn of unspecified degree of left axilla	Diagnosis	ICD-10-CM
T22.042A	Burn of unspecified degree of left axilla, initial encounter	Diagnosis	ICD-10-CM
T22.042D	Burn of unspecified degree of left axilla, subsequent encounter	Diagnosis	ICD-10-CM
T22.042S	Burn of unspecified degree of left axilla, sequela	Diagnosis	ICD-10-CM
T22.049	Burn of unspecified degree of unspecified axilla	Diagnosis	ICD-10-CM
T22.049A	Burn of unspecified degree of unspecified axilla, initial encounter	Diagnosis	ICD-10-CM
T22.049D	Burn of unspecified degree of unspecified axilla, subsequent encounter	Diagnosis	ICD-10-CM
T22.049S	Burn of unspecified degree of unspecified axilla, sequela	Diagnosis	ICD-10-CM
T22.05	Burn of unspecified degree of shoulder	Diagnosis	ICD-10-CM
T22.051	Burn of unspecified degree of right shoulder	Diagnosis	ICD-10-CM
T22.051A	Burn of unspecified degree of right shoulder, initial encounter	Diagnosis	ICD-10-CM
T22.051D	Burn of unspecified degree of right shoulder, subsequent encounter	Diagnosis	ICD-10-CM
T22.051S	Burn of unspecified degree of right shoulder, sequela	Diagnosis	ICD-10-CM
T22.052	Burn of unspecified degree of left shoulder	Diagnosis	ICD-10-CM
T22.052A	Burn of unspecified degree of left shoulder, initial encounter	Diagnosis	ICD-10-CM
T22.052D	Burn of unspecified degree of left shoulder, subsequent encounter	Diagnosis	ICD-10-CM
T22.052S	Burn of unspecified degree of left shoulder, sequela	Diagnosis	ICD-10-CM
T22.059	Burn of unspecified degree of unspecified shoulder	Diagnosis	ICD-10-CM
T22.059A	Burn of unspecified degree of unspecified shoulder, initial encounter	Diagnosis	ICD-10-CM
T22.059D	Burn of unspecified degree of unspecified shoulder, subsequent encounter	Diagnosis	ICD-10-CM
T22.059S	Burn of unspecified degree of unspecified shoulder, sequela	Diagnosis	ICD-10-CM
T22.06	Burn of unspecified degree of scapular region	Diagnosis	ICD-10-CM
T22.061	Burn of unspecified degree of right scapular region	Diagnosis	ICD-10-CM
		Diagnosis	100 10 0141



Code	Description	Code Category	Code Type
T22.061A	Burn of unspecified degree of right scapular region, initial encounter	Diagnosis	ICD-10-CM
T22.061D	Burn of unspecified degree of right scapular region, subsequent encounter	Diagnosis	ICD-10-CM
T22.061S	Burn of unspecified degree of right scapular region, sequela	Diagnosis	ICD-10-CM
T22.062	Burn of unspecified degree of left scapular region	Diagnosis	ICD-10-CM
T22.062A	Burn of unspecified degree of left scapular region, initial encounter	Diagnosis	ICD-10-CM
T22.062D	Burn of unspecified degree of left scapular region, subsequent encounter	Diagnosis	ICD-10-CM
T22.062S	Burn of unspecified degree of left scapular region, sequela	Diagnosis	ICD-10-CM
T22.069	Burn of unspecified degree of unspecified scapular region	Diagnosis	ICD-10-CM
T22.069A	Burn of unspecified degree of unspecified scapular region, initial encounter	Diagnosis	ICD-10-CM
T22.069D	Burn of unspecified degree of unspecified scapular region, subsequent encounter	Diagnosis	ICD-10-CM
T22.069S	Burn of unspecified degree of unspecified scapular region, sequela	Diagnosis	ICD-10-CM
T22.09	Burn of unspecified degree of multiple sites of shoulder and upper limb, except wrist and hand	Diagnosis	ICD-10-CM
T22.091	Burn of unspecified degree of multiple sites of right shoulder and upper limb, except wrist and hand	Ũ	
		Diagnosis	ICD-10-CM
T22.091A	Burn of unspecified degree of multiple sites of right shoulder and upper limb, except wrist and hand, initial encounter	Ũ	
		Diagnosis	ICD-10-CM
T22.091D	Burn of unspecified degree of multiple sites of right shoulder and upper limb, except wrist and hand, subsequent encounter	Diagnosis	ICD-10-CM
T22.091S	Burn of unspecified degree of multiple sites of right shoulder and upper limb, except wrist and hand, sequela	Diagnosis	ICD-10-CM
T22.092	Burn of unspecified degree of multiple sites of left shoulder and upper limb, except wrist and hand	2.06.10010	102 20 011
		Diagnosis	ICD-10-CM
T22.092A	Burn of unspecified degree of multiple sites of left shoulder and upper limb, except wrist and hand, initial encounter		
		Diagnosis	ICD-10-CM
T22.092D	Burn of unspecified degree of multiple sites of left shoulder and upper limb, except wrist and hand, subsequent encounter	Diagnosis	ICD-10-CM
T22.092S	Burn of unspecified degree of multiple sites of left shoulder and upper limb, except wrist and hand, sequela	Diagnosis	ICD-10-CM
T22.099	Burn of unspecified degree of multiple sites of unspecified shoulder and upper limb, except wrist and hand		
		Diagnosis	ICD-10-CM



Code	Description	Code Category	Code Type
T22.099A	Burn of unspecified degree of multiple sites of unspecified shoulder and upper limb, except wrist and hand, initial encounter		
		Diagnosis	ICD-10-CM
T22.099D	Burn of unspecified degree of multiple sites of unspecified shoulder and upper limb, except wrist and hand, subsequent encounter	Diagnosis	
T22.099S	Burn of unspecified degree of multiple sites of unspecified shoulder and upper limb, except wrist and hand, sequela	Diagnosis	ICD-10-CM
T22.1	Burn of first degree of shoulder and upper limb, except wrist and hand	Diagnosis	ICD-10-CM
T22.10	Burn of first degree of shoulder and upper limb, except wrist and hand, unspecified site	Diagnosis	ICD-10-CM
T22.10	Burn of first degree of shoulder and upper limb, except wrist and hand, unspecified site, initial encounter	Diagnosis	ICD-10-CM
122.1074	burn of hist degree of shoulder and upper hind, except what and hand, dispectived site, initial encounter	Diagnosis	ICD-10-CM
T22.10XD	Burn of first degree of shoulder and upper limb, except wrist and hand, unspecified site, subsequent encounter	Diagnosis	ICD-10-CM
T22.10XS	Burn of first degree of shoulder and upper limb, except wrist and hand, unspecified site, sequela	Diagnosis	ICD-10-CM
T22.11	Burn of first degree of forearm	Diagnosis	ICD-10-CM
T22.111	Burn of first degree of right forearm	Diagnosis	ICD-10-CM
T22.111A	Burn of first degree of right forearm, initial encounter	Diagnosis	ICD-10-CM
T22.111D	Burn of first degree of right forearm, subsequent encounter	Diagnosis	ICD-10-CM
T22.111S	Burn of first degree of right forearm, sequela	Diagnosis	ICD-10-CM
T22.112	Burn of first degree of left forearm	Diagnosis	ICD-10-CM
T22.112A	Burn of first degree of left forearm, initial encounter	Diagnosis	ICD-10-CM
T22.112D	Burn of first degree of left forearm, subsequent encounter	Diagnosis	ICD-10-CM
T22.112S	Burn of first degree of left forearm, sequela	Diagnosis	ICD-10-CM
T22.119	Burn of first degree of unspecified forearm	Diagnosis	ICD-10-CM
T22.119A	Burn of first degree of unspecified forearm, initial encounter	Diagnosis	ICD-10-CM
T22.119D	Burn of first degree of unspecified forearm, subsequent encounter	Diagnosis	ICD-10-CM
T22.119S	Burn of first degree of unspecified forearm, sequela	Diagnosis	ICD-10-CM
T22.12	Burn of first degree of elbow	Diagnosis	ICD-10-CM
T22.121	Burn of first degree of right elbow	Diagnosis	ICD-10-CM
T22.121A	Burn of first degree of right elbow, initial encounter	6	
-		Diagnosis	ICD-10-CM



Code	Description	Code Category	Code Type
T22.121D	Burn of first degree of right elbow, subsequent encounter	Diagnosis	ICD-10-CM
T22.121S	Burn of first degree of right elbow, sequela	Diagnosis	ICD-10-CM
T22.122	Burn of first degree of left elbow	Diagnosis	ICD-10-CM
T22.122A	Burn of first degree of left elbow, initial encounter	Diagnosis	ICD-10-CM
T22.122D	Burn of first degree of left elbow, subsequent encounter	Diagnosis	ICD-10-CM
T22.122S	Burn of first degree of left elbow, sequela	Diagnosis	ICD-10-CM
T22.129	Burn of first degree of unspecified elbow	Diagnosis	ICD-10-CM
T22.129A	Burn of first degree of unspecified elbow, initial encounter	Diagnosis	ICD-10-CM
T22.129D	Burn of first degree of unspecified elbow, subsequent encounter	Diagnosis	ICD-10-CM
T22.129S	Burn of first degree of unspecified elbow, sequela	Diagnosis	ICD-10-CM
T22.13	Burn of first degree of upper arm	Diagnosis	ICD-10-CM
T22.131	Burn of first degree of right upper arm	Diagnosis	ICD-10-CM
T22.131A	Burn of first degree of right upper arm, initial encounter	Diagnosis	ICD-10-CM
T22.131D	Burn of first degree of right upper arm, subsequent encounter	Diagnosis	ICD-10-CM
T22.131S	Burn of first degree of right upper arm, sequela	Diagnosis	ICD-10-CM
T22.132	Burn of first degree of left upper arm	Diagnosis	ICD-10-CM
T22.132A	Burn of first degree of left upper arm, initial encounter	Diagnosis	ICD-10-CM
T22.132D	Burn of first degree of left upper arm, subsequent encounter	Diagnosis	ICD-10-CM
T22.132S	Burn of first degree of left upper arm, sequela	Diagnosis	ICD-10-CM
T22.139	Burn of first degree of unspecified upper arm	Diagnosis	ICD-10-CM
T22.139A	Burn of first degree of unspecified upper arm, initial encounter	Diagnosis	ICD-10-CM
T22.139D	Burn of first degree of unspecified upper arm, subsequent encounter	Diagnosis	ICD-10-CM
T22.139S	Burn of first degree of unspecified upper arm, sequela	Diagnosis	ICD-10-CM
T22.14	Burn of first degree of axilla	Diagnosis	ICD-10-CM
T22.141	Burn of first degree of right axilla	Diagnosis	ICD-10-CM
T22.141A	Burn of first degree of right axilla, initial encounter	Diagnosis	ICD-10-CM
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Code	Description	Code Category	Code Type
T22.141D	Burn of first degree of right axilla, subsequent encounter	Diagnosis	ICD-10-CM
T22.141S	Burn of first degree of right axilla, sequela	Diagnosis	ICD-10-CM
T22.142	Burn of first degree of left axilla	Diagnosis	ICD-10-CM
T22.142A	Burn of first degree of left axilla, initial encounter	Diagnosis	ICD-10-CM
T22.142D	Burn of first degree of left axilla, subsequent encounter	Diagnosis	ICD-10-CM
T22.142S	Burn of first degree of left axilla, sequela	Diagnosis	ICD-10-CM
T22.149	Burn of first degree of unspecified axilla	Diagnosis	ICD-10-CM
T22.149A	Burn of first degree of unspecified axilla, initial encounter	Diagnosis	ICD-10-CM
T22.149D	Burn of first degree of unspecified axilla, subsequent encounter	Diagnosis	ICD-10-CM
T22.149S	Burn of first degree of unspecified axilla, sequela	Diagnosis	ICD-10-CM
T22.15	Burn of first degree of shoulder	Diagnosis	ICD-10-CM
T22.151	Burn of first degree of right shoulder	Diagnosis	ICD-10-CM
T22.151A	Burn of first degree of right shoulder, initial encounter	Diagnosis	ICD-10-CM
T22.151D	Burn of first degree of right shoulder, subsequent encounter	Diagnosis	ICD-10-CM
T22.151S	Burn of first degree of right shoulder, sequela	Diagnosis	ICD-10-CM
T22.152	Burn of first degree of left shoulder	Diagnosis	ICD-10-CM
T22.152A	Burn of first degree of left shoulder, initial encounter	Diagnosis	ICD-10-CM
T22.152D	Burn of first degree of left shoulder, subsequent encounter	Diagnosis	ICD-10-CM
T22.152S	Burn of first degree of left shoulder, sequela	Diagnosis	ICD-10-CM
T22.159	Burn of first degree of unspecified shoulder	Diagnosis	ICD-10-CM
T22.159A	Burn of first degree of unspecified shoulder, initial encounter	Diagnosis	ICD-10-CM
T22.159D	Burn of first degree of unspecified shoulder, subsequent encounter	Diagnosis	ICD-10-CM
T22.159S	Burn of first degree of unspecified shoulder, sequela	Diagnosis	ICD-10-CM
T22.16	Burn of first degree of scapular region	Diagnosis	ICD-10-CM
T22.161	Burn of first degree of right scapular region	Diagnosis	ICD-10-CM
T22.161A	Burn of first degree of right scapular region, initial encounter	Diagnosis	ICD-10-CM
		Diagnosis	



Code	Description	Code Category	Code Type
T22.161D	Burn of first degree of right scapular region, subsequent encounter	Diagnosis	ICD-10-CM
T22.161S	Burn of first degree of right scapular region, sequela	Diagnosis	ICD-10-CM
T22.162	Burn of first degree of left scapular region	Diagnosis	ICD-10-CM
T22.162A	Burn of first degree of left scapular region, initial encounter	Diagnosis	ICD-10-CM
T22.162D	Burn of first degree of left scapular region, subsequent encounter	Diagnosis	ICD-10-CM
T22.162S	Burn of first degree of left scapular region, sequela	Diagnosis	ICD-10-CM
T22.169	Burn of first degree of unspecified scapular region	Diagnosis	ICD-10-CM
T22.169A	Burn of first degree of unspecified scapular region, initial encounter	Diagnosis	ICD-10-CM
T22.169D	Burn of first degree of unspecified scapular region, subsequent encounter	Diagnosis	ICD-10-CM
T22.169S	Burn of first degree of unspecified scapular region, sequela	Diagnosis	ICD-10-CM
T22.19	Burn of first degree of multiple sites of shoulder and upper limb, except wrist and hand	Diagnosis	ICD-10-CM
T22.191	Burn of first degree of multiple sites of right shoulder and upper limb, except wrist and hand	Diagnosis	ICD-10-CM
T22.191A	Burn of first degree of multiple sites of right shoulder and upper limb, except wrist and hand, initial encounter		
T22.191D	Burn of first degree of multiple sites of right shoulder and upper limb, event writt and hand, subsequent encounter	Diagnosis	ICD-10-CM
T22.191D	Burn of first degree of multiple sites of right shoulder and upper limb, except wrist and hand, subsequent encounter	Diagnosis	ICD-10-CM
	Burn of first degree of multiple sites of right shoulder and upper limb, except wrist and hand, sequela	Diagnosis	ICD-10-CM
T22.192	Burn of first degree of multiple sites of left shoulder and upper limb, except wrist and hand	Diagnosis	ICD-10-CM
T22.192A	Burn of first degree of multiple sites of left shoulder and upper limb, except wrist and hand, initial encounter	Diagnosis	ICD-10-CM
T22.192D	Burn of first degree of multiple sites of left shoulder and upper limb, except wrist and hand, subsequent encounter	Diagnosis	ICD-10-CM
T22.192S	Burn of first degree of multiple sites of left shoulder and upper limb, except wrist and hand, sequela	Diagnosis	ICD-10-CM
T22.199	Burn of first degree of multiple sites of unspecified shoulder and upper limb, except wrist and hand	Diagnosis	
		Diagnosis	ICD-10-CM
T22.199A	Burn of first degree of multiple sites of unspecified shoulder and upper limb, except wrist and hand, initial encounter		
		Diagnosis	ICD-10-CM
T22.199D	Burn of first degree of multiple sites of unspecified shoulder and upper limb, except wrist and hand, subsequent encounter	Diagnosis	ICD-10-CM
T22.199S	Burn of first degree of multiple sites of unspecified shoulder and upper limb, except wrist and hand, sequela	Diagnosis	ICD-10-CM
T22.2	Burn of second degree of shoulder and upper limb, except wrist and hand	Diagnosis	ICD-10-CM



Code	Description	Code Category	Code Type
T22.20	Burn of second degree of shoulder and upper limb, except wrist and hand, unspecified site	Diagnosis	ICD-10-CM
T22.20XA	Burn of second degree of shoulder and upper limb, except wrist and hand, unspecified site, initial encounter	Diagnosis	ICD-10-CM
T22.20XD	Burn of second degree of shoulder and upper limb, except wrist and hand, unspecified site, subsequent encounter	Diagnosis	ICD-10-CM
T22.20XS	Burn of second degree of shoulder and upper limb, except wrist and hand, unspecified site, sequela	C C	ICD-10-CM
T22.21	Burn of second degree of forearm	Diagnosis	
T22.211	Burn of second degree of right forearm	Diagnosis	ICD-10-CM
T22.211A	Burn of second degree of right forearm, initial encounter	Diagnosis	ICD-10-CM
T22.211A	Burn of second degree of right forearm, subsequent encounter	Diagnosis	ICD-10-CM
T22.211D		Diagnosis	ICD-10-CM
	Burn of second degree of right forearm, sequela	Diagnosis	ICD-10-CM
T22.212	Burn of second degree of left forearm	Diagnosis	ICD-10-CM
T22.212A	Burn of second degree of left forearm, initial encounter	Diagnosis	ICD-10-CM
T22.212D	Burn of second degree of left forearm, subsequent encounter	Diagnosis	ICD-10-CM
T22.212S	Burn of second degree of left forearm, sequela	Diagnosis	ICD-10-CM
T22.219	Burn of second degree of unspecified forearm	Diagnosis	ICD-10-CM
T22.219A	Burn of second degree of unspecified forearm, initial encounter	Diagnosis	ICD-10-CM
T22.219D	Burn of second degree of unspecified forearm, subsequent encounter	Diagnosis	ICD-10-CM
T22.219S	Burn of second degree of unspecified forearm, sequela	Diagnosis	ICD-10-CM
T22.22	Burn of second degree of elbow	Diagnosis	ICD-10-CM
T22.221	Burn of second degree of right elbow	Diagnosis	ICD-10-CM
T22.221A	Burn of second degree of right elbow, initial encounter	Diagnosis	ICD-10-CM
T22.221D	Burn of second degree of right elbow, subsequent encounter	Diagnosis	ICD-10-CM
T22.221S	Burn of second degree of right elbow, sequela	Diagnosis	ICD-10-CM
T22.222	Burn of second degree of left elbow	Diagnosis	ICD-10-CM
T22.222A	Burn of second degree of left elbow, initial encounter	Diagnosis	ICD-10-CM
T22.222D	Burn of second degree of left elbow, subsequent encounter	Diagnosis	ICD-10-CM
T22.222S	Burn of second degree of left elbow, sequela	Diagnosis	ICD-10-CM
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Code	Description	Code Category	Code Type
T22.229	Burn of second degree of unspecified elbow	Diagnosis	ICD-10-CM
T22.229A	Burn of second degree of unspecified elbow, initial encounter	Diagnosis	ICD-10-CM
T22.229D	Burn of second degree of unspecified elbow, subsequent encounter	Diagnosis	ICD-10-CM
T22.229S	Burn of second degree of unspecified elbow, sequela	Diagnosis	ICD-10-CM
T22.23	Burn of second degree of upper arm	Diagnosis	ICD-10-CM
T22.231	Burn of second degree of right upper arm	Diagnosis	ICD-10-CM
T22.231A	Burn of second degree of right upper arm, initial encounter	Diagnosis	ICD-10-CM
T22.231D	Burn of second degree of right upper arm, subsequent encounter	Diagnosis	ICD-10-CM
T22.231S	Burn of second degree of right upper arm, sequela	Diagnosis	ICD-10-CM
T22.232	Burn of second degree of left upper arm	Diagnosis	ICD-10-CM
T22.232A	Burn of second degree of left upper arm, initial encounter	Diagnosis	ICD-10-CM
T22.232D	Burn of second degree of left upper arm, subsequent encounter	Diagnosis	ICD-10-CM
T22.232S	Burn of second degree of left upper arm, sequela	Diagnosis	ICD-10-CM
T22.239	Burn of second degree of unspecified upper arm	Diagnosis	ICD-10-CM
T22.239A	Burn of second degree of unspecified upper arm, initial encounter	Diagnosis	ICD-10-CM
T22.239D	Burn of second degree of unspecified upper arm, subsequent encounter	Diagnosis	ICD-10-CM
T22.239S	Burn of second degree of unspecified upper arm, sequela	Diagnosis	ICD-10-CM
T22.24	Burn of second degree of axilla	Diagnosis	ICD-10-CM
T22.241	Burn of second degree of right axilla	Diagnosis	ICD-10-CM
T22.241A	Burn of second degree of right axilla, initial encounter	Diagnosis	ICD-10-CM
T22.241D	Burn of second degree of right axilla, subsequent encounter	Diagnosis	ICD-10-CM
T22.241S	Burn of second degree of right axilla, sequela	Diagnosis	ICD-10-CM
T22.242	Burn of second degree of left axilla	Diagnosis	ICD-10-CM
T22.242A	Burn of second degree of left axilla, initial encounter	Diagnosis	ICD-10-CM
T22.242D	Burn of second degree of left axilla, subsequent encounter	Diagnosis	ICD-10-CM
T22.242S	Burn of second degree of left axilla, sequela	Diagnosis	ICD-10-CM



Code	Description	Code Category	Code Type
T22.249	Burn of second degree of unspecified axilla	Diagnosis	ICD-10-CM
T22.249A	Burn of second degree of unspecified axilla, initial encounter	Diagnosis	ICD-10-CM
T22.249D	Burn of second degree of unspecified axilla, subsequent encounter	Diagnosis	ICD-10-CM
T22.249S	Burn of second degree of unspecified axilla, sequela	Diagnosis	ICD-10-CM
T22.25	Burn of second degree of shoulder	Diagnosis	ICD-10-CM
T22.251	Burn of second degree of right shoulder	Diagnosis	ICD-10-CM
T22.251A	Burn of second degree of right shoulder, initial encounter	Diagnosis	ICD-10-CM
T22.251D	Burn of second degree of right shoulder, subsequent encounter	Diagnosis	ICD-10-CM
T22.251S	Burn of second degree of right shoulder, sequela	Diagnosis	ICD-10-CM
T22.252	Burn of second degree of left shoulder	Diagnosis	ICD-10-CM
T22.252A	Burn of second degree of left shoulder, initial encounter	Diagnosis	ICD-10-CM
T22.252D	Burn of second degree of left shoulder, subsequent encounter	Diagnosis	ICD-10-CM
T22.252S	Burn of second degree of left shoulder, sequela	Diagnosis	ICD-10-CM
T22.259	Burn of second degree of unspecified shoulder	Diagnosis	ICD-10-CM
T22.259A	Burn of second degree of unspecified shoulder, initial encounter	Diagnosis	ICD-10-CM
T22.259D	Burn of second degree of unspecified shoulder, subsequent encounter	Diagnosis	ICD-10-CM
T22.259S	Burn of second degree of unspecified shoulder, sequela	Diagnosis	ICD-10-CM
T22.26	Burn of second degree of scapular region	Diagnosis	ICD-10-CM
T22.261	Burn of second degree of right scapular region	Diagnosis	ICD-10-CM
T22.261A	Burn of second degree of right scapular region, initial encounter	Diagnosis	ICD-10-CM
T22.261D	Burn of second degree of right scapular region, subsequent encounter	Diagnosis	ICD-10-CM
T22.261S	Burn of second degree of right scapular region, sequela	Diagnosis	ICD-10-CM
T22.262	Burn of second degree of left scapular region	Diagnosis	ICD-10-CM
T22.262A	Burn of second degree of left scapular region, initial encounter	Diagnosis	ICD-10-CM
T22.262D	Burn of second degree of left scapular region, subsequent encounter	Diagnosis	ICD-10-CM
T22.262S	Burn of second degree of left scapular region, sequela	Diagnosis	ICD-10-CM



Code	Description	Code Category	Code Type
T22.269	Burn of second degree of unspecified scapular region	Diagnosis	ICD-10-CM
T22.269A	Burn of second degree of unspecified scapular region, initial encounter	Diagnosis	ICD-10-CM
T22.269D	Burn of second degree of unspecified scapular region, subsequent encounter	Diagnosis	ICD-10-CM
T22.269S	Burn of second degree of unspecified scapular region, sequela	Diagnosis	ICD-10-CM
T22.29	Burn of second degree of multiple sites of shoulder and upper limb, except wrist and hand	Diagnosis	ICD-10-CM
T22.291	Burn of second degree of multiple sites of right shoulder and upper limb, except wrist and hand	C	
T22.291A	Burn of second degree of multiple sites of right shoulder and upper limb, except wrist and hand, initial encounter	Diagnosis	ICD-10-CM
		Diagnosis	ICD-10-CM
T22.291D	Burn of second degree of multiple sites of right shoulder and upper limb, except wrist and hand, subsequent encounter	Diagnosis	ICD-10-CM
T22.291S	Burn of second degree of multiple sites of right shoulder and upper limb, except wrist and hand, sequela	Diagnosis	ICD-10-CM
T22.292	Burn of second degree of multiple sites of left shoulder and upper limb, except wrist and hand	-	
		Diagnosis	ICD-10-CM
T22.292A	Burn of second degree of multiple sites of left shoulder and upper limb, except wrist and hand, initial encounter		
		Diagnosis	ICD-10-CM
T22.292D	Burn of second degree of multiple sites of left shoulder and upper limb, except wrist and hand, subsequent encounter	Diagnosis	ICD-10-CM
T22.292S	Burn of second degree of multiple sites of left shoulder and upper limb, except wrist and hand, sequela	Diagnosis	ICD-10-CM
T22.299	Burn of second degree of multiple sites of unspecified shoulder and upper limb, except wrist and hand		
T22.299A	Burn of second degree of multiple sites of unspecified shoulder and upper limb, except wrist and hand, initial encounter	Diagnosis	ICD-10-CM
		Diagnosis	ICD-10-CM
T22.299D	Burn of second degree of multiple sites of unspecified shoulder and upper limb, except wrist and hand, subsequent encounter		
T22 2000		Diagnosis	ICD-10-CM
T22.299S	Burn of second degree of multiple sites of unspecified shoulder and upper limb, except wrist and hand, sequela	Diagnosis	ICD-10-CM
T22.3	Burn of third degree of shoulder and upper limb, except wrist and hand	Diagnosis	ICD-10-CM
T22.30	Burn of third degree of shoulder and upper limb, except wrist and hand, unspecified site	Diagnosis	ICD-10-CM



Code	Description	Code Category	Code Type
T22.30XA	Burn of third degree of shoulder and upper limb, except wrist and hand, unspecified site, initial encounter	-	
	Burn of third degree of chaulder and upper limb, event writt and hand, upper official site, subsequent encounter	Diagnosis	ICD-10-CM
T22.30XD	Burn of third degree of shoulder and upper limb, except wrist and hand, unspecified site, subsequent encounter	Diagnosis	ICD-10-CM
T22.30XS	Burn of third degree of shoulder and upper limb, except wrist and hand, unspecified site, sequela	Diagnosis	ICD-10-CM
T22.31	Burn of third degree of forearm	Diagnosis	ICD-10-CM
T22.311	Burn of third degree of right forearm	Diagnosis	ICD-10-CM
T22.311A	Burn of third degree of right forearm, initial encounter	Diagnosis	ICD-10-CM
T22.311D	Burn of third degree of right forearm, subsequent encounter	Diagnosis	ICD-10-CM
T22.311S	Burn of third degree of right forearm, sequela	Diagnosis	ICD-10-CM
T22.312	Burn of third degree of left forearm	Diagnosis	ICD-10-CM
T22.312A	Burn of third degree of left forearm, initial encounter	Diagnosis	ICD-10-CM
T22.312D	Burn of third degree of left forearm, subsequent encounter	Diagnosis	ICD-10-CM
T22.312S	Burn of third degree of left forearm, sequela	Diagnosis	ICD-10-CM
T22.319	Burn of third degree of unspecified forearm	Diagnosis	ICD-10-CM
T22.319A	Burn of third degree of unspecified forearm, initial encounter	Diagnosis	ICD-10-CM
T22.319D	Burn of third degree of unspecified forearm, subsequent encounter	Diagnosis	ICD-10-CM
T22.319S	Burn of third degree of unspecified forearm, sequela	Diagnosis	ICD-10-CM
T22.32	Burn of third degree of elbow	Diagnosis	ICD-10-CM
T22.321	Burn of third degree of right elbow	Diagnosis	ICD-10-CM
T22.321A	Burn of third degree of right elbow, initial encounter	Diagnosis	ICD-10-CM
T22.321D	Burn of third degree of right elbow, subsequent encounter	Diagnosis	ICD-10-CM
T22.321S	Burn of third degree of right elbow, sequela	Diagnosis	ICD-10-CM
T22.322	Burn of third degree of left elbow	Diagnosis	ICD-10-CM
T22.322A	Burn of third degree of left elbow, initial encounter		
T22.322D	Burn of third degree of left elbow, subsequent encounter	Diagnosis	ICD-10-CM
T22.3225	Burn of third degree of left elbow, sequela	Diagnosis	ICD-10-CM
T22.3223	Burn of third degree of unspecified elbow	Diagnosis	ICD-10-CM
122.323	buill of third degree of dispectiled elbow	Diagnosis	ICD-10-CM



Code	Description	Code Category	Code Type
T22.329A	Burn of third degree of unspecified elbow, initial encounter	Diagnosis	ICD-10-CM
T22.329D	Burn of third degree of unspecified elbow, subsequent encounter	Diagnosis	ICD-10-CM
T22.329S	Burn of third degree of unspecified elbow, sequela	Diagnosis	ICD-10-CM
T22.33	Burn of third degree of upper arm	Diagnosis	ICD-10-CM
T22.331	Burn of third degree of right upper arm	Diagnosis	ICD-10-CM
T22.331A	Burn of third degree of right upper arm, initial encounter	Diagnosis	ICD-10-CM
T22.331D	Burn of third degree of right upper arm, subsequent encounter	Diagnosis	ICD-10-CM
T22.331S	Burn of third degree of right upper arm, sequela	Diagnosis	ICD-10-CM
T22.332	Burn of third degree of left upper arm	Diagnosis	ICD-10-CM
T22.332A	Burn of third degree of left upper arm, initial encounter	Diagnosis	ICD-10-CM
T22.332D	Burn of third degree of left upper arm, subsequent encounter	Diagnosis	ICD-10-CM
T22.332S	Burn of third degree of left upper arm, sequela	Diagnosis	ICD-10-CM
T22.339	Burn of third degree of unspecified upper arm	Diagnosis	ICD-10-CM
T22.339A	Burn of third degree of unspecified upper arm, initial encounter	Diagnosis	ICD-10-CM
T22.339D	Burn of third degree of unspecified upper arm, subsequent encounter	Diagnosis	ICD-10-CM
T22.339S	Burn of third degree of unspecified upper arm, sequela	Diagnosis	ICD-10-CM
T22.34	Burn of third degree of axilla	Diagnosis	ICD-10-CM
T22.341	Burn of third degree of right axilla	Diagnosis	ICD-10-CM
T22.341A	Burn of third degree of right axilla, initial encounter	Diagnosis	ICD-10-CM
T22.341D	Burn of third degree of right axilla, subsequent encounter	Diagnosis	ICD-10-CM
T22.341S	Burn of third degree of right axilla, sequela	Diagnosis	ICD-10-CM
T22.342	Burn of third degree of left axilla	Diagnosis	ICD-10-CM
T22.342A	Burn of third degree of left axilla, initial encounter	Diagnosis	ICD-10-CM
T22.342D	Burn of third degree of left axilla, subsequent encounter	Diagnosis	ICD-10-CM
T22.342S	Burn of third degree of left axilla, sequela	Diagnosis	ICD-10-CM
T22.349	Burn of third degree of unspecified axilla	Diagnosis	ICD-10-CM
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Code	Description	Code Category	Code Type
T22.349A	Burn of third degree of unspecified axilla, initial encounter	Diagnosis	ICD-10-CM
T22.349D	Burn of third degree of unspecified axilla, subsequent encounter	Diagnosis	ICD-10-CM
T22.349S	Burn of third degree of unspecified axilla, sequela	Diagnosis	ICD-10-CM
T22.35	Burn of third degree of shoulder	Diagnosis	ICD-10-CM
T22.351	Burn of third degree of right shoulder	Diagnosis	ICD-10-CM
T22.351A	Burn of third degree of right shoulder, initial encounter	Diagnosis	ICD-10-CM
T22.351D	Burn of third degree of right shoulder, subsequent encounter	Diagnosis	ICD-10-CM
T22.351S	Burn of third degree of right shoulder, sequela	Diagnosis	ICD-10-CM
T22.352	Burn of third degree of left shoulder	Diagnosis	ICD-10-CM
T22.352A	Burn of third degree of left shoulder, initial encounter	Diagnosis	ICD-10-CM
T22.352D	Burn of third degree of left shoulder, subsequent encounter	Diagnosis	ICD-10-CM
T22.352S	Burn of third degree of left shoulder, sequela	Diagnosis	ICD-10-CM
T22.359	Burn of third degree of unspecified shoulder	Diagnosis	ICD-10-CM
T22.359A	Burn of third degree of unspecified shoulder, initial encounter	Diagnosis	ICD-10-CM
T22.359D	Burn of third degree of unspecified shoulder, subsequent encounter	Diagnosis	ICD-10-CM
T22.359S	Burn of third degree of unspecified shoulder, sequela	Diagnosis	ICD-10-CM
T22.36	Burn of third degree of scapular region	Diagnosis	ICD-10-CM
T22.361	Burn of third degree of right scapular region	Diagnosis	ICD-10-CM
T22.361A	Burn of third degree of right scapular region, initial encounter	Diagnosis	ICD-10-CM
T22.361D	Burn of third degree of right scapular region, subsequent encounter	Diagnosis	ICD-10-CM
T22.361S	Burn of third degree of right scapular region, sequela	Diagnosis	ICD-10-CM
T22.362	Burn of third degree of left scapular region	Diagnosis	ICD-10-CM
T22.362A	Burn of third degree of left scapular region, initial encounter	Diagnosis	ICD-10-CM
T22.362D	Burn of third degree of left scapular region, subsequent encounter	Diagnosis	ICD-10-CM
T22.362S	Burn of third degree of left scapular region, sequela	Diagnosis	ICD-10-CM
T22.369	Burn of third degree of unspecified scapular region	Diagnosis	ICD-10-CM
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Code T22.369A	Description Burn of third degree of unspecified scapular region, initial encounter	Code Category	Code Type
T22.369D	Burn of third degree of unspecified scapular region, subsequent encounter	Diagnosis	ICD-10-CM
T22.369D		Diagnosis	ICD-10-CM
	Burn of third degree of unspecified scapular region, sequela	Diagnosis	ICD-10-CM
T22.39	Burn of third degree of multiple sites of shoulder and upper limb, except wrist and hand	Diagnosis	ICD-10-CM
T22.391	Burn of third degree of multiple sites of right shoulder and upper limb, except wrist and hand	D	
T22.391A	Burn of third degree of multiple sites of right shoulder and upper limb, except wrist and hand, initial encounter	Diagnosis	ICD-10-CM
122.391A	Butt of third degree of multiple sites of right shoulder and upper inno, except whist and hand, initial encounter	Diagnosis	ICD-10-CM
T22.391D	Burn of third degree of multiple sites of right shoulder and upper limb, except wrist and hand, subsequent encounter	Diagnosis	ICD-10-CM
T22.391S	Burn of third degree of multiple sites of right shoulder and upper limb, except wrist and hand, sequela	Diagnosis	ICD-10-CM
T22.392	Burn of third degree of multiple sites of left shoulder and upper limb, except wrist and hand	Diagnosis	ICD-10-CM
T22.392A	Burn of third degree of multiple sites of left shoulder and upper limb, except wrist and hand, initial encounter	Diagnosis	
		Diagnosis	ICD-10-CM
T22.392D	Burn of third degree of multiple sites of left shoulder and upper limb, except wrist and hand, subsequent encounter	Diagnosis	ICD-10-CM
T22.392S	Burn of third degree of multiple sites of left shoulder and upper limb, except wrist and hand, sequela	Diagnosis	ICD-10-CM
T22.399	Burn of third degree of multiple sites of unspecified shoulder and upper limb, except wrist and hand		
		Diagnosis	ICD-10-CM
T22.399A	Burn of third degree of multiple sites of unspecified shoulder and upper limb, except wrist and hand, initial encounter		
		Diagnosis	ICD-10-CM
T22.399D	Burn of third degree of multiple sites of unspecified shoulder and upper limb, except wrist and hand, subsequent encounter	Diagnosis	ICD-10-CM
T22.399S	Burn of third degree of multiple sites of unspecified shoulder and upper limb, except wrist and hand, sequela	Diagnosis	ICD-10-CM
T23	Burn and corrosion of wrist and hand	Diagnosis	ICD-10-CM
T23.0	Burn of unspecified degree of wrist and hand	Diagnosis	ICD-10-CM
T23.00	Burn of unspecified degree of hand, unspecified site	-	ICD-10-CM
T23.001	Burn of unspecified degree of right hand, unspecified site	Diagnosis	
T23.001A	Burn of unspecified degree of right hand, unspecified site, initial encounter	Diagnosis	ICD-10-CM
T23.001A	Burn of unspecified degree of right hand, unspecified site, subsequent encounter	Diagnosis	ICD-10-CM
T23.001D		Diagnosis	ICD-10-CM
123.0015	Burn of unspecified degree of right hand, unspecified site, sequela	Diagnosis	ICD-10-CM



