Disclaimer

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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Request ID: cder_mpl1p_wp093

Request Description: In this report, we identified prescriptions for selected central nervous system (CNS) stimulants and a set of comparator drugs and evaluated the proportion of prescriptions that were followed by a dispensing in the Sentinel Distributed Database (SDD). The analysis was repeated in two time periods, one representing a period before a known drug shortage affecting the CNS stimulants of interest, and one representing the shortage period itself. The proportion of prescriptions followed by a dispensing was compared between the CNS stimulants and comparator drugs across time periods using a difference-in-differences approach. FDA attempted to analyze prescribing and dispensing around the time that lisdexamfetamine and methylphenidate products were in shortage; however, exposure data requested by FDA were unavailable for the requested study period.

Sentinel Routine Querying Module: Cohort Identification and Descriptive Analysis (CIDA) module, version 13.1.2, with custom programming

Data Source: We distributed this query to three Sentinel Data Partners: one on August 26, 2024, one on October 8, 2024, and one on November 4, 2024. The study period included data from September 1, 2021, through February 28, 2023. These three Data Partners comprise the subset of the SDD with data available on drugs prescribed and dispensed and do not include patients with Medicare coverage. Please see Appendix A for a list of dates of available data for each Data Partner.

Study Design: We identified prescriptions for use of CNS stimulants or comparator drugs and evaluated the occurrence of a dispensing for that drug within 15 days of the prescription date (inclusive). The analysis was repeated in a pre-shortage and shortage period. The pre-shortage period spanned from September 1, 2021, through February 28, 2022, and the shortage period spanned from September 1, 2022, through February 28, 2023. The change in the proportion of prescriptions followed by a dispensing between each CNS stimulant and each comparator drug was calculated in both time periods and compared to the difference for each comparator using a difference-in-differences approach. The difference-in-differences was calculated overall and within unique strata of calendar month, age group, and calendar month*age group.

We separately identified cohorts comprising all eligible dispensings of the CNS stimulants of interest in each period and assessed the proportion with evidence of a prior prescription. This is a Type 2 analysis in the Query Request Package (QRP) documentation.

Exposures of Interest: The CNS stimulants of interest were immediate release (IR) amphetamine-dextroamphetamine and extended release (ER) amphetamine-dextroamphetamine. The comparator drugs of interest were atomoxetine, fluoxetine, diazepam, atorvastatin, and ER morphine. We defined prescriptions using Generic Product Identifier (GPI) or National Drug Codes (NDCs) as appropriate for each Data Partner. We defined dispensings using NDCs from outpatient pharmacy data. A single member could contribute multiple index prescriptions or dispensings. Please see Appendix B for a list of generic and brand names of medical products used to define exposures in this request.

Outcome of Interest: For the analyses indexing on a prescription, the outcome of interest was a dispensing of the same drug as the index prescription. There was no outcome of interest for the analyses that indexed on a dispensing. Dispensings were defined using NDCs from outpatient pharmacy data. See Appendix B for a list of generic and brand names of medical products used to define outcomes in this request.

Cohort Eligibility Criteria: For all analyses, we required that eligible prescriptions and dispensings came from members enrolled in health plans with medical and drug coverage for at least 30 days prior to their index date. Eligible prescriptions and dispensings came from members who were aged 64 or younger at the time of the prescription or dispensing and were grouped in the following age categories: 0-4, 5-17, 18-29, and 30-64. Additionally, eligible prescriptions had no evidence of an earlier prescription for the same drug in the 14 days prior to the index date.

Follow-up Time: Members with an eligible prescription were followed for a dispensing of the same drug for up to 15 days using an intention-to-treat approach. Follow-up began on the index date and continued until disenrollment, death, end of the data provided by each Data Partner, the end of the query period, or the dispensing date. As a sensitivity analysis, we reduced the maximum follow-up duration to eight days. For those analyses, eligible prescriptions had no evidence of an earlier prescription for the same drug in the seven days prior to the index date. There was no follow-up for cohorts indexing on a dispensing.

Baseline Characteristics: Within each cohort, whether comprised of prescriptions or dispensings, we evaluated the following baseline characteristics on the index date: age, sex, race, Hispanic origin, and calendar year. We also tabulated the proportion with evidence of a prescription for each CNS stimulant of interest in the 30 or 15 days prior to and including the index date. These characteristics were calculated on a member-level. We additionally looked for evidence of the following diagnoses in the 30 days prior to and 60 days following the index date on the episode-level: depression, anxiety, attention deficit/hyperactivity disorder, conduct or adjustment disorders, narcolepsy, and binge-eating disorder. Please see Appendix C for a list of International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) diagnosis codes, Healthcare Common Procedure Coding System (HCPCS) codes, and Current Procedural Terminology, Fourth Edition (CPT-4) and Second Edition (CPT-2) codes used to define baseline characteristics in this request. Please see Appendices D and E for a list of the parameters used in this query. Please see Appendix F for the design diagram.

Limitations: Algorithms to define exposures, outcomes, inclusion and exclusion criteria, and baseline characteristics are imperfect and may be misclassified. Additionally, the prescribing table does not capture the situations in which the prescriber cancels a prescription because the prescribed drug is out-of-stock at the pharmacy, and the prescriber and patient decide to substitute the drug with one that is more likely to be available for dispensing. Results should be interpreted with these limitations in mind.

Notes: 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 the specific routine querying module utilized in this query, please refer to the documentation on exposures and follow-up time within our documentation library accessible at https://dev.sentinelsystem.org/projects/SENTINEL/repos/sentinel-routine-querying-tool-documentation/browse.

	Table of Contents

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 requests.

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

Table 1a. Aggregated Characteristics of Immediate Release (IR) Amphetamine Dextroamphetamine Prescriptions (15 Day Follow-Up), Pre-Shortage Period in the Sentinel Distributed Database (SDD) from September 1, 2021 to February 28, 2022

Patient Characteristics[1]	IR Amphetamine Dextroamphetamine Prescriptions (15 Day Follow-Up), Pre-Shortage Period	
	Number/Mean	Percent/ Standard Deviation[2]
Unique patients	5,306	N/A
Episodes	13,514	100.0%
Demographic Characteristics		
Age (years)	36.5	12.0
Age		
0-4 years	2	0.0%
5-17 years	780	5.8%
18-29 years	3,286	24.3%
30-64 years	9,446	69.9%
Sex		
Female	3,039	57.3%
Male	2,267	42.7%
Race[3]		
American Indian or Alaska Native	23	0.4%
Asian	157	3.0%
Black or African American	221	4.2%
Multi-racial	366	6.9%
Native Hawaiian or Other Pacific Islander	11	0.2%
Unknown	292	5.5%
White	4,236	79.8%
Hispanic origin		
Yes	279	5.3%
No	4,800	90.5%
Unknown	227	4.3%
Year		
2021	9,842	72.8%
2022	3,672	27.2%
2023	0	0.0%
Health Characteristics (-30, 60)		
Depression	1,527	28.8%
Anxiety	2,038	38.4%
Attention-Deficit/Hyperactivity Disorder	3,428	64.6%
Conduct or Adjustment Disorders	275	5.2%
Narcolepsy	48	0.9%
Binge-Eating Disorder	31	0.6%

Table 1a. Aggregated Characteristics of Immediate Release (IR) Amphetamine Dextroamphetamine Prescriptions (15 Day Follow-Up), Pre-Shortage Period in the Sentinel Distributed Database (SDD) from September 1, 2021 to February 28, 2022

Patient Characteristics[1]	IR Amphetamine Dextroamphetamine Prescriptions (15 Day Follow-Up), Pre-Shortage Period	
	Number/Mean	Percent/ Standard Deviation[2]
Medical Product Use		
IR Amphetamine/Dextroamphetamine Prescription (-30, 0)	13,514	100.0%
IR Amphetamine/Dextroamphetamine Prescription (-15, 0)	13,514	100.0%
ER Amphetamine/Dextroamphetamine Prescription (-30, 0)	4,514	33.4%
ER Amphetamine/Dextroamphetamine Prescription (-15, 0)	4,238	31.4%
IR Methylphenidate Prescription (-30, 0)	17	0.1%
IR Methylphenidate Prescription (-15, 0)	10	0.1%
ER Methylphenidate Prescription (-30, 0)	29	0.2%
ER Methylphenidate Prescription (-15, 0)	18	0.1%
Lisdexamfetamine Prescription (-30, 0)	253	1.9%
Lisdexamfetamine Prescription (-15, 0)	226	1.7%

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

[2]Value represents standard deviation where no % follows the value.

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

N/A = Not applicable

Table 1b. Aggregated Characteristics of Immediate Release (IR) Amphetamine Dextroamphetamine Prescriptions (15 Day Follow-Up), Shortage Period in the Sentinel Distributed Database (SDD) from September 1, 2022 to February 28, 2023

Patient Characteristics[1]	IR Amphetamine Dextroamphetamine Prescriptions (15 Day Follow-Up), Shortage Period	
	Number/Mean	Percent/ Standard Deviation[2]
Unique patients	5,920	N/A
Episodes	15,464	100.0%
Demographic Characteristics		
Age (years)	37.0	11.9
Age		
0-4 years	1	0.0%
5-17 years	911	5.9%
18-29 years	3,098	20.0%
30-64 years	11,454	74.1%
Sex		
Female	3,480	58.8%
Male	2,440	41.2%
Race[3]		
American Indian or Alaska Native	28	0.5%
Asian	185	3.1%
Black or African American	245	4.1%
Multi-racial	418	7.1%
Native Hawaiian or Other Pacific Islander	14	0.2%
Unknown	368	6.2%
White	4,662	78.8%
Hispanic origin		
Yes	339	5.7%
No	5,272	89.1%
Unknown	309	5.2%
Year		
2021	0	0.0%
2022	11,014	71.2%
2023	4,450	28.8%
Health Characteristics (-30, 60)		
Depression	1,625	27.4%
Anxiety	2,374	40.1%
Attention-Deficit/Hyperactivity Disorder	3,967	67.0%
Conduct or Adjustment Disorders	331	5.6%
Narcolepsy	48	0.8%
Binge-Eating Disorder	38	0.6%

Table 1b. Aggregated Characteristics of Immediate Release (IR) Amphetamine Dextroamphetamine Prescriptions (15 Day Follow-Up), Shortage Period in the Sentinel Distributed Database (SDD) from September 1, 2022 to February 28, 2023

Patient Characteristics[1]	IR Amphetamine Dextroamphetamine Prescriptions (15 Day Follow-Up), Shortage Period	
	Number/Mean	Percent/ Standard Deviation[2]
Medical Product Use		
IR Amphetamine/Dextroamphetamine Prescription (-30, 0)	15,464	100.0%
IR Amphetamine/Dextroamphetamine Prescription (-15, 0)	15,464	100.0%
ER Amphetamine/Dextroamphetamine Prescription (-30, 0)	5,564	36.0%
ER Amphetamine/Dextroamphetamine Prescription (-15, 0)	5,133	33.2%
IR Methylphenidate Prescription (-30, 0)	26	0.2%
IR Methylphenidate Prescription (-15, 0)	16	0.1%
ER Methylphenidate Prescription (-30, 0)	42	0.3%
ER Methylphenidate Prescription (-15, 0)	30	0.2%
Lisdexamfetamine Prescription (-30, 0)	314	2.0%
Lisdexamfetamine Prescription (-15, 0)	273	1.8%

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

[2]Value represents standard deviation where no % follows the value.

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

N/A = Not applicable

Table 1c. Aggregated Characteristics of Immediate Release (IR) Amphetamine Dextroamphetamine Prescriptions (8 Day Follow-Up), Pre-Shortage Period in the Sentinel Distributed Database (SDD) from September 1, 2021 to February 28, 2022

Patient Characteristics[1]	IR Amphetamine Dextroamphetamine Prescriptions (8 Day Follow-Up), Pre-Shortage Period	
	Number/Mean	Percent/ Standard Deviation[2]
Unique patients	5,441	N/A
Episodes	14,503	100.0%
Demographic Characteristics		
Age (years)	36.5	12.1
Age		
0-4 years	2	0.0%
5-17 years	843	5.8%
18-29 years	3,533	24.4%
30-64 years	10,125	69.8%
Sex		
Female	3,116	57.3%
Male	2,325	42.7%
Race[3]		
American Indian or Alaska Native	23	0.4%
Asian	161	3.0%
Black or African American	230	4.2%
Multi-racial	379	7.0%
Native Hawaiian or Other Pacific Islander	11	0.2%
Unknown	305	5.6%
White	4,332	79.6%
Hispanic origin		
Yes	288	5.3%
No	4,916	90.4%
Unknown	237	4.4%
Year		
2021	10,128	69.8%
2022	4,375	30.2%
2023	0	0.0%
Health Characteristics (-30, 60)		
Depression	1,576	29.0%
Anxiety	2,109	38.8%
Attention-Deficit/Hyperactivity Disorder	3,541	65.1%
Conduct or Adjustment Disorders	283	5.2%
Narcolepsy	49	0.9%
Binge-Eating Disorder	31	0.6%

Table 1c. Aggregated Characteristics of Immediate Release (IR) Amphetamine Dextroamphetamine Prescriptions (8 Day Follow-Up), Pre-Shortage Period in the Sentinel Distributed Database (SDD) from September 1, 2021 to February 28, 2022

Patient Characteristics[1]	IR Amphetamine Dextroamphetamine Prescriptions (8 Day Follow-Up), Pre-Shortage Period	
	Number/Mean	Percent/ Standard Deviation[2]
Medical Product Use		
IR Amphetamine/Dextroamphetamine Prescription (-30, 0)	14,503	100.0%
IR Amphetamine/Dextroamphetamine Prescription (-15, 0)	14,503	100.0%
ER Amphetamine/Dextroamphetamine Prescription (-30, 0)	4,851	33.4%
ER Amphetamine/Dextroamphetamine Prescription (-15, 0)	4,550	31.4%
IR Methylphenidate Prescription (-30, 0)	21	0.1%
IR Methylphenidate Prescription (-15, 0)	13	0.1%
ER Methylphenidate Prescription (-30, 0)	35	0.2%
ER Methylphenidate Prescription (-15, 0)	22	0.2%
Lisdexamfetamine Prescription (-30, 0)	276	1.9%
Lisdexamfetamine Prescription (-15, 0)	248	1.7%

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

[2]Value represents standard deviation where no % follows the value.

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

N/A = Not applicable

Table 1d. Aggregated Characteristics of Immediate Release (IR) Amphetamine Dextroamphetamine Prescriptions (8 Day Follow-Up), Shortage Period in the Sentinel Distributed Database (SDD) from September 1, 2022 to February 28, 2023

Patient Characteristics[1]	IR Amphetamine Dextroamphetamine Prescriptions (8 Day Follow-Up), Shortage Period	
	Number/Mean	Percent/ Standard Deviation[2]
Unique patients	6,030	N/A
Episodes	16,799	100.0%
Demographic Characteristics		
Age (years)	37.0	11.9
Age		
0-4 years	1	0.0%
5-17 years	980	5.8%
18-29 years	3,376	20.1%
30-64 years	12,442	74.1%
Sex		
Female	3,541	58.7%
Male	2,489	41.3%
Race[3]		
American Indian or Alaska Native	31	0.5%
Asian	186	3.1%
Black or African American	251	4.2%
Multi-racial	425	7.0%
Native Hawaiian or Other Pacific Islander	14	0.2%
Unknown	378	6.3%
White	4,745	78.7%
Hispanic origin		
Yes	344	5.7%
No	5,371	89.1%
Unknown	315	5.2%
Year		
2021	0	0.0%
2022	11,501	68.5%
2023	5,298	31.5%
Health Characteristics (-30, 60)		
Depression	1,678	27.8%
Anxiety	2,440	40.5%
Attention-Deficit/Hyperactivity Disorder	4,071	67.5%
Conduct or Adjustment Disorders	342	5.7%
Narcolepsy	48	0.8%
Binge-Eating Disorder	39	0.6%

Table 1d. Aggregated Characteristics of Immediate Release (IR) Amphetamine Dextroamphetamine Prescriptions (8 Day Follow-Up), Shortage Period in the Sentinel Distributed Database (SDD) from September 1, 2022 to February 28, 2023

Patient Characteristics[1]	IR Amphetamine Dextroamphetamine Prescriptions (8 Day Follow-Up), Shortage Period	
	Number/Mean	Percent/ Standard Deviation[2]
Medical Product Use		
IR Amphetamine/Dextroamphetamine Prescription (-30, 0)	16,799	100.0%
IR Amphetamine/Dextroamphetamine Prescription (-15, 0)	16,799	100.0%
ER Amphetamine/Dextroamphetamine Prescription (-30, 0)	6,036	35.9%
ER Amphetamine/Dextroamphetamine Prescription (-15, 0)	5,577	33.2%
IR Methylphenidate Prescription (-30, 0)	35	0.2%
IR Methylphenidate Prescription (-15, 0)	20	0.1%
ER Methylphenidate Prescription (-30, 0)	48	0.3%
ER Methylphenidate Prescription (-15, 0)	34	0.2%
Lisdexamfetamine Prescription (-30, 0)	344	2.0%
Lisdexamfetamine Prescription (-15, 0)	297	1.8%

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

[2]Value represents standard deviation where no % follows the value.

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

N/A = Not applicable

Table 1e. Aggregated Characteristics of Extended Release (ER) Amphetamine Dextroamphetamine Prescriptions (15 Day Follow-Up), Pre-Shortage Period in the Sentinel Distributed Database (SDD) from September 1, 2021 to February 28, 2022

Patient Characteristics[1]	ER Amphetamine Dextroamphetamine Prescriptions (15 Day Follow-Up), Pre-Shortage Period	
	Number/Mean	Percent/ Standard Deviation[2]
Unique patients	7,842	N/A
Episodes	20,272	100.0%
Demographic Characteristics		
Age (years)	33.3	13.2
Age		
0-4 years	7	0.0%
5-17 years	2,860	14.1%
18-29 years	5,444	26.9%
30-64 years	11,961	59.0%
Sex		
Female	4,286	54.7%
Male	3,556	45.3%
Race[3]		
American Indian or Alaska Native	37	0.5%
Asian	242	3.1%
Black or African American	350	4.5%
Multi-racial	592	7.5%
Native Hawaiian or Other Pacific Islander	17	0.2%
Unknown	443	5.6%
White	6,161	78.6%
Hispanic origin		
Yes	479	6.1%
No	7,004	89.3%
Unknown	359	4.6%
Year		
2021	14,852	73.3%
2022	5,420	26.7%
2023	0	0.0%
Health Characteristics (-30, 60)		
Depression	2,152	27.4%
Anxiety	2,848	36.3%
Attention-Deficit/Hyperactivity Disorder	5,315	67.8%
Conduct or Adjustment Disorders	430	5.5%
Narcolepsy	46	0.6%
Binge-Eating Disorder	53	0.7%

Table 1e. Aggregated Characteristics of Extended Release (ER) Amphetamine Dextroamphetamine Prescriptions (15 Day Follow-Up), Pre-Shortage Period in the Sentinel Distributed Database (SDD) from September 1, 2021 to February 28, 2022

Patient Characteristics[1]	ER Amphetamine Dextroamphetamine Prescriptions (15 Day Follow-Up), Pre-Shortage Period	
	Number/Mean	Percent/ Standard Deviation[2]
Medical Product Use		
IR Amphetamine/Dextroamphetamine Prescription (-30, 0)	4,523	22.3%
IR Amphetamine/Dextroamphetamine Prescription (-15, 0)	4,242	20.9%
ER Amphetamine/Dextroamphetamine Prescription (-30, 0)	20,272	100.0%
ER Amphetamine/Dextroamphetamine Prescription (-15, 0)	20,272	100.0%
IR Methylphenidate Prescription (-30, 0)	55	0.3%
IR Methylphenidate Prescription (-15, 0)	53	0.3%
ER Methylphenidate Prescription (-30, 0)	56	0.3%
ER Methylphenidate Prescription (-15, 0)	29	0.1%
Lisdexamfetamine Prescription (-30, 0)	75	0.4%
Lisdexamfetamine Prescription (-15, 0)	52	0.3%

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

[2]Value represents standard deviation where no % follows the value.

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

N/A = Not applicable

Table 1f. Aggregated Characteristics of Extended Release (ER) Amphetamine Dextroamphetamine Prescriptions (15 Day Follow-Up), Shortage Period in the Sentinel Distributed Database (SDD) from September 1, 2022 to February 28, 2023

Patient Characteristics[1]	ER Amphetamine Dextroamphetamine Prescriptions (15 Day Follow-Up), Shortage Period	
	Number/Mean	Percent/ Standard Deviation[2]
Unique patients	8,880	N/A
Episodes	23,927	100.0%
Demographic Characteristics		
Age (years)	33.5	13.2
Age		
0-4 years	8	0.0%
5-17 years	3,480	14.5%
18-29 years	5,927	24.8%
30-64 years	14,512	60.7%
Sex		
Female	4,902	55.2%
Male	3,978	44.8%
Race[3]		
American Indian or Alaska Native	40	0.5%
Asian	298	3.4%
Black or African American	354	4.0%
Multi-racial	643	7.2%
Native Hawaiian or Other Pacific Islander	19	0.2%
Unknown	609	6.9%
White	6,917	77.9%
Hispanic origin		
Yes	598	6.7%
No	7,803	87.9%
Unknown	479	5.4%
Year		
2021	0	0.0%
2022	16,883	70.6%
2023	7,044	29.4%
Health Characteristics (-30, 60)		
Depression	2,366	26.6%
Anxiety	3,397	38.3%
Attention-Deficit/Hyperactivity Disorder	6,243	70.3%
Conduct or Adjustment Disorders	570	6.4%
Narcolepsy	47	0.5%
Binge-Eating Disorder	63	0.7%

Table 1f. Aggregated Characteristics of Extended Release (ER) Amphetamine Dextroamphetamine Prescriptions (15 Day Follow-Up), Shortage Period in the Sentinel Distributed Database (SDD) from September 1, 2022 to February 28, 2023

Patient Characteristics[1]	ER Amphetamine Dextroamphetamine Prescriptions (15 Day Follow-Up), Shortage Period	
	Number/Mean	Percent/ Standard Deviation[2]
Medical Product Use		
IR Amphetamine/Dextroamphetamine Prescription (-30, 0)	5,527	23.1%
IR Amphetamine/Dextroamphetamine Prescription (-15, 0)	5,117	21.4%
ER Amphetamine/Dextroamphetamine Prescription (-30, 0)	23,927	100.0%
ER Amphetamine/Dextroamphetamine Prescription (-15, 0)	23,927	100.0%
IR Methylphenidate Prescription (-30, 0)	73	0.3%
IR Methylphenidate Prescription (-15, 0)	64	0.3%
ER Methylphenidate Prescription (-30, 0)	103	0.4%
ER Methylphenidate Prescription (-15, 0)	64	0.3%
Lisdexamfetamine Prescription (-30, 0)	119	0.5%
Lisdexamfetamine Prescription (-15, 0)	93	0.4%

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

[2]Value represents standard deviation where no % follows the value.