Code	Description	Code Category	Code Type
T23.002	Burn of unspecified degree of left hand, unspecified site	Diagnosis	ICD-10-CM
T23.002A	Burn of unspecified degree of left hand, unspecified site, initial encounter	Diagnosis	ICD-10-CM
T23.002D	Burn of unspecified degree of left hand, unspecified site, subsequent encounter	Diagnosis	ICD-10-CM
T23.002S	Burn of unspecified degree of left hand, unspecified site, sequela	Diagnosis	ICD-10-CM
T23.009	Burn of unspecified degree of unspecified hand, unspecified site	Diagnosis	ICD-10-CM
T23.009A	Burn of unspecified degree of unspecified hand, unspecified site, initial encounter	Diagnosis	ICD-10-CM
T23.009D	Burn of unspecified degree of unspecified hand, unspecified site, subsequent encounter	Diagnosis	ICD-10-CM
T23.009S	Burn of unspecified degree of unspecified hand, unspecified site, sequela	Diagnosis	ICD-10-CM
T23.01	Burn of unspecified degree of thumb (nail)	Diagnosis	ICD-10-CM
T23.011	Burn of unspecified degree of right thumb (nail)	Diagnosis	ICD-10-CM
T23.011A	Burn of unspecified degree of right thumb (nail), initial encounter	Diagnosis	ICD-10-CM
T23.011D	Burn of unspecified degree of right thumb (nail), subsequent encounter	Diagnosis	ICD-10-CM
T23.011S	Burn of unspecified degree of right thumb (nail), sequela	Diagnosis	ICD-10-CM
T23.012	Burn of unspecified degree of left thumb (nail)	Diagnosis	ICD-10-CM
T23.012A	Burn of unspecified degree of left thumb (nail), initial encounter	Diagnosis	ICD-10-CM
T23.012D	Burn of unspecified degree of left thumb (nail), subsequent encounter	Diagnosis	ICD-10-CM
T23.012S	Burn of unspecified degree of left thumb (nail), sequela	Diagnosis	ICD-10-CM
T23.019	Burn of unspecified degree of unspecified thumb (nail)	Diagnosis	ICD-10-CM
T23.019A	Burn of unspecified degree of unspecified thumb (nail), initial encounter	Diagnosis	ICD-10-CM
T23.019D	Burn of unspecified degree of unspecified thumb (nail), subsequent encounter	Diagnosis	ICD-10-CM
T23.019S	Burn of unspecified degree of unspecified thumb (nail), sequela	Diagnosis	ICD-10-CM
T23.02	Burn of unspecified degree of single finger (nail) except thumb	Diagnosis	ICD-10-CM
T23.021	Burn of unspecified degree of single right finger (nail) except thumb	Diagnosis	ICD-10-CM
T23.021A	Burn of unspecified degree of single right finger (nail) except thumb, initial encounter	Diagnosis	ICD-10-CM
T23.021D	Burn of unspecified degree of single right finger (nail) except thumb, subsequent encounter	Diagnosis	ICD-10-CM
T23.021S	Burn of unspecified degree of single right finger (nail) except thumb, sequela	Diagnosis	ICD-10-CM
		0	



Code	Description	Code Category	Code Type
T23.022	Burn of unspecified degree of single left finger (nail) except thumb	Diagnosis	ICD-10-CM
T23.022A	Burn of unspecified degree of single left finger (nail) except thumb, initial encounter	Diagnosis	ICD-10-CM
T23.022D	Burn of unspecified degree of single left finger (nail) except thumb, subsequent encounter	Diagnosis	ICD-10-CM
T23.022S	Burn of unspecified degree of single left finger (nail) except thumb, sequela	Diagnosis	ICD-10-CM
T23.029	Burn of unspecified degree of unspecified single finger (nail) except thumb	Diagnosis	ICD-10-CM
T23.029A	Burn of unspecified degree of unspecified single finger (nail) except thumb, initial encounter	Diagnosis	ICD-10-CM
T23.029D	Burn of unspecified degree of unspecified single finger (nail) except thumb, subsequent encounter	Diagnosis	ICD-10-CM
T23.029S	Burn of unspecified degree of unspecified single finger (nail) except thumb, sequela	Diagnosis	ICD-10-CM
T23.03	Burn of unspecified degree of multiple fingers (nail), not including thumb	Diagnosis	ICD-10-CM
T23.031	Burn of unspecified degree of multiple right fingers (nail), not including thumb	Diagnosis	ICD-10-CM
T23.031A	Burn of unspecified degree of multiple right fingers (nail), not including thumb, initial encounter	Diagnosis	ICD-10-CM
T23.031D	Burn of unspecified degree of multiple right fingers (nail), not including thumb, subsequent encounter	Diagnosis	ICD-10-CM
T23.031S	Burn of unspecified degree of multiple right fingers (nail), not including thumb, sequela	Diagnosis	ICD-10-CM
T23.032	Burn of unspecified degree of multiple left fingers (nail), not including thumb	Diagnosis	ICD-10-CM
T23.032A	Burn of unspecified degree of multiple left fingers (nail), not including thumb, initial encounter	Diagnosis	ICD-10-CM
T23.032D	Burn of unspecified degree of multiple left fingers (nail), not including thumb, subsequent encounter	Diagnosis	ICD-10-CM
T23.032S	Burn of unspecified degree of multiple left fingers (nail), not including thumb, sequela	Diagnosis	ICD-10-CM
T23.039	Burn of unspecified degree of unspecified multiple fingers (nail), not including thumb	Diagnosis	ICD-10-CM
T23.039A	Burn of unspecified degree of unspecified multiple fingers (nail), not including thumb, initial encounter	Diagnosis	ICD-10-CM
T23.039D	Burn of unspecified degree of unspecified multiple fingers (nail), not including thumb, subsequent encounter	Diagnosis	ICD-10-CM
T23.039S	Burn of unspecified degree of unspecified multiple fingers (nail), not including thumb, sequela	Diagnosis	ICD-10-CM
T23.04	Burn of unspecified degree of multiple fingers (nail), including thumb	Diagnosis	ICD-10-CM
T23.041	Burn of unspecified degree of multiple right fingers (nail), including thumb	Diagnosis	ICD-10-CM
T23.041A	Burn of unspecified degree of multiple right fingers (nail), including thumb, initial encounter	Diagnosis	ICD-10-CM
T23.041D	Burn of unspecified degree of multiple right fingers (nail), including thumb, subsequent encounter	Diagnosis	ICD-10-CM
T23.041S	Burn of unspecified degree of multiple right fingers (nail), including thumb, sequela	Diagnosis	ICD-10-CM
		Diagnosis	



Code	Description	Code Category	Code Type
T23.042	Burn of unspecified degree of multiple left fingers (nail), including thumb	Diagnosis	ICD-10-CM
T23.042A	Burn of unspecified degree of multiple left fingers (nail), including thumb, initial encounter	Diagnosis	ICD-10-CM
T23.042D	Burn of unspecified degree of multiple left fingers (nail), including thumb, subsequent encounter	Diagnosis	ICD-10-CM
T23.042S	Burn of unspecified degree of multiple left fingers (nail), including thumb, sequela	Diagnosis	ICD-10-CM
T23.049	Burn of unspecified degree of unspecified multiple fingers (nail), including thumb	Diagnosis	ICD-10-CM
T23.049A	Burn of unspecified degree of unspecified multiple fingers (nail), including thumb, initial encounter	Diagnosis	ICD-10-CM
T23.049D	Burn of unspecified degree of unspecified multiple fingers (nail), including thumb, subsequent encounter	Diagnosis	ICD-10-CM
T23.049S	Burn of unspecified degree of unspecified multiple fingers (nail), including thumb, sequela	Diagnosis	ICD-10-CM
T23.05	Burn of unspecified degree of palm	Diagnosis	ICD-10-CM
T23.051	Burn of unspecified degree of right palm	Diagnosis	ICD-10-CM
T23.051A	Burn of unspecified degree of right palm, initial encounter	Diagnosis	ICD-10-CM
T23.051D	Burn of unspecified degree of right palm, subsequent encounter	Diagnosis	ICD-10-CM
T23.051S	Burn of unspecified degree of right palm, sequela	Diagnosis	ICD-10-CM
T23.052	Burn of unspecified degree of left palm	Diagnosis	ICD-10-CM
T23.052A	Burn of unspecified degree of left palm, initial encounter	Diagnosis	ICD-10-CM
T23.052D	Burn of unspecified degree of left palm, subsequent encounter	Diagnosis	ICD-10-CM
T23.052S	Burn of unspecified degree of left palm, sequela	Diagnosis	ICD-10-CM
T23.059	Burn of unspecified degree of unspecified palm	Diagnosis	ICD-10-CM
T23.059A	Burn of unspecified degree of unspecified palm, initial encounter	Diagnosis	ICD-10-CM
T23.059D	Burn of unspecified degree of unspecified palm, subsequent encounter	Diagnosis	ICD-10-CM
T23.059S	Burn of unspecified degree of unspecified palm, sequela	Diagnosis	ICD-10-CM
T23.06	Burn of unspecified degree of back of hand	Diagnosis	ICD-10-CM
T23.061	Burn of unspecified degree of back of right hand	Diagnosis	ICD-10-CM
T23.061A	Burn of unspecified degree of back of right hand, initial encounter	Diagnosis	ICD-10-CM
T23.061D	Burn of unspecified degree of back of right hand, subsequent encounter	Diagnosis	ICD-10-CM
T23.061S	Burn of unspecified degree of back of right hand, sequela	Diagnosis	ICD-10-CM
		Diagnosis	



Code	Description	Code Category	Code Type
T23.062	Burn of unspecified degree of back of left hand	Diagnosis	ICD-10-CM
T23.062A	Burn of unspecified degree of back of left hand, initial encounter	Diagnosis	ICD-10-CM
T23.062D	Burn of unspecified degree of back of left hand, subsequent encounter	Diagnosis	ICD-10-CM
T23.062S	Burn of unspecified degree of back of left hand, sequela	Diagnosis	ICD-10-CM
T23.069	Burn of unspecified degree of back of unspecified hand	Diagnosis	ICD-10-CM
T23.069A	Burn of unspecified degree of back of unspecified hand, initial encounter	Diagnosis	ICD-10-CM
T23.069D	Burn of unspecified degree of back of unspecified hand, subsequent encounter	Diagnosis	ICD-10-CM
T23.069S	Burn of unspecified degree of back of unspecified hand, sequela	Diagnosis	ICD-10-CM
T23.07	Burn of unspecified degree of wrist	Diagnosis	ICD-10-CM
T23.071	Burn of unspecified degree of right wrist	Diagnosis	ICD-10-CM
T23.071A	Burn of unspecified degree of right wrist, initial encounter	Diagnosis	ICD-10-CM
T23.071D	Burn of unspecified degree of right wrist, subsequent encounter	Diagnosis	ICD-10-CM
T23.071S	Burn of unspecified degree of right wrist, sequela	Diagnosis	ICD-10-CM
T23.072	Burn of unspecified degree of left wrist	Diagnosis	ICD-10-CM
T23.072A	Burn of unspecified degree of left wrist, initial encounter	Diagnosis	ICD-10-CM
T23.072D	Burn of unspecified degree of left wrist, subsequent encounter	Diagnosis	ICD-10-CM
T23.072S	Burn of unspecified degree of left wrist, sequela	Diagnosis	ICD-10-CM
T23.079	Burn of unspecified degree of unspecified wrist	Diagnosis	ICD-10-CM
T23.079A	Burn of unspecified degree of unspecified wrist, initial encounter	Diagnosis	ICD-10-CM
T23.079D	Burn of unspecified degree of unspecified wrist, subsequent encounter	Diagnosis	ICD-10-CM
T23.079S	Burn of unspecified degree of unspecified wrist, sequela	Diagnosis	ICD-10-CM
T23.09	Burn of unspecified degree of multiple sites of wrist and hand	Diagnosis	ICD-10-CM
T23.091	Burn of unspecified degree of multiple sites of right wrist and hand	Diagnosis	ICD-10-CM
T23.091A	Burn of unspecified degree of multiple sites of right wrist and hand, initial encounter	Diagnosis	ICD-10-CM
T23.091D	Burn of unspecified degree of multiple sites of right wrist and hand, subsequent encounter	Diagnosis	ICD-10-CM
T23.091S	Burn of unspecified degree of multiple sites of right wrist and hand, sequela	Diagnosis	ICD-10-CM



Code	Description	Code Category	Code Type
T23.092	Burn of unspecified degree of multiple sites of left wrist and hand	Diagnosis	ICD-10-CM
T23.092A	Burn of unspecified degree of multiple sites of left wrist and hand, initial encounter	Diagnosis	ICD-10-CM
T23.092D	Burn of unspecified degree of multiple sites of left wrist and hand, subsequent encounter	Diagnosis	ICD-10-CM
T23.092S	Burn of unspecified degree of multiple sites of left wrist and hand, sequela	Diagnosis	ICD-10-CM
T23.099	Burn of unspecified degree of multiple sites of unspecified wrist and hand	Diagnosis	ICD-10-CM
T23.099A	Burn of unspecified degree of multiple sites of unspecified wrist and hand, initial encounter	Diagnosis	ICD-10-CM
T23.099D	Burn of unspecified degree of multiple sites of unspecified wrist and hand, subsequent encounter	Diagnosis	ICD-10-CM
T23.099S	Burn of unspecified degree of multiple sites of unspecified wrist and hand, sequela	Diagnosis	ICD-10-CM
T23.1	Burn of first degree of wrist and hand	Diagnosis	ICD-10-CM
T23.10	Burn of first degree of hand, unspecified site	Diagnosis	ICD-10-CM
T23.101	Burn of first degree of right hand, unspecified site	Diagnosis	ICD-10-CM
T23.101A	Burn of first degree of right hand, unspecified site, initial encounter	Diagnosis	ICD-10-CM
T23.101D	Burn of first degree of right hand, unspecified site, subsequent encounter	Diagnosis	ICD-10-CM
T23.101S	Burn of first degree of right hand, unspecified site, sequela	Diagnosis	ICD-10-CM
T23.102	Burn of first degree of left hand, unspecified site	Diagnosis	ICD-10-CM
T23.102A	Burn of first degree of left hand, unspecified site, initial encounter	Diagnosis	ICD-10-CM
T23.102D	Burn of first degree of left hand, unspecified site, subsequent encounter	Diagnosis	ICD-10-CM
T23.102S	Burn of first degree of left hand, unspecified site, sequela	Diagnosis	ICD-10-CM
T23.109	Burn of first degree of unspecified hand, unspecified site	Diagnosis	ICD-10-CM
T23.109A	Burn of first degree of unspecified hand, unspecified site, initial encounter	Diagnosis	ICD-10-CM
T23.109D	Burn of first degree of unspecified hand, unspecified site, subsequent encounter	Diagnosis	ICD-10-CM
T23.109S	Burn of first degree of unspecified hand, unspecified site, sequela	Diagnosis	ICD-10-CM
T23.11	Burn of first degree of thumb (nail)	Diagnosis	ICD-10-CM
T23.111	Burn of first degree of right thumb (nail)	Diagnosis	ICD-10-CM
T23.111A	Burn of first degree of right thumb (nail), initial encounter	Diagnosis	ICD-10-CM
T23.111D	Burn of first degree of right thumb (nail), subsequent encounter	Diagnosis	ICD-10-CM
		Diagnosis	



Code	Description	Code Category	Code Type
T23.111S	Burn of first degree of right thumb (nail), sequela	Diagnosis	ICD-10-CM
T23.112	Burn of first degree of left thumb (nail)	Diagnosis	ICD-10-CM
T23.112A	Burn of first degree of left thumb (nail), initial encounter	Diagnosis	ICD-10-CM
T23.112D	Burn of first degree of left thumb (nail), subsequent encounter	Diagnosis	ICD-10-CM
T23.112S	Burn of first degree of left thumb (nail), sequela	Diagnosis	ICD-10-CM
T23.119	Burn of first degree of unspecified thumb (nail)	Diagnosis	ICD-10-CM
T23.119A	Burn of first degree of unspecified thumb (nail), initial encounter	Diagnosis	ICD-10-CM
T23.119D	Burn of first degree of unspecified thumb (nail), subsequent encounter	Diagnosis	ICD-10-CM
T23.119S	Burn of first degree of unspecified thumb (nail), sequela	Diagnosis	ICD-10-CM
T23.12	Burn of first degree of single finger (nail) except thumb	Diagnosis	ICD-10-CM
T23.121	Burn of first degree of single right finger (nail) except thumb	Diagnosis	ICD-10-CM
T23.121A	Burn of first degree of single right finger (nail) except thumb, initial encounter	Diagnosis	ICD-10-CM
T23.121D	Burn of first degree of single right finger (nail) except thumb, subsequent encounter	Diagnosis	ICD-10-CM
T23.121S	Burn of first degree of single right finger (nail) except thumb, sequela	Diagnosis	ICD-10-CM
T23.122	Burn of first degree of single left finger (nail) except thumb	Diagnosis	ICD-10-CM
T23.122A	Burn of first degree of single left finger (nail) except thumb, initial encounter	Diagnosis	ICD-10-CM
T23.122D	Burn of first degree of single left finger (nail) except thumb, subsequent encounter	Diagnosis	ICD-10-CM
T23.122S	Burn of first degree of single left finger (nail) except thumb, sequela	Diagnosis	ICD-10-CM
T23.129	Burn of first degree of unspecified single finger (nail) except thumb	Diagnosis	ICD-10-CM
T23.129A	Burn of first degree of unspecified single finger (nail) except thumb, initial encounter	Diagnosis	ICD-10-CM
T23.129D	Burn of first degree of unspecified single finger (nail) except thumb, subsequent encounter	Diagnosis	ICD-10-CM
T23.129S	Burn of first degree of unspecified single finger (nail) except thumb, sequela	Diagnosis	ICD-10-CM
T23.13	Burn of first degree of multiple fingers (nail), not including thumb	Diagnosis	ICD-10-CM
T23.131	Burn of first degree of multiple right fingers (nail), not including thumb	Diagnosis	ICD-10-CM
T23.131A	Burn of first degree of multiple right fingers (nail), not including thumb, initial encounter	Diagnosis	ICD-10-CM
T23.131D	Burn of first degree of multiple right fingers (nail), not including thumb, subsequent encounter	Diagnosis	ICD-10-CM



Code	Description	Code Category	Code Type
T23.131S	Burn of first degree of multiple right fingers (nail), not including thumb, sequela	Diagnosis	ICD-10-CM
T23.132	Burn of first degree of multiple left fingers (nail), not including thumb	Diagnosis	ICD-10-CM
T23.132A	Burn of first degree of multiple left fingers (nail), not including thumb, initial encounter	Diagnosis	ICD-10-CM
T23.132D	Burn of first degree of multiple left fingers (nail), not including thumb, subsequent encounter	Diagnosis	ICD-10-CM
T23.132S	Burn of first degree of multiple left fingers (nail), not including thumb, sequela	Diagnosis	ICD-10-CM
T23.139	Burn of first degree of unspecified multiple fingers (nail), not including thumb	Diagnosis	ICD-10-CM
T23.139A	Burn of first degree of unspecified multiple fingers (nail), not including thumb, initial encounter	Diagnosis	ICD-10-CM
T23.139D	Burn of first degree of unspecified multiple fingers (nail), not including thumb, subsequent encounter	Diagnosis	ICD-10-CM
T23.139S	Burn of first degree of unspecified multiple fingers (nail), not including thumb, sequela	Diagnosis	ICD-10-CM
T23.14	Burn of first degree of multiple fingers (nail), including thumb	Diagnosis	ICD-10-CM
T23.141	Burn of first degree of multiple right fingers (nail), including thumb	Diagnosis	ICD-10-CM
T23.141A	Burn of first degree of multiple right fingers (nail), including thumb, initial encounter	Diagnosis	ICD-10-CM
T23.141D	Burn of first degree of multiple right fingers (nail), including thumb, subsequent encounter	Diagnosis	ICD-10-CM
T23.141S	Burn of first degree of multiple right fingers (nail), including thumb, sequela	Diagnosis	ICD-10-CM
T23.142	Burn of first degree of multiple left fingers (nail), including thumb	Diagnosis	ICD-10-CM
T23.142A	Burn of first degree of multiple left fingers (nail), including thumb, initial encounter	Diagnosis	ICD-10-CM
T23.142D	Burn of first degree of multiple left fingers (nail), including thumb, subsequent encounter	Diagnosis	ICD-10-CM
T23.142S	Burn of first degree of multiple left fingers (nail), including thumb, sequela	Diagnosis	ICD-10-CM
T23.149	Burn of first degree of unspecified multiple fingers (nail), including thumb	Diagnosis	ICD-10-CM
T23.149A	Burn of first degree of unspecified multiple fingers (nail), including thumb, initial encounter	Diagnosis	ICD-10-CM
T23.149D	Burn of first degree of unspecified multiple fingers (nail), including thumb, subsequent encounter	Diagnosis	ICD-10-CM
T23.149S	Burn of first degree of unspecified multiple fingers (nail), including thumb, sequela	Diagnosis	ICD-10-CM
T23.15	Burn of first degree of palm	Diagnosis	ICD-10-CM
T23.151	Burn of first degree of right palm	Diagnosis	ICD-10-CM
T23.151A	Burn of first degree of right palm, initial encounter	Diagnosis	ICD-10-CM
T23.151D	Burn of first degree of right palm, subsequent encounter	Diagnosis	ICD-10-CM
		2.00.0000	



Code	Description	Code Category	Code Type
T23.151S	Burn of first degree of right palm, sequela	Diagnosis	ICD-10-CM
T23.152	Burn of first degree of left palm	Diagnosis	ICD-10-CM
T23.152A	Burn of first degree of left palm, initial encounter	Diagnosis	ICD-10-CM
T23.152D	Burn of first degree of left palm, subsequent encounter	Diagnosis	ICD-10-CM
T23.152S	Burn of first degree of left palm, sequela	Diagnosis	ICD-10-CM
T23.159	Burn of first degree of unspecified palm	Diagnosis	ICD-10-CM
T23.159A	Burn of first degree of unspecified palm, initial encounter	Diagnosis	ICD-10-CM
T23.159D	Burn of first degree of unspecified palm, subsequent encounter	Diagnosis	ICD-10-CM
T23.159S	Burn of first degree of unspecified palm, sequela	Diagnosis	ICD-10-CM
T23.16	Burn of first degree of back of hand	Diagnosis	ICD-10-CM
T23.161	Burn of first degree of back of right hand	Diagnosis	ICD-10-CM
T23.161A	Burn of first degree of back of right hand, initial encounter	Diagnosis	ICD-10-CM
T23.161D	Burn of first degree of back of right hand, subsequent encounter	Diagnosis	ICD-10-CM
T23.161S	Burn of first degree of back of right hand, sequela	Diagnosis	ICD-10-CM
T23.162	Burn of first degree of back of left hand	Diagnosis	ICD-10-CM
T23.162A	Burn of first degree of back of left hand, initial encounter	Diagnosis	ICD-10-CM
T23.162D	Burn of first degree of back of left hand, subsequent encounter	Diagnosis	ICD-10-CM
T23.162S	Burn of first degree of back of left hand, sequela	Diagnosis	ICD-10-CM
T23.169	Burn of first degree of back of unspecified hand	Diagnosis	ICD-10-CM
T23.169A	Burn of first degree of back of unspecified hand, initial encounter	Diagnosis	ICD-10-CM
T23.169D	Burn of first degree of back of unspecified hand, subsequent encounter	Diagnosis	ICD-10-CM
T23.169S	Burn of first degree of back of unspecified hand, sequela	Diagnosis	ICD-10-CM
T23.17	Burn of first degree of wrist	Diagnosis	ICD-10-CM
T23.171	Burn of first degree of right wrist	Diagnosis	ICD-10-CM
T23.171A	Burn of first degree of right wrist, initial encounter	Diagnosis	ICD-10-CM
T23.171D	Burn of first degree of right wrist, subsequent encounter	Diagnosis	ICD-10-CM
		2.00.0000	



Code	Description	Code Category	Code Type
T23.171S	Burn of first degree of right wrist, sequela	Diagnosis	ICD-10-CM
T23.172	Burn of first degree of left wrist	Diagnosis	ICD-10-CM
T23.172A	Burn of first degree of left wrist, initial encounter	Diagnosis	ICD-10-CM
T23.172D	Burn of first degree of left wrist, subsequent encounter	Diagnosis	ICD-10-CM
T23.172S	Burn of first degree of left wrist, sequela	Diagnosis	ICD-10-CM
T23.179	Burn of first degree of unspecified wrist	Diagnosis	ICD-10-CM
T23.179A	Burn of first degree of unspecified wrist, initial encounter	Diagnosis	ICD-10-CM
T23.179D	Burn of first degree of unspecified wrist, subsequent encounter	Diagnosis	ICD-10-CM
T23.179S	Burn of first degree of unspecified wrist, sequela	Diagnosis	ICD-10-CM
T23.19	Burn of first degree of multiple sites of wrist and hand	Diagnosis	ICD-10-CM
T23.191	Burn of first degree of multiple sites of right wrist and hand	Diagnosis	ICD-10-CM
T23.191A	Burn of first degree of multiple sites of right wrist and hand, initial encounter	Diagnosis	ICD-10-CM
T23.191D	Burn of first degree of multiple sites of right wrist and hand, subsequent encounter	Diagnosis	ICD-10-CM
T23.191S	Burn of first degree of multiple sites of right wrist and hand, sequela	Diagnosis	ICD-10-CM
T23.192	Burn of first degree of multiple sites of left wrist and hand	Diagnosis	ICD-10-CM
T23.192A	Burn of first degree of multiple sites of left wrist and hand, initial encounter	Diagnosis	ICD-10-CM
T23.192D	Burn of first degree of multiple sites of left wrist and hand, subsequent encounter	Diagnosis	ICD-10-CM
T23.192S	Burn of first degree of multiple sites of left wrist and hand, sequela	Diagnosis	ICD-10-CM
T23.199	Burn of first degree of multiple sites of unspecified wrist and hand	Diagnosis	ICD-10-CM
T23.199A	Burn of first degree of multiple sites of unspecified wrist and hand, initial encounter	Diagnosis	ICD-10-CM
T23.199D	Burn of first degree of multiple sites of unspecified wrist and hand, subsequent encounter	Diagnosis	ICD-10-CM
T23.199S	Burn of first degree of multiple sites of unspecified wrist and hand, sequela	Diagnosis	ICD-10-CM
T23.2	Burn of second degree of wrist and hand	Diagnosis	ICD-10-CM
T23.20	Burn of second degree of hand, unspecified site	Diagnosis	ICD-10-CM
T23.201	Burn of second degree of right hand, unspecified site	Diagnosis	ICD-10-CM
T23.201A	Burn of second degree of right hand, unspecified site, initial encounter	Diagnosis	ICD-10-CM
		0	



Code	Description	Code Category	Code Type
T23.201D	Burn of second degree of right hand, unspecified site, subsequent encounter	Diagnosis	ICD-10-CM
T23.201S	Burn of second degree of right hand, unspecified site, sequela	Diagnosis	ICD-10-CM
T23.202	Burn of second degree of left hand, unspecified site	Diagnosis	ICD-10-CM
T23.202A	Burn of second degree of left hand, unspecified site, initial encounter	Diagnosis	ICD-10-CM
T23.202D	Burn of second degree of left hand, unspecified site, subsequent encounter	Diagnosis	ICD-10-CM
T23.202S	Burn of second degree of left hand, unspecified site, sequela	Diagnosis	ICD-10-CM
T23.209	Burn of second degree of unspecified hand, unspecified site	Diagnosis	ICD-10-CM
T23.209A	Burn of second degree of unspecified hand, unspecified site, initial encounter	Diagnosis	ICD-10-CM
T23.209D	Burn of second degree of unspecified hand, unspecified site, subsequent encounter	Diagnosis	ICD-10-CM
T23.209S	Burn of second degree of unspecified hand, unspecified site, sequela	Diagnosis	ICD-10-CM
T23.21	Burn of second degree of thumb (nail)	Diagnosis	ICD-10-CM
T23.211	Burn of second degree of right thumb (nail)	Diagnosis	ICD-10-CM
T23.211A	Burn of second degree of right thumb (nail), initial encounter	Diagnosis	ICD-10-CM
T23.211D	Burn of second degree of right thumb (nail), subsequent encounter	Diagnosis	ICD-10-CM
T23.211S	Burn of second degree of right thumb (nail), sequela	Diagnosis	ICD-10-CM
T23.212	Burn of second degree of left thumb (nail)	Diagnosis	ICD-10-CM
T23.212A	Burn of second degree of left thumb (nail), initial encounter	Diagnosis	ICD-10-CM
T23.212D	Burn of second degree of left thumb (nail), subsequent encounter	Diagnosis	ICD-10-CM
T23.212S	Burn of second degree of left thumb (nail), sequela	Diagnosis	ICD-10-CM
T23.219	Burn of second degree of unspecified thumb (nail)	Diagnosis	ICD-10-CM
T23.219A	Burn of second degree of unspecified thumb (nail), initial encounter	Diagnosis	ICD-10-CM
T23.219D	Burn of second degree of unspecified thumb (nail), subsequent encounter	Diagnosis	ICD-10-CM
T23.219S	Burn of second degree of unspecified thumb (nail), sequela	Diagnosis	ICD-10-CM
T23.22	Burn of second degree of single finger (nail) except thumb	Diagnosis	ICD-10-CM
T23.221	Burn of second degree of single right finger (nail) except thumb	Diagnosis	ICD-10-CM
T23.221A	Burn of second degree of single right finger (nail) except thumb, initial encounter	Diagnosis	ICD-10-CM
		-	



Code	Description	Code Category	Code Type
T23.221D	Burn of second degree of single right finger (nail) except thumb, subsequent encounter	Diagnosis	ICD-10-CM
T23.221S	Burn of second degree of single right finger (nail) except thumb, sequela	Diagnosis	ICD-10-CM
T23.222	Burn of second degree of single left finger (nail) except thumb	Diagnosis	ICD-10-CM
T23.222A	Burn of second degree of single left finger (nail) except thumb, initial encounter	Diagnosis	ICD-10-CM
T23.222D	Burn of second degree of single left finger (nail) except thumb, subsequent encounter	Diagnosis	ICD-10-CM
T23.222S	Burn of second degree of single left finger (nail) except thumb, sequela	Diagnosis	ICD-10-CM
T23.229	Burn of second degree of unspecified single finger (nail) except thumb	Diagnosis	ICD-10-CM
T23.229A	Burn of second degree of unspecified single finger (nail) except thumb, initial encounter	Diagnosis	ICD-10-CM
T23.229D	Burn of second degree of unspecified single finger (nail) except thumb, subsequent encounter	Diagnosis	ICD-10-CM
T23.229S	Burn of second degree of unspecified single finger (nail) except thumb, sequela	Diagnosis	ICD-10-CM
T23.23	Burn of second degree of multiple fingers (nail), not including thumb	Diagnosis	ICD-10-CM
T23.231	Burn of second degree of multiple right fingers (nail), not including thumb	Diagnosis	ICD-10-CM
T23.231A	Burn of second degree of multiple right fingers (nail), not including thumb, initial encounter	Diagnosis	ICD-10-CM
T23.231D	Burn of second degree of multiple right fingers (nail), not including thumb, subsequent encounter	Diagnosis	ICD-10-CM
T23.231S	Burn of second degree of multiple right fingers (nail), not including thumb, sequela	Diagnosis	ICD-10-CM
T23.232	Burn of second degree of multiple left fingers (nail), not including thumb	Diagnosis	ICD-10-CM
T23.232A	Burn of second degree of multiple left fingers (nail), not including thumb, initial encounter	Diagnosis	ICD-10-CM
T23.232D	Burn of second degree of multiple left fingers (nail), not including thumb, subsequent encounter	Diagnosis	ICD-10-CM
T23.232S	Burn of second degree of multiple left fingers (nail), not including thumb, sequela	Diagnosis	ICD-10-CM
T23.239	Burn of second degree of unspecified multiple fingers (nail), not including thumb	Diagnosis	ICD-10-CM
T23.239A	Burn of second degree of unspecified multiple fingers (nail), not including thumb, initial encounter	Diagnosis	ICD-10-CM
T23.239D	Burn of second degree of unspecified multiple fingers (nail), not including thumb, subsequent encounter	Diagnosis	ICD-10-CM
T23.239S	Burn of second degree of unspecified multiple fingers (nail), not including thumb, sequela	Diagnosis	ICD-10-CM
T23.24	Burn of second degree of multiple fingers (nail), including thumb	Diagnosis	ICD-10-CM
T23.241	Burn of second degree of multiple right fingers (nail), including thumb	Diagnosis	ICD-10-CM
T23.241A	Burn of second degree of multiple right fingers (nail), including thumb, initial encounter	Diagnosis	ICD-10-CM