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

N/A = Not applicable

Table 1g. Aggregated Characteristics of Extended Release (ER) Amphetamine Dextroamphetamine Prescriptions (8 Day Follow-Up), Pre-Shortage Period in the Sentinel Distributed Database (SDD) from September 1, 2021 to February 28, 2022

Patient Characteristics[1]	ER Amphetamine Dextroamphetamine Prescriptions (8 Day Follow-Up), Pre-Shortage Period	
	Number/Mean	Percent/ Standard Deviation[2]
Unique patients	8,020	N/A
Episodes	21,745	100.0%
Demographic Characteristics		
Age (years)	33.2	13.2
Age		
0-4 years	8	0.0%
5-17 years	3,093	14.2%
18-29 years	5,871	27.0%
30-64 years	12,773	58.7%
Sex		
Female	4,384	54.7%
Male	3,636	45.3%
Race[3]		
American Indian or Alaska Native	41	0.5%
Asian	247	3.1%
Black or African American	364	4.5%
Multi-racial	608	7.6%
Native Hawaiian or Other Pacific Islander	18	0.2%
Unknown	457	5.7%
White	6,285	78.4%
Hispanic origin		
Yes	487	6.1%
No	7,161	89.3%
Unknown	372	4.6%
Year		
2021	15,352	70.6%
2022	6,393	29.4%
2023	0	0.0%
Health Characteristics (-30, 60)		
Depression	2,223	27.7%
Anxiety	2,956	36.9%
Attention-Deficit/Hyperactivity Disorder	5,469	68.2%
Conduct or Adjustment Disorders	440	5.5%
Narcolepsy	47	0.6%
Binge-Eating Disorder	56	0.7%

Table 1g. Aggregated Characteristics of Extended Release (ER) Amphetamine Dextroamphetamine Prescriptions (8 Day Follow-Up), Pre-Shortage Period in the Sentinel Distributed Database (SDD) from September 1, 2021 to February 28, 2022

Patient Characteristics[1]	ER Amphetamine Dextroamphetamine Prescriptions (8 Day Follow-Up), Pre-Shortage Period	
	Number/Mean	Percent/ Standard Deviation[2]
Medical Product Use		
IR Amphetamine/Dextroamphetamine Prescription (-30, 0)	4,869	22.4%
IR Amphetamine/Dextroamphetamine Prescription (-15, 0)	4,569	21.0%
ER Amphetamine/Dextroamphetamine Prescription (-30, 0)	21,745	100.0%
ER Amphetamine/Dextroamphetamine Prescription (-15, 0)	21,745	100.0%
IR Methylphenidate Prescription (-30, 0)	59	0.3%
IR Methylphenidate Prescription (-15, 0)	57	0.3%
ER Methylphenidate Prescription (-30, 0)	59	0.3%
ER Methylphenidate Prescription (-15, 0)	29	0.1%
Lisdexamfetamine Prescription (-30, 0)	78	0.4%
Lisdexamfetamine Prescription (-15, 0)	54	0.2%

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

[2]Value represents standard deviation where no % follows the value.

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

N/A = Not applicable

Table 1h. Aggregated Characteristics of Extended Release (ER) Amphetamine Dextroamphetamine Prescriptions (8 Day Follow-Up), Shortage Period in the Sentinel Distributed Database (SDD) from September 1, 2022 to February 28, 2023

Patient Characteristics[1]	ER Amphetamine Dextroamphetamine Prescriptions (8 Day Follow-Up), Shortage Period	
	Number/Mean	Percent/ Standard Deviation[2]
Unique patients	9,093	N/A
Episodes	25,899	100.0%
Demographic Characteristics		
Age (years)	33.4	13.3
Age		
0-4 years	11	0.0%
5-17 years	3,830	14.8%
18-29 years	6,417	24.8%
30-64 years	15,641	60.4%
Sex		
Female	5,009	55.1%
Male	4,084	44.9%
Race[3]		
American Indian or Alaska Native	41	0.5%
Asian	306	3.4%
Black or African American	363	4.0%
Multi-racial	661	7.3%
Native Hawaiian or Other Pacific Islander	19	0.2%
Unknown	627	6.9%
White	7,076	77.8%
Hispanic origin		
Yes	610	6.7%
No	7,987	87.8%
Unknown	496	5.5%
Year		
2021	0	0.0%
2022	17,470	67.5%
2023	8,429	32.5%
Health Characteristics (-30, 60)		
Depression	2,450	26.9%
Anxiety	3,504	38.5%
Attention-Deficit/Hyperactivity Disorder	6,445	70.9%
Conduct or Adjustment Disorders	592	6.5%
Narcolepsy	49	0.5%
Binge-Eating Disorder	64	0.7%

Table 1h. Aggregated Characteristics of Extended Release (ER) Amphetamine Dextroamphetamine Prescriptions (8 Day Follow-Up), Shortage Period in the Sentinel Distributed Database (SDD) from September 1, 2022 to February 28, 2023

Patient Characteristics[1]	ER Amphetamine Dextroamphetamine Prescriptions (8 Day Follow-Up), Shortage Period	
	Number/Mean	Percent/ Standard Deviation[2]
Medical Product Use		
IR Amphetamine/Dextroamphetamine Prescription (-30, 0)	6,023	23.3%
IR Amphetamine/Dextroamphetamine Prescription (-15, 0)	5,569	21.5%
ER Amphetamine/Dextroamphetamine Prescription (-30, 0)	25,899	100.0%
ER Amphetamine/Dextroamphetamine Prescription (-15, 0)	25,899	100.0%
IR Methylphenidate Prescription (-30, 0)	81	0.3%
IR Methylphenidate Prescription (-15, 0)	70	0.3%
ER Methylphenidate Prescription (-30, 0)	121	0.5%
ER Methylphenidate Prescription (-15, 0)	78	0.3%
Lisdexamfetamine Prescription (-30, 0)	137	0.5%
Lisdexamfetamine Prescription (-15, 0)	105	0.4%

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

[2]Value represents standard deviation where no % follows the value.

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

N/A = Not applicable

Table 1i. Aggregated Characteristics of Atomoxetine IR Prescriptions (15 Day Follow-Up), Pre-Shortage Period in the Sentinel Distributed Database (SDD) from September 1, 2021 to February 28, 2022

	Atomoxetine IR Prescriptions (15 Day Follow-Up), Pre-Shortage Period	
Patient Characteristics[1]	Number/Mean	Percent/ Standard Deviation[2]
Unique patients	1,041	N/A
Episodes	1,581	100.0%
Demographic Characteristics		
Age (years)	29.1	13.7
Age		
0-4 years	0	0.0%
5-17 years	410	25.9%
18-29 years	452	28.6%
30-64 years	719	45.5%
Sex		
Female	589	56.6%
Male	452	43.4%
Race[3]		
American Indian or Alaska Native	2	0.2%
Asian	31	3.0%
Black or African American	44	4.2%
Multi-racial	93	8.9%
Native Hawaiian or Other Pacific Islander	1	0.1%
Unknown	53	5.1%
White	817	78.5%
Hispanic origin		
Yes	80	7.7%
No	917	88.1%
Unknown	44	4.2%
Year		
2021	1,140	72.1%
2022	441	27.9%
2023	0	0.0%
Health Characteristics (-30, 60)		
Depression	400	38.4%
Anxiety	602	57.8%
Attention-Deficit/Hyperactivity Disorder	726	69.7%
Conduct or Adjustment Disorders	90	8.6%
Narcolepsy	0	0.0%
Binge-Eating Disorder	17	1.6%

Table 1i. Aggregated Characteristics of Atomoxetine IR Prescriptions (15 Day Follow-Up), Pre-Shortage Period in the Sentinel Distributed Database (SDD) from September 1, 2021 to February 28, 2022

Patient Characteristics[1]	Atomoxetine IR Prescriptions (15 Day Follow-Up), Pre-Shortage Period	
	Number/Mean	Percent/ Standard Deviation[2]
Medical Product Use		
IR Amphetamine/Dextroamphetamine Prescription (-30, 0)	39	2.5%
IR Amphetamine/Dextroamphetamine Prescription (-15, 0)	27	1.7%
ER Amphetamine/Dextroamphetamine Prescription (-30, 0)	52	3.3%
ER Amphetamine/Dextroamphetamine Prescription (-15, 0)	42	2.7%
IR Methylphenidate Prescription (-30, 0)	13	0.8%
IR Methylphenidate Prescription (-15, 0)	10	0.6%
ER Methylphenidate Prescription (-30, 0)	33	2.1%
ER Methylphenidate Prescription (-15, 0)	24	1.5%
Lisdexamfetamine Prescription (-30, 0)	25	1.6%
Lisdexamfetamine Prescription (-15, 0)	21	1.3%

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

[2]Value represents standard deviation where no % follows the value.

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

N/A = Not applicable

Table 1j. Aggregated Characteristics of Atomoxetine IR Prescriptions (15 Day Follow-Up), Shortage Period in the Sentinel Distributed Database (SDD) from September 1, 2022 to February 28, 2023

Patient Characteristics[1]	Number/Mean	Percent/ Standard Deviation[2]
	Atomoxetine IR Prescriptions (15 Day Follow-Up), Shortage Period	
Unique patients	1,211	N/A
Episodes	1,797	100.0%
Demographic Characteristics		
Age (years)	29.7	13.9
Age		
0-4 years	1	0.1%
5-17 years	457	25.4%
18-29 years	467	26.0%
30-64 years	872	48.5%
Sex		
Female	673	55.6%
Male	538	44.4%
Race[3]		
American Indian or Alaska Native	5	0.4%
Asian	45	3.7%
Black or African American	45	3.7%
Multi-racial	105	8.7%
Native Hawaiian or Other Pacific Islander	1	0.1%
Unknown	81	6.7%
White	929	76.7%
Hispanic origin		
Yes	66	5.5%
No	1,079	89.1%
Unknown	66	5.5%
Year		
2021	0	0.0%
2022	1,285	71.5%
2023	512	28.5%
Health Characteristics (-30, 60)		
Depression	430	35.5%
Anxiety	691	57.1%
Attention-Deficit/Hyperactivity Disorder	860	71.0%
Conduct or Adjustment Disorders	72	5.9%
Narcolepsy	4	0.3%
Binge-Eating Disorder	8	0.7%

Table 1j. Aggregated Characteristics of Atomoxetine IR Prescriptions (15 Day Follow-Up), Shortage Period in the Sentinel Distributed Database (SDD) from September 1, 2022 to February 28, 2023

Patient Characteristics[1]	Atomoxetine IR Prescriptions (15 Day Follow-Up), Shortage Period	
	Number/Mean	Percent/ Standard Deviation[2]
Medical Product Use		
IR Amphetamine/Dextroamphetamine Prescription (-30, 0)	42	2.3%
IR Amphetamine/Dextroamphetamine Prescription (-15, 0)	28	1.6%
ER Amphetamine/Dextroamphetamine Prescription (-30, 0)	76	4.2%
ER Amphetamine/Dextroamphetamine Prescription (-15, 0)	59	3.3%
IR Methylphenidate Prescription (-30, 0)	11	0.6%
IR Methylphenidate Prescription (-15, 0)	8	0.4%
ER Methylphenidate Prescription (-30, 0)	43	2.4%
ER Methylphenidate Prescription (-15, 0)	31	1.7%
Lisdexamfetamine Prescription (-30, 0)	33	1.8%
Lisdexamfetamine Prescription (-15, 0)	25	1.4%

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

[2]Value represents standard deviation where no % follows the value.

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

N/A = Not applicable

Table 1k. Aggregated Characteristics of Atomoxetine Immediate Release (IR) Prescriptions (8 Day Follow-Up), Pre-Shortage Period in the Sentinel Distributed Database (SDD) from September 1, 2021 to February 28, 2022

| Patient Characteristics[1] | Atomoxetine IR Prescriptions (8 Day Follow-Up), Pre-Shortage Period | |
	Number/Mean	Percent/ Standard Deviation[2]
Unique patients	1,076	N/A
Episodes	1,707	100.0%
Demographic Characteristics		
Age (years)	29.0	13.8
Age		
0-4 years	0	0.0%
5-17 years	454	26.6%
18-29 years	481	28.2%
30-64 years	772	45.2%
Sex		
Female	608	56.5%
Male	468	43.5%
Race[3]		
American Indian or Alaska Native	3	0.3%
Asian	31	2.9%
Black or African American	44	4.1%
Multi-racial	97	9.0%
Native Hawaiian or Other Pacific Islander	1	0.1%
Unknown	53	4.9%
White	847	78.7%
Hispanic origin		
Yes	82	7.6%
No	950	88.3%
Unknown	44	4.1%
Year		
2021	1,184	69.4%
2022	523	30.6%
2023	0	0.0%
Health Characteristics (-30, 60)		
Depression	418	38.8%
Anxiety	620	57.6%
Attention-Deficit/Hyperactivity Disorder	751	69.8%
Conduct or Adjustment Disorders	92	8.6%
Narcolepsy	0	0.0%
Binge-Eating Disorder	17	1.6%

Table 1k. Aggregated Characteristics of Atomoxetine Immediate Release (IR) Prescriptions (8 Day Follow-Up), Pre-Shortage Period in the Sentinel Distributed Database (SDD) from September 1, 2021 to February 28, 2022

Patient Characteristics[1]	Atomoxetine IR Prescriptions (8 Day Follow-Up), Pre-Shortage Period	
	Number/Mean	Percent/ Standard Deviation[2]
Medical Product Use		
IR Amphetamine/Dextroamphetamine Prescription (-30, 0)	45	2.6%
IR Amphetamine/Dextroamphetamine Prescription (-15, 0)	33	1.9%
ER Amphetamine/Dextroamphetamine Prescription (-30, 0)	58	3.4%
ER Amphetamine/Dextroamphetamine Prescription (-15, 0)	48	2.8%
IR Methylphenidate Prescription (-30, 0)	14	0.8%
IR Methylphenidate Prescription (-15, 0)	11	0.6%
ER Methylphenidate Prescription (-30, 0)	38	2.2%
ER Methylphenidate Prescription (-15, 0)	29	1.7%
Lisdexamfetamine Prescription (-30, 0)	29	1.7%
Lisdexamfetamine Prescription (-15, 0)	25	1.5%

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

[2]Value represents standard deviation where no % follows the value.

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

N/A = Not applicable

Table 1l. Aggregated Characteristics of Atomoxetine Immediate Release (IR) Prescriptions (8 Day Follow-Up), Shortage Period in the Sentinel Distributed Database (SDD) from September 1, 2022 to February 28, 2023

Patient Characteristics[1]	Atomoxetine IR Prescriptions (8 Day Follow-Up), Shortage Period	
	Number/Mean	Percent/ Standard Deviation[2]
Unique patients	1,245	N/A
Episodes	1,942	100.0%
Demographic Characteristics		
Age (years)	29.7	13.9
Age		
0-4 years	1	0.1%
5-17 years	491	25.3%
18-29 years	508	26.2%
30-64 years	942	48.5%
Sex		
Female	688	55.3%
Male	557	44.7%
Race[3]		
American Indian or Alaska Native	5	0.4%
Asian	46	3.7%
Black or African American	46	3.7%
Multi-racial	109	8.8%
Native Hawaiian or Other Pacific Islander	1	0.1%
Unknown	85	6.8%
White	953	76.5%
Hispanic origin		
Yes	69	5.5%
No	1,106	88.8%
Unknown	70	5.6%
Year		
2021	0	0.0%
2022	1,331	68.5%
2023	611	31.5%
Health Characteristics (-30, 60)		
Depression	441	35.4%
Anxiety	710	57.0%
Attention-Deficit/Hyperactivity Disorder	889	71.4%
Conduct or Adjustment Disorders	75	6.0%
Narcolepsy	4	0.3%
Binge-Eating Disorder	9	0.7%

Table 1l. Aggregated Characteristics of Atomoxetine Immediate Release (IR) Prescriptions (8 Day Follow-Up), Shortage Period in the Sentinel Distributed Database (SDD) from September 1, 2022 to February 28, 2023

Patient Characteristics[1]	Atomoxetine IR Prescriptions (8 Day Follow-Up), Shortage Period	
	Number/Mean	Percent/ Standard Deviation[2]
Medical Product Use		
IR Amphetamine/Dextroamphetamine Prescription (-30, 0)	48	2.5%
IR Amphetamine/Dextroamphetamine Prescription (-15, 0)	33	1.7%
ER Amphetamine/Dextroamphetamine Prescription (-30, 0)	82	4.2%
ER Amphetamine/Dextroamphetamine Prescription (-15, 0)	63	3.2%
IR Methylphenidate Prescription (-30, 0)	14	0.7%
IR Methylphenidate Prescription (-15, 0)	10	0.5%
ER Methylphenidate Prescription (-30, 0)	47	2.4%
ER Methylphenidate Prescription (-15, 0)	34	1.8%
Lisdexamfetamine Prescription (-30, 0)	38	2.0%
Lisdexamfetamine Prescription (-15, 0)	28	1.4%

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

[2]Value represents standard deviation where no % follows the value.

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

N/A = Not applicable

Table 1m. Aggregated Characteristics of Fluoxetine Prescriptions (15 Day Follow-Up), Pre-Shortage Period in the Sentinel Distributed Database (SDD) from September 1, 2021 to February 28, 2022

Patient Characteristics[1]	Fluoxetine Prescriptions (15 Day Follow-Up), Pre-Shortage Period	
	Number/Mean	Percent/ Standard Deviation[2]
Unique patients	11,016	N/A
Episodes	15,411	100.0%
Demographic Characteristics		
Age (years)	36.7	15.8
Age		
0-4 years	2	0.0%
5-17 years	2,427	15.7%
18-29 years	3,602	23.4%
30-64 years	9,380	60.9%
Sex		
Female	8,041	73.0%
Male	2,975	27.0%
Race[3]		
American Indian or Alaska Native	59	0.5%
Asian	391	3.5%
Black or African American	400	3.6%
Multi-racial	675	6.1%
Native Hawaiian or Other Pacific Islander	26	0.2%
Unknown	602	5.5%
White	8,863	80.5%
Hispanic origin		
Yes	705	6.4%
No	9,877	89.7%
Unknown	434	3.9%
Year		
2021	11,228	72.9%
2022	4,183	27.1%
2023	0	0.0%
Health Characteristics (-30, 60)		
Depression	5,008	45.5%
Anxiety	6,205	56.3%
Attention-Deficit/Hyperactivity Disorder	1,215	11.0%
Conduct or Adjustment Disorders	810	7.4%
Narcolepsy	13	0.1%
Binge-Eating Disorder	100	0.9%

Table 1m. Aggregated Characteristics of Fluoxetine Prescriptions (15 Day Follow-Up), Pre-Shortage Period in the Sentinel Distributed Database (SDD) from September 1, 2021 to February 28, 2022

Patient Characteristics[1]	Fluoxetine Prescriptions (15 Day Follow-Up), Pre-Shortage Period	
	Number/Mean	Percent/ Standard Deviation[2]
Medical Product Use		
IR Amphetamine/Dextroamphetamine Prescription (-30, 0)	290	1.9%
IR Amphetamine/Dextroamphetamine Prescription (-15, 0)	237	1.5%
ER Amphetamine/Dextroamphetamine Prescription (-30, 0)	456	3.0%
ER Amphetamine/Dextroamphetamine Prescription (-15, 0)	376	2.4%
IR Methylphenidate Prescription (-30, 0)	70	0.5%
IR Methylphenidate Prescription (-15, 0)	67	0.4%
ER Methylphenidate Prescription (-30, 0)	200	1.3%
ER Methylphenidate Prescription (-15, 0)	174	1.1%
Lisdexamfetamine Prescription (-30, 0)	105	0.7%
Lisdexamfetamine Prescription (-15, 0)	91	0.6%

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

[2]Value represents standard deviation where no % follows the value.

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

N/A = Not applicable

Table 1n. Aggregated Characteristics of Fluoxetine Prescriptions (15 Day Follow-Up), Shortage Period in the Sentinel Distributed Database (SDD) from September 1, 2022 to February 28, 2023

Patient Characteristics[1]	Fluoxetine Prescriptions (15 Day Follow-Up), Shortage Period	
	Number/Mean	Percent/ Standard Deviation[2]
Unique patients	10,639	N/A
Episodes	14,917	100.0%
Demographic Characteristics		
Age (years)	37.2	15.8
Age		
0-4 years	1	0.0%
5-17 years	2,218	14.9%
18-29 years	3,451	23.1%
30-64 years	9,247	62.0%
Sex		
Female	7,666	72.1%
Male	2,973	27.9%
Race[3]		
American Indian or Alaska Native	55	0.5%
Asian	399	3.8%
Black or African American	403	3.8%
Multi-racial	673	6.3%
Native Hawaiian or Other Pacific Islander	35	0.3%
Unknown	693	6.5%
White	8,381	78.8%
Hispanic origin		
Yes	652	6.1%
No	9,468	89.0%
Unknown	519	4.9%
Year		
2021	0	0.0%
2022	10,815	72.5%
2023	4,102	27.5%
Health Characteristics (-30, 60)		
Depression	4,563	42.9%
Anxiety	6,183	58.1%
Attention-Deficit/Hyperactivity Disorder	1,302	12.2%
Conduct or Adjustment Disorders	743	7.0%
Narcolepsy	19	0.2%
Binge-Eating Disorder	110	1.0%

Table 1n. Aggregated Characteristics of Fluoxetine Prescriptions (15 Day Follow-Up), Shortage Period in the Sentinel Distributed Database (SDD) from September 1, 2022 to February 28, 2023

Patient Characteristics[1]	Fluoxetine Prescriptions (15 Day Follow-Up), Shortage Period	
	Number/Mean	Percent/ Standard Deviation[2]
Medical Product Use		
IR Amphetamine/Dextroamphetamine Prescription (-30, 0)	291	2.0%
IR Amphetamine/Dextroamphetamine Prescription (-15, 0)	235	1.6%
ER Amphetamine/Dextroamphetamine Prescription (-30, 0)	508	3.4%
ER Amphetamine/Dextroamphetamine Prescription (-15, 0)	436	2.9%
IR Methylphenidate Prescription (-30, 0)	106	0.7%
IR Methylphenidate Prescription (-15, 0)	91	0.6%
ER Methylphenidate Prescription (-30, 0)	248	1.7%
ER Methylphenidate Prescription (-15, 0)	218	1.5%
Lisdexamfetamine Prescription (-30, 0)	151	1.0%
Lisdexamfetamine Prescription (-15, 0)	130	0.9%

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

[2]Value represents standard deviation where no % follows the value.

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

N/A = Not applicable

Table 1o. Aggregated Characteristics of Fluoxetine Prescriptions (8 Day Follow-Up), Pre-Shortage Period in the Sentinel Distributed Database (SDD) from September 1, 2021 to February 28, 2022

Patient Characteristics[1]	Fluoxetine Prescriptions (8 Day Follow-Up), Pre-Shortage Period	
	Number/Mean	Percent/ Standard Deviation[2]
Unique patients	11,414	N/A
Episodes	16,568	100.0%
Demographic Characteristics		
Age (years)	36.6	15.9
Age		
0-4 years	2	0.0%
5-17 years	2,676	16.2%
18-29 years	3,888	23.5%
30-64 years	10,002	60.4%
Sex		
Female	8,322	72.9%
Male	3,092	27.1%
Race[3]		
American Indian or Alaska Native	64	0.6%
Asian	407	3.6%
Black or African American	411	3.6%
Multi-racial	703	6.2%
Native Hawaiian or Other Pacific Islander	27	0.2%
Unknown	628	5.5%
White	9,174	80.4%
Hispanic origin		
Yes	729	6.4%
No	10,233	89.7%
Unknown	452	4.0%
Year		
2021	11,637	70.2%
2022	4,931	29.8%
2023	0	0.0%
Health Characteristics (-30, 60)		
Depression	5,208	45.6%
Anxiety	6,454	56.5%
Attention-Deficit/Hyperactivity Disorder	1,262	11.1%
Conduct or Adjustment Disorders	845	7.4%
Narcolepsy	15	0.1%
Binge-Eating Disorder	101	0.9%

Table 1o. Aggregated Characteristics of Fluoxetine Prescriptions (8 Day Follow-Up), Pre-Shortage Period in the Sentinel Distributed Database (SDD) from September 1, 2021 to February 28, 2022

Patient Characteristics[1]	Fluoxetine Prescriptions (8 Day Follow-Up), Pre-Shortage Period	
	Number/Mean	Percent/ Standard Deviation[2]
Medical Product Use		
IR Amphetamine/Dextroamphetamine Prescription (-30, 0)	307	1.9%
IR Amphetamine/Dextroamphetamine Prescription (-15, 0)	249	1.5%
ER Amphetamine/Dextroamphetamine Prescription (-30, 0)	493	3.0%
ER Amphetamine/Dextroamphetamine Prescription (-15, 0)	406	2.5%
IR Methylphenidate Prescription (-30, 0)	81	0.5%
IR Methylphenidate Prescription (-15, 0)	76	0.5%
ER Methylphenidate Prescription (-30, 0)	219	1.3%
ER Methylphenidate Prescription (-15, 0)	190	1.1%
Lisdexamfetamine Prescription (-30, 0)	112	0.7%
Lisdexamfetamine Prescription (-15, 0)	97	0.6%

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

[2]Value represents standard deviation where no % follows the value.

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

N/A = Not applicable

Table 1p. Aggregated Characteristics of Fluoxetine Prescriptions (8 Day Follow-Up), Shortage Period in the Sentinel Distributed Database (SDD) from September 1, 2022 to February 28, 2023

Patient Characteristics[1]	Fluoxetine Prescriptions (8 Day Follow-Up), Shortage Period	
	Number/Mean	Percent/ Standard Deviation[2]
Unique patients	10,972	N/A
Episodes	15,961	100.0%
Demographic Characteristics		
Age (years)	37.0	15.8
Age		
0-4 years	1	0.0%
5-17 years	2,425	15.2%
18-29 years	3,698	23.2%
30-64 years	9,837	61.6%
Sex		
Female	7,908	72.1%
Male	3,064	27.9%
Race[3]		
American Indian or Alaska Native	56	0.5%
Asian	411	3.7%
Black or African American	418	3.8%
Multi-racial	698	6.4%
Native Hawaiian or Other Pacific Islander	37	0.3%
Unknown	712	6.5%
White	8,640	78.7%
Hispanic origin		
Yes	662	6.0%
No	9,772	89.1%
Unknown	538	4.9%
Year		
2021	0	0.0%
2022	11,195	70.1%
2023	4,766	29.9%
Health Characteristics (-30, 60)		
Depression	4,744	43.2%
Anxiety	6,403	58.4%
Attention-Deficit/Hyperactivity Disorder	1,344	12.2%
Conduct or Adjustment Disorders	773	7.0%
Narcolepsy	19	0.2%
Binge-Eating Disorder	112	1.0%

Table 1p. Aggregated Characteristics of Fluoxetine Prescriptions (8 Day Follow-Up), Shortage Period in the Sentinel Distributed Database (SDD) from September 1, 2022 to February 28, 2023

Patient Characteristics[1]	Fluoxetine Prescriptions (8 Day Follow-Up), Shortage Period	
	Number/Mean	Percent/ Standard Deviation[2]
Medical Product Use		
IR Amphetamine/Dextroamphetamine Prescription (-30, 0)	317	2.0%
IR Amphetamine/Dextroamphetamine Prescription (-15, 0)	258	1.6%
ER Amphetamine/Dextroamphetamine Prescription (-30, 0)	538	3.4%
ER Amphetamine/Dextroamphetamine Prescription (-15, 0)	463	2.9%
IR Methylphenidate Prescription (-30, 0)	116	0.7%
IR Methylphenidate Prescription (-15, 0)	100	0.6%
ER Methylphenidate Prescription (-30, 0)	273	1.7%
ER Methylphenidate Prescription (-15, 0)	238	1.5%
Lisdexamfetamine Prescription (-30, 0)	165	1.0%
Lisdexamfetamine Prescription (-15, 0)	143	0.9%

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

[2]Value represents standard deviation where no % follows the value.

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

N/A = Not applicable

Table 1q. Aggregated Characteristics of Diazepam Prescriptions (15 Day Follow-Up), Pre-Shortage Period in the Sentinel Distributed Database (SDD) from September 1, 2021 to February 28, 2022

Patient Characteristics[1]	Diazepam Prescriptions (15 Day Follow-Up), Pre-Shortage Period	
	Number/Mean	Percent/ Standard Deviation[2]
Unique patients	1,736	N/A
Episodes	2,161	100.0%
Demographic Characteristics		
Age (years)	46.2	12.7
Age		
0-4 years	12	0.6%
5-17 years	43	2.0%
18-29 years	153	7.1%
30-64 years	1,953	90.4%
Sex		
Female	916	52.8%
Male	820	47.2%
Race[3]		
American Indian or Alaska Native	12	0.7%
Asian	39	2.2%
Black or African American	140	8.1%
Multi-racial	120	6.9%
Native Hawaiian or Other Pacific Islander	0	0.0%
Unknown	39	2.2%
White	1,386	79.8%
Hispanic origin		
Yes	74	4.3%
No	1,625	93.6%
Unknown	37	2.1%
Year		
2021	1,617	74.8%
2022	544	25.2%
2023	0	0.0%
Health Characteristics (-30, 60)		
Depression	426	24.5%
Anxiety	681	39.2%
Attention-Deficit/Hyperactivity Disorder	100	5.8%
Conduct or Adjustment Disorders	98	5.6%
Narcolepsy	0	0.0%
Binge-Eating Disorder	6	0.3%

Table 1q. Aggregated Characteristics of Diazepam Prescriptions (15 Day Follow-Up), Pre-Shortage Period in the Sentinel Distributed Database (SDD) from September 1, 2021 to February 28, 2022

Patient Characteristics[1]	Diazepam Prescriptions (15 Day Follow-Up), Pre-Shortage Period	
	Number/Mean	Percent/ Standard Deviation[2]
Medical Product Use		
IR Amphetamine/Dextroamphetamine Prescription (-30, 0)	63	2.9%
IR Amphetamine/Dextroamphetamine Prescription (-15, 0)	50	2.3%
ER Amphetamine/Dextroamphetamine Prescription (-30, 0)	27	1.2%
ER Amphetamine/Dextroamphetamine Prescription (-15, 0)	19	0.9%
IR Methylphenidate Prescription (-30, 0)	11	0.5%
IR Methylphenidate Prescription (-15, 0)	9	0.4%
ER Methylphenidate Prescription (-30, 0)	4	0.2%
ER Methylphenidate Prescription (-15, 0)	2	0.1%
Lisdexamfetamine Prescription (-30, 0)	10	0.5%
Lisdexamfetamine Prescription (-15, 0)	8	0.4%

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

[2]Value represents standard deviation where no % follows the value.

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

N/A = Not applicable

Table 1r. Aggregated Characteristics of Diazepam Prescriptions (15 Day Follow-Up), Shortage Period in the Sentinel Distributed Database (SDD) from September 1, 2022 to February 28, 2023

Patient Characteristics[1]	Diazepam Prescriptions (15 Day Follow-Up), Shortage Period	
	Number/Mean	Percent/ Standard Deviation[2]
Unique patients	1,952	N/A
Episodes	2,378	100.0%
Demographic Characteristics		
Age (years)	46.1	12.6
Age		
0-4 years	5	0.2%
5-17 years	40	1.7%
18-29 years	206	8.7%
30-64 years	2,127	89.4%
Sex		
Female	1,067	54.7%
Male	885	45.3%
Race[3]		
American Indian or Alaska Native	8	0.4%
Asian	45	2.3%
Black or African American	179	9.2%
Multi-racial	166	8.5%
Native Hawaiian or Other Pacific Islander	1	0.1%
Unknown	52	2.7%
White	1,501	76.9%
Hispanic origin		
Yes	98	5.0%
No	1,813	92.9%
Unknown	41	2.1%
Year		
2021	0	0.0%
2022	1,742	73.3%
2023	636	26.7%
Health Characteristics (-30, 60)		
Depression	483	24.7%
Anxiety	855	43.8%
Attention-Deficit/Hyperactivity Disorder	160	8.2%
Conduct or Adjustment Disorders	100	5.1%
Narcolepsy	5	0.3%
Binge-Eating Disorder	16	0.8%

Table 1r. Aggregated Characteristics of Diazepam Prescriptions (15 Day Follow-Up), Shortage Period in the Sentinel Distributed Database (SDD) from September 1, 2022 to February 28, 2023

Patient Characteristics[1]	Diazepam Prescriptions (15 Day Follow-Up), Shortage Period	
	Number/Mean	Percent/ Standard Deviation[2]
Medical Product Use		
IR Amphetamine/Dextroamphetamine Prescription (-30, 0)	73	3.1%
IR Amphetamine/Dextroamphetamine Prescription (-15, 0)	57	2.4%
ER Amphetamine/Dextroamphetamine Prescription (-30, 0)	37	1.6%
ER Amphetamine/Dextroamphetamine Prescription (-15, 0)	29	1.2%
IR Methylphenidate Prescription (-30, 0)	12	0.5%
IR Methylphenidate Prescription (-15, 0)	8	0.3%
ER Methylphenidate Prescription (-30, 0)	8	0.3%
ER Methylphenidate Prescription (-15, 0)	6	0.3%
Lisdexamfetamine Prescription (-30, 0)	17	0.7%
Lisdexamfetamine Prescription (-15, 0)	12	0.5%

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

[2]Value represents standard deviation where no % follows the value.

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

N/A = Not applicable

Table 1s. Aggregated Characteristics of Diazepam Prescriptions (8 Day Follow-Up), Pre-Shortage Period in the Sentinel Distributed Database (SDD) from September 1, 2021 to February 28, 2022

Patient Characteristics[1]	Diazepam Prescriptions (8 Day Follow-Up), Pre-Shortage Period	
	Number/Mean	Percent/ Standard Deviation[2]
Unique patients	1,836	N/A
Episodes	2,374	100.0%
Demographic Characteristics		
Age (years)	46.3	12.7
Age		
0-4 years	12	0.5%
5-17 years	49	2.1%
18-29 years	163	6.9%
30-64 years	2,150	90.6%
Sex		
Female	966	52.6%
Male	870	47.4%
Race[3]		
American Indian or Alaska Native	12	0.7%
Asian	42	2.3%
Black or African American	151	8.2%
Multi-racial	131	7.1%
Native Hawaiian or Other Pacific Islander	0	0.0%
Unknown	42	2.3%
White	1,458	79.4%
Hispanic origin		
Yes	79	4.3%
No	1,719	93.6%
Unknown	38	2.1%
Year		
2021	1,672	70.4%
2022	702	29.6%
2023	0	0.0%
Health Characteristics (-30, 60)		
Depression	452	24.6%
Anxiety	731	39.8%
Attention-Deficit/Hyperactivity Disorder	104	5.7%
Conduct or Adjustment Disorders	101	5.5%
Narcolepsy	0	0.0%
Binge-Eating Disorder	6	0.3%

Table 1s. Aggregated Characteristics of Diazepam Prescriptions (8 Day Follow-Up), Pre-Shortage Period in the Sentinel Distributed Database (SDD) from September 1, 2021 to February 28, 2022

Patient Characteristics[1]	Diazepam Prescriptions (8 Day Follow-Up), Pre-Shortage Period	
	Number/Mean	Percent/ Standard Deviation[2]
Medical Product Use		
IR Amphetamine/Dextroamphetamine Prescription (-30, 0)	73	3.1%
IR Amphetamine/Dextroamphetamine Prescription (-15, 0)	56	2.4%
ER Amphetamine/Dextroamphetamine Prescription (-30, 0)	32	1.3%
ER Amphetamine/Dextroamphetamine Prescription (-15, 0)	24	1.0%
IR Methylphenidate Prescription (-30, 0)	11	0.5%
IR Methylphenidate Prescription (-15, 0)	9	0.4%
ER Methylphenidate Prescription (-30, 0)	4	0.2%
ER Methylphenidate Prescription (-15, 0)	2	0.1%
Lisdexamfetamine Prescription (-30, 0)	11	0.5%
Lisdexamfetamine Prescription (-15, 0)	9	0.4%

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

[2]Value represents standard deviation where no % follows the value.

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

N/A = Not applicable

Table 1t. Aggregated Characteristics of Diazepam Prescriptions (8 Day Follow-Up), Shortage Period in the Sentinel Distributed Database (SDD) from September 1, 2022 to February 28, 2023

Patient Characteristics[1]	Diazepam Prescriptions (8 Day Follow-Up), Shortage Period	
	Number/Mean	**Percent/ Standard Deviation[2]**
Unique patients	2,035	N/A
Episodes	2,569	100.0%
Demographic Characteristics		
Age (years)	46.2	12.6
Age		
0-4 years	6	0.2%
5-17 years	41	1.6%
18-29 years	221	8.6%
30-64 years	2,301	89.6%
Sex		
Female	1,108	54.4%
Male	927	45.6%
Race[3]		
American Indian or Alaska Native	8	0.4%
Asian	45	2.2%
Black or African American	190	9.3%
Multi-racial	175	8.6%
Native Hawaiian or Other Pacific Islander	1	0.0%
Unknown	55	2.7%
White	1,561	76.7%
Hispanic origin		
Yes	102	5.0%
No	1,888	92.8%
Unknown	45	2.2%
Year		
2021	0	0.0%
2022	1,814	70.6%
2023	755	29.4%
Health Characteristics (-30, 60)		
Depression	508	25.0%
Anxiety	894	43.9%
Attention-Deficit/Hyperactivity Disorder	168	8.3%
Conduct or Adjustment Disorders	105	5.2%
Narcolepsy	5	0.2%
Binge-Eating Disorder	19	0.9%

Table 1t. Aggregated Characteristics of Diazepam Prescriptions (8 Day Follow-Up), Shortage Period in the Sentinel Distributed Database (SDD) from September 1, 2022 to February 28, 2023

Patient Characteristics[1]	Diazepam Prescriptions (8 Day Follow-Up), Shortage Period	
	Number/Mean	Percent/ Standard Deviation[2]
Medical Product Use		
IR Amphetamine/Dextroamphetamine Prescription (-30, 0)	85	3.3%
IR Amphetamine/Dextroamphetamine Prescription (-15, 0)	66	2.6%
ER Amphetamine/Dextroamphetamine Prescription (-30, 0)	43	1.7%
ER Amphetamine/Dextroamphetamine Prescription (-15, 0)	35	1.4%
IR Methylphenidate Prescription (-30, 0)	12	0.5%
IR Methylphenidate Prescription (-15, 0)	8	0.3%
ER Methylphenidate Prescription (-30, 0)	8	0.3%
ER Methylphenidate Prescription (-15, 0)	6	0.2%
Lisdexamfetamine Prescription (-30, 0)	18	0.7%
Lisdexamfetamine Prescription (-15, 0)	12	0.5%

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

[2]Value represents standard deviation where no % follows the value.

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

N/A = Not applicable

Table 1u. Aggregated Characteristics of Atorvastatin Prescriptions (15 Day Follow-Up), Pre-Shortage Period in the Sentinel Distributed Database (SDD) from September 1, 2021 to February 28, 2022

Patient Characteristics[1]	Atorvastatin Prescriptions (15 Day Follow-Up), Pre-Shortage Period	
	Number/Mean	Percent/ Standard Deviation[2]
Unique patients	18,534	N/A
Episodes	21,780	100.0%
Demographic Characteristics		
Age (years)	56.4	7.4
Age		
0-4 years	0	0.0%
5-17 years	3	0.0%
18-29 years	97	0.4%
30-64 years	21,680	99.5%
Sex		
Female	7,061	38.1%
Male	11,473	61.9%
Race[3]		
American Indian or Alaska Native	103	0.6%
Asian	2,002	10.8%
Black or African American	1,524	8.2%
Multi-racial	802	4.3%
Native Hawaiian or Other Pacific Islander	164	0.9%
Unknown	1,125	6.1%
White	12,814	69.1%
Hispanic origin		
Yes	927	5.0%
No	16,863	91.0%
Unknown	744	4.0%
Year		
2021	15,997	73.4%
2022	5,783	26.6%
2023	0	0.0%
Health Characteristics (-30, 60)		
Depression	1,776	9.6%
Anxiety	2,185	11.8%
Attention-Deficit/Hyperactivity Disorder	262	1.4%
Conduct or Adjustment Disorders	287	1.5%
Narcolepsy	5	0.0%
Binge-Eating Disorder	22	0.1%

Table 1u. Aggregated Characteristics of Atorvastatin Prescriptions (15 Day Follow-Up), Pre-Shortage Period in the Sentinel Distributed Database (SDD) from September 1, 2021 to February 28, 2022

Patient Characteristics[1]	Atorvastatin Prescriptions (15 Day Follow-Up), Pre-Shortage Period	
	Number/Mean	Percent/ Standard Deviation[2]
Medical Product Use		
IR Amphetamine/Dextroamphetamine Prescription (-30, 0)	56	0.3%
IR Amphetamine/Dextroamphetamine Prescription (-15, 0)	35	0.2%
ER Amphetamine/Dextroamphetamine Prescription (-30, 0)	82	0.4%
ER Amphetamine/Dextroamphetamine Prescription (-15, 0)	58	0.3%
IR Methylphenidate Prescription (-30, 0)	20	0.1%
IR Methylphenidate Prescription (-15, 0)	15	0.1%
ER Methylphenidate Prescription (-30, 0)	24	0.1%
ER Methylphenidate Prescription (-15, 0)	20	0.1%
Lisdexamfetamine Prescription (-30, 0)	11	0.1%
Lisdexamfetamine Prescription (-15, 0)	9	0.0%

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

[2]Value represents standard deviation where no % follows the value.

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

N/A = Not applicable

Table 1v. Aggregated Characteristics of Atorvastatin Prescriptions (15 Day Follow-Up), Shortage Period in the Sentinel Distributed Database (SDD) from September 1, 2022 to February 28, 2023

Patient Characteristics[1]	Atorvastatin Prescriptions (15 Day Follow-Up), Shortage Period	
	Number/Mean	Percent/ Standard Deviation[2]
Unique patients	19,127	N/A
Episodes	22,605	100.0%
Demographic Characteristics		
Age (years)	56.1	7.6
Age		
0-4 years	0	0.0%
5-17 years	5	0.0%
18-29 years	115	0.5%
30-64 years	22,485	99.5%
Sex		
Female	7,394	38.7%
Male	11,733	61.3%
Race[3]		
American Indian or Alaska Native	104	0.5%
Asian	2,211	11.6%
Black or African American	1,632	8.5%
Multi-racial	802	4.2%
Native Hawaiian or Other Pacific Islander	181	0.9%
Unknown	1,308	6.8%
White	12,889	67.4%
Hispanic origin		
Yes	974	5.1%
No	17,247	90.2%
Unknown	906	4.7%
Year		
2021	0	0.0%
2022	16,507	73.0%
2023	6,098	27.0%
Health Characteristics (-30, 60)		
Depression	1,808	9.5%
Anxiety	2,545	13.3%
Attention-Deficit/Hyperactivity Disorder	285	1.5%
Conduct or Adjustment Disorders	318	1.7%
Narcolepsy	13	0.1%
Binge-Eating Disorder	34	0.2%

Table 1v. Aggregated Characteristics of Atorvastatin Prescriptions (15 Day Follow-Up), Shortage Period in the Sentinel Distributed Database (SDD) from September 1, 2022 to February 28, 2023

Patient Characteristics[1]	Atorvastatin Prescriptions (15 Day Follow-Up), Shortage Period	
	Number/Mean	Percent/ Standard Deviation[2]
Medical Product Use		
IR Amphetamine/Dextroamphetamine Prescription (-30, 0)	71	0.3%
IR Amphetamine/Dextroamphetamine Prescription (-15, 0)	51	0.2%
ER Amphetamine/Dextroamphetamine Prescription (-30, 0)	87	0.4%
ER Amphetamine/Dextroamphetamine Prescription (-15, 0)	67	0.3%
IR Methylphenidate Prescription (-30, 0)	19	0.1%
IR Methylphenidate Prescription (-15, 0)	12	0.1%
ER Methylphenidate Prescription (-30, 0)	20	0.1%
ER Methylphenidate Prescription (-15, 0)	14	0.1%
Lisdexamfetamine Prescription (-30, 0)	18	0.1%
Lisdexamfetamine Prescription (-15, 0)	15	0.1%

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

[2]Value represents standard deviation where no % follows the value.

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

N/A = Not applicable

Table 1w. Aggregated Characteristics of Atorvastatin Prescriptions (8 Day Follow-Up), Pre-Shortage Period in the Sentinel Distributed Database (SDD) from September 1, 2021 to February 28, 2022

Patient Characteristics[1]	Atorvastatin Prescriptions (8 Day Follow-Up), Pre-Shortage Period	
	Number/Mean	Percent/ Standard Deviation[2]
Unique patients	19,250	N/A
Episodes	23,127	100.0%
Demographic Characteristics		
Age (years)	56.4	7.4
Age		
0-4 years	0	0.0%
5-17 years	3	0.0%
18-29 years	102	0.4%
30-64 years	23,022	99.5%
Sex		
Female	7,339	38.1%
Male	11,911	61.9%
Race[3]		
American Indian or Alaska Native	108	0.6%
Asian	2,078	10.8%
Black or African American	1,581	8.2%
Multi-racial	838	4.4%
Native Hawaiian or Other Pacific Islander	172	0.9%
Unknown	1,169	6.1%
White	13,304	69.1%
Hispanic origin		
Yes	960	5.0%
No	17,524	91.0%
Unknown	766	4.0%
Year		
2021	16,344	70.7%
2022	6,783	29.3%
2023	0	0.0%
Health Characteristics (-30, 60)		
Depression	1,853	9.6%
Anxiety	2,277	11.8%
Attention-Deficit/Hyperactivity Disorder	273	1.4%
Conduct or Adjustment Disorders	300	1.6%
Narcolepsy	5	0.0%
Binge-Eating Disorder	27	0.1%

Table 1w. Aggregated Characteristics of Atorvastatin Prescriptions (8 Day Follow-Up), Pre-Shortage Period in the Sentinel Distributed Database (SDD) from September 1, 2021 to February 28, 2022

Patient Characteristics[1]	Atorvastatin Prescriptions (8 Day Follow-Up), Pre-Shortage Period	
	Number/Mean	Percent/ Standard Deviation[2]
Medical Product Use		
IR Amphetamine/Dextroamphetamine Prescription (-30, 0)	62	0.3%
IR Amphetamine/Dextroamphetamine Prescription (-15, 0)	40	0.2%
ER Amphetamine/Dextroamphetamine Prescription (-30, 0)	86	0.4%
ER Amphetamine/Dextroamphetamine Prescription (-15, 0)	62	0.3%
IR Methylphenidate Prescription (-30, 0)	21	0.1%
IR Methylphenidate Prescription (-15, 0)	16	0.1%
ER Methylphenidate Prescription (-30, 0)	26	0.1%
ER Methylphenidate Prescription (-15, 0)	22	0.1%
Lisdexamfetamine Prescription (-30, 0)	13	0.1%
Lisdexamfetamine Prescription (-15, 0)	11	0.0%

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

[2]Value represents standard deviation where no % follows the value.