Code	Description	Code Category	Code Type
T23.241D	Burn of second degree of multiple right fingers (nail), including thumb, subsequent encounter	Diagnosis	ICD-10-CM
T23.241S	Burn of second degree of multiple right fingers (nail), including thumb, sequela	Diagnosis	ICD-10-CM
T23.242	Burn of second degree of multiple left fingers (nail), including thumb	Diagnosis	ICD-10-CM
T23.242A	Burn of second degree of multiple left fingers (nail), including thumb, initial encounter	Diagnosis	ICD-10-CM
T23.242D	Burn of second degree of multiple left fingers (nail), including thumb, subsequent encounter	Diagnosis	ICD-10-CM
T23.242S	Burn of second degree of multiple left fingers (nail), including thumb, sequela	Diagnosis	ICD-10-CM
T23.249	Burn of second degree of unspecified multiple fingers (nail), including thumb	Diagnosis	ICD-10-CM
T23.249A	Burn of second degree of unspecified multiple fingers (nail), including thumb, initial encounter	Diagnosis	ICD-10-CM
T23.249D	Burn of second degree of unspecified multiple fingers (nail), including thumb, subsequent encounter	Diagnosis	ICD-10-CM
T23.249S	Burn of second degree of unspecified multiple fingers (nail), including thumb, sequela	Diagnosis	ICD-10-CM
T23.25	Burn of second degree of palm	Diagnosis	ICD-10-CM
T23.251	Burn of second degree of right palm	Diagnosis	ICD-10-CM
T23.251A	Burn of second degree of right palm, initial encounter	Diagnosis	ICD-10-CM
T23.251D	Burn of second degree of right palm, subsequent encounter	Diagnosis	ICD-10-CM
T23.251S	Burn of second degree of right palm, sequela	Diagnosis	ICD-10-CM
T23.252	Burn of second degree of left palm	Diagnosis	ICD-10-CM
T23.252A	Burn of second degree of left palm, initial encounter	Diagnosis	ICD-10-CM
T23.252D	Burn of second degree of left palm, subsequent encounter	Diagnosis	ICD-10-CM
T23.252S	Burn of second degree of left palm, sequela	Diagnosis	ICD-10-CM
T23.259	Burn of second degree of unspecified palm	Diagnosis	ICD-10-CM
T23.259A	Burn of second degree of unspecified palm, initial encounter	Diagnosis	ICD-10-CM
T23.259D	Burn of second degree of unspecified palm, subsequent encounter	Diagnosis	ICD-10-CM
T23.259S	Burn of second degree of unspecified palm, sequela	Diagnosis	ICD-10-CM
T23.26	Burn of second degree of back of hand	Diagnosis	ICD-10-CM
T23.261	Burn of second degree of back of right hand	Diagnosis	ICD-10-CM
T23.261A	Burn of second degree of back of right hand, initial encounter	Diagnosis	ICD-10-CM
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Code	Description	Code Category	Code Type
T23.261D	Burn of second degree of back of right hand, subsequent encounter	Diagnosis	ICD-10-CM
T23.261S	Burn of second degree of back of right hand, sequela	Diagnosis	ICD-10-CM
T23.262	Burn of second degree of back of left hand	Diagnosis	ICD-10-CM
T23.262A	Burn of second degree of back of left hand, initial encounter	Diagnosis	ICD-10-CM
T23.262D	Burn of second degree of back of left hand, subsequent encounter	Diagnosis	ICD-10-CM
T23.262S	Burn of second degree of back of left hand, sequela	Diagnosis	ICD-10-CM
T23.269	Burn of second degree of back of unspecified hand	Diagnosis	ICD-10-CM
T23.269A	Burn of second degree of back of unspecified hand, initial encounter	Diagnosis	ICD-10-CM
T23.269D	Burn of second degree of back of unspecified hand, subsequent encounter	Diagnosis	ICD-10-CM
T23.269S	Burn of second degree of back of unspecified hand, sequela	Diagnosis	ICD-10-CM
T23.27	Burn of second degree of wrist	Diagnosis	ICD-10-CM
T23.271	Burn of second degree of right wrist	Diagnosis	ICD-10-CM
T23.271A	Burn of second degree of right wrist, initial encounter	Diagnosis	ICD-10-CM
T23.271D	Burn of second degree of right wrist, subsequent encounter	Diagnosis	ICD-10-CM
T23.271S	Burn of second degree of right wrist, sequela	Diagnosis	ICD-10-CM
T23.272	Burn of second degree of left wrist	Diagnosis	ICD-10-CM
T23.272A	Burn of second degree of left wrist, initial encounter	Diagnosis	ICD-10-CM
T23.272D	Burn of second degree of left wrist, subsequent encounter	Diagnosis	ICD-10-CM
T23.272S	Burn of second degree of left wrist, sequela	Diagnosis	ICD-10-CM
T23.279	Burn of second degree of unspecified wrist	Diagnosis	ICD-10-CM
T23.279A	Burn of second degree of unspecified wrist, initial encounter	Diagnosis	ICD-10-CM
T23.279D	Burn of second degree of unspecified wrist, subsequent encounter	Diagnosis	ICD-10-CM
T23.279S	Burn of second degree of unspecified wrist, sequela	Diagnosis	ICD-10-CM
T23.29	Burn of second degree of multiple sites of wrist and hand	Diagnosis	ICD-10-CM
T23.291	Burn of second degree of multiple sites of right wrist and hand	Diagnosis	ICD-10-CM
T23.291A	Burn of second degree of multiple sites of right wrist and hand, initial encounter	Diagnosis	ICD-10-CM
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Code	Description	Code Category	Code Type
T23.291D	Burn of second degree of multiple sites of right wrist and hand, subsequent encounter	Diagnosis	ICD-10-CM
T23.291S	Burn of second degree of multiple sites of right wrist and hand, sequela	Diagnosis	ICD-10-CM
T23.292	Burn of second degree of multiple sites of left wrist and hand	Diagnosis	ICD-10-CM
T23.292A	Burn of second degree of multiple sites of left wrist and hand, initial encounter	Diagnosis	ICD-10-CM
T23.292D	Burn of second degree of multiple sites of left wrist and hand, subsequent encounter	Diagnosis	ICD-10-CM
T23.292S	Burn of second degree of multiple sites of left wrist and hand, sequela	Diagnosis	ICD-10-CM
T23.299	Burn of second degree of multiple sites of unspecified wrist and hand	Diagnosis	ICD-10-CM
T23.299A	Burn of second degree of multiple sites of unspecified wrist and hand, initial encounter	Diagnosis	ICD-10-CM
T23.299D	Burn of second degree of multiple sites of unspecified wrist and hand, subsequent encounter	Diagnosis	ICD-10-CM
T23.299S	Burn of second degree of multiple sites of unspecified wrist and hand, sequela	Diagnosis	ICD-10-CM
T23.3	Burn of third degree of wrist and hand	Diagnosis	ICD-10-CM
T23.30	Burn of third degree of hand, unspecified site	Diagnosis	ICD-10-CM
T23.301	Burn of third degree of right hand, unspecified site	Diagnosis	ICD-10-CM
T23.301A	Burn of third degree of right hand, unspecified site, initial encounter	Diagnosis	ICD-10-CM
T23.301D	Burn of third degree of right hand, unspecified site, subsequent encounter	Diagnosis	ICD-10-CM
T23.301S	Burn of third degree of right hand, unspecified site, sequela	Diagnosis	ICD-10-CM
T23.302	Burn of third degree of left hand, unspecified site	Diagnosis	ICD-10-CM
T23.302A	Burn of third degree of left hand, unspecified site, initial encounter	Diagnosis	ICD-10-CM
T23.302D	Burn of third degree of left hand, unspecified site, subsequent encounter	Diagnosis	ICD-10-CM
T23.302S	Burn of third degree of left hand, unspecified site, sequela	Diagnosis	ICD-10-CM
T23.309	Burn of third degree of unspecified hand, unspecified site	Diagnosis	ICD-10-CM
T23.309A	Burn of third degree of unspecified hand, unspecified site, initial encounter	Diagnosis	ICD-10-CM
T23.309D	Burn of third degree of unspecified hand, unspecified site, subsequent encounter	Diagnosis	ICD-10-CM
T23.309S	Burn of third degree of unspecified hand, unspecified site, sequela	Diagnosis	ICD-10-CM
T23.31	Burn of third degree of thumb (nail)	Diagnosis	ICD-10-CM
T23.311	Burn of third degree of right thumb (nail)	Diagnosis	ICD-10-CM
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Code	Description	Code Category	Code Type
T23.311A	Burn of third degree of right thumb (nail), initial encounter	Diagnosis	ICD-10-CM
T23.311D	Burn of third degree of right thumb (nail), subsequent encounter	Diagnosis	ICD-10-CM
T23.311S	Burn of third degree of right thumb (nail), sequela	Diagnosis	ICD-10-CM
T23.312	Burn of third degree of left thumb (nail)	Diagnosis	ICD-10-CM
T23.312A	Burn of third degree of left thumb (nail), initial encounter	Diagnosis	ICD-10-CM
T23.312D	Burn of third degree of left thumb (nail), subsequent encounter	Diagnosis	ICD-10-CM
T23.312S	Burn of third degree of left thumb (nail), sequela	Diagnosis	ICD-10-CM
T23.319	Burn of third degree of unspecified thumb (nail)	Diagnosis	ICD-10-CM
T23.319A	Burn of third degree of unspecified thumb (nail), initial encounter	Diagnosis	ICD-10-CM
T23.319D	Burn of third degree of unspecified thumb (nail), subsequent encounter	Diagnosis	ICD-10-CM
T23.319S	Burn of third degree of unspecified thumb (nail), sequela	Diagnosis	ICD-10-CM
T23.32	Burn of third degree of single finger (nail) except thumb	Diagnosis	ICD-10-CM
T23.321	Burn of third degree of single right finger (nail) except thumb	Diagnosis	ICD-10-CM
T23.321A	Burn of third degree of single right finger (nail) except thumb, initial encounter	Diagnosis	ICD-10-CM
T23.321D	Burn of third degree of single right finger (nail) except thumb, subsequent encounter	Diagnosis	ICD-10-CM
T23.321S	Burn of third degree of single right finger (nail) except thumb, sequela	Diagnosis	ICD-10-CM
T23.322	Burn of third degree of single left finger (nail) except thumb	Diagnosis	ICD-10-CM
T23.322A	Burn of third degree of single left finger (nail) except thumb, initial encounter	Diagnosis	ICD-10-CM
T23.322D	Burn of third degree of single left finger (nail) except thumb, subsequent encounter	Diagnosis	ICD-10-CM
T23.322S	Burn of third degree of single left finger (nail) except thumb, sequela	Diagnosis	ICD-10-CM
T23.329	Burn of third degree of unspecified single finger (nail) except thumb	Diagnosis	ICD-10-CM
T23.329A	Burn of third degree of unspecified single finger (nail) except thumb, initial encounter	Diagnosis	ICD-10-CM
T23.329D	Burn of third degree of unspecified single finger (nail) except thumb, subsequent encounter	Diagnosis	ICD-10-CM
T23.329S	Burn of third degree of unspecified single finger (nail) except thumb, sequela	Diagnosis	ICD-10-CM
T23.33	Burn of third degree of multiple fingers (nail), not including thumb	Diagnosis	ICD-10-CM
T23.331	Burn of third degree of multiple right fingers (nail), not including thumb	Diagnosis	ICD-10-CM



Code	Description	Code Category	Code Type
T23.331A	Burn of third degree of multiple right fingers (nail), not including thumb, initial encounter	Diagnosis	ICD-10-CM
T23.331D	Burn of third degree of multiple right fingers (nail), not including thumb, subsequent encounter	Diagnosis	ICD-10-CM
T23.331S	Burn of third degree of multiple right fingers (nail), not including thumb, sequela	Diagnosis	ICD-10-CM
T23.332	Burn of third degree of multiple left fingers (nail), not including thumb	Diagnosis	ICD-10-CM
T23.332A	Burn of third degree of multiple left fingers (nail), not including thumb, initial encounter	Diagnosis	ICD-10-CM
T23.332D	Burn of third degree of multiple left fingers (nail), not including thumb, subsequent encounter	Diagnosis	ICD-10-CM
T23.332S	Burn of third degree of multiple left fingers (nail), not including thumb, sequela	Diagnosis	ICD-10-CM
T23.339	Burn of third degree of unspecified multiple fingers (nail), not including thumb	Diagnosis	ICD-10-CM
T23.339A	Burn of third degree of unspecified multiple fingers (nail), not including thumb, initial encounter	Diagnosis	ICD-10-CM
T23.339D	Burn of third degree of unspecified multiple fingers (nail), not including thumb, subsequent encounter	Diagnosis	ICD-10-CM
T23.339S	Burn of third degree of unspecified multiple fingers (nail), not including thumb, sequela	Diagnosis	ICD-10-CM
T23.34	Burn of third degree of multiple fingers (nail), including thumb	Diagnosis	ICD-10-CM
T23.341	Burn of third degree of multiple right fingers (nail), including thumb	Diagnosis	ICD-10-CM
T23.341A	Burn of third degree of multiple right fingers (nail), including thumb, initial encounter	Diagnosis	ICD-10-CM
T23.341D	Burn of third degree of multiple right fingers (nail), including thumb, subsequent encounter	Diagnosis	ICD-10-CM
T23.341S	Burn of third degree of multiple right fingers (nail), including thumb, sequela	Diagnosis	ICD-10-CM
T23.342	Burn of third degree of multiple left fingers (nail), including thumb	Diagnosis	ICD-10-CM
T23.342A	Burn of third degree of multiple left fingers (nail), including thumb, initial encounter	Diagnosis	ICD-10-CM
T23.342D	Burn of third degree of multiple left fingers (nail), including thumb, subsequent encounter	Diagnosis	ICD-10-CM
T23.342S	Burn of third degree of multiple left fingers (nail), including thumb, sequela	Diagnosis	ICD-10-CM
T23.349	Burn of third degree of unspecified multiple fingers (nail), including thumb	Diagnosis	ICD-10-CM
T23.349A	Burn of third degree of unspecified multiple fingers (nail), including thumb, initial encounter	Diagnosis	ICD-10-CM
T23.349D	Burn of third degree of unspecified multiple fingers (nail), including thumb, subsequent encounter	Diagnosis	ICD-10-CM
T23.349S	Burn of third degree of unspecified multiple fingers (nail), including thumb, sequela	Diagnosis	ICD-10-CM
T23.35	Burn of third degree of palm	Diagnosis	ICD-10-CM
T23.351	Burn of third degree of right palm	Diagnosis	ICD-10-CM
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Code	Description	Code Category	Code Type
T23.351A	Burn of third degree of right palm, initial encounter	Diagnosis	ICD-10-CM
T23.351D	Burn of third degree of right palm, subsequent encounter	Diagnosis	ICD-10-CM
T23.351S	Burn of third degree of right palm, sequela	Diagnosis	ICD-10-CM
T23.352	Burn of third degree of left palm	Diagnosis	ICD-10-CM
T23.352A	Burn of third degree of left palm, initial encounter	Diagnosis	ICD-10-CM
T23.352D	Burn of third degree of left palm, subsequent encounter	Diagnosis	ICD-10-CM
T23.352S	Burn of third degree of left palm, sequela	Diagnosis	ICD-10-CM
T23.359	Burn of third degree of unspecified palm	Diagnosis	ICD-10-CM
T23.359A	Burn of third degree of unspecified palm, initial encounter	Diagnosis	ICD-10-CM
T23.359D	Burn of third degree of unspecified palm, subsequent encounter	Diagnosis	ICD-10-CM
T23.359S	Burn of third degree of unspecified palm, sequela	Diagnosis	ICD-10-CM
T23.36	Burn of third degree of back of hand	Diagnosis	ICD-10-CM
T23.361	Burn of third degree of back of right hand	Diagnosis	ICD-10-CM
T23.361A	Burn of third degree of back of right hand, initial encounter	Diagnosis	ICD-10-CM
T23.361D	Burn of third degree of back of right hand, subsequent encounter	Diagnosis	ICD-10-CM
T23.361S	Burn of third degree of back of right hand, sequela	Diagnosis	ICD-10-CM
T23.362	Burn of third degree of back of left hand	Diagnosis	ICD-10-CM
T23.362A	Burn of third degree of back of left hand, initial encounter	Diagnosis	ICD-10-CM
T23.362D	Burn of third degree of back of left hand, subsequent encounter	Diagnosis	ICD-10-CM
T23.362S	Burn of third degree of back of left hand, sequela	Diagnosis	ICD-10-CM
T23.369	Burn of third degree of back of unspecified hand	Diagnosis	ICD-10-CM
T23.369A	Burn of third degree of back of unspecified hand, initial encounter	Diagnosis	ICD-10-CM
T23.369D	Burn of third degree of back of unspecified hand, subsequent encounter	Diagnosis	ICD-10-CM
T23.369S	Burn of third degree of back of unspecified hand, sequela	Diagnosis	ICD-10-CM
T23.37	Burn of third degree of wrist	Diagnosis	ICD-10-CM
T23.371	Burn of third degree of right wrist	Diagnosis	ICD-10-CM
		Diagnosis	



Code	Description	Code Category	Code Type
T23.371A	Burn of third degree of right wrist, initial encounter	Diagnosis	ICD-10-CM
T23.371D	Burn of third degree of right wrist, subsequent encounter	Diagnosis	ICD-10-CM
T23.371S	Burn of third degree of right wrist, sequela	Diagnosis	ICD-10-CM
T23.372	Burn of third degree of left wrist	Diagnosis	ICD-10-CM
T23.372A	Burn of third degree of left wrist, initial encounter	Diagnosis	ICD-10-CM
T23.372D	Burn of third degree of left wrist, subsequent encounter	Diagnosis	ICD-10-CM
T23.372S	Burn of third degree of left wrist, sequela	Diagnosis	ICD-10-CM
T23.379	Burn of third degree of unspecified wrist	Diagnosis	ICD-10-CM
T23.379A	Burn of third degree of unspecified wrist, initial encounter	Diagnosis	ICD-10-CM
T23.379D	Burn of third degree of unspecified wrist, subsequent encounter	Diagnosis	ICD-10-CM
T23.379S	Burn of third degree of unspecified wrist, sequela	Diagnosis	ICD-10-CM
T23.39	Burn of third degree of multiple sites of wrist and hand	Diagnosis	ICD-10-CM
T23.391	Burn of third degree of multiple sites of right wrist and hand	Diagnosis	ICD-10-CM
T23.391A	Burn of third degree of multiple sites of right wrist and hand, initial encounter	Diagnosis	ICD-10-CM
T23.391D	Burn of third degree of multiple sites of right wrist and hand, subsequent encounter	Diagnosis	ICD-10-CM
T23.391S	Burn of third degree of multiple sites of right wrist and hand, sequela	Diagnosis	ICD-10-CM
T23.392	Burn of third degree of multiple sites of left wrist and hand	Diagnosis	ICD-10-CM
T23.392A	Burn of third degree of multiple sites of left wrist and hand, initial encounter	Diagnosis	ICD-10-CM
T23.392D	Burn of third degree of multiple sites of left wrist and hand, subsequent encounter	Diagnosis	ICD-10-CM
T23.392S	Burn of third degree of multiple sites of left wrist and hand, sequela	Diagnosis	ICD-10-CM
T23.399	Burn of third degree of multiple sites of unspecified wrist and hand	Diagnosis	ICD-10-CM
T23.399A	Burn of third degree of multiple sites of unspecified wrist and hand, initial encounter	Diagnosis	ICD-10-CM
T23.399D	Burn of third degree of multiple sites of unspecified wrist and hand, subsequent encounter	Diagnosis	ICD-10-CM
T23.399S	Burn of third degree of multiple sites of unspecified wrist and hand, sequela	Diagnosis	ICD-10-CM
T24	Burn and corrosion of lower limb, except ankle and foot	Diagnosis	ICD-10-CM
T24.0	Burn of unspecified degree of lower limb, except ankle and foot	Diagnosis	ICD-10-CM



Code	Description	Code Category	Code Type
T24.00	Burn of unspecified degree of unspecified site of lower limb, except ankle and foot	Diagnosis	ICD-10-CM
T24.001	Burn of unspecified degree of unspecified site of right lower limb, except ankle and foot	Diagnosis	ICD-10-CM
T24.001A	Burn of unspecified degree of unspecified site of right lower limb, except ankle and foot, initial encounter		
T2 4 004 D		Diagnosis	ICD-10-CM
T24.001D	Burn of unspecified degree of unspecified site of right lower limb, except ankle and foot, subsequent encounter	Diagnosis	ICD-10-CM
T24.001S	Burn of unspecified degree of unspecified site of right lower limb, except ankle and foot, sequela	Diagnosis	ICD-10-CM
T24.002	Burn of unspecified degree of unspecified site of left lower limb, except ankle and foot	Diagnosis	ICD-10-CM
T24.002A	Burn of unspecified degree of unspecified site of left lower limb, except ankle and foot, initial encounter		
T24 002D		Diagnosis	ICD-10-CM
T24.002D	Burn of unspecified degree of unspecified site of left lower limb, except ankle and foot, subsequent encounter	Diagnosis	ICD-10-CM
T24.002S	Burn of unspecified degree of unspecified site of left lower limb, except ankle and foot, sequela	Diagnosis	ICD-10-CM
T24.009	Burn of unspecified degree of unspecified site of unspecified lower limb, except ankle and foot		
T24.009A	Burn of unspecified degree of unspecified site of unspecified lower limb, except ankle and foot, initial encounter	Diagnosis	ICD-10-CM
124.00JA	but of unspectied degree of unspectied site of unspectied lower hind, except annie and loot, initial encounter		
T24.009D	Durn of unconsitived degrees of unconstitived site of unconstitived lower limb, event and/o and fact, subsequent encounter	Diagnosis	ICD-10-CM
	Burn of unspecified degree of unspecified site of unspecified lower limb, except ankle and foot, subsequent encounter	Diagnosis	ICD-10-CM
T24.009S	Burn of unspecified degree of unspecified site of unspecified lower limb, except ankle and foot, sequela	Diagnosis	ICD-10-CM
T24.01	Burn of unspecified degree of thigh	Diagnosis	ICD-10-CM
T24.011	Burn of unspecified degree of right thigh	Diagnosis	ICD-10-CM
T24.011A	Burn of unspecified degree of right thigh, initial encounter	Diagnosis	ICD-10-CM
T24.011D	Burn of unspecified degree of right thigh, subsequent encounter	Diagnosis	ICD-10-CM
T24.011S	Burn of unspecified degree of right thigh, sequela	Diagnosis	ICD-10-CM
T24.012	Burn of unspecified degree of left thigh	Diagnosis	ICD-10-CM
T24.012A	Burn of unspecified degree of left thigh, initial encounter	Diagnosis	ICD-10-CM
T24.012D	Burn of unspecified degree of left thigh, subsequent encounter	Diagnosis	ICD-10-CM
T24.012S	Burn of unspecified degree of left thigh, sequela	Diagnosis	ICD-10-CM
T24.019	Burn of unspecified degree of unspecified thigh	Diagnosis	ICD-10-CM
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Code	Description	Code Category	Code Type
T24.019A	Burn of unspecified degree of unspecified thigh, initial encounter	Diagnosis	ICD-10-CM
T24.019D	Burn of unspecified degree of unspecified thigh, subsequent encounter	Diagnosis	ICD-10-CM
T24.019S	Burn of unspecified degree of unspecified thigh, sequela	Diagnosis	ICD-10-CM
T24.02	Burn of unspecified degree of knee	Diagnosis	ICD-10-CM
T24.021	Burn of unspecified degree of right knee	Diagnosis	ICD-10-CM
T24.021A	Burn of unspecified degree of right knee, initial encounter	Diagnosis	ICD-10-CM
T24.021D	Burn of unspecified degree of right knee, subsequent encounter	Diagnosis	ICD-10-CM
T24.021S	Burn of unspecified degree of right knee, sequela	Diagnosis	ICD-10-CM
T24.022	Burn of unspecified degree of left knee	Diagnosis	ICD-10-CM
T24.022A	Burn of unspecified degree of left knee, initial encounter	Diagnosis	ICD-10-CM
T24.022D	Burn of unspecified degree of left knee, subsequent encounter	Diagnosis	ICD-10-CM
T24.022S	Burn of unspecified degree of left knee, sequela	Diagnosis	ICD-10-CM
T24.029	Burn of unspecified degree of unspecified knee	Diagnosis	ICD-10-CM
T24.029A	Burn of unspecified degree of unspecified knee, initial encounter	Diagnosis	ICD-10-CM
T24.029D	Burn of unspecified degree of unspecified knee, subsequent encounter	Diagnosis	ICD-10-CM
T24.029S	Burn of unspecified degree of unspecified knee, sequela	Diagnosis	ICD-10-CM
T24.03	Burn of unspecified degree of lower leg	Diagnosis	ICD-10-CM
T24.031	Burn of unspecified degree of right lower leg	Diagnosis	ICD-10-CM
T24.031A	Burn of unspecified degree of right lower leg, initial encounter	Diagnosis	ICD-10-CM
T24.031D	Burn of unspecified degree of right lower leg, subsequent encounter	Diagnosis	ICD-10-CM
T24.031S	Burn of unspecified degree of right lower leg, sequela	Diagnosis	ICD-10-CM
T24.032	Burn of unspecified degree of left lower leg	Diagnosis	ICD-10-CM
T24.032A	Burn of unspecified degree of left lower leg, initial encounter	Diagnosis	ICD-10-CM
T24.032D	Burn of unspecified degree of left lower leg, subsequent encounter	Diagnosis	ICD-10-CM
T24.032S	Burn of unspecified degree of left lower leg, sequela	Diagnosis	ICD-10-CM
T24.039	Burn of unspecified degree of unspecified lower leg	Diagnosis	ICD-10-CM
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Code	Description	Code Category	Code Type
T24.039A	Burn of unspecified degree of unspecified lower leg, initial encounter	Diagnosis	ICD-10-CM
T24.039D	Burn of unspecified degree of unspecified lower leg, subsequent encounter	Diagnosis	ICD-10-CM
T24.039S	Burn of unspecified degree of unspecified lower leg, sequela	Diagnosis	ICD-10-CM
T24.09	Burn of unspecified degree of multiple sites of lower limb, except ankle and foot	Diagnosis	ICD-10-CM
T24.091	Burn of unspecified degree of multiple sites of right lower limb, except ankle and foot	Diagnosis	ICD-10-CM
T24.091A	Burn of unspecified degree of multiple sites of right lower limb, except ankle and foot, initial encounter	Diagnosis	ICD-10-CM
T24.091D	Burn of unspecified degree of multiple sites of right lower limb, except ankle and foot, subsequent encounter	Diagnosis	ICD-10-CM
T24.091S	Burn of unspecified degree of multiple sites of right lower limb, except ankle and foot, sequela	Diagnosis	ICD-10-CM
T24.092	Burn of unspecified degree of multiple sites of left lower limb, except ankle and foot	Diagnosis	ICD-10-CM
T24.092A	Burn of unspecified degree of multiple sites of left lower limb, except ankle and foot, initial encounter	Diagnosis	ICD-10-CM
T24.092D	Burn of unspecified degree of multiple sites of left lower limb, except ankle and foot, subsequent encounter	Diagnosis	ICD-10-CM
T24.092S	Burn of unspecified degree of multiple sites of left lower limb, except ankle and foot, sequela	Ū	ICD-10-CM
T24.099	Burn of unspecified degree of multiple sites of unspecified lower limb, except ankle and foot	Diagnosis	ICD-10-CIM
		Diagnosis	ICD-10-CM
T24.099A	Burn of unspecified degree of multiple sites of unspecified lower limb, except ankle and foot, initial encounter		
		Diagnosis	ICD-10-CM
T24.099D	Burn of unspecified degree of multiple sites of unspecified lower limb, except ankle and foot, subsequent encounter	Diagnosis	ICD-10-CM
T24.099S	Burn of unspecified degree of multiple sites of unspecified lower limb, except ankle and foot, sequela	Diagnosis	ICD-10-CM
T24.1	Burn of first degree of lower limb, except ankle and foot	Diagnosis	ICD-10-CM
T24.10	Burn of first degree of unspecified site of lower limb, except ankle and foot	Diagnosis	ICD-10-CM
T24.101	Burn of first degree of unspecified site of right lower limb, except ankle and foot	Diagnosis	ICD-10-CM
T24.101A	Burn of first degree of unspecified site of right lower limb, except ankle and foot, initial encounter	Diagnosis	ICD-10-CM
T24.101D	Burn of first degree of unspecified site of right lower limb, except ankle and foot, subsequent encounter	Diagnosis	ICD-10-CM
T24.101S	Burn of first degree of unspecified site of right lower limb, except ankle and foot, sequela	0	ICD-10-CM
T24.102	Burn of first degree of unspecified site of left lower limb, except ankle and foot	Diagnosis	
T24.102A	Burn of first degree of unspecified site of left lower limb, except ankle and foot, initial encounter	Diagnosis	ICD-10-CM
T24.102A	Burn of first degree of unspecified site of left lower limb, except ankle and foot, subsequent encounter	Diagnosis	ICD-10-CM
124.1020	buth of hist degree of unspectied site of left lower limb, except ankle and loot, subsequent encounter	Diagnosis	ICD-10-CM



Code T24.102S	Description Burn of first degree of unspecified site of left lower limb, except ankle and foot, sequela	Code Category	Code Type
		Diagnosis	ICD-10-CM
T24.109	Burn of first degree of unspecified site of unspecified lower limb, except ankle and foot	Diagnosis	ICD-10-CM
T24.109A	Burn of first degree of unspecified site of unspecified lower limb, except ankle and foot, initial encounter	Diagnosis	ICD-10-CM
T24.109D	Burn of first degree of unspecified site of unspecified lower limb, except ankle and foot, subsequent encounter	Diagnosis	ICD-10-CM
T24.109S	Burn of first degree of unspecified site of unspecified lower limb, except ankle and foot, sequela	-	ICD-10-CM
T24.11	Burn of first degree of thigh	Diagnosis	
T24.111	Burn of first degree of right thigh	Diagnosis	ICD-10-CM
T24.111A	Burn of first degree of right thigh, initial encounter	Diagnosis	ICD-10-CM
T24.111D	Burn of first degree of right thigh, subsequent encounter	Diagnosis	ICD-10-CM
T24.1115	Burn of first degree of right thigh, sequela	Diagnosis	ICD-10-CM
		Diagnosis	ICD-10-CM
T24.112	Burn of first degree of left thigh	Diagnosis	ICD-10-CM
T24.112A	Burn of first degree of left thigh, initial encounter	Diagnosis	ICD-10-CM
T24.112D	Burn of first degree of left thigh, subsequent encounter	Diagnosis	ICD-10-CM
T24.112S	Burn of first degree of left thigh, sequela	Diagnosis	ICD-10-CM
T24.119	Burn of first degree of unspecified thigh	Diagnosis	ICD-10-CM
T24.119A	Burn of first degree of unspecified thigh, initial encounter	Diagnosis	ICD-10-CM
T24.119D	Burn of first degree of unspecified thigh, subsequent encounter	Diagnosis	ICD-10-CM
T24.119S	Burn of first degree of unspecified thigh, sequela	Diagnosis	ICD-10-CM
T24.12	Burn of first degree of knee	Diagnosis	ICD-10-CM
T24.121	Burn of first degree of right knee	Diagnosis	ICD-10-CM
T24.121A	Burn of first degree of right knee, initial encounter	Diagnosis	ICD-10-CM
T24.121D	Burn of first degree of right knee, subsequent encounter	Diagnosis	ICD-10-CM
T24.121S	Burn of first degree of right knee, sequela	Diagnosis	ICD-10-CM
T24.122	Burn of first degree of left knee	Diagnosis	ICD-10-CM
T24.122A	Burn of first degree of left knee, initial encounter	Diagnosis	ICD-10-CM
T24.122D	Burn of first degree of left knee, subsequent encounter	Diagnosis	ICD-10-CM
		Diagnosis	



Code	Description	Code Category	Code Type
T24.122S	Burn of first degree of left knee, sequela	Diagnosis	ICD-10-CM
T24.129	Burn of first degree of unspecified knee	Diagnosis	ICD-10-CM
T24.129A	Burn of first degree of unspecified knee, initial encounter	Diagnosis	ICD-10-CM
T24.129D	Burn of first degree of unspecified knee, subsequent encounter	Diagnosis	ICD-10-CM
T24.129S	Burn of first degree of unspecified knee, sequela	Diagnosis	ICD-10-CM
T24.13	Burn of first degree of lower leg	Diagnosis	ICD-10-CM
T24.131	Burn of first degree of right lower leg	Diagnosis	ICD-10-CM
T24.131A	Burn of first degree of right lower leg, initial encounter	Diagnosis	ICD-10-CM
T24.131D	Burn of first degree of right lower leg, subsequent encounter	Diagnosis	ICD-10-CM
T24.131S	Burn of first degree of right lower leg, sequela	Diagnosis	ICD-10-CM
T24.132	Burn of first degree of left lower leg	Diagnosis	ICD-10-CM
T24.132A	Burn of first degree of left lower leg, initial encounter	Diagnosis	ICD-10-CM
T24.132D	Burn of first degree of left lower leg, subsequent encounter	Diagnosis	ICD-10-CM
T24.132S	Burn of first degree of left lower leg, sequela	Diagnosis	ICD-10-CM
T24.139	Burn of first degree of unspecified lower leg	Diagnosis	ICD-10-CM
T24.139A	Burn of first degree of unspecified lower leg, initial encounter	Diagnosis	ICD-10-CM
T24.139D	Burn of first degree of unspecified lower leg, subsequent encounter	Diagnosis	ICD-10-CM
T24.139S	Burn of first degree of unspecified lower leg, sequela	Diagnosis	ICD-10-CM
T24.19	Burn of first degree of multiple sites of lower limb, except ankle and foot	Diagnosis	ICD-10-CM
T24.191	Burn of first degree of multiple sites of right lower limb, except ankle and foot	Diagnosis	ICD-10-CM
T24.191A	Burn of first degree of multiple sites of right lower limb, except ankle and foot, initial encounter	Diagnosis	ICD-10-CM
T24.191D	Burn of first degree of multiple sites of right lower limb, except ankle and foot, subsequent encounter	Diagnosis	ICD-10-CM
T24.191S	Burn of first degree of multiple sites of right lower limb, except ankle and foot, sequela	Diagnosis	ICD-10-CM
T24.192	Burn of first degree of multiple sites of left lower limb, except ankle and foot	Diagnosis	ICD-10-CM
T24.192A	Burn of first degree of multiple sites of left lower limb, except ankle and foot, initial encounter	Diagnosis	ICD-10-CM
T24.192D	Burn of first degree of multiple sites of left lower limb, except ankle and foot, subsequent encounter	Diagnosis	ICD-10-CM
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Code		Code Cotosom	Code Ture-
Code T24.192S	Description Burn of first degree of multiple sites of left lower limb, except ankle and foot, sequela	Code Category	Code Type
T24.1923	Burn of first degree of multiple sites of unspecified lower limb, except ankle and foot	Diagnosis	ICD-10-CM
T24.199 T24.199A		Diagnosis	ICD-10-CM
	Burn of first degree of multiple sites of unspecified lower limb, except ankle and foot, initial encounter	Diagnosis	ICD-10-CM
T24.199D	Burn of first degree of multiple sites of unspecified lower limb, except ankle and foot, subsequent encounter	Diagnosis	ICD-10-CM
T24.199S	Burn of first degree of multiple sites of unspecified lower limb, except ankle and foot, sequela	Diagnosis	ICD-10-CM
T24.2	Burn of second degree of lower limb, except ankle and foot	Diagnosis	ICD-10-CM
T24.20	Burn of second degree of unspecified site of lower limb, except ankle and foot	Diagnosis	ICD-10-CM
T24.201	Burn of second degree of unspecified site of right lower limb, except ankle and foot	Diagnosis	ICD-10-CM
T24.201A	Burn of second degree of unspecified site of right lower limb, except ankle and foot, initial encounter	Diagnosis	ICD-10-CM
T24.201D	Burn of second degree of unspecified site of right lower limb, except ankle and foot, subsequent encounter	Diagnosis	ICD-10-CM
T24.201S	Burn of second degree of unspecified site of right lower limb, except ankle and foot, sequela	Diagnosis	ICD-10-CM
T24.202	Burn of second degree of unspecified site of left lower limb, except ankle and foot	Diagnosis	ICD-10-CM
T24.202A	Burn of second degree of unspecified site of left lower limb, except ankle and foot, initial encounter	Diagnosis	ICD-10-CM
T24.202D	Burn of second degree of unspecified site of left lower limb, except ankle and foot, subsequent encounter	Diagnosis	ICD-10-CM
T24.202S	Burn of second degree of unspecified site of left lower limb, except ankle and foot, sequela	Diagnosis	ICD-10-CM
T24.209	Burn of second degree of unspecified site of unspecified lower limb, except ankle and foot	Diagnosis	ICD-10-CM
T24.209A	Burn of second degree of unspecified site of unspecified lower limb, except ankle and foot, initial encounter	-	
		Diagnosis	ICD-10-CM
T24.209D	Burn of second degree of unspecified site of unspecified lower limb, except ankle and foot, subsequent encounter	Diagnosis	ICD-10-CM
T24.209S	Burn of second degree of unspecified site of unspecified lower limb, except ankle and foot, sequela	Diagnosis	ICD-10-CM
T24.21	Burn of second degree of thigh	Diagnosis	ICD-10-CM
T24.211	Burn of second degree of right thigh	Diagnosis	ICD-10-CM
T24.211A	Burn of second degree of right thigh, initial encounter	Diagnosis	ICD-10-CM
T24.211D	Burn of second degree of right thigh, subsequent encounter	Diagnosis	ICD-10-CM
T24.211S	Burn of second degree of right thigh, sequela	Diagnosis	ICD-10-CM
T24.212	Burn of second degree of left thigh	Diagnosis	ICD-10-CM
T24.212A	Burn of second degree of left thigh, initial encounter	Diagnosis	ICD-10-CM
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Code	Description	Code Category	Code Type
T24.212D	Burn of second degree of left thigh, subsequent encounter	Diagnosis	ICD-10-CM
T24.212S	Burn of second degree of left thigh, sequela	Diagnosis	ICD-10-CM
T24.219	Burn of second degree of unspecified thigh	Diagnosis	ICD-10-CM
T24.219A	Burn of second degree of unspecified thigh, initial encounter	Diagnosis	ICD-10-CM
T24.219D	Burn of second degree of unspecified thigh, subsequent encounter	Diagnosis	ICD-10-CM
T24.219S	Burn of second degree of unspecified thigh, sequela	Diagnosis	ICD-10-CM
T24.22	Burn of second degree of knee	Diagnosis	ICD-10-CM
T24.221	Burn of second degree of right knee	Diagnosis	ICD-10-CM
T24.221A	Burn of second degree of right knee, initial encounter	Diagnosis	ICD-10-CM
T24.221D	Burn of second degree of right knee, subsequent encounter	Diagnosis	ICD-10-CM
T24.221S	Burn of second degree of right knee, sequela	Diagnosis	ICD-10-CM
T24.222	Burn of second degree of left knee	Diagnosis	ICD-10-CM
T24.222A	Burn of second degree of left knee, initial encounter	Diagnosis	ICD-10-CM
T24.222D	Burn of second degree of left knee, subsequent encounter	Diagnosis	ICD-10-CM
T24.222S	Burn of second degree of left knee, sequela	Diagnosis	ICD-10-CM
T24.229	Burn of second degree of unspecified knee	Diagnosis	ICD-10-CM
T24.229A	Burn of second degree of unspecified knee, initial encounter	Diagnosis	ICD-10-CM
T24.229D	Burn of second degree of unspecified knee, subsequent encounter	Diagnosis	ICD-10-CM
T24.229S	Burn of second degree of unspecified knee, sequela	Diagnosis	ICD-10-CM
T24.23	Burn of second degree of lower leg	Diagnosis	ICD-10-CM
T24.231	Burn of second degree of right lower leg	Diagnosis	ICD-10-CM
T24.231A	Burn of second degree of right lower leg, initial encounter	Diagnosis	ICD-10-CM
T24.231D	Burn of second degree of right lower leg, subsequent encounter	Diagnosis	ICD-10-CM
T24.231S	Burn of second degree of right lower leg, sequela	Diagnosis	ICD-10-CM
T24.232	Burn of second degree of left lower leg	Diagnosis	ICD-10-CM
T24.232A	Burn of second degree of left lower leg, initial encounter	Diagnosis	ICD-10-CM
		Diagnosis	



Code	Description	Code Category	Code Type
T24.232D	Burn of second degree of left lower leg, subsequent encounter	Diagnosis	ICD-10-CM
T24.232S	Burn of second degree of left lower leg, sequela	Diagnosis	ICD-10-CM
T24.239	Burn of second degree of unspecified lower leg	Diagnosis	ICD-10-CM
T24.239A	Burn of second degree of unspecified lower leg, initial encounter	Diagnosis	ICD-10-CM
T24.239D	Burn of second degree of unspecified lower leg, subsequent encounter	Diagnosis	ICD-10-CM
T24.239S	Burn of second degree of unspecified lower leg, sequela	Diagnosis	ICD-10-CM
T24.29	Burn of second degree of multiple sites of lower limb, except ankle and foot	Diagnosis	ICD-10-CM
T24.291	Burn of second degree of multiple sites of right lower limb, except ankle and foot	Diagnosis	ICD-10-CM
T24.291A	Burn of second degree of multiple sites of right lower limb, except ankle and foot, initial encounter	Diagnosis	ICD-10-CM
T24.291D	Burn of second degree of multiple sites of right lower limb, except ankle and foot, subsequent encounter	Diagnosis	ICD-10-CM
T24.291S	Burn of second degree of multiple sites of right lower limb, except ankle and foot, sequela	Diagnosis	ICD-10-CM
T24.292	Burn of second degree of multiple sites of left lower limb, except ankle and foot	Diagnosis	ICD-10-CM
T24.292A	Burn of second degree of multiple sites of left lower limb, except ankle and foot, initial encounter	Diagnosis	ICD-10-CM
T24.292D	Burn of second degree of multiple sites of left lower limb, except ankle and foot, subsequent encounter	Diagnosis	ICD-10-CM
T24.292S	Burn of second degree of multiple sites of left lower limb, except ankle and foot, sequela	Diagnosis	ICD-10-CM
T24.299	Burn of second degree of multiple sites of unspecified lower limb, except ankle and foot	Diagnosis	ICD-10-CM
T24.299A	Burn of second degree of multiple sites of unspecified lower limb, except ankle and foot, initial encounter	0	
		Diagnosis	ICD-10-CM
T24.299D	Burn of second degree of multiple sites of unspecified lower limb, except ankle and foot, subsequent encounter	Diagnosis	ICD-10-CM
T24.299S	Burn of second degree of multiple sites of unspecified lower limb, except ankle and foot, sequela	Diagnosis	ICD-10-CM
T24.3	Burn of third degree of lower limb, except ankle and foot	Diagnosis	ICD-10-CM
T24.30	Burn of third degree of unspecified site of lower limb, except ankle and foot	Diagnosis	ICD-10-CM
T24.301	Burn of third degree of unspecified site of right lower limb, except ankle and foot	Diagnosis	ICD-10-CM
T24.301A	Burn of third degree of unspecified site of right lower limb, except ankle and foot, initial encounter	Diagnosis	ICD-10-CM
T24.301D	Burn of third degree of unspecified site of right lower limb, except ankle and foot, subsequent encounter	Diagnosis	ICD-10-CM
T24.301S	Burn of third degree of unspecified site of right lower limb, except ankle and foot, sequela	Diagnosis	ICD-10-CM
T24.302	Burn of third degree of unspecified site of left lower limb, except ankle and foot	Diagnosis	ICD-10-CM



Code	Description	Code Category	Code Type
T24.302A	Burn of third degree of unspecified site of left lower limb, except ankle and foot, initial encounter	Diagnosis	ICD-10-CM
T24.302D	Burn of third degree of unspecified site of left lower limb, except ankle and foot, subsequent encounter	Diagnosis	ICD-10-CM
T24.302S	Burn of third degree of unspecified site of left lower limb, except ankle and foot, sequela	Diagnosis	ICD-10-CM
T24.309	Burn of third degree of unspecified site of unspecified lower limb, except ankle and foot	Diagnosis	ICD-10-CM
T24.309A	Burn of third degree of unspecified site of unspecified lower limb, except ankle and foot, initial encounter		
T24 200D		Diagnosis	ICD-10-CM
T24.309D	Burn of third degree of unspecified site of unspecified lower limb, except ankle and foot, subsequent encounter	Diagnosis	ICD-10-CM
T24.309S	Burn of third degree of unspecified site of unspecified lower limb, except ankle and foot, sequela	Diagnosis	ICD-10-CM
T24.31	Burn of third degree of thigh	Diagnosis	ICD-10-CM
T24.311	Burn of third degree of right thigh	Diagnosis	ICD-10-CM
T24.311A	Burn of third degree of right thigh, initial encounter	Diagnosis	ICD-10-CM
T24.311D	Burn of third degree of right thigh, subsequent encounter	Diagnosis	ICD-10-CM
T24.311S	Burn of third degree of right thigh, sequela	Diagnosis	ICD-10-CM
T24.312	Burn of third degree of left thigh	Diagnosis	ICD-10-CM
T24.312A	Burn of third degree of left thigh, initial encounter	Diagnosis	ICD-10-CM
T24.312D	Burn of third degree of left thigh, subsequent encounter	Diagnosis	ICD-10-CM
T24.312S	Burn of third degree of left thigh, sequela	Diagnosis	ICD-10-CM
T24.319	Burn of third degree of unspecified thigh	Diagnosis	ICD-10-CM
T24.319A	Burn of third degree of unspecified thigh, initial encounter	Diagnosis	ICD-10-CM
T24.319D	Burn of third degree of unspecified thigh, subsequent encounter	Diagnosis	ICD-10-CM
T24.319S	Burn of third degree of unspecified thigh, sequela	Diagnosis	ICD-10-CM
T24.32	Burn of third degree of knee	Diagnosis	ICD-10-CM
T24.321	Burn of third degree of right knee	Diagnosis	ICD-10-CM
T24.321A	Burn of third degree of right knee, initial encounter	Diagnosis	ICD-10-CM
T24.321D	Burn of third degree of right knee, subsequent encounter	Diagnosis	ICD-10-CM
T24.321S	Burn of third degree of right knee, sequela	C	
T24.322	Burn of third degree of left knee	Diagnosis	ICD-10-CM
		Diagnosis	ICD-10-CM



Code	Description	Code Category	Code Type
T24.322A	Burn of third degree of left knee, initial encounter	Diagnosis	ICD-10-CM
T24.322D	Burn of third degree of left knee, subsequent encounter	Diagnosis	ICD-10-CM
T24.322S	Burn of third degree of left knee, sequela	Diagnosis	ICD-10-CM
T24.329	Burn of third degree of unspecified knee	Diagnosis	ICD-10-CM
T24.329A	Burn of third degree of unspecified knee, initial encounter	Diagnosis	ICD-10-CM
T24.329D	Burn of third degree of unspecified knee, subsequent encounter	Diagnosis	ICD-10-CM
T24.329S	Burn of third degree of unspecified knee, sequela	Diagnosis	ICD-10-CM
T24.33	Burn of third degree of lower leg	Diagnosis	ICD-10-CM
T24.331	Burn of third degree of right lower leg	Diagnosis	ICD-10-CM
T24.331A	Burn of third degree of right lower leg, initial encounter	Diagnosis	ICD-10-CM
T24.331D	Burn of third degree of right lower leg, subsequent encounter	Diagnosis	ICD-10-CM
T24.331S	Burn of third degree of right lower leg, sequela	Diagnosis	ICD-10-CM
T24.332	Burn of third degree of left lower leg	Diagnosis	ICD-10-CM
T24.332A	Burn of third degree of left lower leg, initial encounter	Diagnosis	ICD-10-CM
T24.332D	Burn of third degree of left lower leg, subsequent encounter	Diagnosis	ICD-10-CM
T24.332S	Burn of third degree of left lower leg, sequela	Diagnosis	ICD-10-CM
T24.339	Burn of third degree of unspecified lower leg	Diagnosis	ICD-10-CM
T24.339A	Burn of third degree of unspecified lower leg, initial encounter	Diagnosis	ICD-10-CM
T24.339D	Burn of third degree of unspecified lower leg, subsequent encounter	Diagnosis	ICD-10-CM
T24.339S	Burn of third degree of unspecified lower leg, sequela	Diagnosis	ICD-10-CM
T24.39	Burn of third degree of multiple sites of lower limb, except ankle and foot	Diagnosis	ICD-10-CM
T24.391	Burn of third degree of multiple sites of right lower limb, except ankle and foot	Diagnosis	ICD-10-CM
T24.391A	Burn of third degree of multiple sites of right lower limb, except ankle and foot, initial encounter	Diagnosis	ICD-10-CM
T24.391D	Burn of third degree of multiple sites of right lower limb, except ankle and foot, subsequent encounter	Diagnosis	ICD-10-CM
T24.391S	Burn of third degree of multiple sites of right lower limb, except ankle and foot, sequela	Diagnosis	ICD-10-CM
T24.392	Burn of third degree of multiple sites of left lower limb, except ankle and foot	Diagnosis	ICD-10-CM
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Code	Description	Code Category	Code Type
T24.392A	Burn of third degree of multiple sites of left lower limb, except ankle and foot, initial encounter	Diagnosis	ICD-10-CM
T24.392D	Burn of third degree of multiple sites of left lower limb, except ankle and foot, subsequent encounter	Diagnosis	ICD-10-CM
T24.392S	Burn of third degree of multiple sites of left lower limb, except ankle and foot, sequela	Diagnosis	ICD-10-CM
T24.399	Burn of third degree of multiple sites of unspecified lower limb, except ankle and foot	Diagnosis	ICD-10-CM
T24.399A	Burn of third degree of multiple sites of unspecified lower limb, except ankle and foot, initial encounter	Diagnosis	ICD-10-CM
T24.399D	Burn of third degree of multiple sites of unspecified lower limb, except ankle and foot, subsequent encounter	Diagnosis	ICD-10-CM
T24.399S	Burn of third degree of multiple sites of unspecified lower limb, except ankle and foot, sequela	Diagnosis	ICD-10-CM
T25	Burn and corrosion of ankle and foot	Diagnosis	ICD-10-CM
T25.0	Burn of unspecified degree of ankle and foot	Diagnosis	ICD-10-CM
T25.01	Burn of unspecified degree of ankle	Diagnosis	ICD-10-CM
T25.011	Burn of unspecified degree of right ankle	Diagnosis	ICD-10-CM
T25.011A	Burn of unspecified degree of right ankle, initial encounter	Diagnosis	ICD-10-CM
T25.011D	Burn of unspecified degree of right ankle, subsequent encounter	Diagnosis	ICD-10-CM
T25.011S	Burn of unspecified degree of right ankle, sequela	Diagnosis	ICD-10-CM
T25.012	Burn of unspecified degree of left ankle	Diagnosis	ICD-10-CM
T25.012A	Burn of unspecified degree of left ankle, initial encounter	Diagnosis	ICD-10-CM
T25.012D	Burn of unspecified degree of left ankle, subsequent encounter	Diagnosis	ICD-10-CM
T25.012S	Burn of unspecified degree of left ankle, sequela	Diagnosis	ICD-10-CM
T25.019	Burn of unspecified degree of unspecified ankle	Diagnosis	ICD-10-CM
T25.019A	Burn of unspecified degree of unspecified ankle, initial encounter	Diagnosis	ICD-10-CM
T25.019D	Burn of unspecified degree of unspecified ankle, subsequent encounter	Diagnosis	ICD-10-CM
T25.019S	Burn of unspecified degree of unspecified ankle, sequela	Diagnosis	ICD-10-CM
T25.02	Burn of unspecified degree of foot	Diagnosis	ICD-10-CM
T25.021	Burn of unspecified degree of right foot	Diagnosis	ICD-10-CM
T25.021A	Burn of unspecified degree of right foot, initial encounter	Diagnosis	ICD-10-CM
T25.021D	Burn of unspecified degree of right foot, subsequent encounter	Diagnosis	ICD-10-CM
		0	



Code	Description	Code Category	Code Type
T25.021S	Burn of unspecified degree of right foot, sequela	Diagnosis	ICD-10-CM
T25.022	Burn of unspecified degree of left foot	Diagnosis	ICD-10-CM
T25.022A	Burn of unspecified degree of left foot, initial encounter	Diagnosis	ICD-10-CM
T25.022D	Burn of unspecified degree of left foot, subsequent encounter	Diagnosis	ICD-10-CM
T25.022S	Burn of unspecified degree of left foot, sequela	Diagnosis	ICD-10-CM
T25.029	Burn of unspecified degree of unspecified foot	Diagnosis	ICD-10-CM
T25.029A	Burn of unspecified degree of unspecified foot, initial encounter	Diagnosis	ICD-10-CM
T25.029D	Burn of unspecified degree of unspecified foot, subsequent encounter	Diagnosis	ICD-10-CM
T25.029S	Burn of unspecified degree of unspecified foot, sequela	Diagnosis	ICD-10-CM
T25.03	Burn of unspecified degree of toe(s) (nail)	Diagnosis	ICD-10-CM
T25.031	Burn of unspecified degree of right toe(s) (nail)	Diagnosis	ICD-10-CM
T25.031A	Burn of unspecified degree of right toe(s) (nail), initial encounter	Diagnosis	ICD-10-CM
T25.031D	Burn of unspecified degree of right toe(s) (nail), subsequent encounter	Diagnosis	ICD-10-CM
T25.031S	Burn of unspecified degree of right toe(s) (nail), sequela	Diagnosis	ICD-10-CM
T25.032	Burn of unspecified degree of left toe(s) (nail)	Diagnosis	ICD-10-CM
T25.032A	Burn of unspecified degree of left toe(s) (nail), initial encounter	Diagnosis	ICD-10-CM
T25.032D	Burn of unspecified degree of left toe(s) (nail), subsequent encounter	Diagnosis	ICD-10-CM
T25.032S	Burn of unspecified degree of left toe(s) (nail), sequela	Diagnosis	ICD-10-CM
T25.039	Burn of unspecified degree of unspecified toe(s) (nail)	Diagnosis	ICD-10-CM
T25.039A	Burn of unspecified degree of unspecified toe(s) (nail), initial encounter	Diagnosis	ICD-10-CM
T25.039D	Burn of unspecified degree of unspecified toe(s) (nail), subsequent encounter	Diagnosis	ICD-10-CM
T25.039S	Burn of unspecified degree of unspecified toe(s) (nail), sequela	Diagnosis	ICD-10-CM
T25.09	Burn of unspecified degree of multiple sites of ankle and foot	Diagnosis	ICD-10-CM
T25.091	Burn of unspecified degree of multiple sites of right ankle and foot	Diagnosis	ICD-10-CM
T25.091A	Burn of unspecified degree of multiple sites of right ankle and foot, initial encounter	Diagnosis	ICD-10-CM
T25.091D	Burn of unspecified degree of multiple sites of right ankle and foot, subsequent encounter	Diagnosis	ICD-10-CM
		Diagnosis	



Code	Description	Code Category	Code Type
T25.091S	Burn of unspecified degree of multiple sites of right ankle and foot, sequela	Diagnosis	ICD-10-CM
T25.092	Burn of unspecified degree of multiple sites of left ankle and foot	Diagnosis	ICD-10-CM
T25.092A	Burn of unspecified degree of multiple sites of left ankle and foot, initial encounter	Diagnosis	ICD-10-CM
T25.092D	Burn of unspecified degree of multiple sites of left ankle and foot, subsequent encounter	Diagnosis	ICD-10-CM
T25.092S	Burn of unspecified degree of multiple sites of left ankle and foot, sequela	Diagnosis	ICD-10-CM
T25.099	Burn of unspecified degree of multiple sites of unspecified ankle and foot	Diagnosis	ICD-10-CM
T25.099A	Burn of unspecified degree of multiple sites of unspecified ankle and foot, initial encounter	Diagnosis	ICD-10-CM
T25.099D	Burn of unspecified degree of multiple sites of unspecified ankle and foot, subsequent encounter	Diagnosis	ICD-10-CM
T25.099S	Burn of unspecified degree of multiple sites of unspecified ankle and foot, sequela	Diagnosis	ICD-10-CM
T25.1	Burn of first degree of ankle and foot	Diagnosis	ICD-10-CM
T25.11	Burn of first degree of ankle	Diagnosis	ICD-10-CM
T25.111	Burn of first degree of right ankle	Diagnosis	ICD-10-CM
T25.111A	Burn of first degree of right ankle, initial encounter	Diagnosis	ICD-10-CM
T25.111D	Burn of first degree of right ankle, subsequent encounter	Diagnosis	ICD-10-CM
T25.111S	Burn of first degree of right ankle, sequela	Diagnosis	ICD-10-CM
T25.112	Burn of first degree of left ankle	Diagnosis	ICD-10-CM
T25.112A	Burn of first degree of left ankle, initial encounter	Diagnosis	ICD-10-CM
T25.112D	Burn of first degree of left ankle, subsequent encounter	Diagnosis	ICD-10-CM
T25.112S	Burn of first degree of left ankle, sequela	Diagnosis	ICD-10-CM
T25.119	Burn of first degree of unspecified ankle	Diagnosis	ICD-10-CM
T25.119A	Burn of first degree of unspecified ankle, initial encounter	Diagnosis	ICD-10-CM
T25.119D	Burn of first degree of unspecified ankle, subsequent encounter	Diagnosis	ICD-10-CM
T25.119S	Burn of first degree of unspecified ankle, sequela	Diagnosis	ICD-10-CM
T25.12	Burn of first degree of foot	Diagnosis	ICD-10-CM
T25.121	Burn of first degree of right foot	Diagnosis	ICD-10-CM
T25.121A	Burn of first degree of right foot, initial encounter	Diagnosis	ICD-10-CM



Code	Description	Code Category	Code Type
T25.121D	Burn of first degree of right foot, subsequent encounter	Diagnosis	ICD-10-CM
T25.121S	Burn of first degree of right foot, sequela	Diagnosis	ICD-10-CM
T25.122	Burn of first degree of left foot	Diagnosis	ICD-10-CM
T25.122A	Burn of first degree of left foot, initial encounter	Diagnosis	ICD-10-CM
T25.122D	Burn of first degree of left foot, subsequent encounter	Diagnosis	ICD-10-CM
T25.122S	Burn of first degree of left foot, sequela	Diagnosis	ICD-10-CM
T25.129	Burn of first degree of unspecified foot	Diagnosis	ICD-10-CM
T25.129A	Burn of first degree of unspecified foot, initial encounter	Diagnosis	ICD-10-CM
T25.129D	Burn of first degree of unspecified foot, subsequent encounter	Diagnosis	ICD-10-CM
T25.129S	Burn of first degree of unspecified foot, sequela	Diagnosis	ICD-10-CM
T25.13	Burn of first degree of toe(s) (nail)	Diagnosis	ICD-10-CM
T25.131	Burn of first degree of right toe(s) (nail)	Diagnosis	ICD-10-CM
T25.131A	Burn of first degree of right toe(s) (nail), initial encounter	Diagnosis	ICD-10-CM
T25.131D	Burn of first degree of right toe(s) (nail), subsequent encounter	Diagnosis	ICD-10-CM
T25.131S	Burn of first degree of right toe(s) (nail), sequela	Diagnosis	ICD-10-CM
T25.132	Burn of first degree of left toe(s) (nail)	Diagnosis	ICD-10-CM
T25.132A	Burn of first degree of left toe(s) (nail), initial encounter	Diagnosis	ICD-10-CM
T25.132D	Burn of first degree of left toe(s) (nail), subsequent encounter	Diagnosis	ICD-10-CM
T25.132S	Burn of first degree of left toe(s) (nail), sequela	Diagnosis	ICD-10-CM
T25.139	Burn of first degree of unspecified toe(s) (nail)	Diagnosis	ICD-10-CM
T25.139A	Burn of first degree of unspecified toe(s) (nail), initial encounter	Diagnosis	ICD-10-CM
T25.139D	Burn of first degree of unspecified toe(s) (nail), subsequent encounter	Diagnosis	ICD-10-CM
T25.139S	Burn of first degree of unspecified toe(s) (nail), sequela	Diagnosis	ICD-10-CM
T25.19	Burn of first degree of multiple sites of ankle and foot	Diagnosis	ICD-10-CM
T25.191	Burn of first degree of multiple sites of right ankle and foot	Diagnosis	ICD-10-CM
T25.191A	Burn of first degree of multiple sites of right ankle and foot, initial encounter	Diagnosis	ICD-10-CM



Code	Description	Code Category	Code Type
T25.191D	Burn of first degree of multiple sites of right ankle and foot, subsequent encounter	Diagnosis	ICD-10-CM
T25.191S	Burn of first degree of multiple sites of right ankle and foot, sequela	Diagnosis	ICD-10-CM
T25.192	Burn of first degree of multiple sites of left ankle and foot	Diagnosis	ICD-10-CM
T25.192A	Burn of first degree of multiple sites of left ankle and foot, initial encounter	Diagnosis	ICD-10-CM
T25.192D	Burn of first degree of multiple sites of left ankle and foot, subsequent encounter	Diagnosis	ICD-10-CM
T25.192S	Burn of first degree of multiple sites of left ankle and foot, sequela	Diagnosis	ICD-10-CM
T25.199	Burn of first degree of multiple sites of unspecified ankle and foot	Diagnosis	ICD-10-CM
T25.199A	Burn of first degree of multiple sites of unspecified ankle and foot, initial encounter	Diagnosis	ICD-10-CM
T25.199D	Burn of first degree of multiple sites of unspecified ankle and foot, subsequent encounter	Diagnosis	ICD-10-CM
T25.199S	Burn of first degree of multiple sites of unspecified ankle and foot, sequela	Diagnosis	ICD-10-CM
T25.2	Burn of second degree of ankle and foot	Diagnosis	ICD-10-CM
T25.21	Burn of second degree of ankle	Diagnosis	ICD-10-CM
T25.211	Burn of second degree of right ankle	Diagnosis	ICD-10-CM
T25.211A	Burn of second degree of right ankle, initial encounter	Diagnosis	ICD-10-CM
T25.211D	Burn of second degree of right ankle, subsequent encounter	Diagnosis	ICD-10-CM
T25.211S	Burn of second degree of right ankle, sequela	Diagnosis	ICD-10-CM
T25.212	Burn of second degree of left ankle	Diagnosis	ICD-10-CM
T25.212A	Burn of second degree of left ankle, initial encounter	Diagnosis	ICD-10-CM
T25.212D	Burn of second degree of left ankle, subsequent encounter	Diagnosis	ICD-10-CM
T25.212S	Burn of second degree of left ankle, sequela	Diagnosis	ICD-10-CM
T25.219	Burn of second degree of unspecified ankle	Diagnosis	ICD-10-CM
T25.219A	Burn of second degree of unspecified ankle, initial encounter	Diagnosis	ICD-10-CM
T25.219D	Burn of second degree of unspecified ankle, subsequent encounter	Diagnosis	ICD-10-CM
T25.219S	Burn of second degree of unspecified ankle, sequela	Diagnosis	ICD-10-CM
T25.22	Burn of second degree of foot	Diagnosis	ICD-10-CM
T25.221	Burn of second degree of right foot	Diagnosis	ICD-10-CM
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Code	Description	Code Category	Code Type
T25.221A	Burn of second degree of right foot, initial encounter	Diagnosis	ICD-10-CM
T25.221D	Burn of second degree of right foot, subsequent encounter	Diagnosis	ICD-10-CM
T25.221S	Burn of second degree of right foot, sequela	Diagnosis	ICD-10-CM
T25.222	Burn of second degree of left foot	Diagnosis	ICD-10-CM
T25.222A	Burn of second degree of left foot, initial encounter	Diagnosis	ICD-10-CM
T25.222D	Burn of second degree of left foot, subsequent encounter	Diagnosis	ICD-10-CM
T25.222S	Burn of second degree of left foot, sequela	Diagnosis	ICD-10-CM
T25.229	Burn of second degree of unspecified foot	Diagnosis	ICD-10-CM
T25.229A	Burn of second degree of unspecified foot, initial encounter	Diagnosis	ICD-10-CM
T25.229D	Burn of second degree of unspecified foot, subsequent encounter	Diagnosis	ICD-10-CM
T25.229S	Burn of second degree of unspecified foot, sequela	Diagnosis	ICD-10-CM
T25.23	Burn of second degree of toe(s) (nail)	Diagnosis	ICD-10-CM
T25.231	Burn of second degree of right toe(s) (nail)	Diagnosis	ICD-10-CM
T25.231A	Burn of second degree of right toe(s) (nail), initial encounter	Diagnosis	ICD-10-CM
T25.231D	Burn of second degree of right toe(s) (nail), subsequent encounter	Diagnosis	ICD-10-CM
T25.231S	Burn of second degree of right toe(s) (nail), sequela	Diagnosis	ICD-10-CM
T25.232	Burn of second degree of left toe(s) (nail)	Diagnosis	ICD-10-CM
T25.232A	Burn of second degree of left toe(s) (nail), initial encounter	Diagnosis	ICD-10-CM
T25.232D	Burn of second degree of left toe(s) (nail), subsequent encounter	Diagnosis	ICD-10-CM
T25.232S	Burn of second degree of left toe(s) (nail), sequela	Diagnosis	ICD-10-CM
T25.239	Burn of second degree of unspecified toe(s) (nail)	Diagnosis	ICD-10-CM
T25.239A	Burn of second degree of unspecified toe(s) (nail), initial encounter	Diagnosis	ICD-10-CM
T25.239D	Burn of second degree of unspecified toe(s) (nail), subsequent encounter	Diagnosis	ICD-10-CM
T25.239S	Burn of second degree of unspecified toe(s) (nail), sequela	Diagnosis	ICD-10-CM
T25.29	Burn of second degree of multiple sites of ankle and foot	Diagnosis	ICD-10-CM
T25.291	Burn of second degree of multiple sites of right ankle and foot	Diagnosis	ICD-10-CM
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Code	Description	Code Category	Code Type
T25.291A	Burn of second degree of multiple sites of right ankle and foot, initial encounter	Diagnosis	ICD-10-CM
T25.291D	Burn of second degree of multiple sites of right ankle and foot, subsequent encounter	Diagnosis	ICD-10-CM
T25.291S	Burn of second degree of multiple sites of right ankle and foot, sequela	Diagnosis	ICD-10-CM
T25.292	Burn of second degree of multiple sites of left ankle and foot	Diagnosis	ICD-10-CM
T25.292A	Burn of second degree of multiple sites of left ankle and foot, initial encounter	Diagnosis	ICD-10-CM
T25.292D	Burn of second degree of multiple sites of left ankle and foot, subsequent encounter	Diagnosis	ICD-10-CM
T25.292S	Burn of second degree of multiple sites of left ankle and foot, sequela	Diagnosis	ICD-10-CM
T25.299	Burn of second degree of multiple sites of unspecified ankle and foot	Diagnosis	ICD-10-CM
T25.299A	Burn of second degree of multiple sites of unspecified ankle and foot, initial encounter	Diagnosis	ICD-10-CM
T25.299D	Burn of second degree of multiple sites of unspecified ankle and foot, subsequent encounter	Diagnosis	ICD-10-CM
T25.299S	Burn of second degree of multiple sites of unspecified ankle and foot, sequela	Diagnosis	ICD-10-CM
T25.3	Burn of third degree of ankle and foot	Diagnosis	ICD-10-CM
T25.31	Burn of third degree of ankle	Diagnosis	ICD-10-CM
T25.311	Burn of third degree of right ankle	Diagnosis	ICD-10-CM
T25.311A	Burn of third degree of right ankle, initial encounter	Diagnosis	ICD-10-CM
T25.311D	Burn of third degree of right ankle, subsequent encounter	Diagnosis	ICD-10-CM
T25.311S	Burn of third degree of right ankle, sequela	Diagnosis	ICD-10-CM
T25.312	Burn of third degree of left ankle	Diagnosis	ICD-10-CM
T25.312A	Burn of third degree of left ankle, initial encounter	Diagnosis	ICD-10-CM
T25.312D	Burn of third degree of left ankle, subsequent encounter	Diagnosis	ICD-10-CM
T25.312S	Burn of third degree of left ankle, sequela	Diagnosis	ICD-10-CM
T25.319	Burn of third degree of unspecified ankle	Diagnosis	ICD-10-CM
T25.319A	Burn of third degree of unspecified ankle, initial encounter	Diagnosis	ICD-10-CM
T25.319D	Burn of third degree of unspecified ankle, subsequent encounter	Diagnosis	ICD-10-CM
T25.319S	Burn of third degree of unspecified ankle, sequela	Diagnosis	ICD-10-CM
T25.32	Burn of third degree of foot	Diagnosis	ICD-10-CM
		-	



Code	Description	Code Category	Code Type
T25.321	Burn of third degree of right foot	Diagnosis	ICD-10-CM
T25.321A	Burn of third degree of right foot, initial encounter	Diagnosis	ICD-10-CM
T25.321D	Burn of third degree of right foot, subsequent encounter	Diagnosis	ICD-10-CM
T25.321S	Burn of third degree of right foot, sequela	Diagnosis	ICD-10-CM
T25.322	Burn of third degree of left foot	Diagnosis	ICD-10-CM
T25.322A	Burn of third degree of left foot, initial encounter	Diagnosis	ICD-10-CM
T25.322D	Burn of third degree of left foot, subsequent encounter	Diagnosis	ICD-10-CM
T25.322S	Burn of third degree of left foot, sequela	Diagnosis	ICD-10-CM
T25.329	Burn of third degree of unspecified foot	Diagnosis	ICD-10-CM
T25.329A	Burn of third degree of unspecified foot, initial encounter	Diagnosis	ICD-10-CM
T25.329D	Burn of third degree of unspecified foot, subsequent encounter	Diagnosis	ICD-10-CM
T25.329S	Burn of third degree of unspecified foot, sequela	Diagnosis	ICD-10-CM
T25.33	Burn of third degree of toe(s) (nail)	Diagnosis	ICD-10-CM
T25.331	Burn of third degree of right toe(s) (nail)	Diagnosis	ICD-10-CM
T25.331A	Burn of third degree of right toe(s) (nail), initial encounter	Diagnosis	ICD-10-CM
T25.331D	Burn of third degree of right toe(s) (nail), subsequent encounter	Diagnosis	ICD-10-CM
T25.331S	Burn of third degree of right toe(s) (nail), sequela	Diagnosis	ICD-10-CM
T25.332	Burn of third degree of left toe(s) (nail)	Diagnosis	ICD-10-CM
T25.332A	Burn of third degree of left toe(s) (nail), initial encounter	Diagnosis	ICD-10-CM
T25.332D	Burn of third degree of left toe(s) (nail), subsequent encounter	Diagnosis	ICD-10-CM
T25.332S	Burn of third degree of left toe(s) (nail), sequela	Diagnosis	ICD-10-CM
T25.339	Burn of third degree of unspecified toe(s) (nail)	Diagnosis	ICD-10-CM
T25.339A	Burn of third degree of unspecified toe(s) (nail), initial encounter	Diagnosis	ICD-10-CM
T25.339D	Burn of third degree of unspecified toe(s) (nail), subsequent encounter	Diagnosis	ICD-10-CM
T25.339S	Burn of third degree of unspecified toe(s) (nail), sequela	Diagnosis	ICD-10-CM
T25.39	Burn of third degree of multiple sites of ankle and foot	Diagnosis	ICD-10-CM
		2102110313	