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

N/A = Not applicable

Table 1x. Aggregated Characteristics of Atorvastatin Prescriptions (8 Day Follow-Up), Shortage Period in the Sentinel Distributed Database (SDD) from September 1, 2022 to February 28, 2023

Patient Characteristics[1]	Atorvastatin Prescriptions (8 Day Follow-Up), Shortage Period	
	Number/Mean	Percent/ Standard Deviation[2]
Unique patients	19,812	N/A
Episodes	23,899	100.0%
Demographic Characteristics		
Age (years)	56.1	7.6
Age		
0-4 years	0	0.0%
5-17 years	6	0.0%
18-29 years	123	0.5%
30-64 years	23,770	99.5%
Sex		
Female	7,670	38.7%
Male	12,142	61.3%
Race[3]		
American Indian or Alaska Native	106	0.5%
Asian	2,274	11.5%
Black or African American	1,698	8.6%
Multi-racial	834	4.2%
Native Hawaiian or Other Pacific Islander	186	0.9%
Unknown	1,358	6.9%
White	13,356	67.4%
Hispanic origin		
Yes	1,003	5.1%
No	17,862	90.2%
Unknown	947	4.8%
Year		
2021	0	0.0%
2022	16,904	70.7%
2023	6,995	29.3%
Health Characteristics (-30, 60)		
Depression	1,892	9.5%
Anxiety	2,667	13.5%
Attention-Deficit/Hyperactivity Disorder	309	1.6%
Conduct or Adjustment Disorders	324	1.6%
Narcolepsy	13	0.1%
Binge-Eating Disorder	34	0.2%

Table 1x. Aggregated Characteristics of Atorvastatin Prescriptions (8 Day Follow-Up), Shortage Period in the Sentinel Distributed Database (SDD) from September 1, 2022 to February 28, 2023

Patient Characteristics[1]	Atorvastatin Prescriptions (8 Day Follow-Up), Shortage Period	
	Number/Mean	Percent/ Standard Deviation[2]
Medical Product Use		
IR Amphetamine/Dextroamphetamine Prescription (-30, 0)	80	0.3%
IR Amphetamine/Dextroamphetamine Prescription (-15, 0)	58	0.2%
ER Amphetamine/Dextroamphetamine Prescription (-30, 0)	93	0.4%
ER Amphetamine/Dextroamphetamine Prescription (-15, 0)	72	0.3%
IR Methylphenidate Prescription (-30, 0)	21	0.1%
IR Methylphenidate Prescription (-15, 0)	12	0.1%
ER Methylphenidate Prescription (-30, 0)	23	0.1%
ER Methylphenidate Prescription (-15, 0)	16	0.1%
Lisdexamfetamine Prescription (-30, 0)	19	0.1%
Lisdexamfetamine Prescription (-15, 0)	16	0.1%

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

[2]Value represents standard deviation where no % follows the value.

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

N/A = Not applicable

Table 1y. Aggregated Characteristics of Extended Release (ER) Morphine Prescriptions (15 Day Follow-Up), Pre-Shortage Period in the Sentinel Distributed Database (SDD) from September 1, 2021 to February 28, 2022

Patient Characteristics[1]	ER Morphine Prescriptions (15 Day Follow-Up), Pre-Shortage Period	
	Number/Mean	Percent/ Standard Deviation[2]
Unique patients	339	N/A
Episodes	1,201	100.0%
Demographic Characteristics		
Age (years)	56.8	7.4
Age		
0-4 years	0	0.0%
5-17 years	0	0.0%
18-29 years	1	0.1%
30-64 years	1,200	99.9%
Sex		
Female	184	54.3%
Male	155	45.7%
Race[3]		
American Indian or Alaska Native	1	0.3%
Asian	10	2.9%
Black or African American	20	5.9%
Multi-racial	22	6.5%
Native Hawaiian or Other Pacific Islander	1	0.3%
Unknown	12	3.5%
White	273	80.5%
Hispanic origin		
Yes	9	2.7%
No	320	94.4%
Unknown	10	2.9%
Year		
2021	884	73.6%
2022	317	26.4%
2023	0	0.0%
Health Characteristics (-30, 60)		
Depression	85	25.1%
Anxiety	101	29.8%
Attention-Deficit/Hyperactivity Disorder	11	3.2%
Conduct or Adjustment Disorders	15	4.4%
Narcolepsy	0	0.0%
Binge-Eating Disorder	1	0.3%

Table 1y. Aggregated Characteristics of Extended Release (ER) Morphine Prescriptions (15 Day Follow-Up), Pre-Shortage Period in the Sentinel Distributed Database (SDD) from September 1, 2021 to February 28, 2022

Patient Characteristics[1]	ER Morphine Prescriptions (15 Day Follow-Up), Pre-Shortage Period	
	Number/Mean	Percent/ Standard Deviation[2]
Medical Product Use		
IR Amphetamine/Dextroamphetamine Prescription (-30, 0)	17	1.4%
IR Amphetamine/Dextroamphetamine Prescription (-15, 0)	12	1.0%
ER Amphetamine/Dextroamphetamine Prescription (-30, 0)	20	1.7%
ER Amphetamine/Dextroamphetamine Prescription (-15, 0)	15	1.2%
IR Methylphenidate Prescription (-30, 0)	11	0.9%
IR Methylphenidate Prescription (-15, 0)	10	0.8%
ER Methylphenidate Prescription (-30, 0)	3	0.2%
ER Methylphenidate Prescription (-15, 0)	1	0.1%
Lisdexamfetamine Prescription (-30, 0)	0	0.0%
Lisdexamfetamine Prescription (-15, 0)	0	0.0%

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

[2]Value represents standard deviation where no % follows the value.

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

N/A = Not applicable

Table 1z. Aggregated Characteristics of Extended Release (ER) Morphine Prescriptions (15 Day Follow-Up), Shortage Period in the Sentinel Distributed Database (SDD) from September 1, 2022 to February 28, 2023

Patient Characteristics[1]	ER Morphine Prescriptions (15 Day Follow-Up), Shortage Period	
	Number/Mean	Percent/ Standard Deviation[2]
Unique patients	303	N/A
Episodes	1,068	100.0%
Demographic Characteristics		
Age (years)	56.3	7.9
Age		
0-4 years	0	0.0%
5-17 years	0	0.0%
18-29 years	9	0.8%
30-64 years	1,059	99.2%
Sex		
Female	157	51.8%
Male	146	48.2%
Race[3]		
American Indian or Alaska Native	2	0.7%
Asian	12	4.0%
Black or African American	20	6.6%
Multi-racial	20	6.6%
Native Hawaiian or Other Pacific Islander	3	1.0%
Unknown	13	4.3%
White	233	76.9%
Hispanic origin		
Yes	15	5.0%
No	278	91.7%
Unknown	10	3.3%
Year		
2021	0	0.0%
2022	777	72.8%
2023	291	27.2%
Health Characteristics (-30, 60)		
Depression	53	17.5%
Anxiety	80	26.4%
Attention-Deficit/Hyperactivity Disorder	5	1.7%
Conduct or Adjustment Disorders	16	5.3%
Narcolepsy	0	0.0%
Binge-Eating Disorder	1	0.3%

Table 1z. Aggregated Characteristics of Extended Release (ER) Morphine Prescriptions (15 Day Follow-Up), Shortage Period in the Sentinel Distributed Database (SDD) from September 1, 2022 to February 28, 2023

Patient Characteristics[1]	ER Morphine Prescriptions (15 Day Follow-Up), Shortage Period	
	Number/Mean	Percent/ Standard Deviation[2]
Medical Product Use		
IR Amphetamine/Dextroamphetamine Prescription (-30, 0)	12	1.1%
IR Amphetamine/Dextroamphetamine Prescription (-15, 0)	10	0.9%
ER Amphetamine/Dextroamphetamine Prescription (-30, 0)	11	1.0%
ER Amphetamine/Dextroamphetamine Prescription (-15, 0)	8	0.7%
IR Methylphenidate Prescription (-30, 0)	6	0.6%
IR Methylphenidate Prescription (-15, 0)	6	0.6%
ER Methylphenidate Prescription (-30, 0)	4	0.4%
ER Methylphenidate Prescription (-15, 0)	2	0.2%
Lisdexamfetamine Prescription (-30, 0)	0	0.0%
Lisdexamfetamine Prescription (-15, 0)	0	0.0%

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

[2]Value represents standard deviation where no % follows the value.

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

N/A = Not applicable

Table 1aa. Aggregated Characteristics of Extended Release (ER) Morphine Prescriptions (8 Day Follow-Up), Pre-Shortage Period in the Sentinel Distributed Database (SDD) from September 1, 2021 to February 28, 2022

Patient Characteristics[1]	ER Morphine Prescriptions (8 Day Follow-Up), Pre-Shortage Period	
	Number/Mean	Percent/ Standard Deviation[2]
Unique patients	347	N/A
Episodes	1,323	100.0%
Demographic Characteristics		
Age (years)	56.8	7.5
Age		
0-4 years	0	0.0%
5-17 years	0	0.0%
18-29 years	1	0.1%
30-64 years	1,322	99.9%
Sex		
Female	187	53.9%
Male	160	46.1%
Race[3]		
American Indian or Alaska Native	1	0.3%
Asian	11	3.2%
Black or African American	20	5.8%
Multi-racial	23	6.6%
Native Hawaiian or Other Pacific Islander	1	0.3%
Unknown	12	3.5%
White	279	80.4%
Hispanic origin		
Yes	10	2.9%
No	327	94.2%
Unknown	10	2.9%
Year		
2021	944	71.4%
2022	379	28.6%
2023	0	0.0%
Health Characteristics (-30, 60)		
Depression	86	24.8%
Anxiety	103	29.7%
Attention-Deficit/Hyperactivity Disorder	11	3.2%
Conduct or Adjustment Disorders	15	4.3%
Narcolepsy	0	0.0%
Binge-Eating Disorder	1	0.3%

Table 1aa. Aggregated Characteristics of Extended Release (ER) Morphine Prescriptions (8 Day Follow-Up), Pre-Shortage Period in the Sentinel Distributed Database (SDD) from September 1, 2021 to February 28, 2022

Patient Characteristics[1]	ER Morphine Prescriptions (8 Day Follow-Up), Pre-Shortage Period	
	Number/Mean	Percent/ Standard Deviation[2]
Medical Product Use		
IR Amphetamine/Dextroamphetamine Prescription (-30, 0)	21	1.6%
IR Amphetamine/Dextroamphetamine Prescription (-15, 0)	14	1.1%
ER Amphetamine/Dextroamphetamine Prescription (-30, 0)	22	1.7%
ER Amphetamine/Dextroamphetamine Prescription (-15, 0)	16	1.2%
IR Methylphenidate Prescription (-30, 0)	13	1.0%
IR Methylphenidate Prescription (-15, 0)	12	0.9%
ER Methylphenidate Prescription (-30, 0)	4	0.3%
ER Methylphenidate Prescription (-15, 0)	2	0.2%
Lisdexamfetamine Prescription (-30, 0)	0	0.0%
Lisdexamfetamine Prescription (-15, 0)	0	0.0%

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

[2]Value represents standard deviation where no % follows the value.

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

N/A = Not applicable

Table 1ab. Aggregated Characteristics of Extended Release (ER) Morphine Prescriptions (8 Day Follow-Up), Shortage Period in the Sentinel Distributed Database (SDD) from September 1, 2022 to February 28, 2023

Patient Characteristics[1]	ER Morphine Prescriptions (8 Day Follow-Up), Shortage Period	
	Number/Mean	Percent/ Standard Deviation[2]
Unique patients	312	N/A
Episodes	1,177	100.0%
Demographic Characteristics		
Age (years)	56.2	8.0
Age		
0-4 years	0	0.0%
5-17 years	0	0.0%
18-29 years	9	0.8%
30-64 years	1,168	99.2%
Sex		
Female	162	51.9%
Male	150	48.1%
Race[3]		
American Indian or Alaska Native	2	0.6%
Asian	12	3.8%
Black or African American	22	7.1%
Multi-racial	20	6.4%
Native Hawaiian or Other Pacific Islander	3	1.0%
Unknown	13	4.2%
White	240	76.9%
Hispanic origin		
Yes	15	4.8%
No	286	91.7%
Unknown	11	3.5%
Year		
2021	0	0.0%
2022	822	69.8%
2023	355	30.2%
Health Characteristics (-30, 60)		
Depression	56	17.9%
Anxiety	81	26.0%
Attention-Deficit/Hyperactivity Disorder	5	1.6%
Conduct or Adjustment Disorders	17	5.4%
Narcolepsy	0	0.0%
Binge-Eating Disorder	1	0.3%

Table 1ab. Aggregated Characteristics of Extended Release (ER) Morphine Prescriptions (8 Day Follow-Up), Shortage Period in the Sentinel Distributed Database (SDD) from September 1, 2022 to February 28, 2023

Patient Characteristics[1]	ER Morphine Prescriptions (8 Day Follow-Up), Shortage Period	
	Number/Mean	Percent/ Standard Deviation[2]
Medical Product Use		
IR Amphetamine/Dextroamphetamine Prescription (-30, 0)	12	1.0%
IR Amphetamine/Dextroamphetamine Prescription (-15, 0)	10	0.8%
ER Amphetamine/Dextroamphetamine Prescription (-30, 0)	11	0.9%
ER Amphetamine/Dextroamphetamine Prescription (-15, 0)	8	0.7%
IR Methylphenidate Prescription (-30, 0)	6	0.5%
IR Methylphenidate Prescription (-15, 0)	6	0.5%
ER Methylphenidate Prescription (-30, 0)	4	0.3%
ER Methylphenidate Prescription (-15, 0)	2	0.2%
Lisdexamfetamine Prescription (-30, 0)	0	0.0%
Lisdexamfetamine Prescription (-15, 0)	0	0.0%

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

[2]Value represents standard deviation where no % follows the value.

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

N/A = Not applicable

Table 1ac. Aggregated Characteristics of Immediate Release (IR) Amphetamine Dextroamphetamine Dispensings, Pre-Shortage Period in the Sentinel Distributed Database (SDD) from September 1, 2021 to February 28, 2022

Patient Characteristics[1]	IR Amphetamine Dextroamphetamine Dispensings, Pre-Shortage Period	
	Number/Mean	Percent/ Standard Deviation[2]
Unique patients	9,504	N/A
Episodes	13,266	100.0%
Demographic Characteristics		
Age (years)	34.1	13.3
Age		
0-4 years	4	0.0%
5-17 years	1,545	11.6%
18-29 years	3,769	28.4%
30-64 years	7,948	59.9%
Sex		
Female	5,388	56.7%
Male	4,116	43.3%
Race[3]		
American Indian or Alaska Native	47	0.5%
Asian	221	2.3%
Black or African American	291	3.1%
Multi-racial	529	5.6%
Native Hawaiian or Other Pacific Islander	14	0.1%
Unknown	1,932	20.3%
White	6,470	68.1%
Hispanic origin		
Yes	413	4.3%
No	6,977	73.4%
Unknown	2,114	22.2%
Year		
2021	9,448	71.2%
2022	3,818	28.8%
2023	0	0.0%
Health Characteristics (-30, 60)		
Depression	2,435	25.6%
Anxiety	3,358	35.3%
Attention-Deficit/Hyperactivity Disorder	5,596	58.9%
Conduct or Adjustment Disorders	487	5.1%
Narcolepsy	60	0.6%
Binge-Eating Disorder	58	0.6%

Table 1ac. Aggregated Characteristics of Immediate Release (IR) Amphetamine Dextroamphetamine Dispensings, Pre-Shortage Period in the Sentinel Distributed Database (SDD) from September 1, 2021 to February 28, 2022

Patient Characteristics[1]	IR Amphetamine Dextroamphetamine Dispensings, Pre-Shortage Period	
	Number/Mean	Percent/ Standard Deviation[2]
Medical Product Use		
IR Amphetamine/Dextroamphetamine Prescription (-30, 0)	3,681	27.7%
IR Amphetamine/Dextroamphetamine Prescription (-15, 0)	3,557	26.8%
ER Amphetamine/Dextroamphetamine Prescription (-30, 0)	1,606	12.1%
ER Amphetamine/Dextroamphetamine Prescription (-15, 0)	1,443	10.9%
IR Methylphenidate Prescription (-30, 0)	9	0.1%
IR Methylphenidate Prescription (-15, 0)	4	0.0%
ER Methylphenidate Prescription (-30, 0)	20	0.2%
ER Methylphenidate Prescription (-15, 0)	8	0.1%
Lisdexamfetamine Prescription (-30, 0)	118	0.9%
Lisdexamfetamine Prescription (-15, 0)	98	0.7%

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

[2]Value represents standard deviation where no % follows the value.

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

N/A = Not applicable

Table 1ad. Aggregated Characteristics of Immediate Release (IR) Amphetamine Dextroamphetamine Dispensings, Shortage Period in the Sentinel Distributed Database (SDD) from September 1, 2022 to February 28, 2023

Patient Characteristics[1]	IR Amphetamine Dextroamphetamine Dispensings, Shortage Period	
	Number/Mean	Percent/ Standard Deviation[2]
Unique patients	10,862	N/A
Episodes	14,979	100.0%
Demographic Characteristics		
Age (years)	34.8	13.0
Age		
0-4 years	7	0.0%
5-17 years	1,560	10.4%
18-29 years	3,897	26.0%
30-64 years	9,515	63.5%
Sex		
Female	6,335	58.3%
Male	4,527	41.7%
Race[3]		
American Indian or Alaska Native	49	0.5%
Asian	258	2.4%
Black or African American	341	3.1%
Multi-racial	591	5.4%
Native Hawaiian or Other Pacific Islander	13	0.1%
Unknown	2,150	19.8%
White	7,460	68.7%
Hispanic origin		
Yes	516	4.8%
No	8,032	73.9%
Unknown	2,314	21.3%
Year		
2021	0	0.0%
2022	10,710	71.5%
2023	4,269	28.5%
Health Characteristics (-30, 60)		
Depression	2,840	26.1%
Anxiety	4,088	37.6%
Attention-Deficit/Hyperactivity Disorder	6,515	60.0%
Conduct or Adjustment Disorders	526	4.8%
Narcolepsy	70	0.6%
Binge-Eating Disorder	62	0.6%

Table 1ad. Aggregated Characteristics of Immediate Release (IR) Amphetamine Dextroamphetamine Dispensings, Shortage Period in the Sentinel Distributed Database (SDD) from September 1, 2022 to February 28, 2023

Patient Characteristics[1]	IR Amphetamine Dextroamphetamine Dispensings, Shortage Period	
	Number/Mean	Percent/ Standard Deviation[2]
Medical Product Use		
IR Amphetamine/Dextroamphetamine Prescription (-30, 0)	4,233	28.3%
IR Amphetamine/Dextroamphetamine Prescription (-15, 0)	4,009	26.8%
ER Amphetamine/Dextroamphetamine Prescription (-30, 0)	1,936	12.9%
ER Amphetamine/Dextroamphetamine Prescription (-15, 0)	1,666	11.1%
IR Methylphenidate Prescription (-30, 0)	16	0.1%
IR Methylphenidate Prescription (-15, 0)	9	0.1%
ER Methylphenidate Prescription (-30, 0)	27	0.2%
ER Methylphenidate Prescription (-15, 0)	19	0.1%
Lisdexamfetamine Prescription (-30, 0)	145	1.0%
Lisdexamfetamine Prescription (-15, 0)	113	0.8%

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

[2]Value represents standard deviation where no % follows the value.

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

N/A = Not applicable

Table 1ae. Aggregated Characteristics of Extended Release (ER) Amphetamine Dextroamphetamine Dispensings, Pre-Shortage Period in the Sentinel Distributed Database (SDD) from September 1, 2021 to February 28, 2022

Patient Characteristics[1]	ER Amphetamine Dextroamphetamine Dispensings, Pre-Shortage Period	
	Number/Mean	Percent/ Standard Deviation[2]
Unique patients	10,896	N/A
Episodes	14,887	100.0%
Demographic Characteristics		
Age (years)	29.5	13.4
Age		
0-4 years	5	0.0%
5-17 years	3,549	23.8%
18-29 years	4,664	31.3%
30-64 years	6,669	44.8%
Sex		
Female	5,876	53.9%
Male	5,020	46.1%
Race[3]		
American Indian or Alaska Native	43	0.4%
Asian	238	2.2%
Black or African American	408	3.7%
Multi-racial	648	5.9%
Native Hawaiian or Other Pacific Islander	17	0.2%
Unknown	2,150	19.7%
White	7,392	67.8%
Hispanic origin		
Yes	520	4.8%
No	8,066	74.0%
Unknown	2,310	21.2%
Year		
2021	10,558	70.9%
2022	4,329	29.1%
2023	0	0.0%
Health Characteristics (-30, 60)		
Depression	2,729	25.0%
Anxiety	3,765	34.6%
Attention-Deficit/Hyperactivity Disorder	6,855	62.9%
Conduct or Adjustment Disorders	579	5.3%
Narcolepsy	34	0.3%
Binge-Eating Disorder	61	0.6%

Table 1ae. Aggregated Characteristics of Extended Release (ER) Amphetamine Dextroamphetamine Dispensings, Pre-Shortage Period in the Sentinel Distributed Database (SDD) from September 1, 2021 to February 28, 2022

Patient Characteristics[1]	ER Amphetamine Dextroamphetamine Dispensings, Pre-Shortage Period	
	Number/Mean	Percent/ Standard Deviation[2]
Medical Product Use		
IR Amphetamine/Dextroamphetamine Prescription (-30, 0)	933	6.3%
IR Amphetamine/Dextroamphetamine Prescription (-15, 0)	826	5.5%
ER Amphetamine/Dextroamphetamine Prescription (-30, 0)	5,192	34.9%
ER Amphetamine/Dextroamphetamine Prescription (-15, 0)	5,047	33.9%
IR Methylphenidate Prescription (-30, 0)	19	0.1%
IR Methylphenidate Prescription (-15, 0)	16	0.1%
ER Methylphenidate Prescription (-30, 0)	52	0.3%
ER Methylphenidate Prescription (-15, 0)	25	0.2%
Lisdexamfetamine Prescription (-30, 0)	37	0.2%
Lisdexamfetamine Prescription (-15, 0)	21	0.1%

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

[2]Value represents standard deviation where no % follows the value.

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

N/A = Not applicable

Table 1af. Aggregated Characteristics of Extended Release (ER) Amphetamine Dextroamphetamine Dispensings, Shortage Period in the Sentinel Distributed Database (SDD) from September 1, 2022 to February 28, 2023

Patient Characteristics[1]	ER Amphetamine Dextroamphetamine Dispensings, Shortage Period	
	Number/Mean	Percent/ Standard Deviation[2]
Unique patients	12,773	N/A
Episodes	17,488	100.0%
Demographic Characteristics		
Age (years)	30.3	13.4
Age		
0-4 years	2	0.0%
5-17 years	3,832	21.9%
18-29 years	5,294	30.3%
30-64 years	8,360	47.8%
Sex		
Female	6,907	54.1%
Male	5,866	45.9%
Race[3]		
American Indian or Alaska Native	59	0.5%
Asian	317	2.5%
Black or African American	470	3.7%
Multi-racial	734	5.7%
Native Hawaiian or Other Pacific Islander	22	0.2%
Unknown	2,483	19.4%
White	8,688	68.0%
Hispanic origin		
Yes	735	5.8%
No	9,482	74.2%
Unknown	2,556	20.0%
Year		
2021	0	0.0%
2022	12,185	69.7%
2023	5,303	30.3%
Health Characteristics (-30, 60)		
Depression	3,275	25.6%
Anxiety	4,713	36.9%
Attention-Deficit/Hyperactivity Disorder	8,284	64.9%
Conduct or Adjustment Disorders	680	5.3%
Narcolepsy	40	0.3%
Binge-Eating Disorder	82	0.6%

Table 1af. Aggregated Characteristics of Extended Release (ER) Amphetamine Dextroamphetamine Dispensings, Shortage Period in the Sentinel Distributed Database (SDD) from September 1, 2022 to February 28, 2023

Patient Characteristics[1]	ER Amphetamine Dextroamphetamine Dispensings, Shortage Period	
	Number/Mean	Percent/ Standard Deviation[2]
Medical Product Use		
IR Amphetamine/Dextroamphetamine Prescription (-30, 0)	1,138	6.5%
IR Amphetamine/Dextroamphetamine Prescription (-15, 0)	984	5.6%
ER Amphetamine/Dextroamphetamine Prescription (-30, 0)	6,166	35.3%
ER Amphetamine/Dextroamphetamine Prescription (-15, 0)	5,986	34.2%
IR Methylphenidate Prescription (-30, 0)	18	0.1%
IR Methylphenidate Prescription (-15, 0)	12	0.1%
ER Methylphenidate Prescription (-30, 0)	84	0.5%
ER Methylphenidate Prescription (-15, 0)	50	0.3%
Lisdexamfetamine Prescription (-30, 0)	65	0.4%
Lisdexamfetamine Prescription (-15, 0)	47	0.3%

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

[2]Value represents standard deviation where no % follows the value.

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

N/A = Not applicable

Table 2. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from September 1, 2021 to February 28, 2022, and from September 1, 2022 to February 28, 2023

	Pre-Shortage Period September 1, 2021 - February 28, 2022				Shortage Period September 1, 2022 - February 28, 2023			
	N Patients	N Prescriptions	N Prescriptions Followed by a Dispensing	Proportion of Prescriptions Followed by a Dispensing	N Patients	N Prescriptions	N Prescriptions Followed by a Dispensing	Proportion of Prescriptions Followed by a Dispensing
Immediate Release (IR) Amphetamine Dextroamphetamine Prescriptions (15 Day Follow-Up)	5,306	13,514	11,826	87.5 (87.0, 88.1)	5,920	15,464	12,959	83.8 (83.2, 84.4)
IR Amphetamine Dextroamphetamine Prescriptions (8 Day Follow-Up)	5,441	14,503	11,521	79.4 (78.8, 80.1)	6,030	16,799	12,711	75.7 (75.0, 76.3)
Extended Release (ER) Amphetamine Dextroamphetamine Prescriptions (15 Day Follow-Up)	7,842	20,272	17,920	88.4 (88.0, 88.8)	8,880	23,927	21,220	88.7 (88.3, 89.1)
ER Amphetamine Dextroamphetamine Prescriptions (8 Day Follow-Up)	8,020	21,745	17,668	81.3 (80.7, 81.8)	9,093	25,899	21,125	81.6 (81.1, 82.0)
Atomoxetine IR Prescriptions (15 Day Follow-Up)	1,041	1,581	1,240	78.4 (76.4, 80.5)	1,211	1,797	1,373	76.4 (74.4, 78.4)
Atomoxetine IR Prescriptions (8 Day Follow-Up)	1,076	1,707	1,189	69.7 (67.5, 71.8)	1,245	1,942	1,357	69.9 (67.8, 71.9)
Fluoxetine Prescriptions (15 Day Follow-Up)	11,016	15,411	11,381	73.8 (73.2, 74.5)	10,639	14,917	10,603	71.1 (70.4, 71.8)
Fluoxetine Prescriptions (8 Day Follow-Up)	11,414	16,568	10,958	66.1 (65.4, 66.9)	10,972	15,961	10,241	64.2 (63.4, 64.9)
Diazepam Prescriptions (15 Day Follow-Up)	1,736	2,161	1,294	59.9 (57.8, 61.9)	1,952	2,378	1,314	55.3 (53.3, 57.3)
Diazepam Prescriptions (8 Day Follow-Up)	1,836	2,374	1,367	57.6 (55.6, 59.6)	2,035	2,569	1,351	52.6 (50.7, 54.5)
Atorvastatin Prescriptions (15 Day Follow-Up)	18,534	21,780	15,813	72.6 (72.0, 73.2)	19,127	22,605	16,197	71.7 (71.1, 72.2)
Atorvastatin Prescriptions (8 Day Follow-Up)	19,250	23,127	15,170	65.6 (65.0, 66.2)	19,812	23,899	15,717	65.8 (65.2, 66.4)
ER Morphine Prescriptions (15 Day Follow-Up)	339	1,201	1,084	90.3 (88.6, 91.9)	303	1,068	948	88.8 (86.9, 90.7)
ER Morphine Prescriptions (8 Day Follow-Up)	347	1,323	1,046	79.1 (76.9, 81.3)	312	1,177	910	77.3 (74.9, 79.7)

Table 2. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from September 1, 2021 to February 28, 2022, and from September 1, 2022 to February 28, 2023

	Difference in Proportions (Shortage - Pre-Shortage)	Difference in Differences (Atomoxetine IR Prescriptions Comparison)	Difference in Differences (Fluoxetine Prescriptions Comparison)	Difference in Differences (Diazepam Prescriptions Comparison)	Difference in Differences (Atorvastatin Prescriptions Comparison)	Difference in Differences (ER Morphine Prescriptions Comparison)
IR Amphetamine Dextroamphetamine Prescriptions (15 Day Follow-Up)	-3.7	-1.7	-0.9	0.9	-2.8	-2.2
IR Amphetamine Dextroamphetamine Prescriptions (8 Day Follow-Up)	-3.8	-4.0	-1.8	1.2	-3.9	-2.0
ER Amphetamine Dextroamphetamine Prescriptions (15 Day Follow-Up)	0.3	2.3	3.1	4.9	1.2	1.8
ER Amphetamine Dextroamphetamine Prescriptions (8 Day Follow-Up)	0.3	0.1	2.3	5.3	0.1	2.1
Atomoxetine IR Prescriptions (15 Day Follow-Up)	-2.0					
Atomoxetine IR Prescriptions (8 Day Follow-Up)	0.2					
Fluoxetine Prescriptions (15 Day Follow-Up)	-2.8					
Fluoxetine Prescriptions (8 Day Follow-Up)	-2.0					
Diazepam Prescriptions (15 Day Follow-Up)	-4.6					
Diazepam Prescriptions (8 Day Follow-Up)	-5.0					
Atorvastatin Prescriptions (15 Day Follow-Up)	-1.0					
Atorvastatin Prescriptions (8 Day Follow-Up)	0.2					
ER Morphine Prescriptions (15 Day Follow-Up)	-1.5					
ER Morphine Prescriptions (8 Day Follow-Up)	-1.7					

Shaded cells represent difference-in-differences between comparator drugs and are not reported.

Table 3. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from September 1, 2021 to February 28, 2022, and from September 1, 2022 to February 28, 2023, by Age Group

	Pre-Shortage Period September 1, 2021 - February 28, 2022				Shortage Period September 1, 2022 - February 28, 2023			
	N Patients	N Prescriptions	N Prescriptions Followed by a Dispensing	Proportion of Prescriptions Followed by a Dispensing	N Patients	N Prescriptions	N Prescriptions Followed by a Dispensing	Proportion of Prescriptions Followed by a Dispensing
Immediate Release (IR) Amphetamine Dextroamphetamine Prescriptions (15 Day Follow-Up)								
0-4 years	2	2	1	50.0 (0.0, 119.3)	1	1	1	100.0 (100.0, 100.0)
5-17 years	394	780	656	84.1 (81.5, 86.7)	454	911	728	79.9 (77.3, 82.5)
18-29 years	1,431	3,286	2,809	85.5 (84.3, 86.7)	1,389	3,098	2,522	81.4 (80.0, 82.8)
30-64 years	3,512	9,446	8,360	88.5 (87.9, 89.1)	4,121	11,454	9,708	84.8 (84.1, 85.4)
IR Amphetamine Dextroamphetamine Prescriptions (8 Day Follow-Up)								
0-4 years	2	2	1	50.0 (0.0, 119.3)	1	1	1	100.0 (100.0, 100.0)
5-17 years	404	843	639	75.8 (72.9, 78.7)	463	980	698	71.2 (68.4, 74.1)
18-29 years	1,477	3,533	2,780	78.7 (77.3, 80.0)	1,418	3,376	2,480	73.5 (72.0, 74.9)
30-64 years	3,593	10,125	8,101	80.0 (79.2, 80.8)	4,197	12,442	9,532	76.6 (75.9, 77.4)
Extended Release (ER) Amphetamine Dextroamphetamine Prescriptions (15 Day Follow-Up)								
0-4 years	4	7	7	100.0 (100.0, 100.0)	3	8	8	100.0 (100.0, 100.0)
5-17 years	1,326	2,860	2,485	86.9 (85.7, 88.1)	1,528	3,480	3,035	87.2 (86.1, 88.3)
18-29 years	2,284	5,444	4,734	87.0 (86.1, 87.9)	2,384	5,927	5,163	87.1 (86.3, 88.0)
30-64 years	4,291	11,961	10,694	89.4 (88.9, 90.0)	5,030	14,512	13,014	89.7 (89.2, 90.2)
ER Amphetamine Dextroamphetamine Prescriptions (8 Day Follow-Up)								
0-4 years	4	8	8	100.0 (100.0, 100.0)	3	11	7	63.6 (35.2, 92.1)
5-17 years	1,351	3,093	2,489	80.5 (79.1, 81.9)	1,571	3,830	3,086	80.6 (79.3, 81.8)
18-29 years	2,346	5,871	4,723	80.4 (79.4, 81.5)	2,445	6,417	5,168	80.5 (79.6, 81.5)
30-64 years	4,387	12,773	10,448	81.8 (81.1, 82.5)	5,145	15,641	12,864	82.2 (81.6, 82.8)
Atomoxetine IR Prescriptions (15 Day Follow-Up)								
0-4 years	0	0	0	NaN	1	1	1	100.0 (100.0, 100.0)
5-17 years	240	410	333	81.2 (77.4, 85.0)	282	457	369	80.7 (77.1, 84.4)
18-29 years	322	452	334	73.9 (69.8, 77.9)	338	467	345	73.9 (69.9, 77.9)
30-64 years	481	719	573	79.7 (76.8, 82.6)	593	872	658	75.5 (72.6, 78.3)
Atomoxetine IR Prescriptions (8 Day Follow-Up)								
0-4 years	0	0	0	NaN	1	1	1	100.0 (100.0, 100.0)
5-17 years	249	454	314	69.2 (64.9, 73.4)	288	491	359	73.1 (69.2, 77.0)

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Table 3. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from September 1, 2021 to February 28, 2022, and from September 1, 2022 to February 28, 2023, by Age Group

	Pre-Shortage Period September 1, 2021 - February 28, 2022				Shortage Period September 1, 2022 - February 28, 2023			
	N Patients	N Prescriptions	N Prescriptions Followed by a Dispensing	Proportion of Prescriptions Followed by a Dispensing	N Patients	N Prescriptions	N Prescriptions Followed by a Dispensing	Proportion of Prescriptions Followed by a Dispensing
18-29 years	331	481	323	67.2 (63.0, 71.3)	350	508	343	67.5 (63.4, 71.6)
30-64 years	498	772	552	71.5 (68.3, 74.7)	610	942	654	69.4 (66.5, 72.4)
Fluoxetine Prescriptions (15 Day Follow-Up)								
0-4 years	1	2	0	0.0 (0.0, 0.0)	1	1	1	100.0 (100.0, 100.0)
5-17 years	1,480	2,427	1,901	78.3 (76.7, 80.0)	1,401	2,218	1,617	72.9 (71.1, 74.8)
18-29 years	2,529	3,602	2,592	72.0 (70.5, 73.4)	2,438	3,451	2,388	69.2 (67.7, 70.7)
30-64 years	7,040	9,380	6,888	73.4 (72.5, 74.3)	6,835	9,247	6,597	71.3 (70.4, 72.3)
Fluoxetine Prescriptions (8 Day Follow-Up)								
0-4 years	1	2	0	0.0 (0.0, 0.0)	1	1	1	100.0 (100.0, 100.0)
5-17 years	1,541	2,676	1,873	70.0 (68.3, 71.7)	1,448	2,425	1,601	66.0 (64.1, 67.9)
18-29 years	2,641	3,888	2,517	64.7 (63.2, 66.2)	2,520	3,698	2,334	63.1 (61.6, 64.7)
30-64 years	7,268	10,002	6,568	65.7 (64.7, 66.6)	7,042	9,837	6,305	64.1 (63.1, 65.0)
Diazepam Prescriptions (15 Day Follow-Up)								
0-4 years	12	12	2	16.7 (0.0, 37.8)	5	5	0	0.0 (0.0, 0.0)
5-17 years	38	43	17	39.5 (24.9, 54.1)	37	40	21	52.5 (37.0, 68.0)
18-29 years	140	153	68	44.4 (36.6, 52.3)	180	206	88	42.7 (36.0, 49.5)
30-64 years	1,546	1,953	1,207	61.8 (59.6, 64.0)	1,731	2,127	1,205	56.7 (54.5, 58.8)
Diazepam Prescriptions (8 Day Follow-Up)								
0-4 years	12	12	2	16.7 (0.0, 37.8)	6	6	0	0.0 (0.0, 0.0)
5-17 years	43	49	20	40.8 (27.1, 54.6)	38	41	21	51.2 (35.9, 66.5)
18-29 years	146	163	71	43.6 (35.9, 51.2)	186	221	91	41.2 (34.7, 47.7)
30-64 years	1,635	2,150	1,274	59.3 (57.2, 61.3)	1,806	2,301	1,239	53.8 (51.8, 55.9)
Atorvastatin Prescriptions (15 Day Follow-Up)								
0-4 years	0	0	0	NaN	0	0	0	NaN
5-17 years	3	3	2	66.7 (13.3, 100.0)	4	5	4	80.0 (44.9, 115.1)
18-29 years	91	97	72	74.2 (65.5, 82.9)	107	115	86	74.8 (66.8, 82.7)
30-64 years	18,440	21,680	15,739	72.6 (72.0, 73.2)	19,016	22,485	16,107	71.6 (71.0, 72.2)

Table 3. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from September 1, 2021 to February 28, 2022, and from September 1, 2022 to February 28, 2023, by Age Group

	Pre-Shortage Period September 1, 2021 - February 28, 2022				Shortage Period September 1, 2022 - February 28, 2023			
	N Patients	N Prescriptions	N Prescriptions Followed by a Dispensing	Proportion of Prescriptions Followed by a Dispensing	N Patients	N Prescriptions	N Prescriptions Followed by a Dispensing	Proportion of Prescriptions Followed by a Dispensing
Atorvastatin Prescriptions (8 Day Follow-Up)								
0-4 years	0	0	0	NaN	0	0	0	NaN
5-17 years	3	3	2	66.7 (13.3, 100.0)	5	6	4	66.7 (28.9, 104.4)
18-29 years	94	102	71	69.6 (60.7, 78.5)	111	123	84	68.3 (60.1, 76.5)
30-64 years	19,153	23,022	15,097	65.6 (65.0, 66.2)	19,696	23,770	15,629	65.8 (65.1, 66.4)
ER Morphine Prescriptions (15 Day Follow-Up)								
0-4 years	0	0	0	NaN	0	0	0	NaN
5-17 years	0	0	0	NaN	0	0	0	NaN
18-29 years	1	1	0	0.0 (0.0, 0.0)	2	9	4	44.4 (12.0, 76.9)
30-64 years	338	1,200	1,084	90.3 (88.7, 92.0)	302	1,059	944	89.1 (87.3, 91.0)
ER Morphine Prescriptions (8 Day Follow-Up)								
0-4 years	0	0	0	NaN	0	0	0	NaN
5-17 years	0	0	0	NaN	0	0	0	NaN
18-29 years	1	1	0	0.0 (0.0, 0.0)	2	9	4	44.4 (12.0, 76.9)
30-64 years	346	1,322	1,046	79.1 (76.9, 81.3)	311	1,168	906	77.6 (75.2, 80.0)

Table 3. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from September 1, 2021 to February 28, 2022, and from September 1, 2022 to February 28, 2023, by Age Group

	Difference in Proportions (Shortage - Pre-Shortage)	Difference in Differences (Atomoxetine IR Prescriptions Comparison)	Difference in Differences (Fluoxetine Prescriptions Comparison)	Difference in Differences (Diazepam Prescriptions Comparison)	Difference in Differences (Atorvastatin Prescriptions Comparison)	Difference in Differences (ER Morphine Prescriptions Comparison)
IR Amphetamine Dextroamphetamine Prescriptions (15 Day Follow-Up)						
0-4 years	50.0	NaN	-50.0	66.7	NaN	NaN
5-17 years	-4.2	-3.7	1.2	-17.2	-17.5	NaN
18-29 years	-4.1	-4.1	-1.3	-2.4	-4.6	-48.5
30-64 years	-3.7	0.5	-1.7	1.4	-2.8	-2.6
IR Amphetamine Dextroamphetamine Prescriptions (8 Day Follow-Up)						
0-4 years	50.0	NaN	-50.0	66.7	NaN	NaN
5-17 years	-4.6	-8.5	-0.6	-15.0	-4.6	NaN
18-29 years	-5.2	-5.6	-3.6	-2.8	-3.9	-49.7
30-64 years	-3.4	-1.3	-1.8	2.0	-3.6	-1.8
ER Amphetamine Dextroamphetamine Prescriptions (15 Day Follow-Up)						
0-4 years	0.0	NaN	-100.0	16.7	NaN	NaN
5-17 years	0.3	0.8	5.7	-12.6	-13.0	NaN
18-29 years	0.2	0.2	2.9	1.9	-0.4	-44.3
30-64 years	0.3	4.5	2.4	5.4	1.2	1.5
ER Amphetamine Dextroamphetamine Prescriptions (8 Day Follow-Up)						
0-4 years	-36.4	NaN	-136.4	-19.7	NaN	NaN
5-17 years	0.1	-3.9	4.1	-10.3	0.1	NaN
18-29 years	0.1	-0.3	1.7	2.5	1.4	-44.4
30-64 years	0.4	2.5	2.0	5.9	0.3	2.0
Atomoxetine IR Prescriptions (15 Day Follow-Up)						
0-4 years	NaN					
5-17 years	-0.5					
18-29 years	-0.0					
30-64 years	-4.2					
Atomoxetine IR Prescriptions (8 Day Follow-Up)						
0-4 years	NaN					
5-17 years	4.0					

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Table 3. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from September 1, 2021 to February 28, 2022, and from September 1, 2022 to February 28, 2023, by Age Group

	Difference in Proportions (Shortage - Pre-Shortage)	Difference in Differences (Atomoxetine IR Prescriptions Comparison)	Difference in Differences (Fluoxetine Prescriptions Comparison)	Difference in Differences (Diazepam Prescriptions Comparison)	Difference in Differences (Atorvastatin Prescriptions Comparison)	Difference in Differences (ER Morphine Prescriptions Comparison)
18-29 years	0.4					
30-64 years	-2.1					
Fluoxetine Prescriptions (15 Day Follow-Up)						
0-4 years	100.0					
5-17 years	-5.4					
18-29 years	-2.8					
30-64 years	-2.1					
Fluoxetine Prescriptions (8 Day Follow-Up)						
0-4 years	100.0					
5-17 years	-4.0					
18-29 years	-1.6					
30-64 years	-1.6					
Diazepam Prescriptions (15 Day Follow-Up)						
0-4 years	-16.7					
5-17 years	13.0					
18-29 years	-1.7					
30-64 years	-5.1					
Diazepam Prescriptions (8 Day Follow-Up)						
0-4 years	-16.7					
5-17 years	10.4					
18-29 years	-2.4					
30-64 years	-5.4					
Atorvastatin Prescriptions (15 Day Follow-Up)						
0-4 years	NaN					
5-17 years	13.3					
18-29 years	0.6					
30-64 years	-1.0					

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Table 3. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from September 1, 2021 to February 28, 2022, and from September 1, 2022 to February 28, 2023, by Age Group

	Difference in Proportions (Shortage - Pre-Shortage)	Difference in Differences (Atomoxetine IR Prescriptions Comparison)	Difference in Differences (Fluoxetine Prescriptions Comparison)	Difference in Differences (Diazepam Prescriptions Comparison)	Difference in Differences (Atorvastatin Prescriptions Comparison)	Difference in Differences (ER Morphine Prescriptions Comparison)
Atorvastatin Prescriptions (8 Day Follow-Up)						
0-4 years	NaN					
5-17 years	0.0					
18-29 years	-1.3					
30-64 years	0.2					
ER Morphine Prescriptions (15 Day Follow-Up)						
0-4 years	NaN					
5-17 years	NaN					
18-29 years	44.4					
30-64 years	-1.2					
ER Morphine Prescriptions (8 Day Follow-Up)						
0-4 years	NaN					
5-17 years	NaN					
18-29 years	44.4					
30-64 years	-1.6					

NaN = Not a number

Shaded cells represent difference-in-differences between comparator drugs and are not reported.