Code	Description	Code Category	Code Type
T25.391	Burn of third degree of multiple sites of right ankle and foot	Diagnosis	ICD-10-CM
T25.391A	Burn of third degree of multiple sites of right ankle and foot, initial encounter	Diagnosis	ICD-10-CM
T25.391D	Burn of third degree of multiple sites of right ankle and foot, subsequent encounter	Diagnosis	ICD-10-CM
T25.391S	Burn of third degree of multiple sites of right ankle and foot, sequela	Diagnosis	ICD-10-CM
T25.392	Burn of third degree of multiple sites of left ankle and foot	Diagnosis	ICD-10-CM
T25.392A	Burn of third degree of multiple sites of left ankle and foot, initial encounter	Diagnosis	ICD-10-CM
T25.392D	Burn of third degree of multiple sites of left ankle and foot, subsequent encounter	Diagnosis	ICD-10-CM
T25.392S	Burn of third degree of multiple sites of left ankle and foot, sequela	Diagnosis	ICD-10-CM
T25.399	Burn of third degree of multiple sites of unspecified ankle and foot	Diagnosis	ICD-10-CM
T25.399A	Burn of third degree of multiple sites of unspecified ankle and foot, initial encounter	Diagnosis	ICD-10-CM
T25.399D	Burn of third degree of multiple sites of unspecified ankle and foot, subsequent encounter	Diagnosis	ICD-10-CM
T25.399S	Burn of third degree of multiple sites of unspecified ankle and foot, sequela	Diagnosis	ICD-10-CM
T26	Burn and corrosion confined to eye and adnexa	Diagnosis	ICD-10-CM
T26.0	Burn of eyelid and periocular area	Diagnosis	ICD-10-CM
T26.00	Burn of unspecified eyelid and periocular area	Diagnosis	ICD-10-CM
T26.00XA	Burn of unspecified eyelid and periocular area, initial encounter	Diagnosis	ICD-10-CM
T26.00XD	Burn of unspecified eyelid and periocular area, subsequent encounter	Diagnosis	ICD-10-CM
T26.00XS	Burn of unspecified eyelid and periocular area, sequela	Diagnosis	ICD-10-CM
T26.01	Burn of right eyelid and periocular area	Diagnosis	ICD-10-CM
T26.01XA	Burn of right eyelid and periocular area, initial encounter	Diagnosis	ICD-10-CM
T26.01XD	Burn of right eyelid and periocular area, subsequent encounter	Diagnosis	ICD-10-CM
T26.01XS	Burn of right eyelid and periocular area, sequela	Diagnosis	ICD-10-CM
T26.02	Burn of left eyelid and periocular area	Diagnosis	ICD-10-CM
T26.02XA	Burn of left eyelid and periocular area, initial encounter	Diagnosis	ICD-10-CM
T26.02XD	Burn of left eyelid and periocular area, subsequent encounter	Diagnosis	ICD-10-CM
T26.02XS	Burn of left eyelid and periocular area, sequela	Diagnosis	ICD-10-CM
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CodeDescriptionCode CategoriaT26.1Burn of cornea and conjunctival sacDiagnosT26.10Burn of cornea and conjunctival sac, unspecified eyeDiagnosT26.10XABurn of cornea and conjunctival sac, unspecified eye, initial encounterDiagnosT26.10XDBurn of cornea and conjunctival sac, unspecified eye, subsequent encounterDiagnosT26.10XSBurn of cornea and conjunctival sac, unspecified eye, subsequent encounterDiagnosT26.10XSBurn of cornea and conjunctival sac, unspecified eye, sequelaDiagnos	ICD-10-CM ICD-10-CM ICD-10-CM ICD-10-CM
T26.10Burn of cornea and conjunctival sac, unspecified eyeDiagnosT26.10XABurn of cornea and conjunctival sac, unspecified eye, initial encounterDiagnosT26.10XDBurn of cornea and conjunctival sac, unspecified eye, subsequent encounterDiagnosT26.10XDBurn of cornea and conjunctival sac, unspecified eye, subsequent encounterDiagnosT26.10XDBurn of cornea and conjunctival sac, unspecified eye, subsequent encounterDiagnos	ICD-10-CM ICD-10-CM ICD-10-CM
T26.10XA Burn of cornea and conjunctival sac, unspecified eye, initial encounter Diagnos T26.10XD Burn of cornea and conjunctival sac, unspecified eye, subsequent encounter Diagnos T26.10XD Burn of cornea and conjunctival sac, unspecified eye, subsequent encounter Diagnos	ICD-10-CM ICD-10-CM
T26.10XD Burn of cornea and conjunctival sac, unspecified eye, subsequent encounter Diagnos T26.10XS Burn of cornea and conjunctival sac, unspecified eye, subsequent encounter Diagnos	ICD-10-CM
T2C 40VC Durin of connect and conjunctival conjunctified and convolution	
T26.10XS Burn of cornea and conjunctival sac, unspecified eye, sequela	
	ICD-10-CM
T26.11 Burn of cornea and conjunctival sac, right eye Diagnos	ICD-10-CM
T26.11XA Burn of cornea and conjunctival sac, right eye, initial encounter Diagnos	ICD-10-CM
T26.11XD Burn of cornea and conjunctival sac, right eye, subsequent encounter Diagnos	ICD-10-CM
T26.11XS Burn of cornea and conjunctival sac, right eye, sequela Diagnos	ICD-10-CM
T26.12 Burn of cornea and conjunctival sac, left eye Diagnos	ICD-10-CM
T26.12XA Burn of cornea and conjunctival sac, left eye, initial encounter Diagnos	ICD-10-CM
T26.12XD Burn of cornea and conjunctival sac, left eye, subsequent encounter Diagnos	ICD-10-CM
T26.12XS Burn of cornea and conjunctival sac, left eye, sequela Diagnos	ICD-10-CM
T26.2 Burn with resulting rupture and destruction of eyeball Diagnos	ICD-10-CM
T26.20 Burn with resulting rupture and destruction of unspecified eyeball Diagnos	ICD-10-CM
T26.20XA Burn with resulting rupture and destruction of unspecified eyeball, initial encounter Diagnos	ICD-10-CM
T26.20XD Burn with resulting rupture and destruction of unspecified eyeball, subsequent encounter Diagnos	ICD-10-CM
T26.20XS Burn with resulting rupture and destruction of unspecified eyeball, sequela Diagnos	ICD-10-CM
T26.21 Burn with resulting rupture and destruction of right eyeball Diagnos	ICD-10-CM
T26.21XA Burn with resulting rupture and destruction of right eyeball, initial encounter Diagnos	ICD-10-CM
T26.21XD Burn with resulting rupture and destruction of right eyeball, subsequent encounter Diagnos	ICD-10-CM
T26.21XS Burn with resulting rupture and destruction of right eyeball, sequela Diagnos	ICD-10-CM
T26.22 Burn with resulting rupture and destruction of left eyeball Diagnos	ICD-10-CM
T26.22XA Burn with resulting rupture and destruction of left eyeball, initial encounter Diagnos	
T26.22XD Burn with resulting rupture and destruction of left eyeball, subsequent encounter Diagnos	
T26.22XS Burn with resulting rupture and destruction of left eyeball, sequela Diagnos	ICD-10-CM



Code	Description	Code Category	Code Type
T26.3	Burns of other specified parts of eye and adnexa	Diagnosis	ICD-10-CM
T26.30	Burns of other specified parts of unspecified eye and adnexa	Diagnosis	ICD-10-CM
T26.30XA	Burns of other specified parts of unspecified eye and adnexa, initial encounter	Diagnosis	ICD-10-CM
T26.30XD	Burns of other specified parts of unspecified eye and adnexa, subsequent encounter	Diagnosis	ICD-10-CM
T26.30XS	Burns of other specified parts of unspecified eye and adnexa, sequela	Diagnosis	ICD-10-CM
T26.31	Burns of other specified parts of right eye and adnexa	Diagnosis	ICD-10-CM
T26.31XA	Burns of other specified parts of right eye and adnexa, initial encounter	Diagnosis	ICD-10-CM
T26.31XD	Burns of other specified parts of right eye and adnexa, subsequent encounter	Diagnosis	ICD-10-CM
T26.31XS	Burns of other specified parts of right eye and adnexa, sequela	Diagnosis	ICD-10-CM
T26.32	Burns of other specified parts of left eye and adnexa	Diagnosis	ICD-10-CM
T26.32XA	Burns of other specified parts of left eye and adnexa, initial encounter	Diagnosis	ICD-10-CM
T26.32XD	Burns of other specified parts of left eye and adnexa, subsequent encounter	Diagnosis	ICD-10-CM
T26.32XS	Burns of other specified parts of left eye and adnexa, sequela	Diagnosis	ICD-10-CM
T26.4	Burn of eye and adnexa, part unspecified	Diagnosis	ICD-10-CM
T26.40	Burn of unspecified eye and adnexa, part unspecified	Diagnosis	ICD-10-CM
T26.40XA	Burn of unspecified eye and adnexa, part unspecified, initial encounter	Diagnosis	ICD-10-CM
T26.40XD	Burn of unspecified eye and adnexa, part unspecified, subsequent encounter	Diagnosis	ICD-10-CM
T26.40XS	Burn of unspecified eye and adnexa, part unspecified, sequela	Diagnosis	ICD-10-CM
T26.41	Burn of right eye and adnexa, part unspecified	Diagnosis	ICD-10-CM
T26.41XA	Burn of right eye and adnexa, part unspecified, initial encounter	Diagnosis	ICD-10-CM
T26.41XD	Burn of right eye and adnexa, part unspecified, subsequent encounter	Diagnosis	ICD-10-CM
T26.41XS	Burn of right eye and adnexa, part unspecified, sequela	Diagnosis	ICD-10-CM
T26.42	Burn of left eye and adnexa, part unspecified	Diagnosis	ICD-10-CM
T26.42XA	Burn of left eye and adnexa, part unspecified, initial encounter	Diagnosis	ICD-10-CM
T26.42XD	Burn of left eye and adnexa, part unspecified, subsequent encounter	Diagnosis	ICD-10-CM
T26.42XS	Burn of left eye and adnexa, part unspecified, sequela	Diagnosis	ICD-10-CM
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Code	Description	Code Category	Code Type
T27	Burn and corrosion of respiratory tract	Diagnosis	ICD-10-CM
T27.0	Burn of larynx and trachea	Diagnosis	ICD-10-CM
T27.0XXA	Burn of larynx and trachea, initial encounter	Diagnosis	ICD-10-CM
T27.0XXD	Burn of larynx and trachea, subsequent encounter	Diagnosis	ICD-10-CM
T27.0XXS	Burn of larynx and trachea, sequela	Diagnosis	ICD-10-CM
T27.1	Burn involving larynx and trachea with lung	Diagnosis	ICD-10-CM
T27.1XXA	Burn involving larynx and trachea with lung, initial encounter	Diagnosis	ICD-10-CM
T27.1XXD	Burn involving larynx and trachea with lung, subsequent encounter	Diagnosis	ICD-10-CM
T27.1XXS	Burn involving larynx and trachea with lung, sequela	Diagnosis	ICD-10-CM
T27.2	Burn of other parts of respiratory tract	Diagnosis	ICD-10-CM
T27.2XXA	Burn of other parts of respiratory tract, initial encounter	Diagnosis	ICD-10-CM
T27.2XXD	Burn of other parts of respiratory tract, subsequent encounter	Diagnosis	ICD-10-CM
T27.2XXS	Burn of other parts of respiratory tract, sequela	Diagnosis	ICD-10-CM
T27.3	Burn of respiratory tract, part unspecified	Diagnosis	ICD-10-CM
T27.3XXA	Burn of respiratory tract, part unspecified, initial encounter	Diagnosis	ICD-10-CM
T27.3XXD	Burn of respiratory tract, part unspecified, subsequent encounter	Diagnosis	ICD-10-CM
T27.3XXS	Burn of respiratory tract, part unspecified, sequela	Diagnosis	ICD-10-CM
T28	Burn and corrosion of other internal organs	Diagnosis	ICD-10-CM
T28.0	Burn of mouth and pharynx	Diagnosis	ICD-10-CM
T28.0XXA	Burn of mouth and pharynx, initial encounter	Diagnosis	ICD-10-CM
T28.0XXD	Burn of mouth and pharynx, subsequent encounter	Diagnosis	ICD-10-CM
T28.0XXS	Burn of mouth and pharynx, sequela	Diagnosis	ICD-10-CM
T28.1	Burn of esophagus	Diagnosis	ICD-10-CM
T28.1XXA	Burn of esophagus, initial encounter	Diagnosis	ICD-10-CM
T28.1XXD	Burn of esophagus, subsequent encounter	Diagnosis	ICD-10-CM
T28.1XXS	Burn of esophagus, sequela	Diagnosis	ICD-10-CM
		Diagnosis	ICD TO-CIVI



Code	Description	Code Category	Code Type
T28.2	Burn of other parts of alimentary tract	Diagnosis	ICD-10-CM
T28.2XXA	Burn of other parts of alimentary tract, initial encounter	Diagnosis	ICD-10-CM
T28.2XXD	Burn of other parts of alimentary tract, subsequent encounter	Diagnosis	ICD-10-CM
T28.2XXS	Burn of other parts of alimentary tract, sequela	Diagnosis	ICD-10-CM
T28.3	Burn of internal genitourinary organs	Diagnosis	ICD-10-CM
T28.3XXA	Burn of internal genitourinary organs, initial encounter	Diagnosis	ICD-10-CM
T28.3XXD	Burn of internal genitourinary organs, subsequent encounter	Diagnosis	ICD-10-CM
T28.3XXS	Burn of internal genitourinary organs, sequela	Diagnosis	ICD-10-CM
T28.4	Burns of other and unspecified internal organs	Diagnosis	ICD-10-CM
T28.40	Burn of unspecified internal organ	Diagnosis	ICD-10-CM
T28.40XA	Burn of unspecified internal organ, initial encounter	Diagnosis	ICD-10-CM
T28.40XD	Burn of unspecified internal organ, subsequent encounter	Diagnosis	ICD-10-CM
T28.40XS	Burn of unspecified internal organ, sequela	Diagnosis	ICD-10-CM
T28.41	Burn of ear drum	Diagnosis	ICD-10-CM
T28.411	Burn of right ear drum	Diagnosis	ICD-10-CM
T28.411A	Burn of right ear drum, initial encounter	Diagnosis	ICD-10-CM
T28.411D	Burn of right ear drum, subsequent encounter	Diagnosis	ICD-10-CM
T28.411S	Burn of right ear drum, sequela	Diagnosis	ICD-10-CM
T28.412	Burn of left ear drum	Diagnosis	ICD-10-CM
T28.412A	Burn of left ear drum, initial encounter	Diagnosis	ICD-10-CM
T28.412D	Burn of left ear drum, subsequent encounter	Diagnosis	ICD-10-CM
T28.412S	Burn of left ear drum, sequela	Diagnosis	ICD-10-CM
T28.419	Burn of unspecified ear drum	Diagnosis	ICD-10-CM
T28.419A	Burn of unspecified ear drum, initial encounter	Diagnosis	ICD-10-CM
T28.419D	Burn of unspecified ear drum, subsequent encounter	Diagnosis	ICD-10-CM
T28.419S	Burn of unspecified ear drum, sequela	Diagnosis	ICD-10-CM
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Code	Description	Code Category	Code Type
T28.49	Burn of other internal organ	Diagnosis	ICD-10-CM
T28.49XA	Burn of other internal organ, initial encounter	Diagnosis	ICD-10-CM
T28.49XD	Burn of other internal organ, subsequent encounter	Diagnosis	ICD-10-CM
T28.49XS	Burn of other internal organ, sequela	Diagnosis	ICD-10-CM
Т30	Burn and corrosion, body region unspecified	Diagnosis	ICD-10-CM
Т30.0	Burn of unspecified body region, unspecified degree	Diagnosis	ICD-10-CM
T31	Burns classified according to extent of body surface involved	Diagnosis	ICD-10-CM
T31.0	Burns involving less than 10% of body surface	Diagnosis	ICD-10-CM
T31.1	Burns involving 10-19% of body surface	Diagnosis	ICD-10-CM
T31.10	Burns involving 10-19% of body surface with 0% to 9% third degree burns	Diagnosis	ICD-10-CM
T31.11	Burns involving 10-19% of body surface with 10-19% third degree burns	Diagnosis	ICD-10-CM
T31.2	Burns involving 20-29% of body surface	Diagnosis	ICD-10-CM
T31.20	Burns involving 20-29% of body surface with 0% to 9% third degree burns	Diagnosis	ICD-10-CM
T31.21	Burns involving 20-29% of body surface with 10-19% third degree burns	Diagnosis	ICD-10-CM
T31.22	Burns involving 20-29% of body surface with 20-29% third degree burns	Diagnosis	ICD-10-CM
T31.3	Burns involving 30-39% of body surface	Diagnosis	ICD-10-CM
T31.30	Burns involving 30-39% of body surface with 0% to 9% third degree burns	Diagnosis	ICD-10-CM
T31.31	Burns involving 30-39% of body surface with 10-19% third degree burns	Diagnosis	ICD-10-CM
T31.32	Burns involving 30-39% of body surface with 20-29% third degree burns	Diagnosis	ICD-10-CM
T31.33	Burns involving 30-39% of body surface with 30-39% third degree burns	Diagnosis	ICD-10-CM
T31.4	Burns involving 40-49% of body surface	Diagnosis	ICD-10-CM
T31.40	Burns involving 40-49% of body surface with 0% to 9% third degree burns	Diagnosis	ICD-10-CM
T31.41	Burns involving 40-49% of body surface with 10-19% third degree burns	Diagnosis	ICD-10-CM
T31.42	Burns involving 40-49% of body surface with 20-29% third degree burns	Diagnosis	ICD-10-CM
T31.43	Burns involving 40-49% of body surface with 30-39% third degree burns	Diagnosis	ICD-10-CM
T31.44	Burns involving 40-49% of body surface with 40-49% third degree burns	Diagnosis	ICD-10-CM



Code	Description	Code Category	Code Type
T31.5	Burns involving 50-59% of body surface	Diagnosis	ICD-10-CM
T31.50	Burns involving 50-59% of body surface with 0% to 9% third degree burns	Diagnosis	ICD-10-CM
T31.51	Burns involving 50-59% of body surface with 10-19% third degree burns	Diagnosis	ICD-10-CM
T31.52	Burns involving 50-59% of body surface with 20-29% third degree burns	Diagnosis	ICD-10-CM
T31.53	Burns involving 50-59% of body surface with 30-39% third degree burns	Diagnosis	ICD-10-CM
T31.54	Burns involving 50-59% of body surface with 40-49% third degree burns	Diagnosis	ICD-10-CM
T31.55	Burns involving 50-59% of body surface with 50-59% third degree burns	Diagnosis	ICD-10-CM
T31.6	Burns involving 60-69% of body surface	Diagnosis	ICD-10-CM
T31.60	Burns involving 60-69% of body surface with 0% to 9% third degree burns	Diagnosis	ICD-10-CM
T31.61	Burns involving 60-69% of body surface with 10-19% third degree burns	Diagnosis	ICD-10-CM
T31.62	Burns involving 60-69% of body surface with 20-29% third degree burns	Diagnosis	ICD-10-CM
T31.63	Burns involving 60-69% of body surface with 30-39% third degree burns	Diagnosis	ICD-10-CM
T31.64	Burns involving 60-69% of body surface with 40-49% third degree burns	Diagnosis	ICD-10-CM
T31.65	Burns involving 60-69% of body surface with 50-59% third degree burns	Diagnosis	ICD-10-CM
T31.66	Burns involving 60-69% of body surface with 60-69% third degree burns	Diagnosis	ICD-10-CM
T31.7	Burns involving 70-79% of body surface	Diagnosis	ICD-10-CM
T31.70	Burns involving 70-79% of body surface with 0% to 9% third degree burns	Diagnosis	ICD-10-CM
T31.71	Burns involving 70-79% of body surface with 10-19% third degree burns	Diagnosis	ICD-10-CM
T31.72	Burns involving 70-79% of body surface with 20-29% third degree burns	Diagnosis	ICD-10-CM
T31.73	Burns involving 70-79% of body surface with 30-39% third degree burns	Diagnosis	ICD-10-CM
T31.74	Burns involving 70-79% of body surface with 40-49% third degree burns	Diagnosis	ICD-10-CM
T31.75	Burns involving 70-79% of body surface with 50-59% third degree burns	Diagnosis	ICD-10-CM
T31.76	Burns involving 70-79% of body surface with 60-69% third degree burns	Diagnosis	ICD-10-CM
T31.77	Burns involving 70-79% of body surface with 70-79% third degree burns	Diagnosis	ICD-10-CM
T31.8	Burns involving 80-89% of body surface	Diagnosis	ICD-10-CM
T31.80	Burns involving 80-89% of body surface with 0% to 9% third degree burns	Diagnosis	ICD-10-CM
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Code	Description	Code Category	Code Type
T31.81	Burns involving 80-89% of body surface with 10-19% third degree burns	Diagnosis	ICD-10-CM
T31.82	Burns involving 80-89% of body surface with 20-29% third degree burns	Diagnosis	ICD-10-CM
T31.83	Burns involving 80-89% of body surface with 30-39% third degree burns	Diagnosis	ICD-10-CM
T31.84	Burns involving 80-89% of body surface with 40-49% third degree burns	Diagnosis	ICD-10-CM
T31.85	Burns involving 80-89% of body surface with 50-59% third degree burns	Diagnosis	ICD-10-CM
T31.86	Burns involving 80-89% of body surface with 60-69% third degree burns	Diagnosis	ICD-10-CM
T31.87	Burns involving 80-89% of body surface with 70-79% third degree burns	Diagnosis	ICD-10-CM
T31.88	Burns involving 80-89% of body surface with 80-89% third degree burns	Diagnosis	ICD-10-CM
T31.9	Burns involving 90% or more of body surface	Diagnosis	ICD-10-CM
T31.90	Burns involving 90% or more of body surface with 0% to 9% third degree burns	Diagnosis	ICD-10-CM
T31.91	Burns involving 90% or more of body surface with 10-19% third degree burns	Diagnosis	ICD-10-CM
T31.92	Burns involving 90% or more of body surface with 20-29% third degree burns	Diagnosis	ICD-10-CM
T31.93	Burns involving 90% or more of body surface with 30-39% third degree burns	Diagnosis	ICD-10-CM
T31.94	Burns involving 90% or more of body surface with 40-49% third degree burns	Diagnosis	ICD-10-CM
T31.95	Burns involving 90% or more of body surface with 50-59% third degree burns	Diagnosis	ICD-10-CM
T31.96	Burns involving 90% or more of body surface with 60-69% third degree burns	Diagnosis	ICD-10-CM
T31.97	Burns involving 90% or more of body surface with 70-79% third degree burns	Diagnosis	ICD-10-CM
T31.98	Burns involving 90% or more of body surface with 80-89% third degree burns	Diagnosis	ICD-10-CM
T31.99	Burns involving 90% or more of body surface with 90% or more third degree burns	Diagnosis	ICD-10-CM
V81.81XA	Occupant of railway train or railway vehicle injured due to explosion or fire on train, initial encounter	Diagnosis	ICD-10-CM
V81.81XD	Occupant of railway train or railway vehicle injured due to explosion or fire on train, subsequent encounter	Diagnosis	ICD-10-CM
V91.0	Burn due to watercraft on fire	Diagnosis	ICD-10-CM
V91.00	Burn due to merchant ship on fire	Diagnosis	ICD-10-CM
V91.00XA	Burn due to merchant ship on fire, initial encounter	Diagnosis	ICD-10-CM
V91.00XD	Burn due to merchant ship on fire, subsequent encounter	Diagnosis	ICD-10-CM
V91.00XS	Burn due to merchant ship on fire, sequela	Diagnosis	ICD-10-CM



Code	Description	Code Category	Code Type
V91.01	Burn due to passenger ship on fire	Diagnosis	ICD-10-CM
V91.01XA	Burn due to passenger ship on fire, initial encounter	Diagnosis	ICD-10-CM
V91.01XD	Burn due to passenger ship on fire, subsequent encounter	Diagnosis	ICD-10-CM
V91.01XS	Burn due to passenger ship on fire, sequela	Diagnosis	ICD-10-CM
V91.02	Burn due to fishing boat on fire	Diagnosis	ICD-10-CM
V91.02XA	Burn due to fishing boat on fire, initial encounter	Diagnosis	ICD-10-CM
V91.02XD	Burn due to fishing boat on fire, subsequent encounter	Diagnosis	ICD-10-CM
V91.02XS	Burn due to fishing boat on fire, sequela	Diagnosis	ICD-10-CM
V91.03	Burn due to other powered watercraft on fire	Diagnosis	ICD-10-CM
V91.03XA	Burn due to other powered watercraft on fire, initial encounter	Diagnosis	ICD-10-CM
V91.03XD	Burn due to other powered watercraft on fire, subsequent encounter	Diagnosis	ICD-10-CM
V91.03XS	Burn due to other powered watercraft on fire, sequela	Diagnosis	ICD-10-CM
V91.04	Burn due to sailboat on fire	Diagnosis	ICD-10-CM
V91.04XA	Burn due to sailboat on fire, initial encounter	Diagnosis	ICD-10-CM
V91.04XD	Burn due to sailboat on fire, subsequent encounter	Diagnosis	ICD-10-CM
V91.04XS	Burn due to sailboat on fire, sequela	Diagnosis	ICD-10-CM
V91.05	Burn due to canoe or kayak on fire	Diagnosis	ICD-10-CM
V91.05XA	Burn due to canoe or kayak on fire, initial encounter	Diagnosis	ICD-10-CM
V91.05XD	Burn due to canoe or kayak on fire, subsequent encounter	Diagnosis	ICD-10-CM
V91.05XS	Burn due to canoe or kayak on fire, sequela	Diagnosis	ICD-10-CM
V91.06	Burn due to (nonpowered) inflatable craft on fire	Diagnosis	ICD-10-CM
V91.06XA	Burn due to (nonpowered) inflatable craft on fire, initial encounter	Diagnosis	ICD-10-CM
V91.06XD	Burn due to (nonpowered) inflatable craft on fire, subsequent encounter	Diagnosis	ICD-10-CM
V91.06XS	Burn due to (nonpowered) inflatable craft on fire, sequela	Diagnosis	ICD-10-CM
V91.07	Burn due to water-skis on fire	Diagnosis	ICD-10-CM
V91.07XA	Burn due to water-skis on fire, initial encounter	C	ICD-10-CM
		Diagnosis	



Code	Description	Code Category	Code Type
V91.07XD	Burn due to water-skis on fire, subsequent encounter	Diagnosis	ICD-10-CM
V91.07XS	Burn due to water-skis on fire, sequela	Diagnosis	ICD-10-CM
V91.08	Burn due to other unpowered watercraft on fire	Diagnosis	ICD-10-CM
V91.08XA	Burn due to other unpowered watercraft on fire, initial encounter	Diagnosis	ICD-10-CM
V91.08XD	Burn due to other unpowered watercraft on fire, subsequent encounter	Diagnosis	ICD-10-CM
V91.08XS	Burn due to other unpowered watercraft on fire, sequela	Diagnosis	ICD-10-CM
V91.09	Burn due to unspecified watercraft on fire	Diagnosis	ICD-10-CM
V91.09XA	Burn due to unspecified watercraft on fire, initial encounter	Diagnosis	ICD-10-CM
V91.09XD	Burn due to unspecified watercraft on fire, subsequent encounter	Diagnosis	ICD-10-CM
V91.09XS	Burn due to unspecified watercraft on fire, sequela	Diagnosis	ICD-10-CM
V93.0	Burn due to localized fire on board watercraft	Diagnosis	ICD-10-CM
V93.00	Burn due to localized fire on board merchant vessel	Diagnosis	ICD-10-CM
V93.00XA	Burn due to localized fire on board merchant vessel, initial encounter	Diagnosis	ICD-10-CM
V93.00XD	Burn due to localized fire on board merchant vessel, subsequent encounter	Diagnosis	ICD-10-CM
V93.00XS	Burn due to localized fire on board merchant vessel, sequela	Diagnosis	ICD-10-CM
V93.01	Burn due to localized fire on board passenger vessel	Diagnosis	ICD-10-CM
V93.01XA	Burn due to localized fire on board passenger vessel, initial encounter	Diagnosis	ICD-10-CM
V93.01XD	Burn due to localized fire on board passenger vessel, subsequent encounter	Diagnosis	ICD-10-CM
V93.01XS	Burn due to localized fire on board passenger vessel, sequela	Diagnosis	ICD-10-CM
V93.02	Burn due to localized fire on board fishing boat	Diagnosis	ICD-10-CM
V93.02XA	Burn due to localized fire on board fishing boat, initial encounter	Diagnosis	ICD-10-CM
V93.02XD	Burn due to localized fire on board fishing boat, subsequent encounter	Diagnosis	ICD-10-CM
V93.02XS	Burn due to localized fire on board fishing boat, sequela	Diagnosis	ICD-10-CM
V93.03	Burn due to localized fire on board other powered watercraft	Diagnosis	ICD-10-CM
V93.03XA	Burn due to localized fire on board other powered watercraft, initial encounter	0	ICD-10-CM
V93.03XD	Burn due to localized fire on board other powered watercraft, subsequent encounter	Diagnosis	
		Diagnosis	ICD-10-CM



Code	Description	Code Category	Code Type
V93.03XS	Burn due to localized fire on board other powered watercraft, sequela	Diagnosis	ICD-10-CM
V93.04	Burn due to localized fire on board sailboat	Diagnosis	ICD-10-CM
V93.04XA	Burn due to localized fire on board sailboat, initial encounter	Diagnosis	ICD-10-CM
V93.04XD	Burn due to localized fire on board sailboat, subsequent encounter	Diagnosis	ICD-10-CM
V93.04XS	Burn due to localized fire on board sailboat, sequela	Diagnosis	ICD-10-CM
V93.09	Burn due to localized fire on board unspecified watercraft	Diagnosis	ICD-10-CM
V93.09XA	Burn due to localized fire on board unspecified watercraft, initial encounter	Diagnosis	ICD-10-CM
V93.09XD	Burn due to localized fire on board unspecified watercraft, subsequent encounter	Diagnosis	ICD-10-CM
V93.09XS	Burn due to localized fire on board unspecified watercraft, sequela	Diagnosis	ICD-10-CM
V93.1	Other burn on board watercraft	Diagnosis	ICD-10-CM
V93.10	Other burn on board merchant vessel	Diagnosis	ICD-10-CM
V93.10XA	Other burn on board merchant vessel, initial encounter	Diagnosis	ICD-10-CM
V93.10XD	Other burn on board merchant vessel, subsequent encounter	Diagnosis	ICD-10-CM
V93.10XS	Other burn on board merchant vessel, sequela	Diagnosis	ICD-10-CM
V93.11	Other burn on board passenger vessel	Diagnosis	ICD-10-CM
V93.11XA	Other burn on board passenger vessel, initial encounter	Diagnosis	ICD-10-CM
V93.11XD	Other burn on board passenger vessel, subsequent encounter	Diagnosis	ICD-10-CM
V93.11XS	Other burn on board passenger vessel, sequela	Diagnosis	ICD-10-CM
V93.12	Other burn on board fishing boat	Diagnosis	ICD-10-CM
V93.12XA	Other burn on board fishing boat, initial encounter	Diagnosis	ICD-10-CM
V93.12XD	Other burn on board fishing boat, subsequent encounter	Diagnosis	ICD-10-CM
V93.12XS	Other burn on board fishing boat, sequela	Diagnosis	ICD-10-CM
V93.13	Other burn on board other powered watercraft	Diagnosis	ICD-10-CM
V93.13XA	Other burn on board other powered watercraft, initial encounter	Diagnosis	ICD-10-CM
V93.13XD	Other burn on board other powered watercraft, subsequent encounter	Diagnosis	ICD-10-CM
V93.13XS	Other burn on board other powered watercraft, sequela	Diagnosis	ICD-10-CM
		Diagnosis	



Code	Description	Code Category	Code Type
V93.14	Other burn on board sailboat	Diagnosis	ICD-10-CM
V93.14XA	Other burn on board sailboat, initial encounter	Diagnosis	ICD-10-CM
V93.14XD	Other burn on board sailboat, subsequent encounter	Diagnosis	ICD-10-CM
V93.14XS	Other burn on board sailboat, sequela	Diagnosis	ICD-10-CM
V93.19	Other burn on board unspecified watercraft	Diagnosis	ICD-10-CM
V93.19XA	Other burn on board unspecified watercraft, initial encounter	Diagnosis	ICD-10-CM
V93.19XS	Other burn on board unspecified watercraft, sequela	Diagnosis	ICD-10-CM
X00.0XXA	Exposure to flames in uncontrolled fire in building or structure, initial encounter	Diagnosis	ICD-10-CM
X00.0XXD	Exposure to flames in uncontrolled fire in building or structure, subsequent encounter	Diagnosis	ICD-10-CM
X02.0XXA	Exposure to flames in controlled fire in building or structure, initial encounter	Diagnosis	ICD-10-CM
X02.0XXD	Exposure to flames in controlled fire in building or structure, subsequent encounter	Diagnosis	ICD-10-CM
X08.00	Exposure to bed fire due to unspecified burning material	Diagnosis	ICD-10-CM
X08.00XA	Exposure to bed fire due to unspecified burning material, initial encounter	Diagnosis	ICD-10-CM
X08.00XD	Exposure to bed fire due to unspecified burning material, subsequent encounter	Diagnosis	ICD-10-CM
X08.00XS	Exposure to bed fire due to unspecified burning material, sequela	Diagnosis	ICD-10-CM
X08.01	Exposure to bed fire due to burning cigarette	Diagnosis	ICD-10-CM
X08.01XA	Exposure to bed fire due to burning cigarette, initial encounter	Diagnosis	ICD-10-CM
X08.01XD	Exposure to bed fire due to burning cigarette, subsequent encounter	Diagnosis	ICD-10-CM
X08.01XS	Exposure to bed fire due to burning cigarette, sequela	Diagnosis	ICD-10-CM
X08.09	Exposure to bed fire due to other burning material	Diagnosis	ICD-10-CM
X08.09XA	Exposure to bed fire due to other burning material, initial encounter	Diagnosis	ICD-10-CM
X08.09XD	Exposure to bed fire due to other burning material, subsequent encounter	Diagnosis	ICD-10-CM
X08.09XS	Exposure to bed fire due to other burning material, sequela	Diagnosis	ICD-10-CM
X08.10	Exposure to sofa fire due to unspecified burning material	Diagnosis	ICD-10-CM
X08.10XA	Exposure to sofa fire due to unspecified burning material, initial encounter	Diagnosis	ICD-10-CM
X08.10XD	Exposure to sofa fire due to unspecified burning material, subsequent encounter	6	
		Diagnosis	ICD-10-CM