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Table 4. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from September 1, 2021 to February 28, 2022, and from September 1, 2022 to February 28, 2023, by Month

	Pre-Shortage Period September 1, 2021 - February 28, 2022				Shortage Period September 1, 2022 - February 28, 2023			
	N Patients	N Prescriptions	N Prescriptions Followed by a Dispensing	Proportion of Prescriptions Followed by a Dispensing	N Patients	N Prescriptions	N Prescriptions Followed by a Dispensing	Proportion of Prescriptions Followed by a Dispensing
Immediate Release (IR) Amphetamine Dextroamphetamine Prescriptions (15 Day Follow-Up)								
September	2,346	2,427	2,140	88.2 (86.9, 89.5)	2,576	2,665	2,284	85.7 (84.4, 87.0)
October	2,349	2,405	2,126	88.4 (87.1, 89.7)	2,607	2,678	2,267	84.7 (83.3, 86.0)
November	2,423	2,528	2,234	88.4 (87.1, 89.6)	2,660	2,756	2,254	81.8 (80.3, 83.2)
December	2,393	2,482	2,151	86.7 (85.3, 88.0)	2,807	2,915	2,441	83.7 (82.4, 85.1)
January	2,358	2,428	2,117	87.2 (85.9, 88.5)	2,910	3,057	2,565	83.9 (82.6, 85.2)
February	1,244	1,244	1,058	85.0 (83.1, 87.0)	1,393	1,393	1,148	82.4 (80.4, 84.4)
IR Amphetamine Dextroamphetamine Prescriptions (8 Day Follow-Up)								
September	2,375	2,496	2,041	81.8 (80.3, 83.3)	2,608	2,776	2,172	78.2 (76.7, 79.8)
October	2,378	2,471	1,985	80.3 (78.8, 81.9)	2,647	2,787	2,153	77.3 (75.7, 78.8)
November	2,452	2,597	2,067	79.6 (78.0, 81.1)	2,700	2,868	2,149	74.9 (73.3, 76.5)
December	2,442	2,564	1,994	77.8 (76.2, 79.4)	2,882	3,070	2,299	74.9 (73.4, 76.4)
January	2,378	2,499	1,984	79.4 (77.8, 81.0)	2,944	3,163	2,393	75.7 (74.2, 77.2)
February	1,853	1,876	1,450	77.3 (75.4, 79.2)	2,100	2,135	1,545	72.4 (70.5, 74.3)
Extended Release (ER) Amphetamine Dextroamphetamine Prescriptions (15 Day Follow-Up)								
September	3,601	3,731	3,361	90.1 (89.1, 91.0)	4,019	4,163	3,702	88.9 (88.0, 89.9)
October	3,477	3,573	3,197	89.5 (88.5, 90.5)	3,969	4,088	3,637	89.0 (88.0, 89.9)
November	3,688	3,845	3,378	87.9 (86.8, 88.9)	4,122	4,258	3,771	88.6 (87.6, 89.5)
December	3,599	3,703	3,229	87.2 (86.1, 88.3)	4,228	4,374	3,893	89.0 (88.1, 89.9)
January	3,524	3,648	3,203	87.8 (86.7, 88.9)	4,578	4,790	4,193	87.5 (86.6, 88.5)
February	1,772	1,772	1,552	87.6 (86.0, 89.1)	2,254	2,254	2,024	89.8 (88.5, 91.0)
ER Amphetamine Dextroamphetamine Prescriptions (8 Day Follow-Up)								
September	3,647	3,849	3,236	84.1 (82.9, 85.2)	4,065	4,291	3,571	83.2 (82.1, 84.3)
October	3,529	3,686	3,053	82.8 (81.6, 84.0)	4,015	4,224	3,440	81.4 (80.3, 82.6)
November	3,733	3,961	3,184	80.4 (79.1, 81.6)	4,180	4,398	3,563	81.0 (79.9, 82.2)
December	3,681	3,856	3,048	79.0 (77.8, 80.3)	4,324	4,557	3,697	81.1 (80.0, 82.3)
January	3,566	3,754	3,022	80.5 (79.2, 81.8)	4,628	4,949	3,996	80.7 (79.6, 81.8)
February	2,605	2,639	2,125	80.5 (79.0, 82.0)	3,419	3,480	2,858	82.1 (80.9, 83.4)

Table 4. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from September 1, 2021 to February 28, 2022, and from September 1, 2022 to February 28, 2023, by Month

	Pre-Shortage Period September 1, 2021 - February 28, 2022				Shortage Period September 1, 2022 - February 28, 2023			
	N Patients	N Prescriptions	N Prescriptions Followed by a Dispensing	Proportion of Prescriptions Followed by a Dispensing	N Patients	N Prescriptions	N Prescriptions Followed by a Dispensing	Proportion of Prescriptions Followed by a Dispensing
Atomoxetine IR Prescriptions (15 Day Follow-Up)								
September	269	274	205	74.8 (69.7, 80.0)	296	303	226	74.6 (69.7, 79.5)
October	268	273	214	78.4 (73.5, 83.3)	341	347	260	74.9 (70.4, 79.5)
November	285	294	233	79.3 (74.6, 83.9)	324	332	250	75.3 (70.7, 79.9)
December	294	299	243	81.3 (76.8, 85.7)	297	303	229	75.6 (70.7, 80.4)
January	294	299	231	77.3 (72.5, 82.0)	336	346	281	81.2 (77.1, 85.3)
February	142	142	114	80.3 (73.7, 86.8)	166	166	127	76.5 (70.1, 83.0)
Atomoxetine IR Prescriptions (8 Day Follow-Up)								
September	274	286	197	68.9 (63.5, 74.2)	301	312	218	69.9 (64.8, 75.0)
October	274	283	195	68.9 (63.5, 74.3)	344	356	243	68.3 (63.4, 73.1)
November	289	302	217	71.9 (66.8, 76.9)	327	345	239	69.3 (64.4, 74.1)
December	300	313	226	72.2 (67.2, 77.2)	305	318	222	69.8 (64.8, 74.9)
January	299	312	213	68.3 (63.1, 73.4)	339	359	266	74.1 (69.6, 78.6)
February	204	211	141	66.8 (60.5, 73.2)	247	252	169	67.1 (61.3, 72.9)
Fluoxetine Prescriptions (15 Day Follow-Up)								
September	2,755	2,802	2,091	74.6 (73.0, 76.2)	2,644	2,700	1,968	72.9 (71.2, 74.6)
October	2,649	2,705	2,010	74.3 (72.7, 76.0)	2,691	2,745	1,956	71.3 (69.6, 72.9)
November	2,830	2,876	2,110	73.4 (71.8, 75.0)	2,648	2,705	1,899	70.2 (68.5, 71.9)
December	2,778	2,845	2,078	73.0 (71.4, 74.7)	2,612	2,665	1,875	70.4 (68.6, 72.1)
January	2,733	2,781	2,047	73.6 (72.0, 75.2)	2,713	2,774	1,975	71.2 (69.5, 72.9)
February	1,402	1,402	1,045	74.5 (72.3, 76.8)	1,328	1,328	930	70.0 (67.6, 72.5)
Fluoxetine Prescriptions (8 Day Follow-Up)								
September	2,801	2,906	1,942	66.8 (65.1, 68.5)	2,677	2,785	1,869	67.1 (65.4, 68.9)
October	2,700	2,802	1,868	66.7 (64.9, 68.4)	2,724	2,828	1,825	64.5 (62.8, 66.3)
November	2,870	2,961	1,959	66.2 (64.5, 67.9)	2,686	2,795	1,777	63.6 (61.8, 65.4)
December	2,841	2,968	1,932	65.1 (63.4, 66.8)	2,684	2,787	1,764	63.3 (61.5, 65.1)
January	2,778	2,881	1,905	66.1 (64.4, 67.9)	2,739	2,847	1,815	63.8 (62.0, 65.5)
February	2,022	2,050	1,352	66.0 (63.9, 68.0)	1,883	1,919	1,191	62.1 (59.9, 64.2)

Table 4. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from September 1, 2021 to February 28, 2022, and from September 1, 2022 to February 28, 2023, by Month

	Pre-Shortage Period September 1, 2021 - February 28, 2022				Shortage Period September 1, 2022 - February 28, 2023			
	N Patients	N Prescriptions	N Prescriptions Followed by a Dispensing	Proportion of Prescriptions Followed by a Dispensing	N Patients	N Prescriptions	N Prescriptions Followed by a Dispensing	Proportion of Prescriptions Followed by a Dispensing
Diazepam Prescriptions (15 Day Follow-Up)								
September	395	402	249	61.9 (57.2, 66.7)	419	427	236	55.3 (50.6, 60.0)
October	399	406	246	60.6 (55.8, 65.3)	466	472	249	52.8 (48.3, 57.3)
November	409	413	252	61.0 (56.3, 65.7)	442	449	244	54.3 (49.7, 59.0)
December	392	396	219	55.3 (50.4, 60.2)	386	394	221	56.1 (51.2, 61.0)
January	359	369	227	61.5 (56.6, 66.5)	413	421	241	57.2 (52.5, 62.0)
February	175	175	101	57.7 (50.4, 65.0)	215	215	123	57.2 (50.6, 63.8)
Diazepam Prescriptions (8 Day Follow-Up)								
September	403	418	244	58.4 (53.6, 63.1)	434	446	231	51.8 (47.2, 56.4)
October	405	420	239	56.9 (52.2, 61.6)	474	484	248	51.2 (46.8, 55.7)
November	413	424	249	58.7 (54.0, 63.4)	449	471	243	51.6 (47.1, 56.1)
December	400	410	222	54.1 (49.3, 59.0)	397	413	225	54.5 (49.7, 59.3)
January	368	393	232	59.0 (54.2, 63.9)	417	439	242	55.1 (50.5, 59.8)
February	303	309	181	58.6 (53.1, 64.1)	311	316	162	51.3 (45.8, 56.8)
Atorvastatin Prescriptions (15 Day Follow-Up)								
September	3,904	3,950	2,892	73.2 (71.8, 74.6)	4,009	4,048	2,930	72.4 (71.0, 73.8)
October	3,964	3,998	2,869	71.8 (70.4, 73.2)	3,994	4,025	2,880	71.6 (70.2, 72.9)
November	4,066	4,098	3,024	73.8 (72.4, 75.1)	4,094	4,128	2,939	71.2 (69.8, 72.6)
December	3,926	3,951	2,851	72.2 (70.8, 73.6)	4,270	4,306	3,118	72.4 (71.1, 73.7)
January	3,880	3,910	2,844	72.7 (71.3, 74.1)	4,068	4,106	2,905	70.8 (69.4, 72.1)
February	1,873	1,873	1,333	71.2 (69.1, 73.2)	1,992	1,992	1,425	71.5 (69.6, 73.5)
Atorvastatin Prescriptions (8 Day Follow-Up)								
September	3,944	4,040	2,698	66.8 (65.3, 68.2)	4,053	4,129	2,762	66.9 (65.5, 68.3)
October	4,002	4,080	2,683	65.8 (64.3, 67.2)	4,031	4,110	2,698	65.6 (64.2, 67.1)
November	4,104	4,174	2,793	66.9 (65.5, 68.3)	4,138	4,223	2,782	65.9 (64.4, 67.3)
December	3,991	4,050	2,639	65.2 (63.7, 66.6)	4,354	4,442	2,957	66.6 (65.2, 68.0)
January	3,909	3,979	2,604	65.4 (64.0, 66.9)	4,099	4,176	2,710	64.9 (63.4, 66.3)
February	2,784	2,804	1,753	62.5 (60.7, 64.3)	2,792	2,819	1,808	64.1 (62.4, 65.9)

Table 4. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from September 1, 2021 to February 28, 2022, and from September 1, 2022 to February 28, 2023, by Month

	Pre-Shortage Period September 1, 2021 - February 28, 2022				Shortage Period September 1, 2022 - February 28, 2023			
	N Patients	N Prescriptions	N Prescriptions Followed by a Dispensing	Proportion of Prescriptions Followed by a Dispensing	N Patients	N Prescriptions	N Prescriptions Followed by a Dispensing	Proportion of Prescriptions Followed by a Dispensing
ER Morphine Prescriptions (15 Day Follow-Up)								
September	203	218	204	93.6 (90.3, 96.8)	186	203	179	88.2 (83.7, 92.6)
October	199	213	197	92.5 (88.9, 96.0)	187	198	177	89.4 (85.1, 93.7)
November	207	227	206	90.7 (87.0, 94.5)	183	189	160	84.7 (79.5, 89.8)
December	210	226	195	86.3 (81.8, 90.8)	180	187	165	88.2 (83.6, 92.9)
January	202	220	194	88.2 (83.9, 92.4)	180	204	189	92.6 (89.1, 96.2)
February	97	97	88	90.7 (84.9, 96.5)	87	87	78	89.7 (83.3, 96.1)
ER Morphine Prescriptions (8 Day Follow-Up)								
September	207	237	197	83.1 (78.4, 87.9)	190	212	163	76.9 (71.2, 82.6)
October	203	228	182	79.8 (74.6, 85.0)	192	214	163	76.2 (70.5, 81.9)
November	210	239	184	77.0 (71.7, 82.3)	185	198	147	74.2 (68.2, 80.3)
December	216	240	183	76.3 (70.9, 81.6)	186	198	151	76.3 (70.3, 82.2)
January	208	234	181	77.4 (72.0, 82.7)	182	219	181	82.6 (77.6, 87.7)
February	143	145	119	82.1 (75.8, 88.3)	133	136	105	77.2 (70.2, 84.3)

Table 4. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from September 1, 2021 to February 28, 2022, and from September 1, 2022 to February 28, 2023, by Month

	Difference in Proportions (Shortage - Pre-Shortage)	Difference in Differences (Atomoxetine IR Prescriptions Comparison)	Difference in Differences (Fluoxetine Prescriptions Comparison)	Difference in Differences (Diazepam Prescriptions Comparison)	Difference in Differences (Atorvastatin Prescriptions Comparison)	Difference in Differences (ER Morphine Prescriptions Comparison)
IR Amphetamine Dextroamphetamine Prescriptions (15 Day Follow-Up)						
September	-2.5	-2.2	-0.7	4.2	-1.6	2.9
October	-3.7	-0.3	-0.7	4.1	-3.5	-0.7
November	-6.6	-2.6	-3.4	0.1	-4.0	-0.5
December	-2.9	2.8	-0.2	-3.7	-3.2	-4.9
January	-3.3	-7.2	-0.9	1.0	-1.3	-7.8
February	-2.6	1.1	1.9	-2.1	-3.0	-1.6
IR Amphetamine Dextroamphetamine Prescriptions (8 Day Follow-Up)						
September	-3.5	-4.5	-3.8	3.1	-3.6	2.7
October	-3.1	-2.4	-0.9	2.6	-3.0	0.6
November	-4.7	-2.1	-2.1	2.5	-3.6	-1.9
December	-2.9	-0.5	-1.1	-3.2	-4.3	-2.9
January	-3.7	-9.6	-1.4	0.2	-3.2	-9.0
February	-4.9	-5.2	-1.0	2.4	-6.5	-0.1
ER Amphetamine Dextroamphetamine Prescriptions (15 Day Follow-Up)						
September	-1.2	-0.9	0.6	5.5	-0.3	4.2
October	-0.5	3.0	2.5	7.3	-0.3	2.6
November	0.7	4.7	3.9	7.4	3.3	6.8
December	1.8	7.5	4.5	1.0	1.6	-0.1
January	-0.3	-4.2	2.1	4.0	1.7	-4.7
February	2.2	6.0	6.7	2.7	1.8	3.3
ER Amphetamine Dextroamphetamine Prescriptions (8 Day Follow-Up)						
September	-0.9	-1.8	-1.1	5.7	-1.0	5.4
October	-1.4	-0.7	0.7	4.3	-1.3	2.3
November	0.6	3.2	3.2	7.8	1.7	3.4
December	2.1	4.5	3.9	1.7	0.7	2.1
January	0.2	-5.6	2.6	4.2	0.8	-5.1

Table 4. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from September 1, 2021 to February 28, 2022, and from September 1, 2022 to February 28, 2023, by Month

	Difference in Proportions (Shortage - Pre-Shortage)	Difference in Differences (Atomoxetine IR Prescriptions Comparison)	Difference in Differences (Fluoxetine Prescriptions Comparison)	Difference in Differences (Diazepam Prescriptions Comparison)	Difference in Differences (Atorvastatin Prescriptions Comparison)	Difference in Differences (ER Morphine Prescriptions Comparison)
February	1.6	1.4	5.5	8.9	-0.0	6.5
Atomoxetine IR Prescriptions (15 Day Follow-Up)						
September	-0.2					
October	-3.5					
November	-4.0					
December	-5.7					
January	4.0					
February	-3.8					
Atomoxetine IR Prescriptions (8 Day Follow-Up)						
September	1.0					
October	-0.6					
November	-2.6					
December	-2.4					
January	5.8					
February	0.2					
Fluoxetine Prescriptions (15 Day Follow-Up)						
September	-1.7					
October	-3.1					
November	-3.2					
December	-2.7					
January	-2.4					
February	-4.5					
Fluoxetine Prescriptions (8 Day Follow-Up)						
September	0.3					
October	-2.1					
November	-2.6					
December	-1.8					

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	Difference in Proportions (Shortage - Pre-Shortage)	Difference in Differences (Atomoxetine IR Prescriptions Comparison)	Difference in Differences (Fluoxetine Prescriptions Comparison)	Difference in Differences (Diazepam Prescriptions Comparison)	Difference in Differences (Atorvastatin Prescriptions Comparison)	Difference in Differences (ER Morphine Prescriptions Comparison)
January	-2.4					
February	-3.9					
Diazepam Prescriptions (15 Day Follow-Up)						
September	-6.7					
October	-7.8					
November	-6.7					
December	0.8					
January	-4.3					
February	-0.5					
Diazepam Prescriptions (8 Day Follow-Up)						
September	-6.6					
October	-5.7					
November	-7.1					
December	0.3					
January	-3.9					
February	-7.3					
Atorvastatin Prescriptions (15 Day Follow-Up)						
September	-0.8					
October	-0.2					
November	-2.6					
December	0.3					
January	-2.0					
February	0.4					
Atorvastatin Prescriptions (8 Day Follow-Up)						
September	0.1					
October	-0.1					
November	-1.0					

Table 4. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from September 1, 2021 to February 28, 2022, and from September 1, 2022 to February 28, 2023, by Month

	Difference in Proportions (Shortage - Pre-Shortage)	Difference in Differences (Atomoxetine IR Prescriptions Comparison)	Difference in Differences (Fluoxetine Prescriptions Comparison)	Difference in Differences (Diazepam Prescriptions Comparison)	Difference in Differences (Atorvastatin Prescriptions Comparison)	Difference in Differences (ER Morphine Prescriptions Comparison)
December	1.4					
January	-0.5					
February	1.6					
ER Morphine Prescriptions (15 Day Follow-Up)						
September	-5.4					
October	-3.1					
November	-6.1					
December	2.0					
January	4.5					
February	-1.1					
ER Morphine Prescriptions (8 Day Follow-Up)						
September	-6.2					
October	-3.7					
November	-2.7					
December	0.0					
January	5.3					
February	-4.9					

Shaded cells represent difference-in-differences between comparator drugs and are not reported.

Table 5. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from September 1, 2021 to February 28, 2022, and from September 1, 2022 to February 28, 2023, by Month and Age Group

	Pre-Shortage Period September 1, 2021 - February 28, 2022				Shortage Period September 1, 2022 - February 28, 2023			
	N Patients	N Prescriptions	N Prescriptions Followed by a Dispensing	Proportion of Prescriptions Followed by a Dispensing	N Patients	N Prescriptions	N Prescriptions Followed by a Dispensing	Proportion of Prescriptions Followed by a Dispensing
Immediate Release (IR) Amphetamine Dextroamphetamine Prescriptions (15 Day Follow-Up)								
September								
0-4 years	1	1	1	100.0 (100.0, 100.0)	0	0	0	NaN
5-17 years	142	145	120	82.8 (76.6, 88.9)	142	144	117	81.3 (74.9, 87.6)
18-29 years	578	598	506	84.6 (81.7, 87.5)	549	569	477	83.8 (80.8, 86.9)
30-64 years	1,625	1,683	1,513	89.9 (88.5, 91.3)	1,885	1,952	1,690	86.6 (85.1, 88.1)
October								
0-4 years	1	1	0	0.0 (0.0, 0.0)	0	0	0	NaN
5-17 years	126	131	112	85.5 (79.5, 91.5)	156	162	132	81.5 (75.5, 87.5)
18-29 years	587	598	518	86.6 (83.9, 89.4)	522	532	427	80.3 (76.9, 83.6)
30-64 years	1,635	1,675	1,496	89.3 (87.8, 90.8)	1,929	1,984	1,708	86.1 (84.6, 87.6)
November								
0-4 years	0	0	0	NaN	0	0	0	NaN
5-17 years	139	144	119	82.6 (76.5, 88.8)	158	164	127	77.4 (71.0, 83.8)
18-29 years	599	618	526	85.1 (82.3, 87.9)	535	552	434	78.6 (75.2, 82.0)
30-64 years	1,686	1,766	1,589	90.0 (88.6, 91.4)	1,967	2,040	1,693	83.0 (81.4, 84.6)
December								
0-4 years	0	0	0	NaN	1	1	1	100.0 (100.0, 100.0)
5-17 years	137	144	124	86.1 (80.5, 91.8)	166	173	139	80.3 (74.4, 86.3)
18-29 years	579	598	505	84.4 (81.5, 87.4)	529	539	429	79.6 (76.2, 83.0)
30-64 years	1,677	1,740	1,522	87.5 (85.9, 89.0)	2,112	2,202	1,872	85.0 (83.5, 86.5)
January								
0-4 years	0	0	0	NaN	0	0	0	NaN
5-17 years	138	142	119	83.8 (77.7, 89.9)	157	167	138	82.6 (76.9, 88.4)
18-29 years	549	565	490	86.7 (83.9, 89.5)	599	619	519	83.8 (80.9, 86.7)
30-64 years	1,671	1,721	1,508	87.6 (86.1, 89.2)	2,156	2,271	1,908	84.0 (82.5, 85.5)
February								
0-4 years	0	0	0	NaN	0	0	0	NaN

Table 5. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from September 1, 2021 to February 28, 2022, and from September 1, 2022 to February 28, 2023, by Month and Age Group

	Pre-Shortage Period September 1, 2021 - February 28, 2022				Shortage Period September 1, 2022 - February 28, 2023			
	N Patients	N Prescriptions	N Prescriptions Followed by a Dispensing	Proportion of Prescriptions Followed by a Dispensing	N Patients	N Prescriptions	N Prescriptions Followed by a Dispensing	Proportion of Prescriptions Followed by a Dispensing
5-17 years	74	74	62	83.8 (75.4, 92.2)	101	101	75	74.3 (65.7, 82.8)
18-29 years	309	309	264	85.4 (81.5, 89.4)	287	287	236	82.2 (77.8, 86.7)
30-64 years	861	861	732	85.0 (82.6, 87.4)	1,005	1,005	837	83.3 (81.0, 85.6)
IR Amphetamine Dextroamphetamine Prescriptions (8 Day Follow-Up)								
September								
0-4 years	1	1	1	100.0 (100.0, 100.0)	0	0	0	NaN
5-17 years	143	148	118	79.7 (73.3, 86.2)	144	149	114	76.5 (69.7, 83.3)
18-29 years	589	622	491	78.9 (75.7, 82.1)	559	590	450	76.3 (72.8, 79.7)
30-64 years	1,642	1,725	1,431	83.0 (81.2, 84.7)	1,906	2,037	1,608	78.9 (77.2, 80.7)
October								
0-4 years	1	1	0	0.0 (0.0, 0.0)	0	0	0	NaN
5-17 years	127	135	107	79.3 (72.4, 86.1)	156	166	123	74.1 (67.4, 80.8)
18-29 years	595	614	492	80.1 (77.0, 83.3)	536	562	415	73.8 (70.2, 77.5)
30-64 years	1,655	1,721	1,386	80.5 (78.7, 82.4)	1,955	2,059	1,615	78.4 (76.7, 80.2)
November								
0-4 years	0	0	0	NaN	0	0	0	NaN
5-17 years	140	145	105	72.4 (65.1, 79.7)	159	170	120	70.6 (63.7, 77.4)
18-29 years	610	640	498	77.8 (74.6, 81.0)	547	585	422	72.1 (68.5, 75.8)
30-64 years	1,703	1,812	1,464	80.8 (79.0, 82.6)	1,995	2,113	1,607	76.1 (74.2, 77.9)
December								
0-4 years	0	0	0	NaN	1	1	1	100.0 (100.0, 100.0)
5-17 years	140	149	114	76.5 (69.7, 83.3)	167	180	121	67.2 (60.4, 74.1)
18-29 years	589	616	474	76.9 (73.6, 80.3)	545	573	413	72.1 (68.4, 75.8)
30-64 years	1,713	1,799	1,406	78.2 (76.2, 80.1)	2,170	2,316	1,764	76.2 (74.4, 77.9)
January								
0-4 years	0	0	0	NaN	0	0	0	NaN
5-17 years	139	145	110	75.9 (68.9, 82.8)	160	173	128	74.0 (67.5, 80.5)
18-29 years	554	581	465	80.0 (76.8, 83.3)	605	637	488	76.6 (73.3, 79.9)

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Table 5. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from September 1, 2021 to February 28, 2022, and from September 1, 2022 to February 28, 2023, by Month and Age Group

	Pre-Shortage Period September 1, 2021 - February 28, 2022				Shortage Period September 1, 2022 - February 28, 2023			
	N Patients	N Prescriptions	N Prescriptions Followed by a Dispensing	Proportion of Prescriptions Followed by a Dispensing	N Patients	N Prescriptions	N Prescriptions Followed by a Dispensing	Proportion of Prescriptions Followed by a Dispensing
30-64 years	1,685	1,773	1,409	79.5 (77.6, 81.4)	2,181	2,353	1,777	75.5 (73.8, 77.3)
February								
0-4 years	0	0	0	NaN	0	0	0	NaN
5-17 years	119	121	85	70.2 (62.1, 78.4)	141	142	92	64.8 (56.9, 72.6)
18-29 years	454	460	360	78.3 (74.5, 82.0)	422	429	292	68.1 (63.7, 72.5)
30-64 years	1,280	1,295	1,005	77.6 (75.3, 79.9)	1,537	1,564	1,161	74.2 (72.1, 76.4)
Extended Release (ER) Amphetamine Dextroamphetamine Prescriptions (15 Day Follow-Up)								
September								
0-4 years	1	1	1	100.0 (100.0, 100.0)	2	2	2	100.0 (100.0, 100.0)
5-17 years	519	534	483	90.4 (88.0, 92.9)	555	577	498	86.3 (83.5, 89.1)
18-29 years	991	1,028	902	87.7 (85.7, 89.7)	1,061	1,093	951	87.0 (85.0, 89.0)
30-64 years	2,091	2,168	1,975	91.1 (89.9, 92.3)	2,401	2,491	2,251	90.4 (89.2, 91.5)
October								
0-4 years	1	1	1	100.0 (100.0, 100.0)	1	1	1	100.0 (100.0, 100.0)
5-17 years	493	509	451	88.6 (85.8, 91.4)	573	588	514	87.4 (84.7, 90.1)
18-29 years	935	961	845	87.9 (85.9, 90.0)	991	1,023	895	87.5 (85.5, 89.5)
30-64 years	2,049	2,102	1,900	90.4 (89.1, 91.7)	2,404	2,476	2,227	89.9 (88.8, 91.1)
November								
0-4 years	2	2	2	100.0 (100.0, 100.0)	1	1	1	100.0 (100.0, 100.0)
5-17 years	536	558	478	85.7 (82.8, 88.6)	582	608	534	87.8 (85.2, 90.4)
18-29 years	975	1,017	877	86.2 (84.1, 88.4)	1,034	1,065	938	88.1 (86.1, 90.0)
30-64 years	2,176	2,268	2,021	89.1 (87.8, 90.4)	2,505	2,584	2,298	88.9 (87.7, 90.1)
December								
0-4 years	1	1	1	100.0 (100.0, 100.0)	2	2	2	100.0 (100.0, 100.0)
5-17 years	479	490	404	82.4 (79.1, 85.8)	581	606	529	87.3 (84.6, 89.9)
18-29 years	962	980	839	85.6 (83.4, 87.8)	1,013	1,042	910	87.3 (85.3, 89.4)
30-64 years	2,157	2,232	1,985	88.9 (87.6, 90.2)	2,632	2,724	2,452	90.0 (88.9, 91.1)
January								

Table 5. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from September 1, 2021 to February 28, 2022, and from September 1, 2022 to February 28, 2023, by Month and Age Group

	Pre-Shortage Period September 1, 2021 - February 28, 2022				Shortage Period September 1, 2022 - February 28, 2023			
	N Patients	N Prescriptions	N Prescriptions Followed by a Dispensing	Proportion of Prescriptions Followed by a Dispensing	N Patients	N Prescriptions	N Prescriptions Followed by a Dispensing	Proportion of Prescriptions Followed by a Dispensing
0-4 years	1	1	1	100.0 (100.0, 100.0)	1	1	1	100.0 (100.0, 100.0)
5-17 years	509	533	464	87.1 (84.2, 89.9)	684	720	627	87.1 (84.6, 89.5)
18-29 years	940	964	843	87.4 (85.4, 89.5)	1,139	1,186	1,005	84.7 (82.7, 86.8)
30-64 years	2,074	2,150	1,895	88.1 (86.8, 89.5)	2,754	2,883	2,560	88.8 (87.6, 89.9)
February								
0-4 years	1	1	1	100.0 (100.0, 100.0)	1	1	1	100.0 (100.0, 100.0)
5-17 years	236	236	205	86.9 (82.6, 91.2)	381	381	333	87.4 (84.1, 90.7)
18-29 years	494	494	428	86.6 (83.6, 89.6)	518	518	464	89.6 (86.9, 92.2)
30-64 years	1,041	1,041	918	88.2 (86.2, 90.1)	1,354	1,354	1,226	90.5 (89.0, 92.1)
ER Amphetamine Dextroamphetamine Prescriptions (8 Day Follow-Up)								
September								
0-4 years	1	1	1	100.0 (100.0, 100.0)	2	2	2	100.0 (100.0, 100.0)
5-17 years	526	561	469	83.6 (80.5, 86.7)	563	600	494	82.3 (79.3, 85.4)
18-29 years	1,002	1,059	877	82.8 (80.5, 85.1)	1,073	1,123	918	81.7 (79.5, 84.0)
30-64 years	2,119	2,228	1,889	84.8 (83.3, 86.3)	2,427	2,566	2,157	84.1 (82.6, 85.5)
October								
0-4 years	1	1	1	100.0 (100.0, 100.0)	1	1	1	100.0 (100.0, 100.0)
5-17 years	500	532	435	81.8 (78.5, 85.0)	584	623	495	79.5 (76.3, 82.6)
18-29 years	951	990	814	82.2 (79.8, 84.6)	1,000	1,051	844	80.3 (77.9, 82.7)
30-64 years	2,079	2,163	1,803	83.4 (81.8, 84.9)	2,430	2,549	2,100	82.4 (80.9, 83.9)
November								
0-4 years	2	3	3	100.0 (100.0, 100.0)	1	1	1	100.0 (100.0, 100.0)
5-17 years	545	589	464	78.8 (75.5, 82.1)	594	635	509	80.2 (77.1, 83.3)
18-29 years	987	1,046	827	79.1 (76.6, 81.5)	1,050	1,108	901	81.3 (79.0, 83.6)
30-64 years	2,200	2,323	1,890	81.4 (79.8, 82.9)	2,535	2,654	2,152	81.1 (79.6, 82.6)
December								
0-4 years	1	1	1	100.0 (100.0, 100.0)	2	3	2	66.7 (13.3, 120.0)
5-17 years	485	508	387	76.2 (72.5, 79.9)	591	633	507	80.1 (77.0, 83.2)

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Table 5. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from September 1, 2021 to February 28, 2022, and from September 1, 2022 to February 28, 2023, by Month and Age Group

	Pre-Shortage Period September 1, 2021 - February 28, 2022				Shortage Period September 1, 2022 - February 28, 2023			
	N Patients	N Prescriptions	N Prescriptions Followed by a Dispensing	Proportion of Prescriptions Followed by a Dispensing	N Patients	N Prescriptions	N Prescriptions Followed by a Dispensing	Proportion of Prescriptions Followed by a Dispensing
18-29 years	983	1,021	797	78.1 (75.5, 80.6)	1,042	1,098	880	80.1 (77.8, 82.5)
30-64 years	2,212	2,326	1,863	80.1 (78.5, 81.7)	2,689	2,823	2,308	81.8 (80.3, 83.2)
January								
0-4 years	1	1	1	100.0 (100.0, 100.0)	2	2	0	0.0 (0.0, 0.0)
5-17 years	511	545	439	80.6 (77.2, 83.9)	694	756	613	81.1 (78.3, 83.9)
18-29 years	952	993	807	81.3 (78.8, 83.7)	1,155	1,217	959	78.8 (76.5, 81.1)
30-64 years	2,102	2,215	1,775	80.1 (78.5, 81.8)	2,777	2,974	2,424	81.5 (80.1, 82.9)
February								
0-4 years	1	1	1	100.0 (100.0, 100.0)	2	2	1	50.0 (0.0, 100.0)
5-17 years	352	358	295	82.4 (78.5, 86.3)	567	583	468	80.3 (77.0, 83.5)
18-29 years	751	762	601	78.9 (76.0, 81.8)	812	820	666	81.2 (78.5, 83.9)
30-64 years	1,501	1,518	1,228	80.9 (78.9, 82.9)	2,038	2,075	1,723	83.0 (81.4, 84.7)
Atomoxetine IR Prescriptions (15 Day Follow-Up)								
September								
0-4 years	0	0	0	NaN	0	0	0	NaN
5-17 years	78	81	65	80.2 (71.6, 88.9)	78	82	63	76.8 (67.7, 86.0)
18-29 years	91	93	64	68.8 (59.4, 78.2)	74	75	53	70.7 (60.4, 81.0)
30-64 years	100	100	76	76.0 (67.6, 84.4)	144	146	110	75.3 (68.4, 82.3)
October								
0-4 years	0	0	0	NaN	0	0	0	NaN
5-17 years	73	76	56	73.7 (63.8, 83.6)	85	86	70	81.4 (73.2, 89.6)
18-29 years	70	72	59	81.9 (73.1, 90.8)	82	83	55	66.3 (56.1, 76.4)
30-64 years	125	125	99	79.2 (72.1, 86.3)	174	178	135	75.8 (69.6, 82.1)
November								
0-4 years	0	0	0	NaN	0	0	0	NaN
5-17 years	66	68	59	86.8 (78.7, 94.8)	79	82	65	79.3 (70.5, 88.0)
18-29 years	76	78	56	71.8 (61.8, 81.8)	93	94	72	76.6 (68.0, 85.2)
30-64 years	143	148	118	79.7 (73.3, 86.2)	152	156	113	72.4 (65.4, 79.4)

Table 5. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from September 1, 2021 to February 28, 2022, and from September 1, 2022 to February 28, 2023, by Month and Age Group

	Pre-Shortage Period September 1, 2021 - February 28, 2022				Shortage Period September 1, 2022 - February 28, 2023			
	N Patients	N Prescriptions	N Prescriptions Followed by a Dispensing	Proportion of Prescriptions Followed by a Dispensing	N Patients	N Prescriptions	N Prescriptions Followed by a Dispensing	Proportion of Prescriptions Followed by a Dispensing
December								
0-4 years	0	0	0	NaN	0	0	0	NaN
5-17 years	68	71	60	84.5 (76.1, 92.9)	65	67	55	82.1 (72.9, 91.3)
18-29 years	83	84	64	76.2 (67.1, 85.3)	82	84	60	71.4 (61.8, 81.1)
30-64 years	143	144	119	82.6 (76.5, 88.8)	150	152	114	75.0 (68.1, 81.9)
January								
0-4 years	0	0	0	NaN	1	1	1	100.0 (100.0, 100.0)
5-17 years	76	78	62	79.5 (70.5, 88.4)	87	91	73	80.2 (72.0, 88.4)
18-29 years	82	82	61	74.4 (64.9, 83.8)	90	92	78	84.8 (77.4, 92.1)
30-64 years	136	139	108	77.7 (70.8, 84.6)	158	162	129	79.6 (73.4, 85.8)
February								
0-4 years	0	0	0	NaN	0	0	0	NaN
5-17 years	36	36	31	86.1 (74.8, 97.4)	49	49	43	87.8 (78.6, 96.9)
18-29 years	43	43	30	69.8 (56.0, 83.5)	39	39	27	69.2 (54.7, 83.7)
30-64 years	63	63	53	84.1 (75.1, 93.2)	78	78	57	73.1 (63.2, 82.9)
Atomoxetine IR Prescriptions (8 Day Follow-Up)								
September								
0-4 years	0	0	0	NaN	0	0	0	NaN
5-17 years	81	88	66	75.0 (66.0, 84.0)	79	84	62	73.8 (64.4, 83.2)
18-29 years	92	95	59	62.1 (52.3, 71.9)	76	77	49	63.6 (52.9, 74.4)
30-64 years	101	103	72	69.9 (61.0, 78.8)	146	151	107	70.9 (63.6, 78.1)
October								
0-4 years	0	0	0	NaN	0	0	0	NaN
5-17 years	76	82	50	61.0 (50.4, 71.5)	85	87	66	75.9 (66.9, 84.9)
18-29 years	73	75	51	68.0 (57.4, 78.6)	85	87	52	59.8 (49.5, 70.1)
30-64 years	125	126	94	74.6 (67.0, 82.2)	174	182	125	68.7 (61.9, 75.4)
November								
0-4 years	0	0	0	NaN	0	0	0	NaN

Table 5. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from September 1, 2021 to February 28, 2022, and from September 1, 2022 to February 28, 2023, by Month and Age Group

| | Pre-Shortage Period September 1, 2021 - February 28, 2022 | | | | Shortage Period September 1, 2022 - February 28, 2023 | | | |
	N Patients	N Prescriptions	N Prescriptions Followed by a Dispensing	Proportion of Prescriptions Followed by a Dispensing	N Patients	N Prescriptions	N Prescriptions Followed by a Dispensing	Proportion of Prescriptions Followed by a Dispensing
5-17 years	67	70	52	74.3 (64.0, 84.5)	79	85	61	71.8 (62.2, 81.3)
18-29 years	78	80	54	67.5 (57.2, 77.8)	96	99	73	73.7 (65.1, 82.4)
30-64 years	144	152	111	73.0 (66.0, 80.1)	152	161	105	65.2 (57.9, 72.6)
December								
0-4 years	0	0	0	NaN	0	0	0	NaN
5-17 years	68	74	54	73.0 (62.9, 83.1)	66	70	51	72.9 (62.4, 83.3)
18-29 years	84	87	62	71.3 (61.8, 80.8)	84	88	59	67.0 (57.2, 76.9)
30-64 years	148	152	110	72.4 (65.3, 79.5)	155	160	112	70.0 (62.9, 77.1)
January								
0-4 years	0	0	0	NaN	1	1	1	100.0 (100.0, 100.0)
5-17 years	80	85	58	68.2 (58.3, 78.1)	87	93	66	71.0 (61.7, 80.2)
18-29 years	83	85	60	70.6 (60.9, 80.3)	91	96	72	75.0 (66.3, 83.7)
30-64 years	136	142	95	66.9 (59.2, 74.6)	160	169	127	75.1 (68.6, 81.7)
February								
0-4 years	0	0	0	NaN	0	0	0	NaN
5-17 years	54	55	34	61.8 (49.0, 74.7)	70	72	53	73.6 (63.4, 83.8)
18-29 years	59	59	37	62.7 (50.4, 75.1)	60	61	38	62.3 (50.1, 74.5)
30-64 years	91	97	70	72.2 (63.2, 81.1)	117	119	78	65.5 (57.0, 74.1)
Fluoxetine Prescriptions (15 Day Follow-Up)								
September								
0-4 years	1	1	0	0.0 (0.0, 0.0)	0	0	0	NaN
5-17 years	408	421	316	75.1 (70.9, 79.2)	368	380	274	72.1 (67.6, 76.6)
18-29 years	642	653	469	71.8 (68.4, 75.3)	612	625	442	70.7 (67.2, 74.3)
30-64 years	1,704	1,727	1,306	75.6 (73.6, 77.6)	1,665	1,695	1,252	73.9 (71.8, 76.0)
October								
0-4 years	0	0	0	NaN	0	0	0	NaN
5-17 years	379	391	314	80.3 (76.4, 84.2)	385	399	291	72.9 (68.6, 77.3)
18-29 years	610	627	450	71.8 (68.2, 75.3)	592	605	422	69.8 (66.1, 73.4)

Table 5. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from September 1, 2021 to February 28, 2022, and from September 1, 2022 to February 28, 2023, by Month and Age Group

	Pre-Shortage Period September 1, 2021 - February 28, 2022				Shortage Period September 1, 2022 - February 28, 2023			
	N Patients	N Prescriptions	N Prescriptions Followed by a Dispensing	Proportion of Prescriptions Followed by a Dispensing	N Patients	N Prescriptions	N Prescriptions Followed by a Dispensing	Proportion of Prescriptions Followed by a Dispensing
30-64 years	1,661	1,687	1,246	73.9 (71.8, 76.0)	1,714	1,741	1,243	71.4 (69.3, 73.5)
November								
0-4 years	1	1	0	0.0 (0.0, 0.0)	0	0	0	NaN
5-17 years	467	478	367	76.8 (73.0, 80.6)	378	388	286	73.7 (69.3, 78.1)
18-29 years	661	668	490	73.4 (70.0, 76.7)	599	618	421	68.1 (64.4, 71.8)
30-64 years	1,702	1,729	1,253	72.5 (70.4, 74.6)	1,671	1,699	1,192	70.2 (68.0, 72.3)
December								
0-4 years	0	0	0	NaN	1	1	1	100.0 (100.0, 100.0)
5-17 years	433	450	362	80.4 (76.8, 84.1)	405	421	305	72.4 (68.2, 76.7)
18-29 years	649	665	469	70.5 (67.1, 74.0)	612	624	409	65.5 (61.8, 69.3)
30-64 years	1,697	1,730	1,247	72.1 (70.0, 74.2)	1,594	1,619	1,160	71.6 (69.5, 73.8)
January								
0-4 years	0	0	0	NaN	0	0	0	NaN
5-17 years	447	458	356	77.7 (73.9, 81.5)	401	411	307	74.7 (70.5, 78.9)
18-29 years	647	659	476	72.2 (68.8, 75.7)	646	663	472	71.2 (67.7, 74.6)
30-64 years	1,639	1,664	1,215	73.0 (70.9, 75.1)	1,666	1,700	1,196	70.4 (68.2, 72.5)
February								
0-4 years	0	0	0	NaN	0	0	0	NaN
5-17 years	229	229	186	81.2 (76.2, 86.3)	219	219	154	70.3 (64.3, 76.4)
18-29 years	330	330	238	72.1 (67.3, 77.0)	316	316	222	70.3 (65.2, 75.3)
30-64 years	843	843	621	73.7 (70.7, 76.6)	793	793	554	69.9 (66.7, 73.1)
Fluoxetine Prescriptions (8 Day Follow-Up)								
September								
0-4 years	1	1	0	0.0 (0.0, 0.0)	0	0	0	NaN
5-17 years	418	441	298	67.6 (63.2, 71.9)	373	395	253	64.1 (59.3, 68.8)
18-29 years	652	677	434	64.1 (60.5, 67.7)	622	647	432	66.8 (63.1, 70.4)
30-64 years	1,730	1,787	1,210	67.7 (65.5, 69.9)	1,683	1,743	1,184	67.9 (65.7, 70.1)
October								

cder_mpl1p_wp093

Table 5. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from September 1, 2021 to February 28, 2022, and from September 1, 2022 to February 28, 2023, by Month and Age Group

	Pre-Shortage Period September 1, 2021 - February 28, 2022				Shortage Period September 1, 2022 - February 28, 2023			
	N Patients	N Prescriptions	N Prescriptions Followed by a Dispensing	Proportion of Prescriptions Followed by a Dispensing	N Patients	N Prescriptions	N Prescriptions Followed by a Dispensing	Proportion of Prescriptions Followed by a Dispensing
0-4 years	0	0	0	NaN	0	0	0	NaN
5-17 years	390	412	295	71.6 (67.2, 76.0)	396	421	273	64.8 (60.3, 69.4)
18-29 years	622	650	427	65.7 (62.0, 69.3)	599	621	394	63.4 (59.7, 67.2)
30-64 years	1,689	1,740	1,146	65.9 (63.6, 68.1)	1,729	1,786	1,158	64.8 (62.6, 67.1)
November								
0-4 years	1	1	0	0.0 (0.0, 0.0)	0	0	0	NaN
5-17 years	474	500	352	70.4 (66.4, 74.4)	385	411	278	67.6 (63.1, 72.2)
18-29 years	672	693	447	64.5 (60.9, 68.1)	611	637	389	61.1 (57.3, 64.9)
30-64 years	1,724	1,767	1,160	65.6 (63.4, 67.9)	1,690	1,747	1,110	63.5 (61.3, 65.8)
December								
0-4 years	0	0	0	NaN	1	1	1	100.0 (100.0, 100.0)
5-17 years	444	478	344	72.0 (67.9, 76.0)	423	449	291	64.8 (60.4, 69.2)
18-29 years	671	697	441	63.3 (59.7, 66.9)	630	661	387	58.5 (54.8, 62.3)
30-64 years	1,727	1,793	1,147	64.0 (61.7, 66.2)	1,630	1,676	1,085	64.7 (62.5, 67.0)
January								
0-4 years	0	0	0	NaN	0	0	0	NaN
5-17 years	455	485	332	68.5 (64.3, 72.6)	405	426	294	69.0 (64.6, 73.4)
18-29 years	665	688	443	64.4 (60.8, 68.0)	652	681	442	64.9 (61.3, 68.5)
30-64 years	1,658	1,708	1,130	66.2 (63.9, 68.4)	1,683	1,740	1,079	62.0 (59.7, 64.3)
February								
0-4 years	0	0	0	NaN	0	0	0	NaN
5-17 years	347	360	252	70.0 (65.3, 74.7)	315	323	212	65.6 (60.5, 70.8)
18-29 years	481	483	325	67.3 (63.1, 71.5)	443	451	290	64.3 (59.9, 68.7)
30-64 years	1,194	1,207	775	64.2 (61.5, 66.9)	1,125	1,145	689	60.2 (57.3, 63.0)
Diazepam Prescriptions (15 Day Follow-Up)								
September								
0-4 years	2	2	1	50.0 (0.0, 119.3)	1	1	0	0.0 (0.0, 0.0)
5-17 years	8	8	1	12.5 (0.0, 35.4)	2	2	1	50.0 (0.0, 100.0)

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Table 5. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from September 1, 2021 to February 28, 2022, and from September 1, 2022 to February 28, 2023, by Month and Age Group