Code	Description	Code Category	Code Type
X08.10XS	Exposure to sofa fire due to unspecified burning material, sequela	Diagnosis	ICD-10-CM
X08.11	Exposure to sofa fire due to burning cigarette	Diagnosis	ICD-10-CM
X08.11XA	Exposure to sofa fire due to burning cigarette, initial encounter	Diagnosis	ICD-10-CM
X08.11XD	Exposure to sofa fire due to burning cigarette, subsequent encounter	Diagnosis	ICD-10-CM
X08.11XS	Exposure to sofa fire due to burning cigarette, sequela	Diagnosis	ICD-10-CM
X08.19	Exposure to sofa fire due to other burning material	Diagnosis	ICD-10-CM
X08.19XA	Exposure to sofa fire due to other burning material, initial encounter	Diagnosis	ICD-10-CM
X08.19XD	Exposure to sofa fire due to other burning material, subsequent encounter	Diagnosis	ICD-10-CM
X08.19XS	Exposure to sofa fire due to other burning material, sequela	Diagnosis	ICD-10-CM
X08.20	Exposure to other furniture fire due to unspecified burning material	Diagnosis	ICD-10-CM
X08.20XA	Exposure to other furniture fire due to unspecified burning material, initial encounter	Diagnosis	ICD-10-CM
X08.20XD	Exposure to other furniture fire due to unspecified burning material, subsequent encounter	Diagnosis	ICD-10-CM
X08.20XS	Exposure to other furniture fire due to unspecified burning material, sequela	Diagnosis	ICD-10-CM
X08.21	Exposure to other furniture fire due to burning cigarette	Diagnosis	ICD-10-CM
X08.21XA	Exposure to other furniture fire due to burning cigarette, initial encounter	Diagnosis	ICD-10-CM
X08.21XD	Exposure to other furniture fire due to burning cigarette, subsequent encounter	Diagnosis	ICD-10-CM
X08.21XS	Exposure to other furniture fire due to burning cigarette, sequela	Diagnosis	ICD-10-CM
X08.29	Exposure to other furniture fire due to other burning material	Diagnosis	ICD-10-CM
X08.29XA	Exposure to other furniture fire due to other burning material, initial encounter	Diagnosis	ICD-10-CM
X08.29XD	Exposure to other furniture fire due to other burning material, subsequent encounter	Diagnosis	ICD-10-CM
X08.29XS	Exposure to other furniture fire due to other burning material, sequela	Diagnosis	ICD-10-CM
X08.8XXA	Exposure to other specified smoke, fire and flames, initial encounter	Diagnosis	ICD-10-CM
X08.8XXD	Exposure to other specified smoke, fire and flames, subsequent encounter	Diagnosis	ICD-10-CM
X76.XXXA	Intentional self-harm by smoke, fire and flames, initial encounter	Diagnosis	ICD-10-CM
X76.XXXD	Intentional self-harm by smoke, fire and flames, subsequent encounter	Diagnosis	ICD-10-CM
X77.3XXA	Intentional self-harm by hot household appliances, initial encounter	Diagnosis	ICD-10-CM
	,	Diagnosis	



Code	Description	Code Category	Code Type
X77.3XXD	Intentional self-harm by hot household appliances, subsequent encounter	Diagnosis	ICD-10-CM
X77.8XXA	Intentional self-harm by other hot objects, initial encounter	Diagnosis	ICD-10-CM
X77.8XXD	Intentional self-harm by other hot objects, subsequent encounter	Diagnosis	ICD-10-CM
X77.9XXA	Intentional self-harm by unspecified hot objects, initial encounter	Diagnosis	ICD-10-CM
X77.9XXD	Intentional self-harm by unspecified hot objects, subsequent encounter	Diagnosis	ICD-10-CM
Y26.XXXA	Exposure to smoke, fire and flames, undetermined intent, initial encounter	Diagnosis	ICD-10-CM
Y26.XXXD	Exposure to smoke, fire and flames, undetermined intent, subsequent encounter	Diagnosis	ICD-10-CM
Y27.3XXA	Contact with hot household appliance, undetermined intent, initial encounter	Diagnosis	ICD-10-CM
Y27.3XXD	Contact with hot household appliance, undetermined intent, subsequent encounter	Diagnosis	ICD-10-CM
Y27.8XXA	Contact with other hot objects, undetermined intent, initial encounter	Diagnosis	ICD-10-CM
Y27.8XXD	Contact with other hot objects, undetermined intent, subsequent encounter	Diagnosis	ICD-10-CM
Y27.9XXA	Contact with unspecified hot objects, undetermined intent, initial encounter	Diagnosis	ICD-10-CM
Y27.9XXD	Contact with unspecified hot objects, undetermined intent, subsequent encounter	Diagnosis	ICD-10-CM
	Glaucoma		
362.85	Retinal nerve fiber bundle defects	Diagnosis	ICD-9-CM
365.00	Unspecified preglaucoma	Diagnosis	ICD-9-CM
365.01	Borderline glaucoma, open angle with borderline findings, low risk	Diagnosis	ICD-9-CM
365.02	Borderline glaucoma with anatomical narrow angle	Diagnosis	ICD-9-CM
365.03	Borderline glaucoma with steroid responders	Diagnosis	ICD-9-CM
365.04	Borderline glaucoma with ocular hypertension	Diagnosis	ICD-9-CM
365.10	Unspecified open-angle glaucoma	Diagnosis	ICD-9-CM
365.11	Primary open-angle glaucoma	Diagnosis	ICD-9-CM
365.12	Low tension open-angle glaucoma	Diagnosis	ICD-9-CM
365.13	Pigmentary open-angle glaucoma	Diagnosis	ICD-9-CM
365.15	Residual stage of open angle glaucoma	Diagnosis	ICD-9-CM
365.20	Unspecified primary angle-closure glaucoma	Diagnosis	ICD-9-CM
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Code	Description	Code Category	Code Type
365.21	Intermittent angle-closure glaucoma	Diagnosis	ICD-9-CM
365.22	Acute angle-closure glaucoma	Diagnosis	ICD-9-CM
365.23	Chronic angle-closure glaucoma	Diagnosis	ICD-9-CM
365.24	Residual stage of angle-closure glaucoma	Diagnosis	ICD-9-CM
365.31	Corticosteroid-induced glaucoma, glaucomatous stage	Diagnosis	ICD-9-CM
365.32	Corticosteroid-induced glaucoma, residual stage	Diagnosis	ICD-9-CM
365.41	Glaucoma associated with chamber angle anomalies	Diagnosis	ICD-9-CM
365.42	Glaucoma associated with anomalies of iris	Diagnosis	ICD-9-CM
365.43	Glaucoma associated with other anterior segment anomalies	Diagnosis	ICD-9-CM
365.51	Phacolytic glaucoma	Diagnosis	ICD-9-CM
365.52	Pseudoexfoliation glaucoma	Diagnosis	ICD-9-CM
365.59	Glaucoma associated with other lens disorders	Diagnosis	ICD-9-CM
365.60	Glaucoma associated with unspecified ocular disorder	Diagnosis	ICD-9-CM
365.61	Glaucoma associated with pupillary block	Diagnosis	ICD-9-CM
365.62	Glaucoma associated with ocular inflammations	Diagnosis	ICD-9-CM
365.63	Glaucoma associated with vascular disorders of eye	Diagnosis	ICD-9-CM
365.64	Glaucoma associated with tumors or cysts	Diagnosis	ICD-9-CM
365.65	Glaucoma associated with ocular trauma	Diagnosis	ICD-9-CM
365.81	Hypersecretion glaucoma	Diagnosis	ICD-9-CM
365.82	Glaucoma with increased episcleral venous pressure	Diagnosis	ICD-9-CM
365.83	Aqueous misdirection	Diagnosis	ICD-9-CM
365.89	Other specified glaucoma	Diagnosis	ICD-9-CM
365.9	Unspecified glaucoma	Diagnosis	ICD-9-CM
377.14	Glaucomatous atrophy (cupping) of optic disc	Diagnosis	ICD-9-CM
H40.001	Preglaucoma, unspecified, right eye	Diagnosis	ICD-10-CM
H40.002	Preglaucoma, unspecified, left eye	Diagnosis	ICD-10-CM
		Diagnosis	



Code	Description	Code Category	Code Type
H40.003	Preglaucoma, unspecified, bilateral	Diagnosis	ICD-10-CM
H40.009	Preglaucoma, unspecified, unspecified eye	Diagnosis	ICD-10-CM
H40.011	Open angle with borderline findings, low risk, right eye	Diagnosis	ICD-10-CM
H40.012	Open angle with borderline findings, low risk, left eye	Diagnosis	ICD-10-CM
H40.013	Open angle with borderline findings, low risk, bilateral	Diagnosis	ICD-10-CM
H40.019	Open angle with borderline findings, low risk, unspecified eye	Diagnosis	ICD-10-CM
H40.031	Anatomical narrow angle, right eye	Diagnosis	ICD-10-CM
H40.032	Anatomical narrow angle, left eye	Diagnosis	ICD-10-CM
H40.033	Anatomical narrow angle, bilateral	Diagnosis	ICD-10-CM
H40.039	Anatomical narrow angle, unspecified eye	Diagnosis	ICD-10-CM
H40.041	Steroid responder, right eye	Diagnosis	ICD-10-CM
H40.042	Steroid responder, left eye	Diagnosis	ICD-10-CM
H40.043	Steroid responder, bilateral	Diagnosis	ICD-10-CM
H40.049	Steroid responder, unspecified eye	Diagnosis	ICD-10-CM
H40.051	Ocular hypertension, right eye	Diagnosis	ICD-10-CM
H40.052	Ocular hypertension, left eye	Diagnosis	ICD-10-CM
H40.053	Ocular hypertension, bilateral	Diagnosis	ICD-10-CM
H40.059	Ocular hypertension, unspecified eye	Diagnosis	ICD-10-CM
H40.10X0	Unspecified open-angle glaucoma, stage unspecified	Diagnosis	ICD-10-CM
H40.10X1	Unspecified open-angle glaucoma, mild stage	Diagnosis	ICD-10-CM
H40.10X2	Unspecified open-angle glaucoma, moderate stage	Diagnosis	ICD-10-CM
H40.10X3	Unspecified open-angle glaucoma, severe stage	Diagnosis	ICD-10-CM
H40.10X4	Unspecified open-angle glaucoma, indeterminate stage	Diagnosis	ICD-10-CM
H40.1110	Primary open-angle glaucoma, right eye, stage unspecified	Diagnosis	ICD-10-CM
H40.1111	Primary open-angle glaucoma, right eye, mild stage	Diagnosis	ICD-10-CM
H40.1112	Primary open-angle glaucoma, right eye, moderate stage	Diagnosis	ICD-10-CM
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Code	Description	Code Category	Code Type
H40.1113	Primary open-angle glaucoma, right eye, severe stage	Diagnosis	ICD-10-CM
H40.1114	Primary open-angle glaucoma, right eye, indeterminate stage	Diagnosis	ICD-10-CM
H40.1120	Primary open-angle glaucoma, left eye, stage unspecified	Diagnosis	ICD-10-CM
H40.1121	Primary open-angle glaucoma, left eye, mild stage	Diagnosis	ICD-10-CM
H40.1122	Primary open-angle glaucoma, left eye, moderate stage	Diagnosis	ICD-10-CM
H40.1123	Primary open-angle glaucoma, left eye, severe stage	Diagnosis	ICD-10-CM
H40.1124	Primary open-angle glaucoma, left eye, indeterminate stage	Diagnosis	ICD-10-CM
H40.1130	Primary open-angle glaucoma, bilateral, stage unspecified	Diagnosis	ICD-10-CM
H40.1131	Primary open-angle glaucoma, bilateral, mild stage	Diagnosis	ICD-10-CM
H40.1132	Primary open-angle glaucoma, bilateral, moderate stage	Diagnosis	ICD-10-CM
H40.1133	Primary open-angle glaucoma, bilateral, severe stage	Diagnosis	ICD-10-CM
H40.1134	Primary open-angle glaucoma, bilateral, indeterminate stage	Diagnosis	ICD-10-CM
H40.1190	Primary open-angle glaucoma, unspecified eye, stage unspecified	Diagnosis	ICD-10-CM
H40.1191	Primary open-angle glaucoma, unspecified eye, mild stage	Diagnosis	ICD-10-CM
H40.1192	Primary open-angle glaucoma, unspecified eye, moderate stage	Diagnosis	ICD-10-CM
H40.1193	Primary open-angle glaucoma, unspecified eye, severe stage	Diagnosis	ICD-10-CM
H40.1194	Primary open-angle glaucoma, unspecified eye, indeterminate stage	Diagnosis	ICD-10-CM
H40.11X0	Primary open-angle glaucoma, stage unspecified	Diagnosis	ICD-10-CM
H40.11X1	Primary open-angle glaucoma, mild stage	Diagnosis	ICD-10-CM
H40.11X2	Primary open-angle glaucoma, moderate stage	Diagnosis	ICD-10-CM
H40.11X3	Primary open-angle glaucoma, severe stage	Diagnosis	ICD-10-CM
H40.11X4	Primary open-angle glaucoma, indeterminate stage	Diagnosis	ICD-10-CM
H40.1210	Low-tension glaucoma, right eye, stage unspecified	Diagnosis	ICD-10-CM
H40.1211	Low-tension glaucoma, right eye, mild stage	Diagnosis	ICD-10-CM
H40.1212	Low-tension glaucoma, right eye, moderate stage	Diagnosis	ICD-10-CM
H40.1213	Low-tension glaucoma, right eye, severe stage	Diagnosis	ICD-10-CM



Code	Description	Code Category	Code Type
H40.1214	Low-tension glaucoma, right eye, indeterminate stage	Diagnosis	ICD-10-CM
H40.1220	Low-tension glaucoma, left eye, stage unspecified	Diagnosis	ICD-10-CM
H40.1221	Low-tension glaucoma, left eye, mild stage	Diagnosis	ICD-10-CM
H40.1222	Low-tension glaucoma, left eye, moderate stage	Diagnosis	ICD-10-CM
H40.1223	Low-tension glaucoma, left eye, severe stage	Diagnosis	ICD-10-CM
H40.1224	Low-tension glaucoma, left eye, indeterminate stage	Diagnosis	ICD-10-CM
H40.1230	Low-tension glaucoma, bilateral, stage unspecified	Diagnosis	ICD-10-CM
H40.1231	Low-tension glaucoma, bilateral, mild stage	Diagnosis	ICD-10-CM
H40.1232	Low-tension glaucoma, bilateral, moderate stage	Diagnosis	ICD-10-CM
H40.1233	Low-tension glaucoma, bilateral, severe stage	Diagnosis	ICD-10-CM
H40.1234	Low-tension glaucoma, bilateral, indeterminate stage	Diagnosis	ICD-10-CM
H40.1290	Low-tension glaucoma, unspecified eye, stage unspecified	Diagnosis	ICD-10-CM
H40.1291	Low-tension glaucoma, unspecified eye, mild stage	Diagnosis	ICD-10-CM
H40.1292	Low-tension glaucoma, unspecified eye, moderate stage	Diagnosis	ICD-10-CM
H40.1293	Low-tension glaucoma, unspecified eye, severe stage	Diagnosis	ICD-10-CM
H40.1294	Low-tension glaucoma, unspecified eye, indeterminate stage	Diagnosis	ICD-10-CM
H40.1310	Pigmentary glaucoma, right eye, stage unspecified	Diagnosis	ICD-10-CM
H40.1311	Pigmentary glaucoma, right eye, mild stage	Diagnosis	ICD-10-CM
H40.1312	Pigmentary glaucoma, right eye, moderate stage	Diagnosis	ICD-10-CM
H40.1313	Pigmentary glaucoma, right eye, severe stage	Diagnosis	ICD-10-CM
H40.1314	Pigmentary glaucoma, right eye, indeterminate stage	Diagnosis	ICD-10-CM
H40.1320	Pigmentary glaucoma, left eye, stage unspecified	Diagnosis	ICD-10-CM
H40.1321	Pigmentary glaucoma, left eye, mild stage	Diagnosis	ICD-10-CM
H40.1322	Pigmentary glaucoma, left eye, moderate stage	Diagnosis	ICD-10-CM
H40.1323	Pigmentary glaucoma, left eye, severe stage	Diagnosis	ICD-10-CM
H40.1324	Pigmentary glaucoma, left eye, indeterminate stage	Diagnosis	ICD-10-CM



Code	Description	Code Category	Code Type
H40.1330	Pigmentary glaucoma, bilateral, stage unspecified	Diagnosis	ICD-10-CM
H40.1331	Pigmentary glaucoma, bilateral, mild stage	Diagnosis	ICD-10-CM
H40.1332	Pigmentary glaucoma, bilateral, moderate stage	Diagnosis	ICD-10-CM
H40.1333	Pigmentary glaucoma, bilateral, severe stage	Diagnosis	ICD-10-CM
H40.1334	Pigmentary glaucoma, bilateral, indeterminate stage	Diagnosis	ICD-10-CM
H40.1390	Pigmentary glaucoma, unspecified eye, stage unspecified	Diagnosis	ICD-10-CM
H40.1391	Pigmentary glaucoma, unspecified eye, mild stage	Diagnosis	ICD-10-CM
H40.1392	Pigmentary glaucoma, unspecified eye, moderate stage	Diagnosis	ICD-10-CM
H40.1393	Pigmentary glaucoma, unspecified eye, severe stage	Diagnosis	ICD-10-CM
H40.1394	Pigmentary glaucoma, unspecified eye, indeterminate stage	Diagnosis	ICD-10-CM
H40.1410	Capsular glaucoma with pseudoexfoliation of lens, right eye, stage unspecified	Diagnosis	ICD-10-CM
H40.1411	Capsular glaucoma with pseudoexfoliation of lens, right eye, mild stage	Diagnosis	ICD-10-CM
H40.1412	Capsular glaucoma with pseudoexfoliation of lens, right eye, moderate stage	Diagnosis	ICD-10-CM
H40.1413	Capsular glaucoma with pseudoexfoliation of lens, right eye, severe stage	Diagnosis	ICD-10-CM
H40.1414	Capsular glaucoma with pseudoexfoliation of lens, right eye, indeterminate stage	Diagnosis	ICD-10-CM
H40.1420	Capsular glaucoma with pseudoexfoliation of lens, left eye, stage unspecified	Diagnosis	ICD-10-CM
H40.1421	Capsular glaucoma with pseudoexfoliation of lens, left eye, mild stage	Diagnosis	ICD-10-CM
H40.1422	Capsular glaucoma with pseudoexfoliation of lens, left eye, moderate stage	Diagnosis	ICD-10-CM
H40.1423	Capsular glaucoma with pseudoexfoliation of lens, left eye, severe stage	Diagnosis	ICD-10-CM
H40.1424	Capsular glaucoma with pseudoexfoliation of lens, left eye, indeterminate stage	Diagnosis	ICD-10-CM
H40.1430	Capsular glaucoma with pseudoexfoliation of lens, bilateral, stage unspecified	Diagnosis	ICD-10-CM
H40.1431	Capsular glaucoma with pseudoexfoliation of lens, bilateral, mild stage	Diagnosis	ICD-10-CM
H40.1432	Capsular glaucoma with pseudoexfoliation of lens, bilateral, moderate stage	Diagnosis	ICD-10-CM
H40.1433	Capsular glaucoma with pseudoexfoliation of lens, bilateral, severe stage	Diagnosis	ICD-10-CM
H40.1434	Capsular glaucoma with pseudoexfoliation of lens, bilateral, indeterminate stage	Diagnosis	ICD-10-CM
H40.1490	Capsular glaucoma with pseudoexfoliation of lens, unspecified eye, stage unspecified	Diagnosis	ICD-10-CM



Code	Description	Code Category	Code Type
H40.1491	Capsular glaucoma with pseudoexfoliation of lens, unspecified eye, mild stage	Diagnosis	ICD-10-CM
H40.1492	Capsular glaucoma with pseudoexfoliation of lens, unspecified eye, moderate stage	Diagnosis	ICD-10-CM
H40.1493	Capsular glaucoma with pseudoexfoliation of lens, unspecified eye, severe stage	Diagnosis	ICD-10-CM
H40.1494	Capsular glaucoma with pseudoexfoliation of lens, unspecified eye, indeterminate stage	Diagnosis	ICD-10-CM
H40.151	Residual stage of open-angle glaucoma, right eye	Diagnosis	ICD-10-CM
H40.152	Residual stage of open-angle glaucoma, left eye	Diagnosis	ICD-10-CM
H40.153	Residual stage of open-angle glaucoma, bilateral	Diagnosis	ICD-10-CM
H40.159	Residual stage of open-angle glaucoma, unspecified eye	Diagnosis	ICD-10-CM
H40.20X0	Unspecified primary angle-closure glaucoma, stage unspecified	Diagnosis	ICD-10-CM
H40.20X1	Unspecified primary angle-closure glaucoma, mild stage	Diagnosis	ICD-10-CM
H40.20X2	Unspecified primary angle-closure glaucoma, moderate stage	Diagnosis	ICD-10-CM
H40.20X3	Unspecified primary angle-closure glaucoma, severe stage	Diagnosis	ICD-10-CM
H40.20X4	Unspecified primary angle-closure glaucoma, indeterminate stage	Diagnosis	ICD-10-CM
H40.211	Acute angle-closure glaucoma, right eye	Diagnosis	ICD-10-CM
H40.212	Acute angle-closure glaucoma, left eye	Diagnosis	ICD-10-CM
H40.213	Acute angle-closure glaucoma, bilateral	Diagnosis	ICD-10-CM
H40.219	Acute angle-closure glaucoma, unspecified eye	Diagnosis	ICD-10-CM
H40.2210	Chronic angle-closure glaucoma, right eye, stage unspecified	Diagnosis	ICD-10-CM
H40.2211	Chronic angle-closure glaucoma, right eye, mild stage	Diagnosis	ICD-10-CM
H40.2212	Chronic angle-closure glaucoma, right eye, moderate stage	Diagnosis	ICD-10-CM
H40.2213	Chronic angle-closure glaucoma, right eye, severe stage	Diagnosis	ICD-10-CM
H40.2214	Chronic angle-closure glaucoma, right eye, indeterminate stage	Diagnosis	ICD-10-CM
H40.2220	Chronic angle-closure glaucoma, left eye, stage unspecified	Diagnosis	ICD-10-CM
H40.2221	Chronic angle-closure glaucoma, left eye, mild stage	Diagnosis	ICD-10-CM
H40.2222	Chronic angle-closure glaucoma, left eye, moderate stage	Diagnosis	ICD-10-CM
H40.2223	Chronic angle-closure glaucoma, left eye, severe stage	Diagnosis	ICD-10-CM
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Code	Description	Code Category	Code Type
H40.2224	Chronic angle-closure glaucoma, left eye, indeterminate stage	Diagnosis	ICD-10-CM
H40.2230	Chronic angle-closure glaucoma, bilateral, stage unspecified	Diagnosis	ICD-10-CM
H40.2231	Chronic angle-closure glaucoma, bilateral, mild stage	Diagnosis	ICD-10-CM
H40.2232	Chronic angle-closure glaucoma, bilateral, moderate stage	Diagnosis	ICD-10-CM
H40.2233	Chronic angle-closure glaucoma, bilateral, severe stage	Diagnosis	ICD-10-CM
H40.2234	Chronic angle-closure glaucoma, bilateral, indeterminate stage	Diagnosis	ICD-10-CM
H40.2290	Chronic angle-closure glaucoma, unspecified eye, stage unspecified	Diagnosis	ICD-10-CM
H40.2291	Chronic angle-closure glaucoma, unspecified eye, mild stage	Diagnosis	ICD-10-CM
H40.2292	Chronic angle-closure glaucoma, unspecified eye, moderate stage	Diagnosis	ICD-10-CM
H40.2293	Chronic angle-closure glaucoma, unspecified eye, severe stage	Diagnosis	ICD-10-CM
H40.2294	Chronic angle-closure glaucoma, unspecified eye, indeterminate stage	Diagnosis	ICD-10-CM
H40.231	Intermittent angle-closure glaucoma, right eye	Diagnosis	ICD-10-CM
H40.232	Intermittent angle-closure glaucoma, left eye	Diagnosis	ICD-10-CM
H40.233	Intermittent angle-closure glaucoma, bilateral	Diagnosis	ICD-10-CM
H40.239	Intermittent angle-closure glaucoma, unspecified eye	Diagnosis	ICD-10-CM
H40.241	Residual stage of angle-closure glaucoma, right eye	Diagnosis	ICD-10-CM
H40.242	Residual stage of angle-closure glaucoma, left eye	Diagnosis	ICD-10-CM
H40.243	Residual stage of angle-closure glaucoma, bilateral	Diagnosis	ICD-10-CM
H40.249	Residual stage of angle-closure glaucoma, unspecified eye	Diagnosis	ICD-10-CM
H40.30X0	Glaucoma secondary to eye trauma, unspecified eye, stage unspecified	Diagnosis	ICD-10-CM
H40.30X1	Glaucoma secondary to eye trauma, unspecified eye, mild stage	Diagnosis	ICD-10-CM
H40.30X2	Glaucoma secondary to eye trauma, unspecified eye, moderate stage	Diagnosis	ICD-10-CM
H40.30X3	Glaucoma secondary to eye trauma, unspecified eye, severe stage	Diagnosis	ICD-10-CM
H40.30X4	Glaucoma secondary to eye trauma, unspecified eye, indeterminate stage	Diagnosis	ICD-10-CM
H40.31X0	Glaucoma secondary to eye trauma, right eye, stage unspecified	Diagnosis	ICD-10-CM
H40.31X1	Glaucoma secondary to eye trauma, right eye, mild stage	Diagnosis	ICD-10-CM
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Code	Description	Code Category	Code Type
H40.31X2	Glaucoma secondary to eye trauma, right eye, moderate stage	Diagnosis	ICD-10-CM
H40.31X3	Glaucoma secondary to eye trauma, right eye, severe stage	Diagnosis	ICD-10-CM
H40.31X4	Glaucoma secondary to eye trauma, right eye, indeterminate stage	Diagnosis	ICD-10-CM
H40.32X0	Glaucoma secondary to eye trauma, left eye, stage unspecified	Diagnosis	ICD-10-CM
H40.32X1	Glaucoma secondary to eye trauma, left eye, mild stage	Diagnosis	ICD-10-CM
H40.32X2	Glaucoma secondary to eye trauma, left eye, moderate stage	Diagnosis	ICD-10-CM
H40.32X3	Glaucoma secondary to eye trauma, left eye, severe stage	Diagnosis	ICD-10-CM
H40.32X4	Glaucoma secondary to eye trauma, left eye, indeterminate stage	Diagnosis	ICD-10-CM
H40.33X0	Glaucoma secondary to eye trauma, bilateral, stage unspecified	Diagnosis	ICD-10-CM
H40.33X1	Glaucoma secondary to eye trauma, bilateral, mild stage	Diagnosis	ICD-10-CM
H40.33X2	Glaucoma secondary to eye trauma, bilateral, moderate stage	Diagnosis	ICD-10-CM
H40.33X3	Glaucoma secondary to eye trauma, bilateral, severe stage	Diagnosis	ICD-10-CM
H40.33X4	Glaucoma secondary to eye trauma, bilateral, indeterminate stage	Diagnosis	ICD-10-CM
H40.40X0	Glaucoma secondary to eye inflammation, unspecified eye, stage unspecified	Diagnosis	ICD-10-CM
H40.40X1	Glaucoma secondary to eye inflammation, unspecified eye, mild stage	Diagnosis	ICD-10-CM
H40.40X2	Glaucoma secondary to eye inflammation, unspecified eye, moderate stage	Diagnosis	ICD-10-CM
H40.40X3	Glaucoma secondary to eye inflammation, unspecified eye, severe stage	Diagnosis	ICD-10-CM
H40.40X4	Glaucoma secondary to eye inflammation, unspecified eye, indeterminate stage	Diagnosis	ICD-10-CM
H40.41X0	Glaucoma secondary to eye inflammation, right eye, stage unspecified	Diagnosis	ICD-10-CM
H40.41X1	Glaucoma secondary to eye inflammation, right eye, mild stage	Diagnosis	ICD-10-CM
H40.41X2	Glaucoma secondary to eye inflammation, right eye, moderate stage	Diagnosis	ICD-10-CM
H40.41X3	Glaucoma secondary to eye inflammation, right eye, severe stage	Diagnosis	ICD-10-CM
H40.41X4	Glaucoma secondary to eye inflammation, right eye, indeterminate stage	Diagnosis	ICD-10-CM
H40.42X0	Glaucoma secondary to eye inflammation, left eye, stage unspecified	Diagnosis	ICD-10-CM
H40.42X1	Glaucoma secondary to eye inflammation, left eye, mild stage	Diagnosis	ICD-10-CM
H40.42X2	Glaucoma secondary to eye inflammation, left eye, moderate stage	Diagnosis	ICD-10-CM



Code	Description	Code Category	Code Type
H40.42X3	Glaucoma secondary to eye inflammation, left eye, severe stage	Diagnosis	ICD-10-CM
H40.42X4	Glaucoma secondary to eye inflammation, left eye, indeterminate stage	Diagnosis	ICD-10-CM
H40.43X0	Glaucoma secondary to eye inflammation, bilateral, stage unspecified	Diagnosis	ICD-10-CM
H40.43X1	Glaucoma secondary to eye inflammation, bilateral, mild stage	Diagnosis	ICD-10-CM
H40.43X2	Glaucoma secondary to eye inflammation, bilateral, moderate stage	Diagnosis	ICD-10-CM
H40.43X3	Glaucoma secondary to eye inflammation, bilateral, severe stage	Diagnosis	ICD-10-CM
H40.43X4	Glaucoma secondary to eye inflammation, bilateral, indeterminate stage	Diagnosis	ICD-10-CM
H40.50X0	Glaucoma secondary to other eye disorders, unspecified eye, stage unspecified	Diagnosis	ICD-10-CM
H40.50X1	Glaucoma secondary to other eye disorders, unspecified eye, mild stage	Diagnosis	ICD-10-CM
H40.50X2	Glaucoma secondary to other eye disorders, unspecified eye, moderate stage	Diagnosis	ICD-10-CM
H40.50X3	Glaucoma secondary to other eye disorders, unspecified eye, severe stage	Diagnosis	ICD-10-CM
H40.50X4	Glaucoma secondary to other eye disorders, unspecified eye, indeterminate stage	Diagnosis	ICD-10-CM
H40.51X0	Glaucoma secondary to other eye disorders, right eye, stage unspecified	Diagnosis	ICD-10-CM
H40.51X1	Glaucoma secondary to other eye disorders, right eye, mild stage	Diagnosis	ICD-10-CM
H40.51X2	Glaucoma secondary to other eye disorders, right eye, moderate stage	Diagnosis	ICD-10-CM
H40.51X3	Glaucoma secondary to other eye disorders, right eye, severe stage	Diagnosis	ICD-10-CM
H40.51X4	Glaucoma secondary to other eye disorders, right eye, indeterminate stage	Diagnosis	ICD-10-CM
H40.52X0	Glaucoma secondary to other eye disorders, left eye, stage unspecified	Diagnosis	ICD-10-CM
H40.52X1	Glaucoma secondary to other eye disorders, left eye, mild stage	Diagnosis	ICD-10-CM
H40.52X2	Glaucoma secondary to other eye disorders, left eye, moderate stage	Diagnosis	ICD-10-CM
H40.52X3	Glaucoma secondary to other eye disorders, left eye, severe stage	Diagnosis	ICD-10-CM
H40.52X4	Glaucoma secondary to other eye disorders, left eye, indeterminate stage	Diagnosis	ICD-10-CM
H40.53X0	Glaucoma secondary to other eye disorders, bilateral, stage unspecified	Diagnosis	ICD-10-CM
H40.53X1	Glaucoma secondary to other eye disorders, bilateral, mild stage	Diagnosis	ICD-10-CM
H40.53X2	Glaucoma secondary to other eye disorders, bilateral, moderate stage	Diagnosis	ICD-10-CM
H40.53X3	Glaucoma secondary to other eye disorders, bilateral, severe stage	Diagnosis	ICD-10-CM
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Code	Description	Code Category	Code Type
H40.53X4	Glaucoma secondary to other eye disorders, bilateral, indeterminate stage	Diagnosis	ICD-10-CM
H40.60X0	Glaucoma secondary to drugs, unspecified eye, stage unspecified	Diagnosis	ICD-10-CM
H40.60X1	Glaucoma secondary to drugs, unspecified eye, mild stage	Diagnosis	ICD-10-CM
H40.60X2	Glaucoma secondary to drugs, unspecified eye, moderate stage	Diagnosis	ICD-10-CM
H40.60X3	Glaucoma secondary to drugs, unspecified eye, severe stage	Diagnosis	ICD-10-CM
H40.60X4	Glaucoma secondary to drugs, unspecified eye, indeterminate stage	Diagnosis	ICD-10-CM
H40.61X0	Glaucoma secondary to drugs, right eye, stage unspecified	Diagnosis	ICD-10-CM
H40.61X1	Glaucoma secondary to drugs, right eye, mild stage	Diagnosis	ICD-10-CM
H40.61X2	Glaucoma secondary to drugs, right eye, moderate stage	Diagnosis	ICD-10-CM
H40.61X3	Glaucoma secondary to drugs, right eye, severe stage	Diagnosis	ICD-10-CM
H40.61X4	Glaucoma secondary to drugs, right eye, indeterminate stage	Diagnosis	ICD-10-CM
H40.62X0	Glaucoma secondary to drugs, left eye, stage unspecified	Diagnosis	ICD-10-CM
H40.62X1	Glaucoma secondary to drugs, left eye, mild stage	Diagnosis	ICD-10-CM
H40.62X2	Glaucoma secondary to drugs, left eye, moderate stage	Diagnosis	ICD-10-CM
H40.62X3	Glaucoma secondary to drugs, left eye, severe stage	Diagnosis	ICD-10-CM
H40.62X4	Glaucoma secondary to drugs, left eye, indeterminate stage	Diagnosis	ICD-10-CM
H40.63X0	Glaucoma secondary to drugs, bilateral, stage unspecified	Diagnosis	ICD-10-CM
H40.63X1	Glaucoma secondary to drugs, bilateral, mild stage	Diagnosis	ICD-10-CM
H40.63X2	Glaucoma secondary to drugs, bilateral, moderate stage	Diagnosis	ICD-10-CM
H40.63X3	Glaucoma secondary to drugs, bilateral, severe stage	Diagnosis	ICD-10-CM
H40.63X4	Glaucoma secondary to drugs, bilateral, indeterminate stage	Diagnosis	ICD-10-CM
H40.811	Glaucoma with increased episcleral venous pressure, right eye	Diagnosis	ICD-10-CM
H40.812	Glaucoma with increased episcleral venous pressure, left eye	Diagnosis	ICD-10-CM
H40.813	Glaucoma with increased episcleral venous pressure, bilateral	Diagnosis	ICD-10-CM
H40.819	Glaucoma with increased episcleral venous pressure, unspecified eye	Diagnosis	ICD-10-CM
H40.821	Hypersecretion glaucoma, right eye	Diagnosis	ICD-10-CM



Code	Description	Code Category	Code Type
H40.822	Hypersecretion glaucoma, left eye	Diagnosis	ICD-10-CM
H40.823	Hypersecretion glaucoma, bilateral	Diagnosis	ICD-10-CM
H40.829	Hypersecretion glaucoma, unspecified eye	Diagnosis	ICD-10-CM
H40.831	Aqueous misdirection, right eye	Diagnosis	ICD-10-CM
H40.832	Aqueous misdirection, left eye	Diagnosis	ICD-10-CM
H40.833	Aqueous misdirection, bilateral	Diagnosis	ICD-10-CM
H40.839	Aqueous misdirection, unspecified eye	Diagnosis	ICD-10-CM
H40.89	Other specified glaucoma	Diagnosis	ICD-10-CM
H40.9	Unspecified glaucoma	Diagnosis	ICD-10-CM
H42	Glaucoma in diseases classified elsewhere	Diagnosis	ICD-10-CM
H44.511	Absolute glaucoma, right eye	Diagnosis	ICD-10-CM
H44.512	Absolute glaucoma, left eye	Diagnosis	ICD-10-CM
H44.513	Absolute glaucoma, bilateral	Diagnosis	ICD-10-CM
H44.519	Absolute glaucoma, unspecified eye	Diagnosis	ICD-10-CM
H47.231	Glaucomatous optic atrophy, right eye	Diagnosis	ICD-10-CM
H47.232	Glaucomatous optic atrophy, left eye	Diagnosis	ICD-10-CM
H47.233	Glaucomatous optic atrophy, bilateral	Diagnosis	ICD-10-CM
H47.239	Glaucomatous optic atrophy, unspecified eye	Diagnosis	ICD-10-CM
Q15.0	Congenital glaucoma	Diagnosis	ICD-10-CM
	Autism		
299.0	Autistic disorder	Diagnosis	ICD-9-CM
299.00	Autistic disorder, current or active state	Diagnosis	ICD-9-CM
299.01	Autistic disorder, residual state	Diagnosis	ICD-9-CM
299.1	Childhood disintegrative disorder	Diagnosis	ICD-9-CM
299.11	Childhood disintegrative disorder, residual state	Diagnosis	ICD-9-CM
299.8	Other specified pervasive developmental disorders	Diagnosis	ICD-9-CM



Code	Description	Code Category	Code Type
299.80	Other specified pervasive developmental disorders, current or active state	Diagnosis	ICD-9-CM
299.81	Other specified pervasive developmental disorders, residual state	Diagnosis	ICD-9-CM
299.9	Unspecified pervasive developmental disorder	Diagnosis	ICD-9-CM
299.90	Unspecified pervasive developmental disorder, current or active state	Diagnosis	ICD-9-CM
299.91	Unspecified pervasive developmental disorder, residual state	Diagnosis	ICD-9-CM
F84.0	Autistic disorder	Diagnosis	ICD-10-CM
F84.3	Other childhood disintegrative disorder	Diagnosis	ICD-10-CM
F84.5	Asperger's syndrome	Diagnosis	ICD-10-CM
F84.8	Other pervasive developmental disorders	Diagnosis	ICD-10-CM
F84.9	Pervasive developmental disorder, unspecified	Diagnosis	ICD-10-CM
	Marfans Syndrome		
759.82	Marfan's syndrome	Diagnosis	ICD-9-CM
Q87.4	Marfan's syndrome	Diagnosis	ICD-10-CM
Q87.40	Marfan's syndrome, unspecified	Diagnosis	ICD-10-CM
Q87.41	Marfan's syndrome with cardiovascular manifestations	Diagnosis	ICD-10-CM
Q87.410	Marfan's syndrome with aortic dilation	Diagnosis	ICD-10-CM
Q87.418	Marfan's syndrome with other cardiovascular manifestations	Diagnosis	ICD-10-CM
Q87.42	Marfan's syndrome with ocular manifestations	Diagnosis	ICD-10-CM
Q87.43	Marfan's syndrome with skeletal manifestation	Diagnosis	ICD-10-CM
	Pheochromocytoma/Paraganglioma		
194.0	Malignant neoplasm of adrenal gland	Diagnosis	ICD-9-CM
194.6	Malignant neoplasm of aortic body and other paraganglia	Diagnosis	ICD-9-CM
227.6	Benign neoplasm of aortic body and other paraganglia	Diagnosis	ICD-9-CM
237.2	Neoplasm of uncertain behavior of adrenal gland	Diagnosis	ICD-9-CM
237.3	Neoplasm of uncertain behavior of paraganglia	Diagnosis	ICD-9-CM
238.8	Neoplasm of uncertain behavior of other specified sites	Diagnosis	ICD-9-CM



Code	Description	Code Category	Code Type
C74.1	Malignant neoplasm of medulla of adrenal gland	Diagnosis	ICD-10-CM
C74.9	Malignant neoplasm of unspecified part of adrenal gland	Diagnosis	ICD-10-CM
C75.5	Malignant neoplasm of aortic body and other paraganglia	Diagnosis	ICD-10-CM
D35.0	Benign neoplasm of adrenal gland	Diagnosis	ICD-10-CM
D35.6	Benign neoplasm of aortic body and other paraganglia	Diagnosis	ICD-10-CM
D44.1	Neoplasm of uncertain behavior of adrenal gland	Diagnosis	ICD-10-CM
D44.6	Neoplasm of uncertain behavior of carotid body	Diagnosis	ICD-10-CM
D44.7	Neoplasm of uncertain behavior of aortic body and other paraganglia	Diagnosis	ICD-10-CM
D48.7	Neoplasm of uncertain behavior of other specified sites	Diagnosis	ICD-10-CM
	Diabetes		
249.00	Secondary diabetes mellitus without mention of complication, not stated as uncontrolled, or unspecified	Diagnosis	ICD-9-CM
249.01	Secondary diabetes mellitus without mention of complication, uncontrolled	Diagnosis	ICD-9-CM
249.10	Secondary diabetes mellitus with ketoacidosis, not stated as uncontrolled, or unspecified	Diagnosis	ICD-9-CM
249.11	Secondary diabetes mellitus with ketoacidosis, uncontrolled	Diagnosis	ICD-9-CM
249.20	Secondary diabetes mellitus with hyperosmolarity, not stated as uncontrolled, or unspecified	Diagnosis	ICD-9-CM
249.21	Secondary diabetes mellitus with hyperosmolarity, uncontrolled	Diagnosis	ICD-9-CM
249.30	Secondary diabetes mellitus with other coma, not stated as uncontrolled, or unspecified	Diagnosis	ICD-9-CM
249.31	Secondary diabetes mellitus with other coma, uncontrolled	Diagnosis	ICD-9-CM
249.40	Secondary diabetes mellitus with renal manifestations, not stated as uncontrolled, or unspecified	Diagnosis	ICD-9-CM
249.41	Secondary diabetes mellitus with renal manifestations, uncontrolled	Diagnosis	ICD-9-CM
249.50	Secondary diabetes mellitus with ophthalmic manifestations, not stated as uncontrolled, or unspecified	Diagnosis	ICD-9-CM
249.51	Secondary diabetes mellitus with ophthalmic manifestations, uncontrolled	Diagnosis	ICD-9-CM
249.60	Secondary diabetes mellitus with neurological manifestations, not stated as uncontrolled, or unspecified	Diagnosis	ICD-9-CM
249.61	Secondary diabetes mellitus with neurological manifestations, uncontrolled	Diagnosis	ICD-9-CM
249.70	Secondary diabetes mellitus with peripheral circulatory disorders, not stated as uncontrolled, or unspecified	Diagnosis	ICD-9-CM
249.71	Secondary diabetes mellitus with peripheral circulatory disorders, uncontrolled	Diagnosis	ICD-9-CM
		2.0010010	



Code	Description	Code Category	Code Type
249.80	Secondary diabetes mellitus with other specified manifestations, not stated as uncontrolled, or unspecified	Diagnosis	ICD-9-CM
249.81	Secondary diabetes mellitus with other specified manifestations, uncontrolled	Diagnosis	ICD-9-CM
249.90	Secondary diabetes mellitus with unspecified complication, not stated as uncontrolled, or unspecified	Diagnosis	ICD-9-CM
249.91	Secondary diabetes mellitus with unspecified complication, uncontrolled	Diagnosis	ICD-9-CM
250.00	Diabetes mellitus without mention of complication, type II or unspecified type, not stated as uncontrolled	Diagnosis	ICD-9-CM
250.01	Diabetes mellitus without mention of complication, type I [juvenile type], not stated as uncontrolled	Diagnosis	ICD-9-CM
250.02	Diabetes mellitus without mention of complication, type II or unspecified type, uncontrolled	Diagnosis	ICD-9-CM
250.03	Diabetes mellitus without mention of complication, type I [juvenile type], uncontrolled	Diagnosis	ICD-9-CM
250.10	Diabetes with ketoacidosis, type II or unspecified type, not stated as uncontrolled	Diagnosis	ICD-9-CM
250.11	Diabetes with ketoacidosis, type I [juvenile type], not stated as uncontrolled	Diagnosis	ICD-9-CM
250.12	Diabetes with ketoacidosis, type II or unspecified type, uncontrolled	Diagnosis	ICD-9-CM
250.13	Diabetes with ketoacidosis, type I [juvenile type], uncontrolled	Diagnosis	ICD-9-CM
250.20	Diabetes with hyperosmolarity, type II or unspecified type, not stated as uncontrolled	Diagnosis	ICD-9-CM
250.21	Diabetes with hyperosmolarity, type I [juvenile type], not stated as uncontrolled	Diagnosis	ICD-9-CM
250.22	Diabetes with hyperosmolarity, type II or unspecified type, uncontrolled	Diagnosis	ICD-9-CM
250.23	Diabetes with hyperosmolarity, type I [juvenile type], uncontrolled	Diagnosis	ICD-9-CM
250.30	Diabetes with other coma, type II or unspecified type, not stated as uncontrolled	Diagnosis	ICD-9-CM
250.31	Diabetes with other coma, type I [juvenile type], not stated as uncontrolled	Diagnosis	ICD-9-CM
250.32	Diabetes with other coma, type II or unspecified type, uncontrolled	Diagnosis	ICD-9-CM
250.33	Diabetes with other coma, type I [juvenile type], uncontrolled	Diagnosis	ICD-9-CM
250.40	Diabetes with renal manifestations, type II or unspecified type, not stated as uncontrolled	Diagnosis	ICD-9-CM
250.41	Diabetes with renal manifestations, type I [juvenile type], not stated as uncontrolled	Diagnosis	ICD-9-CM
250.42	Diabetes with renal manifestations, type II or unspecified type, uncontrolled	Diagnosis	ICD-9-CM
250.43	Diabetes with renal manifestations, type I [juvenile type], uncontrolled	Diagnosis	ICD-9-CM
250.50	Diabetes with ophthalmic manifestations, type II or unspecified type, not stated as uncontrolled	Diagnosis	ICD-9-CM
250.51	Diabetes with ophthalmic manifestations, type I [juvenile type], not stated as uncontrolled	Diagnosis	ICD-9-CM
		2.00.0010	



Code	Description	Code Category	Code Type
250.52	Diabetes with ophthalmic manifestations, type II or unspecified type, uncontrolled	Diagnosis	ICD-9-CM
250.53	Diabetes with ophthalmic manifestations, type I [juvenile type], uncontrolled	Diagnosis	ICD-9-CM
250.60	Diabetes with neurological manifestations, type II or unspecified type, not stated as uncontrolled	Diagnosis	ICD-9-CM
250.61	Diabetes with neurological manifestations, type I [juvenile type], not stated as uncontrolled	Diagnosis	ICD-9-CM
250.62	Diabetes with neurological manifestations, type II or unspecified type, uncontrolled	Diagnosis	ICD-9-CM
250.63	Diabetes with neurological manifestations, type I [juvenile type], uncontrolled	Diagnosis	ICD-9-CM
250.70	Diabetes with peripheral circulatory disorders, type II or unspecified type, not stated as uncontrolled	Diagnosis	ICD-9-CM
250.71	Diabetes with peripheral circulatory disorders, type I [juvenile type], not stated as uncontrolled	Diagnosis	ICD-9-CM
250.72	Diabetes with peripheral circulatory disorders, type II or unspecified type, uncontrolled	Diagnosis	ICD-9-CM
250.73	Diabetes with peripheral circulatory disorders, type I [juvenile type], uncontrolled	Diagnosis	ICD-9-CM
250.80	Diabetes with other specified manifestations, type II or unspecified type, not stated as uncontrolled	Diagnosis	ICD-9-CM
250.81	Diabetes with other specified manifestations, type I [juvenile type], not stated as uncontrolled	Diagnosis	ICD-9-CM
250.82	Diabetes with other specified manifestations, type II or unspecified type, uncontrolled	Diagnosis	ICD-9-CM
250.83	Diabetes with other specified manifestations, type I [juvenile type], uncontrolled	Diagnosis	ICD-9-CM
250.90	Diabetes with unspecified complication, type II or unspecified type, not stated as uncontrolled	Diagnosis	ICD-9-CM
250.91	Diabetes with unspecified complication, type I [juvenile type], not stated as uncontrolled	Diagnosis	ICD-9-CM
250.92	Diabetes with unspecified complication, type II or unspecified type, uncontrolled	Diagnosis	ICD-9-CM
250.93	Diabetes with unspecified complication, type I [juvenile type], uncontrolled	Diagnosis	ICD-9-CM
357.2	Polyneuropathy in diabetes	Diagnosis	ICD-9-CM
362.01	Background diabetic retinopathy	Diagnosis	ICD-9-CM
362.02	Proliferative diabetic retinopathy	Diagnosis	ICD-9-CM
362.03	Nonproliferative diabetic retinopathy NOS	Diagnosis	ICD-9-CM
362.04	Mild nonproliferative diabetic retinopathy	Diagnosis	ICD-9-CM
362.05	Moderate nonproliferative diabetic retinopathy	Diagnosis	ICD-9-CM
362.06	Severe nonproliferative diabetic retinopathy	Diagnosis	ICD-9-CM
		0 -	



Code	Description	Code Category	
366.41	Diabetic cataract	Code Category	Code Type
		Diagnosis	ICD-9-CM
E08.00	Diabetes mellitus due to underlying condition with hyperosmolarity without nonketotic hyperglycemic-hyperosmolar coma (NKHHC)	Diagnosis	ICD-10-CM
E08.01	Diabetes mellitus due to underlying condition with hyperosmolarity with coma	Diagnosis	ICD-10-CM
E08.10	Diabetes mellitus due to underlying condition with ketoacidosis without coma	Diagnosis	ICD-10-CM
E08.11	Diabetes mellitus due to underlying condition with ketoacidosis with coma	Diagnosis	ICD-10-CM
E08.21	Diabetes mellitus due to underlying condition with diabetic nephropathy	Diagnosis	ICD-10-CM
E08.22	Diabetes mellitus due to underlying condition with diabetic chronic kidney disease	Diagnosis	ICD-10-CM
E08.29	Diabetes mellitus due to underlying condition with other diabetic kidney complication	Diagnosis	ICD-10-CM
E08.311	Diabetes mellitus due to underlying condition with unspecified diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E08.319	Diabetes mellitus due to underlying condition with unspecified diabetic retinopathy without macular edema	2.08.10010	100 20 0
		Diagnosis	ICD-10-CM
E08.321	Diabetes mellitus due to underlying condition with mild nonproliferative diabetic retinopathy with macular edema		
		Diagnosis	ICD-10-CM
E08.3211	Diabetes mellitus due to underlying condition with mild nonproliferative diabetic retinopathy with macular edema, right eye		
		Diagnosis	ICD-10-CM
E08.3212	Diabetes mellitus due to underlying condition with mild nonproliferative diabetic retinopathy with macular edema, left eye		
		Diagnosis	ICD-10-CM
E08.3213	Diabetes mellitus due to underlying condition with mild nonproliferative diabetic retinopathy with macular edema, bilateral		
		Diagnosis	ICD-10-CM
E08.3219	Diabetes mellitus due to underlying condition with mild nonproliferative diabetic retinopathy with macular edema, unspecified eye		
		Diagnosis	ICD-10-CM
E08.329	Diabetes mellitus due to underlying condition with mild nonproliferative diabetic retinopathy without macular edema		
		Diagnosis	ICD-10-CM
E08.3291	Diabetes mellitus due to underlying condition with mild nonproliferative diabetic retinopathy without macular edema, right eye		
		Diagnosis	ICD-10-CM



Code	Description	Code Category	Code Type
E08.3292	Diabetes mellitus due to underlying condition with mild nonproliferative diabetic retinopathy without macular edema, left eye	coue category	couciype
E08.3293	Diabetes mellitus due to underlying condition with mild nonproliferative diabetic retinopathy without macular edema, bilateral	Diagnosis	ICD-10-CM
E08.3299	Diabetes mellitus due to underlying condition with mild nonproliferative diabetic retinopathy without macular edema, unspecified eye	Diagnosis	ICD-10-CM
E08.331	Diabetes mellitus due to underlying condition with moderate nonproliferative diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E08.3311	Diabetes mellitus due to underlying condition with moderate nonproliferative diabetic retinopathy with macular edema, right eye	Diagnosis	ICD-10-CM
E08.3312	Diabetes mellitus due to underlying condition with moderate nonproliferative diabetic retinopathy with macular edema, left eye	Diagnosis	ICD-10-CM
E08.3313	Diabetes mellitus due to underlying condition with moderate nonproliferative diabetic retinopathy with macular edema, bilateral	Diagnosis	ICD-10-CM
E08.3319	Diabetes mellitus due to underlying condition with moderate nonproliferative diabetic retinopathy with macular edema, unspecified eye	Diagnosis	ICD-10-CM
E08.339	Diabetes mellitus due to underlying condition with moderate nonproliferative diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E08.3391	Diabetes mellitus due to underlying condition with moderate nonproliferative diabetic retinopathy without macular edema, right eye	Diagnosis	ICD-10-CM
		Diagnosis	ICD-10-CM
E08.3392	Diabetes mellitus due to underlying condition with moderate nonproliferative diabetic retinopathy without macular edema, left eye	Diagnosis	ICD-10-CM
E08.3393	Diabetes mellitus due to underlying condition with moderate nonproliferative diabetic retinopathy without macular edema, bilateral		
E08.3399	Diabetes mellitus due to underlying condition with moderate nonproliferative diabetic retinopathy without macular edema, unspecified eye	Diagnosis	ICD-10-CM
		Diagnosis	ICD-10-CM



Code	Description	Code Category	Code Type
E08.341	Diabetes mellitus due to underlying condition with severe nonproliferative diabetic retinopathy with macular edema		
		Diagnosis	ICD-10-CM
E08.3411	Diabetes mellitus due to underlying condition with severe nonproliferative diabetic retinopathy with macular edema, right eye		
		Diagnosis	ICD-10-CM
E08.3412	Diabetes mellitus due to underlying condition with severe nonproliferative diabetic retinopathy with macular edema, left eye		
		Diagnosis	ICD-10-CM
E08.3413	Diabetes mellitus due to underlying condition with severe nonproliferative diabetic retinopathy with macular edema, bilateral		
		Diagnosis	ICD-10-CM
E08.3419	Diabetes mellitus due to underlying condition with severe nonproliferative diabetic retinopathy with macular edema, unspecified eye		
		Diagnosis	ICD-10-CM
E08.349	Diabetes mellitus due to underlying condition with severe nonproliferative diabetic retinopathy without macular edema		
		Diagnosis	ICD-10-CM
E08.3491	Diabetes mellitus due to underlying condition with severe nonproliferative diabetic retinopathy without macular edema, right eye		
		Diagnosis	ICD-10-CM
E08.3492	Diabetes mellitus due to underlying condition with severe nonproliferative diabetic retinopathy without macular edema, left eye		
		Diagnosis	ICD-10-CM
E08.3493	Diabetes mellitus due to underlying condition with severe nonproliferative diabetic retinopathy without macular edema, bilateral		
		Diagnosis	ICD-10-CM
E08.3499	Diabetes mellitus due to underlying condition with severe nonproliferative diabetic retinopathy without macular edema, unspecified eye	Diagnosis	ICD-10-CM
E08.351	Diabetes mellitus due to underlying condition with proliferative diabetic retinopathy with macular edema		
		Diagnosis	ICD-10-CM
E08.3511	Diabetes mellitus due to underlying condition with proliferative diabetic retinopathy with macular edema, right eye		
500 2542		Diagnosis	ICD-10-CM
E08.3512	Diabetes mellitus due to underlying condition with proliferative diabetic retinopathy with macular edema, left eye	5	
E08.3513	Diabetes mellitus due to underlying condition with proliferative diabetic retinopathy with macular edema, bilateral	Diagnosis	ICD-10-CM
200.3313	Subcles meaning due to underging condition with promerative diabetic retinopathy with macular cacina, shateral		
		Diagnosis	ICD-10-CM



Code	Description	Code Category	Code Type
E08.3519	Diabetes mellitus due to underlying condition with proliferative diabetic retinopathy with macular edema, unspecified eye	coue category	
E08.3521	Diabetes mellitus due to underlying condition with proliferative diabetic retinopathy with traction retinal detachment involving the macula, right eye	Diagnosis	ICD-10-CM
E08.3522	Diabetes mellitus due to underlying condition with proliferative diabetic retinopathy with traction retinal detachment involving the macula, left eye	Diagnosis	ICD-10-CM
E08.3523	Diabetes mellitus due to underlying condition with proliferative diabetic retinopathy with traction retinal detachment involving the macula, bilateral	Diagnosis	ICD-10-CM
E08.3529	Diabetes mellitus due to underlying condition with proliferative diabetic retinopathy with traction retinal detachment involving the macula,	Diagnosis	ICD-10-CM
E08.3531	unspecified eye Diabetes mellitus due to underlying condition with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, right	Diagnosis	ICD-10-CM
E08.3532	eye Diabetes mellitus due to underlying condition with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, left eye	Diagnosis	ICD-10-CM
E08.3533	Diabetes mellitus due to underlying condition with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, bilateral	Diagnosis	ICD-10-CM
E08.3539	Diabetes mellitus due to underlying condition with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, unspecified eye	Diagnosis	ICD-10-CM
E08.3541	Diabetes mellitus due to underlying condition with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, right eye	Diagnosis	ICD-10-CM
E08.3542	Diabetes mellitus due to underlying condition with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, left eye	Diagnosis Diagnosis	ICD-10-CM
E08.3543	Diabetes mellitus due to underlying condition with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, bilateral	Ū	ICD-10-CM
E08.3549	Diabetes mellitus due to underlying condition with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous	Diagnosis Diagnosis	ICD-10-CM
E08.3551	Diabetes mellitus due to underlying condition with stable proliferative diabetic retinopathy, right eye	Diagnosis	ICD-10-CM
E08.3552	Diabetes mellitus due to underlying condition with stable proliferative diabetic retinopathy, left eye	Diagnosis	ICD-10-CM



Code	Description	Code Category	Code Type
E08.3553	Diabetes mellitus due to underlying condition with stable proliferative diabetic retinopathy, bilateral	Diagnosis	ICD-10-CM
E08.3559	Diabetes mellitus due to underlying condition with stable proliferative diabetic retinopathy, unspecified eye	Diagnosis	ICD-10-CM
E08.359	Diabetes mellitus due to underlying condition with proliferative diabetic retinopathy without macular edema	U U	
E08.3591	Diabetes mellitus due to underlying condition with proliferative diabetic retinopathy without macular edema, right eye	Diagnosis	ICD-10-CM
E08.3592	Diabetes mellitus due to underlying condition with proliferative diabetic retinopathy without macular edema, left eye	Diagnosis	ICD-10-CM
E08.3593	Diabetes mellitus due to underlying condition with proliferative diabetic retinopathy without macular edema, bilateral	Diagnosis	ICD-10-CM
		Diagnosis	ICD-10-CM
E08.3599 E08.36	Diabetes mellitus due to underlying condition with proliferative diabetic retinopathy without macular edema, unspecified eye Diabetes mellitus due to underlying condition with diabetic cataract	Diagnosis	ICD-10-CM
E08.37X1	Diabetes mellitus due to underlying condition with diabetic macular edema, resolved following treatment, right eye	Diagnosis	ICD-10-CM
E08.37X2	Diabetes mellitus due to underlying condition with diabetic macular edema, resolved following treatment, left eye	Diagnosis	ICD-10-CM
E08.37X3	Diabetes mellitus due to underlying condition with diabetic macular edema, resolved following treatment, bilateral	Diagnosis	ICD-10-CM
		Diagnosis	ICD-10-CM
E08.37X9	Diabetes mellitus due to underlying condition with diabetic macular edema, resolved following treatment, unspecified eye	Diagnosis	ICD-10-CM
E08.39	Diabetes mellitus due to underlying condition with other diabetic ophthalmic complication	Diagnosis	ICD-10-CM
E08.40	Diabetes mellitus due to underlying condition with diabetic neuropathy, unspecified	Diagnosis	ICD-10-CM
E08.41	Diabetes mellitus due to underlying condition with diabetic mononeuropathy	Diagnosis	ICD-10-CM
E08.42	Diabetes mellitus due to underlying condition with diabetic polyneuropathy	Diagnosis	ICD-10-CM
E08.43	Diabetes mellitus due to underlying condition with diabetic autonomic (poly)neuropathy	Diagnosis	ICD-10-CM
E08.44	Diabetes mellitus due to underlying condition with diabetic amyotrophy	Diagnosis	ICD-10-CM
E08.49	Diabetes mellitus due to underlying condition with other diabetic neurological complication	Diagnosis	ICD-10-CM



Code	Description	Code Category	Code Type
E08.51	Diabetes mellitus due to underlying condition with diabetic peripheral angiopathy without gangrene	Diagnosis	ICD-10-CM
E08.52	Diabetes mellitus due to underlying condition with diabetic peripheral angiopathy with gangrene	Diagnosis	ICD-10-CM
E08.59	Diabetes mellitus due to underlying condition with other circulatory complications	Diagnosis	ICD-10-CM
E08.610	Diabetes mellitus due to underlying condition with diabetic neuropathic arthropathy	Diagnosis	ICD-10-CM
E08.618	Diabetes mellitus due to underlying condition with other diabetic arthropathy	Diagnosis	ICD-10-CM
E08.620	Diabetes mellitus due to underlying condition with diabetic dermatitis	Diagnosis	ICD-10-CM
E08.621	Diabetes mellitus due to underlying condition with foot ulcer	Diagnosis	ICD-10-CM
E08.622	Diabetes mellitus due to underlying condition with other skin ulcer	Diagnosis	ICD-10-CM
E08.628	Diabetes mellitus due to underlying condition with other skin complications	Diagnosis	ICD-10-CM
E08.630	Diabetes mellitus due to underlying condition with periodontal disease	Diagnosis	ICD-10-CM
E08.638	Diabetes mellitus due to underlying condition with other oral complications	Diagnosis	ICD-10-CM
E08.641	Diabetes mellitus due to underlying condition with hypoglycemia with coma	Diagnosis	ICD-10-CM
E08.649	Diabetes mellitus due to underlying condition with hypoglycemia without coma	Diagnosis	ICD-10-CM
E08.65	Diabetes mellitus due to underlying condition with hyperglycemia	Diagnosis	ICD-10-CM
E08.69	Diabetes mellitus due to underlying condition with other specified complication	Diagnosis	ICD-10-CM
E08.8	Diabetes mellitus due to underlying condition with unspecified complications	Diagnosis	ICD-10-CM
E08.9	Diabetes mellitus due to underlying condition without complications	0	
		Diagnosis	ICD-10-CM
E09.00	Drug or chemical induced diabetes mellitus with hyperosmolarity without nonketotic hyperglycemic-hyperosmolar coma (NKHHC)	Diagnosis	ICD-10-CM
E09.01	Drug or chemical induced diabetes mellitus with hyperosmolarity with coma	Diagnosis	ICD-10-CM
E09.10	Drug or chemical induced diabetes mellitus with ketoacidosis without coma	Diagnosis	ICD-10-CM
E09.11	Drug or chemical induced diabetes mellitus with ketoacidosis with coma	Diagnosis	ICD-10-CM
E09.21	Drug or chemical induced diabetes mellitus with diabetic nephropathy	Diagnosis	ICD-10-CM
E09.22	Drug or chemical induced diabetes mellitus with diabetic chronic kidney disease	Diagnosis	ICD-10-CM
E09.29	Drug or chemical induced diabetes mellitus with other diabetic kidney complication	Diagnosis	ICD-10-CM
E09.311	Drug or chemical induced diabetes mellitus with unspecified diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM



Code E09.319	Description Drug or chemical induced diabetes mellitus with unspecified diabetic retinopathy without macular edema	Code Category	Code Type
		Diagnosis	ICD-10-CM
E09.321	Drug or chemical induced diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema		
		Diagnosis	ICD-10-CM
E09.3211	Drug or chemical induced diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, right eye		
		Diagnosis	ICD-10-CM
E09.3212	Drug or chemical induced diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, left eye		
		Diagnosis	ICD-10-CM
E09.3213	Drug or chemical induced diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, bilateral	-	
		Diagnosis	ICD-10-CM
E09.3219	Drug or chemical induced diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, unspecified eye		
		Diagnosis	ICD-10-CM
E09.329	Drug or chemical induced diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema		
		Diagnosis	ICD-10-CM
E09.3291	Drug or chemical induced diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, right eye		
		Diagnosis	ICD-10-CM
E09.3292	Drug or chemical induced diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, left eye	Ũ	
		Diagnosis	ICD-10-CM
E09.3293	Drug or chemical induced diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, bilateral		
		Diagnosis	ICD-10-CM
E09.3299	Drug or chemical induced diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, unspecified eye	2.08.10010	100 10 0
		Diagnosis	ICD-10-CM
E09.331	Drug or chemical induced diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema	Diagnosis	
		<u>.</u>	
E09.3311	Drug or chemical induced diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, right eye	Diagnosis	ICD-10-CM
200.0011	brug of element induced diabetes mentus with moderate nonpromerative diabetic retinopathy with macual edema, fight eye		
F00 2212	Drug er shemiet indused disketes mellitus with mederate nennreliferative disketis ratioenathy with meauler edame. Left suc	Diagnosis	ICD-10-CM
E09.3312	Drug or chemical induced diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, left eye		
		Diagnosis	ICD-10-CM



Code	Description	Code Category	Code Type
E09.3313	Drug or chemical induced diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, bilateral	coue category	code Type
E09.3319	Drug or chemical induced diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, unspecified eye	Diagnosis	ICD-10-CM
E09.339	Drug or chemical induced diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E09.3391	Drug or chemical induced diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, right eye	Diagnosis	ICD-10-CM
E09.3392	Drug or chemical induced diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, left eye	Diagnosis	ICD-10-CM
E09.3393	Drug or chemical induced diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, bilateral	Diagnosis	ICD-10-CM
E09.3399	Drug or chemical induced diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, unspecified eye	Diagnosis	ICD-10-CM
E09.341	Drug or chemical induced diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E09.3411	Drug or chemical induced diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, right eye	Diagnosis	ICD-10-CM
E09.3412	Drug or chemical induced diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, left eye	Diagnosis	ICD-10-CM
E09.3413	Drug or chemical induced diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, bilateral	Diagnosis	ICD-10-CM
E09.3419	Drug or chemical induced diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, unspecified eye	Diagnosis	ICD-10-CM
E09.349	Drug or chemical induced diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
		Diagnosis	ICD-10-CM



Code	Description	Code Category	Code Type
E09.3491	Drug or chemical induced diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, right eye		
		Diagnosis	ICD-10-CM
E09.3492	Drug or chemical induced diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, left eye		
		Diagnosis	ICD-10-CM
E09.3493	Drug or chemical induced diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, bilateral		
		Diagnosis	ICD-10-CM
E09.3499	Drug or chemical induced diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, unspecified eye	Diagnosis	ICD-10-CM
E09.351	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy with macular edema		
		Diagnosis	ICD-10-CM
E09.3511	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy with macular edema, right eye		
500 0540		Diagnosis	ICD-10-CM
E09.3512	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy with macular edema, left eye		
E09.3513	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy with macular edema, bilateral	Diagnosis	ICD-10-CM
200.0010			
E09.3519	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy with macular edema, unspecified eye	Diagnosis	ICD-10-CM
200.0010			
E09.3521	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, right eye	Diagnosis	ICD-10-CM
LU9.3321			
E09.3522	Drug or chamical induced disketes mallitus with proliferative disketic ratio anothy with traction rational data champat involving the magula left ave	Diagnosis	ICD-10-CM
EU9.3522	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, left eye		
500 2522		Diagnosis	ICD-10-CM
E09.3523	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, bilateral		
		Diagnosis	ICD-10-CM
E09.3529	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, unspecified eye		
		Diagnosis	ICD-10-CM
E09.3531	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, right eye		
		Diagnosis	ICD-10-CM



Code	Description	Code Category	Code Type
E09.3532	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, left eye		
E09.3533	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, bilateral	Diagnosis	ICD-10-CM
E09.3539	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, unspecified eye	Diagnosis	ICD-10-CM
E09.3541	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, right eye	Diagnosis	ICD-10-CM
E09.3542	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, left eye	Diagnosis	ICD-10-CM
E09.3543	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, bilateral	Diagnosis	ICD-10-CM
E09.3549	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous	Diagnosis	ICD-10-CM
E09.3549	Drug or chemical induced diabetes mellitus with promerative diabetic retinopathy, right eye	Diagnosis	ICD-10-CM
E09.3551	Drug or chemical induced diabetes mellitus with stable proliferative diabetic retinopathy, light eye	Diagnosis	ICD-10-CM
E09.3553	Drug or chemical induced diabetes mellitus with stable proliferative diabetic retinopathy, icrease	Diagnosis	ICD-10-CM
E09.3559	Drug or chemical induced diabetes mellitus with stable proliferative diabetic retinopathy, unspecified eye	Diagnosis	ICD-10-CM
		Diagnosis	ICD-10-CM
E09.359 E09.3591	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy without macular edema Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy without macular edema, right eye	Diagnosis	ICD-10-CM
E09.3592	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy without macular edema, left eye	Diagnosis	ICD-10-CM
E09.3593	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy without macular edema, bilateral	Diagnosis	ICD-10-CM
		Diagnosis	ICD-10-CM
E09.3599	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy without macular edema, unspecified eye	Diagnosis	ICD-10-CM



Codo	Description	Code Cotegory	
Code E09.36	Description Drug or chemical induced diabetes mellitus with diabetic cataract	Code Category	Code Type
200100		Diagnosis	ICD-10-CM
E09.37X1	Drug or chemical induced diabetes mellitus with diabetic macular edema, resolved following treatment, right eye	Diagnosis	
		Diagnosis	ICD-10-CM
E09.37X2	Drug or chemical induced diabetes mellitus with diabetic macular edema, resolved following treatment, left eye	0	
		Diagnosis	ICD-10-CM
E09.37X3	Drug or chemical induced diabetes mellitus with diabetic macular edema, resolved following treatment, bilateral		
		Diagnosis	ICD-10-CM
E09.37X9	Drug or chemical induced diabetes mellitus with diabetic macular edema, resolved following treatment, unspecified eye	Diagnosis	ICD-10-CM
E09.39	Drug or chemical induced diabetes mellitus with other diabetic ophthalmic complication		
		Diagnosis	ICD-10-CM
E09.40	Drug or chemical induced diabetes mellitus with neurological complications with diabetic neuropathy, unspecified	Diagnosis	ICD-10-CM
E09.41	Drug or chemical induced diabetes mellitus with neurological complications with diabetic mononeuropathy	Diagnosis	ICD-10-CM
E09.42	Drug or chemical induced diabetes mellitus with neurological complications with diabetic polyneuropathy		
		Diagnosis	ICD-10-CM
E09.43	Drug or chemical induced diabetes mellitus with neurological complications with diabetic autonomic (poly)neuropathy	Diagnosis	ICD-10-CM
E09.44	Drug or chemical induced diabetes mellitus with neurological complications with diabetic amyotrophy		
		Diagnosis	ICD-10-CM
E09.49	Drug or chemical induced diabetes mellitus with neurological complications with other diabetic neurological complication	Diagnosis	ICD-10-CM
E09.51	Drug or chemical induced diabetes mellitus with diabetic peripheral angiopathy without gangrene	Diagnosis	ICD-10-CM
E09.52	Drug or chemical induced diabetes mellitus with diabetic peripheral angiopathy with gangrene	Diagnosis	ICD-10-CM
E09.59	Drug or chemical induced diabetes mellitus with other circulatory complications	Diagnosis	ICD-10-CM
E09.610	Drug or chemical induced diabetes mellitus with diabetic neuropathic arthropathy	Diagnosis	ICD-10-CM
E09.618	Drug or chemical induced diabetes mellitus with other diabetic arthropathy	Diagnosis	ICD-10-CM
E09.620	Drug or chemical induced diabetes mellitus with diabetic dermatitis	Diagnosis	ICD-10-CM
E09.621	Drug or chemical induced diabetes mellitus with foot ulcer	Diagnosis	ICD-10-CM
E09.622	Drug or chemical induced diabetes mellitus with other skin ulcer	Diagnosis	ICD-10-CM
		-	



Code	Description	Code Category	Code Type
E09.628	Drug or chemical induced diabetes mellitus with other skin complications	Diagnosis	ICD-10-CM
E09.630	Drug or chemical induced diabetes mellitus with periodontal disease	Diagnosis	ICD-10-CM
E09.638	Drug or chemical induced diabetes mellitus with other oral complications	Diagnosis	ICD-10-CM
E09.641	Drug or chemical induced diabetes mellitus with hypoglycemia with coma	Diagnosis	ICD-10-CM
E09.649	Drug or chemical induced diabetes mellitus with hypoglycemia without coma	Diagnosis	ICD-10-CM
E09.65	Drug or chemical induced diabetes mellitus with hyperglycemia	Diagnosis	ICD-10-CM
E09.69	Drug or chemical induced diabetes mellitus with other specified complication	Diagnosis	ICD-10-CM
E09.8	Drug or chemical induced diabetes mellitus with unspecified complications	Diagnosis	ICD-10-CM
E09.9	Drug or chemical induced diabetes mellitus without complications	Diagnosis	ICD-10-CM
E10.10	Type 1 diabetes mellitus with ketoacidosis without coma	Diagnosis	ICD-10-CM
E10.11	Type 1 diabetes mellitus with ketoacidosis with coma	Diagnosis	ICD-10-CM
E10.21	Type 1 diabetes mellitus with diabetic nephropathy	Diagnosis	ICD-10-CM
E10.22	Type 1 diabetes mellitus with diabetic chronic kidney disease	Diagnosis	ICD-10-CM
E10.29	Type 1 diabetes mellitus with other diabetic kidney complication	Diagnosis	ICD-10-CM
E10.311	Type 1 diabetes mellitus with unspecified diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E10.319	Type 1 diabetes mellitus with unspecified diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E10.321	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E10.3211	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, right eye	Diagnosis	ICD-10-CM
E10.3212	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, left eye	Diagnosis	ICD-10-CM
E10.3213	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, bilateral	-	
		Diagnosis	ICD-10-CM
E10.3219	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, unspecified eye	Diagnosis	ICD-10-CM
E10.329	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E10.3291	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, right eye	Diagnosis	ICD-10-CM
E10.3292	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, left eye	Diagnosis	ICD-10-CM
E10.3293	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, bilateral		
		Diagnosis	ICD-10-CM



Code	Description	Code Category	Code Type
E10.3299	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, unspecified eye	Diagnosis	ICD-10-CM
E10.331	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E10.3311	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, right eye	Diagnosis	ICD-10-CM
E10.3312	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, left eye	Diagnosis	ICD-10-CM
E10.3313	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, bilateral		
E10.3319	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, unspecified eye	Diagnosis	ICD-10-CM
E10.3319	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema.	Diagnosis	ICD-10-CM
L10.339	Type I diabetes menitus with moderate nonpromerative diabetic retinopathy without macdial edema	Diagnosis	ICD-10-CM
E10.3391	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, right eye	Diagnosis	
		Diagnosis	ICD-10-CM
E10.3392	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, left eye	Bidghosis	
		Diagnosis	ICD-10-CM
E10.3393	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, bilateral		
		Diagnosis	ICD-10-CM
E10.3399	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, unspecified eye	Diagnosis	ICD-10-CM
E10.341	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E10.3411	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, right eye	Diagnosis	ICD-10-CM
E10.3412	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, left eye	Diagnosis	ICD-10-CM
E10.3413	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, bilateral		
		Diagnosis	ICD-10-CM
E10.3419	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, unspecified eye	Diagnosis	ICD-10-CM
E10.349	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E10.3491	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, right eye	Diagnosis	ICD-10-CM
E10.3492	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, left eye	Diagnosis	ICD-10-CM
E10.3493	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, bilateral	0	
		Diagnosis	ICD-10-CM
E10.3499	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, unspecified eye	Diagnosis	ICD-10-CM



Code	Description	Code Category	Code Type
E10.351	Type 1 diabetes mellitus with proliferative diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E10.3511	Type 1 diabetes mellitus with proliferative diabetic retinopathy with macular edema, right eye	Diagnosis	ICD-10-CM
E10.3512	Type 1 diabetes mellitus with proliferative diabetic retinopathy with macular edema, left eye	Diagnosis	ICD-10-CM
E10.3513	Type 1 diabetes mellitus with proliferative diabetic retinopathy with macular edema, bilateral	Diagnosis	ICD-10-CM
E10.3519	Type 1 diabetes mellitus with proliferative diabetic retinopathy with macular edema, unspecified eye	-	
E10.3521	Type 1 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, right eye	Diagnosis	ICD-10-CM
E10.3522	Type 1 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, left eye	Diagnosis	ICD-10-CM
E10.3523	Type 1 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, bilateral	Diagnosis	ICD-10-CM
E10.3529	Type 1 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, unspecified eye	Diagnosis	ICD-10-CM
E10.3531	Type 1 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, right eye	Diagnosis	ICD-10-CM
E10.3532	Type 1 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, left eye	Diagnosis	ICD-10-CM
E10.3533	Type 1 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, bilateral	Diagnosis	ICD-10-CM
E10.3539	Type 1 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, unspecified eye	Diagnosis	ICD-10-CM
E10.3541	Type 1 diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment,	Diagnosis	ICD-10-CM
E10.3542	right eye Type 1 diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment,	Diagnosis	ICD-10-CM
	left eye	Diagnosis	ICD-10-CM



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Code E10.3543	Description Type 1 diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment,	Code Category	Code Type
210.0010	bilateral		
E10.3549	Type 1 diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment,	Diagnosis	ICD-10-CM
E10.3551	Type 1 diabetes mellitus with stable proliferative diabetic retinopathy, right eye	Diagnosis	ICD-10-CM
E10.3551		Diagnosis	ICD-10-CM
	Type 1 diabetes mellitus with stable proliferative diabetic retinopathy, left eye	Diagnosis	ICD-10-CM
E10.3553	Type 1 diabetes mellitus with stable proliferative diabetic retinopathy, bilateral	Diagnosis	ICD-10-CM
E10.3559	Type 1 diabetes mellitus with stable proliferative diabetic retinopathy, unspecified eye	Diagnosis	ICD-10-CM
E10.359	Type 1 diabetes mellitus with proliferative diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E10.3591	Type 1 diabetes mellitus with proliferative diabetic retinopathy without macular edema, right eye	Diagnosis	ICD-10-CM
E10.3592	Type 1 diabetes mellitus with proliferative diabetic retinopathy without macular edema, left eye	Diagnosis	ICD-10-CM
E10.3593	Type 1 diabetes mellitus with proliferative diabetic retinopathy without macular edema, bilateral	Diagnosis	ICD-10-CM
E10.3599	Type 1 diabetes mellitus with proliferative diabetic retinopathy without macular edema, unspecified eye	Diagnosis	ICD-10-CM
E10.36	Type 1 diabetes mellitus with diabetic cataract	Diagnosis	ICD-10-CM
E10.37X1	Type 1 diabetes mellitus with diabetic macular edema, resolved following treatment, right eye	Diagnosis	ICD-10-CM
E10.37X2	Type 1 diabetes mellitus with diabetic macular edema, resolved following treatment, left eye	Diagnosis	ICD-10-CM
E10.37X3	Type 1 diabetes mellitus with diabetic macular edema, resolved following treatment, bilateral	Diagnosis	ICD-10-CM
E10.37X9	Type 1 diabetes mellitus with diabetic macular edema, resolved following treatment, unspecified eye	Diagnosis	ICD-10-CM
E10.39	Type 1 diabetes mellitus with other diabetic ophthalmic complication	Diagnosis	ICD-10-CM
E10.40	Type 1 diabetes mellitus with diabetic neuropathy, unspecified	Diagnosis	ICD-10-CM
E10.41	Type 1 diabetes mellitus with diabetic mononeuropathy	Diagnosis	ICD-10-CM
E10.42	Type 1 diabetes mellitus with diabetic polyneuropathy	Diagnosis	ICD-10-CM
E10.43	Type 1 diabetes mellitus with diabetic autonomic (poly)neuropathy	Diagnosis	ICD-10-CM
E10.44	Type 1 diabetes mellitus with diabetic amyotrophy	Diagnosis	ICD-10-CM
E10.49	Type 1 diabetes mellitus with other diabetic neurological complication	Diagnosis	ICD-10-CM
E10.51	Type 1 diabetes mellitus with diabetic peripheral angiopathy without gangrene	U U	
E10.52	Type 1 diabetes mellitus with diabetic peripheral angiopathy with gangrene	Diagnosis	ICD-10-CM
210.52	Type I address mental address perprised angiopatity with Sangrene	Diagnosis	ICD-10-CM



Code	Description	Code Category	Code Type
E10.59	Type 1 diabetes mellitus with other circulatory complications	Diagnosis	ICD-10-CM
E10.610	Type 1 diabetes mellitus with diabetic neuropathic arthropathy	Diagnosis	ICD-10-CM
E10.618	Type 1 diabetes mellitus with other diabetic arthropathy	Diagnosis	ICD-10-CM
E10.620	Type 1 diabetes mellitus with diabetic dermatitis	Diagnosis	ICD-10-CM
E10.621	Type 1 diabetes mellitus with foot ulcer	Diagnosis	ICD-10-CM
E10.622	Type 1 diabetes mellitus with other skin ulcer	Diagnosis	ICD-10-CM
E10.628	Type 1 diabetes mellitus with other skin complications	Diagnosis	ICD-10-CM
E10.630	Type 1 diabetes mellitus with periodontal disease	Diagnosis	ICD-10-CM
E10.638	Type 1 diabetes mellitus with other oral complications	Diagnosis	ICD-10-CM
E10.641	Type 1 diabetes mellitus with hypoglycemia with coma	Diagnosis	ICD-10-CM
E10.649	Type 1 diabetes mellitus with hypoglycemia without coma	Diagnosis	ICD-10-CM
E10.65	Type 1 diabetes mellitus with hyperglycemia	Diagnosis	ICD-10-CM
E10.69	Type 1 diabetes mellitus with other specified complication	Diagnosis	ICD-10-CM
E10.8	Type 1 diabetes mellitus with unspecified complications	Diagnosis	ICD-10-CM
E10.9	Type 1 diabetes mellitus without complications		
		Diagnosis	ICD-10-CM
E11.00	Type 2 diabetes mellitus with hyperosmolarity without nonketotic hyperglycemic-hyperosmolar coma (NKHHC)	Diagnosis	ICD-10-CM
E11.01	Type 2 diabetes mellitus with hyperosmolarity with coma	Diagnosis	ICD-10-CM
E11.10	Type 2 diabetes mellitus with ketoacidosis without coma	Diagnosis	ICD-10-CM
E11.11	Type 2 diabetes mellitus with ketoacidosis with coma	Diagnosis	ICD-10-CM
E11.21	Type 2 diabetes mellitus with diabetic nephropathy	Diagnosis	ICD-10-CM
E11.22	Type 2 diabetes mellitus with diabetic chronic kidney disease	Diagnosis	ICD-10-CM
E11.29	Type 2 diabetes mellitus with other diabetic kidney complication	Diagnosis	ICD-10-CM
E11.311	Type 2 diabetes mellitus with unspecified diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E11.319	Type 2 diabetes mellitus with unspecified diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E11.321	Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E11.3211	Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, right eye	Diagnosis	ICD-10-CM



Code	Description	Code Category	Code Type
E11.3212	Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, left eye	Diagnosis	ICD-10-CM
E11.3213	Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, bilateral		
		Diagnosis	ICD-10-CM
E11.3219	Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, unspecified eye	Diagnosis	ICD-10-CM
E11.329	Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E11.3291	Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, right eye	Diagnosis	ICD-10-CM
E11.3292	Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, left eye	Diagnosis	ICD-10-CM
E11.3293	Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, bilateral		
		Diagnosis	ICD-10-CM
E11.3299	Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, unspecified eye	Diagnosis	ICD-10-CM
E11.331	Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E11.3311	Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, right eye	Diagnosis	ICD-10-CM
E11.3312	Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, left eye	Diagnosis	ICD-10-CM
E11.3313	Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, bilateral		
E11.3319	Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, unspecified eye	Diagnosis	ICD-10-CM
E11.3319	Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, dispectined eye	Diagnosis	ICD-10-CM
E11.559	Type 2 diabetes menitus with moderate nonpromerative diabetic retinopatity without macular edema	Diamaria	
E11.3391	Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, right eye	Diagnosis	ICD-10-CM
211.5551		Diagnosis	ICD-10-CM
E11.3392	Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, left eye	Diagnosis	
	· / · · · · · · · · · · · · · · · · · ·	Diagnosis	ICD-10-CM
E11.3393	Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, bilateral	Diagnosis	
		Diagnosis	ICD-10-CM
E11.3399	Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, unspecified eye	0	
E11.341	Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E11.3411	Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, right eye	Diagnosis	ICD-10-CM
E11.3411	Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, light eye	Diagnosis	ICD-10-CM
L11.341Z	Type 2 diabetes menitus with severe nonpromerative diabetic retinopathy with matular edema, left eye	Diagnosis	ICD-10-CM



Code E11.3413	Description Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, bilateral	Code Category	Code Type
E11.3413	Type 2 diabetes mentus with severe honpromerative diabetic retinopathy with macular edema, bilateral	Diagnosis	ICD-10-CM
E11.3419	Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, unspecified eye	Diagnosis	ICD-10-CM
E11.349	Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E11.3491	Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, right eye	Diagnosis	ICD-10-CM
E11.3492	Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, left eye	Diagnosis	ICD-10-CM
E11.3493	Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, bilateral	Diagnosis	
		Diagnosis	ICD-10-CM
E11.3499	Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, unspecified eye	Diagnosis	ICD-10-CM
E11.351	Type 2 diabetes mellitus with proliferative diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E11.3511	Type 2 diabetes mellitus with proliferative diabetic retinopathy with macular edema, right eye	Diagnosis	ICD-10-CM
E11.3512	Type 2 diabetes mellitus with proliferative diabetic retinopathy with macular edema, left eye	Diagnosis	ICD-10-CM
E11.3513	Type 2 diabetes mellitus with proliferative diabetic retinopathy with macular edema, bilateral	Diagnosis	ICD-10-CM
E11.3519	Type 2 diabetes mellitus with proliferative diabetic retinopathy with macular edema, unspecified eye		
		Diagnosis	ICD-10-CM
E11.3521	Type 2 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, right eye		
		Diagnosis	ICD-10-CM
E11.3522	Type 2 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, left eye		
		Diagnosis	ICD-10-CM
E11.3523	Type 2 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, bilateral		
		Diagnosis	ICD-10-CM
E11.3529	Type 2 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, unspecified eye		
		Diagnosis	ICD-10-CM
E11.3531	Type 2 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, right eye		
		Diagnosis	ICD-10-CM
E11.3532	Type 2 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, left eye		
		Diagnosis	ICD-10-CM



Code E11.3533	Description Type 2 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, bilateral	Code Category	Code Type
E11.5555	Type 2 diabetes menitus with promerative diabetic retinopathy with traction retinar detachment not involving the macula, bilateral		
E11.3539	Type 2 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, unspecified eye	Diagnosis	ICD-10-CM
L11.5555			
E11.3541	Type 2 diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment,	Diagnosis	ICD-10-CM
211.5541	right eye	5	
E11.3542	Type 2 diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment,	Diagnosis	ICD-10-CM
	left eye	Diagnasia	
E11.3543	Type 2 diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment,	Diagnosis	ICD-10-CM
	bilateral	Diagnosis	ICD-10-CM
E11.3549	Type 2 diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment,	Diagnosis Diagnosis	ICD-10-CIVI
E11.3551	Type 2 diabetes mellitus with stable proliferative diabetic retinopathy, right eye	Diagnosis	ICD-10-CM
E11.3552	Type 2 diabetes mellitus with stable proliferative diabetic retinopathy, left eye	Diagnosis	ICD-10-CM
E11.3553	Type 2 diabetes mellitus with stable proliferative diabetic retinopathy, bilateral	Diagnosis	ICD-10-CM
E11.3559	Type 2 diabetes mellitus with stable proliferative diabetic retinopathy, unspecified eye	Diagnosis	ICD-10-CM
E11.359	Type 2 diabetes mellitus with proliferative diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E11.3591	Type 2 diabetes mellitus with proliferative diabetic retinopathy without macular edema, right eye	Diagnosis	ICD-10-CM
E11.3592	Type 2 diabetes mellitus with proliferative diabetic retinopathy without macular edema, left eye	Diagnosis	ICD-10-CM
E11.3593	Type 2 diabetes mellitus with proliferative diabetic retinopathy without macular edema, bilateral	Diagnosis	ICD-10-CM
E11.3599	Type 2 diabetes mellitus with proliferative diabetic retinopathy without macular edema, unspecified eye	Diagnosis	ICD-10-CM
E11.36	Type 2 diabetes mellitus with diabetic cataract	Diagnosis	ICD-10-CM
E11.37X1	Type 2 diabetes mellitus with diabetic macular edema, resolved following treatment, right eye	Diagnosis	ICD-10-CM
E11.37X2	Type 2 diabetes mellitus with diabetic macular edema, resolved following treatment, left eye	Diagnosis	ICD-10-CM
E11.37X3	Type 2 diabetes mellitus with diabetic macular edema, resolved following treatment, bilateral	Diagnosis	ICD-10-CM
E11.37X9	Type 2 diabetes mellitus with diabetic macular edema, resolved following treatment, unspecified eye	Diagnosis	ICD-10-CM
E11.39	Type 2 diabetes mellitus with other diabetic ophthalmic complication	Diagnosis	ICD-10-CM
E11.40	Type 2 diabetes mellitus with diabetic neuropathy, unspecified	Diagnosis	ICD-10-CM



Code	Description	Code Category	Code Type
E11.41	Type 2 diabetes mellitus with diabetic mononeuropathy	Diagnosis	ICD-10-CM
E11.42	Type 2 diabetes mellitus with diabetic polyneuropathy	Diagnosis	ICD-10-CM
E11.43	Type 2 diabetes mellitus with diabetic autonomic (poly)neuropathy	Diagnosis	ICD-10-CM
E11.44	Type 2 diabetes mellitus with diabetic amyotrophy	Diagnosis	ICD-10-CM
E11.49	Type 2 diabetes mellitus with other diabetic neurological complication	Diagnosis	ICD-10-CM
E11.51	Type 2 diabetes mellitus with diabetic peripheral angiopathy without gangrene	Diagnosis	ICD-10-CM
E11.52	Type 2 diabetes mellitus with diabetic peripheral angiopathy with gangrene	Diagnosis	ICD-10-CM
E11.59	Type 2 diabetes mellitus with other circulatory complications	Diagnosis	ICD-10-CM
E11.610	Type 2 diabetes mellitus with diabetic neuropathic arthropathy	Diagnosis	ICD-10-CM
E11.618	Type 2 diabetes mellitus with other diabetic arthropathy	Diagnosis	ICD-10-CM
E11.620	Type 2 diabetes mellitus with diabetic dermatitis	Diagnosis	ICD-10-CM
E11.621	Type 2 diabetes mellitus with foot ulcer	Diagnosis	ICD-10-CM
E11.622	Type 2 diabetes mellitus with other skin ulcer	Diagnosis	ICD-10-CM
E11.628	Type 2 diabetes mellitus with other skin complications	Diagnosis	ICD-10-CM
E11.630	Type 2 diabetes mellitus with periodontal disease	Diagnosis	ICD-10-CM
E11.638	Type 2 diabetes mellitus with other oral complications	Diagnosis	ICD-10-CM
E11.641	Type 2 diabetes mellitus with hypoglycemia with coma	Diagnosis	ICD-10-CM
E11.649	Type 2 diabetes mellitus with hypoglycemia without coma	Diagnosis	ICD-10-CM
E11.65	Type 2 diabetes mellitus with hyperglycemia	Diagnosis	ICD-10-CM
E11.69	Type 2 diabetes mellitus with other specified complication	Diagnosis	ICD-10-CM
E11.8	Type 2 diabetes mellitus with unspecified complications	Diagnosis	ICD-10-CM
E11.9	Type 2 diabetes mellitus without complications	Ŭ	
		Diagnosis	ICD-10-CM
E13.00	Other specified diabetes mellitus with hyperosmolarity without nonketotic hyperglycemic-hyperosmolar coma (NKHHC)	Diagnosis	ICD-10-CM
E13.01	Other specified diabetes mellitus with hyperosmolarity with coma	Diagnosis	ICD-10-CM
E13.10	Other specified diabetes mellitus with ketoacidosis without coma	Diagnosis	ICD-10-CM
		2.00.0000	



Code	Description	Code Category	Code Type
E13.11	Other specified diabetes mellitus with ketoacidosis with coma	Diagnosis	ICD-10-CM
E13.21	Other specified diabetes mellitus with diabetic nephropathy	Diagnosis	ICD-10-CM
E13.22	Other specified diabetes mellitus with diabetic chronic kidney disease	Diagnosis	ICD-10-CM
E13.29	Other specified diabetes mellitus with other diabetic kidney complication	Diagnosis	ICD-10-CM
E13.311	Other specified diabetes mellitus with unspecified diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E13.319	Other specified diabetes mellitus with unspecified diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E13.321	Other specified diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema		
		Diagnosis	ICD-10-CM
E13.3211	Other specified diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, right eye		
		Diagnosis	ICD-10-CM
E13.3212	Other specified diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, left eye		
		Diagnosis	ICD-10-CM
E13.3213	Other specified diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, bilateral	Diagnosis	ICD-10-CM
E13.3219	Other specified diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, unspecified eye	Diagnosis	ICD-10-CM
E13.329	Other specified diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E13.3291	Other specified diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, right eye	Diagnosis	ICD-10-CM
E13.3292	Other specified diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, left eye	Diagnosis	ICD-10-CM
E13.3293	Other specified diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, bilateral	Diagnosis	ICD-10-CM
E13.3299	Other specified diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, unspecified eye	Diagnosis	ICD-10-CM
E13.331	Other specified diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E13.3311	Other specified diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, right eye	Diagnosis	ICD-10-CM
E13.3312	Other specified diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, left eye	Diagnosis	ICD-10-CM
E13.3313	Other specified diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, bilateral	Diagnosis	ICD-10-CM
E13.3319	Other specified diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, unspecified eye	Diagnosis	ICD-10-CM
E13.339	Other specified diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E13.3391	Other specified diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, right eye	Diagnosis	ICD-10-CM
E13.3392	Other specified diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, left eye	Diagnosis	ICD-10-CM
E13.3393	Other specified diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, bilateral	Diagnosis	ICD-10-CM



Code	Description	Code Category	Code Type
E13.3399	Other specified diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, unspecified eye	Diagnosis	ICD-10-CM
E13.341	Other specified diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E13.3411	Other specified diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, right eye	Diagnosis	ICD-10-CM
E13.3412	Other specified diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, left eye	Diagnosis	ICD-10-CM
E13.3413	Other specified diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, bilateral	Diagnosis	ICD-10-CM
E13.3419	Other specified diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, unspecified eye	Diagnosis	ICD-10-CM
E13.349	Other specified diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E13.3491	Other specified diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, right eye	Diagnosis	ICD-10-CM
E13.3492	Other specified diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, left eye	Diagnosis	ICD-10-CM
E13.3493	Other specified diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, bilateral	Diagnosis	ICD-10-CM
E13.3499	Other specified diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, unspecified eye	Diagnosis	ICD-10-CM
E13.351	Other specified diabetes mellitus with proliferative diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E13.3511	Other specified diabetes mellitus with proliferative diabetic retinopathy with macular edema, right eye	Diagnosis	ICD-10-CM
E13.3512	Other specified diabetes mellitus with proliferative diabetic retinopathy with macular edema, left eye	Diagnosis	ICD-10-CM
E13.3513	Other specified diabetes mellitus with proliferative diabetic retinopathy with macular edema, bilateral	Diagnosis	ICD-10-CM
E13.3519	Other specified diabetes mellitus with proliferative diabetic retinopathy with macular edema, unspecified eye	Diagnosis	ICD-10-CM
E13.3521	Other specified diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, right eye	Diagnosis	ICD-10-CM
E13.3522	Other specified diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, left eye	Diagnosis	ICD-10-CM
E13.3523	Other specified diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, bilateral	Diagnosis	ICD-10-CM
E13.3529	Other specified diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, unspecified eye	Diagnosis	ICD-10-CM
E13.3531	Other specified diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, right eye	Diagnosis	ICD-10-CM
E13.3532	Other specified diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, left eye	Diagnosis	ICD-10-CM
E13.3533	Other specified diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, bilateral	Diagnosis	ICD-10-CM
E13.3539	Other specified diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, unspecified eye	Diagnosis	ICD-10-CM
E13.3541	Other specified diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, right eye	U U	
E13.3542	Other specified diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal	Diagnosis	ICD-10-CM
	detachment, left eye	Diagnosis	ICD-10-CM



Code E13.3543	Description Other specified diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal	Code Category	Code Type
E15.5545	detachment, bilateral		
F12 2F40		Diagnosis	ICD-10-CM
E13.3549	Other specified diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal	Diagnosis	ICD-10-CM
E13.3551	Other specified diabetes mellitus with stable proliferative diabetic retinopathy, right eye	Diagnosis	ICD-10-CM
E13.3552	Other specified diabetes mellitus with stable proliferative diabetic retinopathy, left eye	Diagnosis	ICD-10-CM
E13.3553	Other specified diabetes mellitus with stable proliferative diabetic retinopathy, bilateral	Diagnosis	ICD-10-CM
E13.3559	Other specified diabetes mellitus with stable proliferative diabetic retinopathy, unspecified eye	Diagnosis	ICD-10-CM
E13.359	Other specified diabetes mellitus with proliferative diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E13.3591	Other specified diabetes mellitus with proliferative diabetic retinopathy without macular edema, right eye	Diagnosis	ICD-10-CM
E13.3592	Other specified diabetes mellitus with proliferative diabetic retinopathy without macular edema, left eye	Diagnosis	ICD-10-CM
E13.3593	Other specified diabetes mellitus with proliferative diabetic retinopathy without macular edema, bilateral		
		Diagnosis	ICD-10-CM
E13.3599	Other specified diabetes mellitus with proliferative diabetic retinopathy without macular edema, unspecified eye	Diagnosis	ICD-10-CM
E13.36	Other specified diabetes mellitus with diabetic cataract	Diagnosis	ICD-10-CM
E13.39	Other specified diabetes mellitus with other diabetic ophthalmic complication	Diagnosis	ICD-10-CM
E13.40	Other specified diabetes mellitus with diabetic neuropathy, unspecified	Diagnosis	ICD-10-CM
E13.41	Other specified diabetes mellitus with diabetic mononeuropathy	Diagnosis	ICD-10-CM
E13.42	Other specified diabetes mellitus with diabetic polyneuropathy	Diagnosis	ICD-10-CM
E13.43	Other specified diabetes mellitus with diabetic autonomic (poly)neuropathy	Diagnosis	ICD-10-CM
E13.44	Other specified diabetes mellitus with diabetic amyotrophy	Diagnosis	ICD-10-CM
E13.49	Other specified diabetes mellitus with other diabetic neurological complication	Diagnosis	ICD-10-CM
E13.51	Other specified diabetes mellitus with diabetic peripheral angiopathy without gangrene	Diagnosis	ICD-10-CM
E13.52	Other specified diabetes mellitus with diabetic peripheral angiopathy with gangrene	Diagnosis	ICD-10-CM
E13.59	Other specified diabetes mellitus with other circulatory complications	Diagnosis	ICD-10-CM
E13.610	Other specified diabetes mellitus with diabetic neuropathic arthropathy	C	
E13.618	Other specified diabetes mellitus with other diabetic arthropathy	Diagnosis	ICD-10-CM
E13.620	Other specified diabetes mellitus with diabetic dermatitis	Diagnosis	ICD-10-CM
213.020	other specified diabetes mentas with diabetic definitities	Diagnosis	ICD-10-CM



Code	Description	Code Category	Code Type
E13.621	Other specified diabetes mellitus with foot ulcer	Diagnosis	ICD-10-CM
E13.622	Other specified diabetes mellitus with other skin ulcer	Diagnosis	ICD-10-CM
E13.628	Other specified diabetes mellitus with other skin complications	Diagnosis	ICD-10-CM
E13.630	Other specified diabetes mellitus with periodontal disease	Diagnosis	ICD-10-CM
E13.638	Other specified diabetes mellitus with other oral complications	Diagnosis	ICD-10-CM
E13.641	Other specified diabetes mellitus with hypoglycemia with coma	Diagnosis	ICD-10-CM
E13.649	Other specified diabetes mellitus with hypoglycemia without coma	Diagnosis	ICD-10-CM
E13.65	Other specified diabetes mellitus with hyperglycemia	Diagnosis	ICD-10-CM
E13.69	Other specified diabetes mellitus with other specified complication	Diagnosis	ICD-10-CM
E13.8	Other specified diabetes mellitus with unspecified complications	Diagnosis	ICD-10-CM
E13.9	Other specified diabetes mellitus without complications	Diagnosis	ICD-10-CM

Appendix E. Technical Specifications for this Request

Specifications for Type 2 Request: cder_mpl1p_wp069

The Center for Drug Evaluation and Research (CDER) has requested execution of the Cohort Identification and Descriptive Analysis (CIDA) tool 11.2.3 to quantify beta blocker utilization in the Sentinel Distributed Database (SDD). This request will be executed in either 2 or 3 runs. The cohorts to be included in each run is as follows: Run 1: Includes cohorts 1-8. Run 2: Includes cohort 9.

Run 3: Includes cohorts 1-2.

Query period:	01/01/2008 - Most Recent Availal
Coverage requirement:	Medical & Drug Coverage
Pre-index enrollment requirement:	183 days (for patients > 6 months
Post-index enrollment requirement:	365 days (for scenarios 2,4,6,8 on
Post-episode enrollment requirement for Type 2 analyses:	N/A
Enrollment gap:	45
Age groups (years):	0-1, 2-5, 6-12, 13-17
Stratifications:	Age group, Sex, Calendar year, Be
Censor output categorization:	0-2 months, 3-5 months, 6-8 mon
Restrictions:	None
Distribution of index-defining codes:	Ν

cenario	Index Exposure	Cohort definition	Incident exposure washout period	Incident w/ respect to:	Exclude evidence of days supply if exposure washout includes dispensings	Treatment episode gap	Exposure episode extension	Minimum exposure episode duration	Minimum days supplied	Maximum exposure episode duration	Minimum cumulative dose of index medication	Maximum cumulative dose of index medication	Evaluation period for cumulative dose determination	Care setting	Principal diagnosis position	Forced supply to attach to dispensings	Create Baseline Table?	Censor treatment episode (enc follow-up time) at evidence of
1	Beta Blockers	All valid exposure episodes during the query period.	183	Beta Blockers	Washout lookback period should search for evidence of days supply	N/A	0	1	1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Yes	Death; DP end date; Query end date; Disenrollment; E of Treatment Episode
2	Beta Blockers	All valid exposure episodes during the query period.	183	Beta Blockers	Washout lookback period should search for evidence of days supply	N/A	0	1	1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Yes	Death; DP end date; Query end date; Disenrollment; E of Treatment Episode
6	Beta Blockers	All valid exposure episodes during the query period.	183	Beta Blockers	Washout lookback period should search for evidence of days supply	50% of prior dispensing' s days supplied	0	1	1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Yes	Death; DP end date; Query end date; Disenrollment; Er of Treatment Episode
7	Beta Blockers	All valid exposure episodes during the query period.	183	Beta Blockers	Washout lookback period should search for evidence of days supply	100% of prior dispensing' s days supplied	0	1	1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Yes	Death; DP end date; Query end date; Disenrollment; E of Treatment Episode
8	Beta Blockers	All valid exposure episodes during the query period.	183	Beta Blockers	Washout lookback period should search for evidence of days supply	100% of prior dispensing' s days supplied	0	1	1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Yes	Death; DP end date; Query end date; Disenrollment; E of Treatment Episode
9	Beta Blockers	All valid exposure episodes during the query period.	0	N/A	Washout lookback period should search for evidence of days supply	N/A	0	1	1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Yes	Death; DP end date; Query end date; Disenrollment; E of Treatment Episode



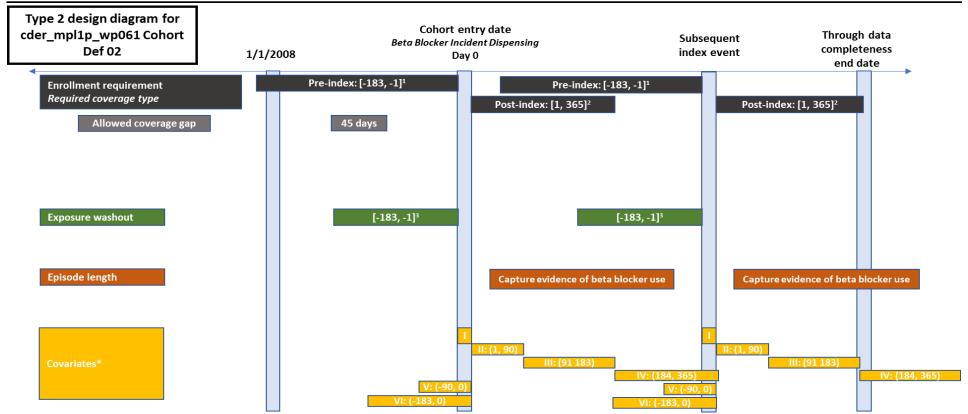
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hs), since birth (for patients < 6 months); Cohorts 1-8 only)

Beta Blocker onths, 9-11 months, ≥12 months



Appendix F. Design Diagram for this Request



*Covariates:

Window I: Age, year, sex, selective beta blockers, non-selective beta blockers, metoprolol (any/regular/ER), propranolol(any/regular/ER), hemangeol, acebutol, atenolol, betaxolol, bisprolol, carvedilol, labetalol, nadolol, nebivolol, pindolol, timolol, hypoglycemia

Window II-IV: hypoglycemia

Window V: Hypertension, hemangioma, heart failure, congenital heart disease, atrial fibrillation, long QT syndrome, other cardiac arrhythmias, cardiac arrhythmias (composite), pulmonary hypertension, cardiomyopathy, coronary artery disease, portal hypertension, anxiety disorder, tremor, migraine, thyrotoxicosis, burns, glaucoma, autism, Marfan's syndrome, pheochromocytoma/paraganglioma, any of the health characteristics, none of the health characteristics

Window VI: Diabetes

¹Enrollment requirements will be less than 183 days for patients under 12 months of age. ²Post-index enrollment will only be required for scenarios 2, 4, 6, 8.