	Pre-Shortage Period September 1, 2021 - February 28, 2022				Shortage Period September 1, 2022 - February 28, 2023			
	N Patients	N Prescriptions	N Prescriptions Followed by a Dispensing	Proportion of Prescriptions Followed by a Dispensing	N Patients	N Prescriptions	N Prescriptions Followed by a Dispensing	Proportion of Prescriptions Followed by a Dispensing
18-29 years	29	29	15	51.7 (33.5, 69.9)	32	32	11	34.4 (17.9, 50.8)
30-64 years	356	363	232	63.9 (59.0, 68.9)	384	392	224	57.1 (52.2, 62.0)
October								
0-4 years	4	4	1	25.0 (0.0, 67.4)	1	1	0	0.0 (0.0, 0.0)
5-17 years	12	12	4	33.3 (6.7, 60.0)	10	10	7	70.0 (41.6, 98.4)
18-29 years	26	26	11	42.3 (23.3, 61.3)	46	46	18	39.1 (25.0, 53.2)
30-64 years	357	364	230	63.2 (58.2, 68.1)	409	415	224	54.0 (49.2, 58.8)
November								
0-4 years	2	2	0	0.0 (0.0, 0.0)	3	3	0	0.0 (0.0, 0.0)
5-17 years	7	7	3	42.9 (6.2, 79.5)	10	10	5	50.0 (19.0, 81.0)
18-29 years	29	29	12	41.4 (23.5, 59.3)	36	38	17	44.7 (28.9, 60.5)
30-64 years	371	375	237	63.2 (58.3, 68.1)	393	398	222	55.8 (50.9, 60.7)
December								
0-4 years	2	2	0	0.0 (0.0, 0.0)	0	0	0	NaN
5-17 years	5	5	5	100.0 (100.0, 100.0)	8	8	2	25.0 (0.0, 55.0)
18-29 years	34	34	14	41.2 (24.6, 57.7)	32	33	16	48.5 (31.4, 65.5)
30-64 years	351	355	200	56.3 (51.2, 61.5)	346	353	203	57.5 (52.4, 62.7)
January								
0-4 years	2	2	0	0.0 (0.0, 0.0)	0	0	0	NaN
5-17 years	6	6	2	33.3 (0.0, 71.1)	7	7	3	42.9 (6.2, 79.5)
18-29 years	26	27	13	48.1 (29.3, 67.0)	36	37	17	45.9 (29.9, 62.0)
30-64 years	325	334	212	63.5 (58.3, 68.6)	370	377	221	58.6 (53.6, 63.6)
February								
0-4 years	0	0	0	NaN	0	0	0	NaN
5-17 years	5	5	2	40.0 (0.0, 82.9)	3	3	3	100.0 (100.0, 100.0)
18-29 years	8	8	3	37.5 (4.0, 71.0)	20	20	9	45.0 (23.2, 66.8)
30-64 years	162	162	96	59.3 (51.7, 66.8)	192	192	111	57.8 (50.8, 64.8)

Table 5. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from September 1, 2021 to February 28, 2022, and from September 1, 2022 to February 28, 2023, by Month and Age Group

| | Pre-Shortage Period September 1, 2021 - February 28, 2022 | | | | Shortage Period September 1, 2022 - February 28, 2023 | | | |
	N Patients	N Prescriptions	N Prescriptions Followed by a Dispensing	Proportion of Prescriptions Followed by a Dispensing	N Patients	N Prescriptions	N Prescriptions Followed by a Dispensing	Proportion of Prescriptions Followed by a Dispensing
Diazepam Prescriptions (8 Day Follow-Up)								
September								
0-4 years	2	2	1	50.0 (0.0, 119.3)	2	2	0	0.0 (0.0, 0.0)
5-17 years	8	8	1	12.5 (0.0, 35.4)	3	3	2	66.7 (13.3, 100.0)
18-29 years	29	29	15	51.7 (33.5, 69.9)	32	33	11	33.3 (17.2, 49.4)
30-64 years	364	379	227	59.9 (55.0, 64.8)	397	408	218	53.4 (48.6, 58.3)
October								
0-4 years	4	4	1	25.0 (0.0, 67.4)	1	1	0	0.0 (0.0, 0.0)
5-17 years	12	12	4	33.3 (6.7, 60.0)	10	10	7	70.0 (41.6, 98.4)
18-29 years	26	26	10	38.5 (19.8, 57.2)	47	47	17	36.2 (22.4, 49.9)
30-64 years	363	378	224	59.3 (54.3, 64.2)	416	426	224	52.6 (47.8, 57.3)
November								
0-4 years	2	2	0	0.0 (0.0, 0.0)	3	3	0	0.0 (0.0, 0.0)
5-17 years	7	7	3	42.9 (6.2, 79.5)	10	10	5	50.0 (19.0, 81.0)
18-29 years	30	30	12	40.0 (22.5, 57.5)	37	41	16	39.0 (24.1, 54.0)
30-64 years	374	385	234	60.8 (55.9, 65.7)	399	417	222	53.2 (48.4, 58.0)
December								
0-4 years	2	2	0	0.0 (0.0, 0.0)	0	0	0	NaN
5-17 years	5	5	5	100.0 (100.0, 100.0)	8	8	2	25.0 (0.0, 55.0)
18-29 years	35	35	14	40.0 (23.8, 56.2)	32	33	16	48.5 (31.4, 65.5)
30-64 years	358	368	203	55.2 (50.1, 60.2)	357	372	207	55.6 (50.6, 60.7)
January								
0-4 years	2	2	0	0.0 (0.0, 0.0)	0	0	0	NaN
5-17 years	6	6	2	33.3 (0.0, 71.1)	7	7	3	42.9 (6.2, 79.5)
18-29 years	26	27	12	44.4 (25.7, 63.2)	36	37	17	45.9 (29.9, 62.0)
30-64 years	334	358	218	60.9 (55.8, 65.9)	374	395	222	56.2 (51.3, 61.1)
February								
0-4 years	0	0	0	NaN	0	0	0	NaN

Table 5. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from September 1, 2021 to February 28, 2022, and from September 1, 2022 to February 28, 2023, by Month and Age Group

	Pre-Shortage Period September 1, 2021 - February 28, 2022				Shortage Period September 1, 2022 - February 28, 2023			
	N Patients	N Prescriptions	N Prescriptions Followed by a Dispensing	Proportion of Prescriptions Followed by a Dispensing	N Patients	N Prescriptions	N Prescriptions Followed by a Dispensing	Proportion of Prescriptions Followed by a Dispensing
5-17 years	10	11	5	45.5 (16.0, 74.9)	3	3	2	66.7 (13.3, 100.0)
18-29 years	16	16	8	50.0 (25.5, 74.5)	30	30	14	46.7 (28.8, 64.5)
30-64 years	277	282	168	59.6 (53.8, 65.3)	278	283	146	51.6 (45.8, 57.4)
Atorvastatin Prescriptions (15 Day Follow-Up)								
September								
0-4 years	0	0	0	NaN	0	0	0	NaN
5-17 years	0	0	0	NaN	0	0	0	NaN
18-29 years	23	23	18	78.3 (61.4, 95.1)	26	26	16	61.5 (42.8, 80.2)
30-64 years	3,881	3,927	2,874	73.2 (71.8, 74.6)	3,983	4,022	2,914	72.5 (71.1, 73.8)
October								
0-4 years	0	0	0	NaN	0	0	0	NaN
5-17 years	0	0	0	NaN	1	1	0	0.0 (0.0, 0.0)
18-29 years	17	17	14	82.4 (64.2, 100.0)	16	16	12	75.0 (53.8, 96.2)
30-64 years	3,947	3,981	2,855	71.7 (70.3, 73.1)	3,977	4,008	2,868	71.6 (70.2, 73.0)
November								
0-4 years	0	0	0	NaN	0	0	0	NaN
5-17 years	2	2	1	50.0 (0.0, 100.0)	0	0	0	NaN
18-29 years	17	17	14	82.4 (64.2, 100.5)	21	21	16	76.2 (58.0, 94.4)
30-64 years	4,047	4,079	3,009	73.8 (72.4, 75.1)	4,073	4,107	2,923	71.2 (69.8, 72.6)
December								
0-4 years	0	0	0	NaN	0	0	0	NaN
5-17 years	1	1	1	100.0 (100.0, 100.0)	1	1	1	100.0 (100.0, 100.0)
18-29 years	15	15	9	60.0 (35.2, 84.8)	25	25	19	76.0 (59.3, 92.7)
30-64 years	3,910	3,935	2,841	72.2 (70.8, 73.6)	4,244	4,280	3,098	72.4 (71.0, 73.7)
January								
0-4 years	0	0	0	NaN	0	0	0	NaN
5-17 years	0	0	0	NaN	3	3	3	100.0 (100.0, 100.0)
18-29 years	14	14	10	71.4 (47.8, 95.1)	17	17	14	82.4 (64.2, 100.5)

cder_mpl1p_wp093

Table 5. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from September 1, 2021 to February 28, 2022, and from September 1, 2022 to February 28, 2023, by Month and Age Group

	Pre-Shortage Period September 1, 2021 - February 28, 2022				Shortage Period September 1, 2022 - February 28, 2023			
	N Patients	N Prescriptions	N Prescriptions Followed by a Dispensing	Proportion of Prescriptions Followed by a Dispensing	N Patients	N Prescriptions	N Prescriptions Followed by a Dispensing	Proportion of Prescriptions Followed by a Dispensing
30-64 years	3,866	3,896	2,834	72.7 (71.3, 74.1)	4,048	4,086	2,888	70.7 (69.3, 72.1)
February								
0-4 years	0	0	0	NaN	0	0	0	NaN
5-17 years	0	0	0	NaN	0	0	0	NaN
18-29 years	11	11	7	63.6 (35.2, 92.1)	10	10	9	90.0 (71.4, 108.6)
30-64 years	1,862	1,862	1,326	71.2 (69.2, 73.3)	1,982	1,982	1,416	71.4 (69.5, 73.4)
Atorvastatin Prescriptions (8 Day Follow-Up)								
September								
0-4 years	0	0	0	NaN	0	0	0	NaN
5-17 years	0	0	0	NaN	0	0	0	NaN
18-29 years	23	23	15	65.2 (45.8, 84.7)	26	26	15	57.7 (38.7, 76.7)
30-64 years	3,921	4,017	2,683	66.8 (65.3, 68.2)	4,027	4,103	2,747	67.0 (65.5, 68.4)
October								
0-4 years	0	0	0	NaN	0	0	0	NaN
5-17 years	0	0	0	NaN	1	1	0	0.0 (0.0, 0.0)
18-29 years	17	17	13	76.5 (56.3, 96.6)	16	17	12	70.6 (48.9, 92.2)
30-64 years	3,985	4,063	2,670	65.7 (64.3, 67.2)	4,014	4,092	2,686	65.6 (64.2, 67.1)
November								
0-4 years	0	0	0	NaN	0	0	0	NaN
5-17 years	2	2	1	50.0 (0.0, 100.0)	0	0	0	NaN
18-29 years	18	18	15	83.3 (66.1, 100.6)	21	21	16	76.2 (58.0, 94.4)
30-64 years	4,084	4,154	2,777	66.9 (65.4, 68.3)	4,117	4,202	2,766	65.8 (64.4, 67.3)
December								
0-4 years	0	0	0	NaN	0	0	0	NaN
5-17 years	1	1	1	100.0 (100.0, 100.0)	1	1	1	100.0 (100.0, 100.0)
18-29 years	15	15	9	60.0 (35.2, 84.8)	27	28	20	71.4 (54.7, 88.2)
30-64 years	3,975	4,034	2,629	65.2 (63.7, 66.6)	4,326	4,413	2,936	66.5 (65.1, 67.9)
January								

Table 5. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from September 1, 2021 to February 28, 2022, and from September 1, 2022 to February 28, 2023, by Month and Age Group

	Pre-Shortage Period September 1, 2021 - February 28, 2022				Shortage Period September 1, 2022 - February 28, 2023			
	N Patients	N Prescriptions	N Prescriptions Followed by a Dispensing	Proportion of Prescriptions Followed by a Dispensing	N Patients	N Prescriptions	N Prescriptions Followed by a Dispensing	Proportion of Prescriptions Followed by a Dispensing
0-4 years	0	0	0	NaN	0	0	0	NaN
5-17 years	0	0	0	NaN	3	3	3	100.0 (100.0, 100.0)
18-29 years	14	14	9	64.3 (39.2, 89.4)	17	17	10	58.8 (35.4, 82.2)
30-64 years	3,895	3,965	2,595	65.4 (64.0, 66.9)	4,079	4,156	2,697	64.9 (63.4, 66.3)
February								
0-4 years	0	0	0	NaN	0	0	0	NaN
5-17 years	0	0	0	NaN	1	1	0	0.0 (0.0, 0.0)
18-29 years	15	15	10	66.7 (42.8, 90.5)	14	14	11	78.6 (57.1, 100.0)
30-64 years	2,769	2,789	1,743	62.5 (60.7, 64.3)	2,777	2,804	1,797	64.1 (62.3, 65.9)
ER Morphine Prescriptions (15 Day Follow-Up)								
September								
0-4 years	0	0	0	NaN	0	0	0	NaN
5-17 years	0	0	0	NaN	0	0	0	NaN
18-29 years	0	0	0	NaN	2	2	1	50.0 (0.0, 100.0)
30-64 years	203	218	204	93.6 (90.3, 96.8)	184	201	178	88.6 (84.2, 93.0)
October								
0-4 years	0	0	0	NaN	0	0	0	NaN
5-17 years	0	0	0	NaN	0	0	0	NaN
18-29 years	1	1	0	0.0 (0.0, 0.0)	2	2	0	0.0 (0.0, 0.0)
30-64 years	198	212	197	92.9 (89.5, 96.4)	185	196	177	90.3 (86.2, 94.4)
November								
0-4 years	0	0	0	NaN	0	0	0	NaN
5-17 years	0	0	0	NaN	0	0	0	NaN
18-29 years	0	0	0	NaN	2	3	2	66.7 (13.3, 100.0)
30-64 years	207	227	206	90.7 (87.0, 94.5)	181	186	158	84.9 (79.8, 90.1)
December								
0-4 years	0	0	0	NaN	0	0	0	NaN
5-17 years	0	0	0	NaN	0	0	0	NaN

Table 5. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from September 1, 2021 to February 28, 2022, and from September 1, 2022 to February 28, 2023, by Month and Age Group

	Pre-Shortage Period September 1, 2021 - February 28, 2022				Shortage Period September 1, 2022 - February 28, 2023			
	N Patients	N Prescriptions	N Prescriptions Followed by a Dispensing	Proportion of Prescriptions Followed by a Dispensing	N Patients	N Prescriptions	N Prescriptions Followed by a Dispensing	Proportion of Prescriptions Followed by a Dispensing
18-29 years	0	0	0	NaN	1	1	0	0.0 (0.0, 0.0)
30-64 years	210	226	195	86.3 (81.8, 90.8)	179	186	165	88.7 (84.2, 93.3)
January								
0-4 years	0	0	0	NaN	0	0	0	NaN
5-17 years	0	0	0	NaN	0	0	0	NaN
18-29 years	0	0	0	NaN	1	1	1	100.0 (100.0, 100.0)
30-64 years	202	220	194	88.2 (83.9, 92.4)	179	203	188	92.6 (89.0, 96.2)
February								
0-4 years	0	0	0	NaN	0	0	0	NaN
5-17 years	0	0	0	NaN	0	0	0	NaN
18-29 years	0	0	0	NaN	0	0	0	NaN
30-64 years	97	97	88	90.7 (84.9, 96.5)	87	87	78	89.7 (83.3, 96.1)
ER Morphine Prescriptions (8 Day Follow-Up)								
September								
0-4 years	0	0	0	NaN	0	0	0	NaN
5-17 years	0	0	0	NaN	0	0	0	NaN
18-29 years	0	0	0	NaN	2	2	1	50.0 (0.0, 100.0)
30-64 years	207	237	197	83.1 (78.4, 87.9)	188	210	162	77.1 (71.5, 82.8)
October								
0-4 years	0	0	0	NaN	0	0	0	NaN
5-17 years	0	0	0	NaN	0	0	0	NaN
18-29 years	1	1	0	0.0 (0.0, 0.0)	2	2	0	0.0 (0.0, 0.0)
30-64 years	202	227	182	80.2 (75.0, 85.4)	190	212	163	76.9 (71.2, 82.6)
November								
0-4 years	0	0	0	NaN	0	0	0	NaN
5-17 years	0	0	0	NaN	0	0	0	NaN
18-29 years	0	0	0	NaN	2	3	2	66.7 (13.3, 100.0)
30-64 years	210	239	184	77.0 (71.7, 82.3)	183	195	145	74.4 (68.2, 80.5)

cder_mpl1p_wp093

Table 5. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from September 1, 2021 to February 28, 2022, and from September 1, 2022 to February 28, 2023, by Month and Age Group

	Pre-Shortage Period September 1, 2021 - February 28, 2022				Shortage Period September 1, 2022 - February 28, 2023			
	N Patients	N Prescriptions	N Prescriptions Followed by a Dispensing	Proportion of Prescriptions Followed by a Dispensing	N Patients	N Prescriptions	N Prescriptions Followed by a Dispensing	Proportion of Prescriptions Followed by a Dispensing
December								
0-4 years	0	0	0	NaN	0	0	0	NaN
5-17 years	0	0	0	NaN	0	0	0	NaN
18-29 years	0	0	0	NaN	1	1	0	0.0 (0.0, 0.0)
30-64 years	216	240	183	76.3 (70.9, 81.6)	185	197	151	76.6 (70.7, 82.6)
January								
0-4 years	0	0	0	NaN	0	0	0	NaN
5-17 years	0	0	0	NaN	0	0	0	NaN
18-29 years	0	0	0	NaN	1	1	1	100.0 (100.0, 100.0)
30-64 years	208	234	181	77.4 (72.0, 82.7)	181	218	180	82.6 (77.5, 87.6)
February								
0-4 years	0	0	0	NaN	0	0	0	NaN
5-17 years	0	0	0	NaN	0	0	0	NaN
18-29 years	0	0	0	NaN	0	0	0	NaN
30-64 years	143	145	119	82.1 (75.8, 88.3)	133	136	105	77.2 (70.2, 84.3)

Table 5. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from September 1, 2021 to February 28, 2022, and from September 1, 2022 to February 28, 2023, by Month and Age Group

	Difference in Proportions (Shortage - Pre-Shortage)	Difference in Differences (Atomoxetine IR Prescriptions Comparison)	Difference in Differences (Fluoxetine Prescriptions Comparison)	Difference in Differences (Diazepam Prescriptions Comparison)	Difference in Differences (Atorvastatin Prescriptions Comparison)	Difference in Differences (ER Morphine Prescriptions Comparison)
IR Amphetamine Dextroamphetamine Prescriptions (15 Day Follow-Up)						
September						
0-4 years	NaN	NaN	NaN	NaN	NaN	NaN
5-17 years	-1.5	1.9	1.4	-39.0	NaN	NaN
18-29 years	-0.8	-2.6	0.3	16.6	15.9	NaN
30-64 years	-3.3	-2.7	-1.6	3.4	-2.6	1.7
October						
0-4 years	NaN	NaN	NaN	NaN	NaN	NaN
5-17 years	-4.0	-11.7	3.4	-40.7	NaN	NaN
18-29 years	-6.4	9.3	-4.3	-3.2	1.0	-6.4
30-64 years	-3.2	0.1	-0.8	6.0	-3.1	-0.6
November						
0-4 years	NaN	NaN	NaN	NaN	NaN	NaN
5-17 years	-5.2	2.3	-2.1	-12.3	NaN	NaN
18-29 years	-6.5	-11.3	-1.3	-9.8	-0.3	NaN
30-64 years	-7.0	0.3	-4.7	0.4	-4.4	-1.2
December						
0-4 years	NaN	NaN	NaN	NaN	NaN	NaN
5-17 years	-5.8	-3.3	2.2	69.2	-5.8	NaN
18-29 years	-4.9	-0.1	0.1	-12.2	-20.9	NaN
30-64 years	-2.5	5.2	-2.0	-3.6	-2.6	-4.9
January						
0-4 years	NaN	NaN	NaN	NaN	NaN	NaN
5-17 years	-1.2	-1.9	1.9	-10.7	NaN	NaN
18-29 years	-2.9	-13.3	-1.8	-0.7	-13.8	NaN
30-64 years	-3.6	-5.5	-0.9	1.2	-1.5	-8.0
February						

cder_mpl1p_wp093

Table 5. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from September 1, 2021 to February 28, 2022, and from September 1, 2022 to February 28, 2023, by Month and Age Group

	Difference in Proportions (Shortage - Pre-Shortage)	Difference in Differences (Atomoxetine IR Prescriptions Comparison)	Difference in Differences (Fluoxetine Prescriptions Comparison)	Difference in Differences (Diazepam Prescriptions Comparison)	Difference in Differences (Atorvastatin Prescriptions Comparison)	Difference in Differences (ER Morphine Prescriptions Comparison)
0-4 years	NaN	NaN	NaN	NaN	NaN	NaN
5-17 years	-9.5	-11.2	1.4	-69.5	NaN	NaN
18-29 years	-3.2	-2.7	-1.3	-10.7	-29.6	NaN
30-64 years	-1.7	9.3	2.1	-0.3	-2.0	-0.7
IR Amphetamine Dextroamphetamine Prescriptions (8 Day Follow-Up)						
September						
0-4 years	NaN	NaN	NaN	NaN	NaN	NaN
5-17 years	-3.2	-2.0	0.3	-57.4	NaN	NaN
18-29 years	-2.7	-4.2	-5.3	15.7	4.9	NaN
30-64 years	-4.0	-5.0	-4.2	2.4	-4.2	2.0
October						
0-4 years	NaN	NaN	NaN	NaN	NaN	NaN
5-17 years	-5.2	-20.0	1.6	-41.8	NaN	NaN
18-29 years	-6.3	1.9	-4.0	-4.0	-0.4	-6.3
30-64 years	-2.1	3.8	-1.1	4.6	-2.0	1.2
November						
0-4 years	NaN	NaN	NaN	NaN	NaN	NaN
5-17 years	-1.8	0.7	0.9	-9.0	NaN	NaN
18-29 years	-5.7	-11.9	-2.2	-4.7	1.5	NaN
30-64 years	-4.7	3.1	-2.6	2.8	-3.7	-2.1
December						
0-4 years	NaN	NaN	NaN	NaN	NaN	NaN
5-17 years	-9.3	-9.2	-2.1	65.7	-9.3	NaN
18-29 years	-4.9	-0.7	-0.1	-13.4	-16.3	NaN
30-64 years	-2.0	0.4	-2.8	-2.5	-3.3	-2.4
January						
0-4 years	NaN	NaN	NaN	NaN	NaN	NaN

	Difference in Proportions (Shortage - Pre-Shortage)	Difference in Differences (Atomoxetine IR Prescriptions Comparison)	Difference in Differences (Fluoxetine Prescriptions Comparison)	Difference in Differences (Diazepam Prescriptions Comparison)	Difference in Differences (Atorvastatin Prescriptions Comparison)	Difference in Differences (ER Morphine Prescriptions Comparison)
5-17 years	-1.9	-4.6	-2.4	-11.4	NaN	NaN
18-29 years	-3.4	-7.8	-3.9	-4.9	2.0	NaN
30-64 years	-3.9	-12.2	0.2	0.7	-3.4	-9.2
February						
0-4 years	NaN	NaN	NaN	NaN	NaN	NaN
5-17 years	-5.5	-17.3	-1.1	-26.7	NaN	NaN
18-29 years	-10.2	-9.8	-7.2	-6.9	-22.1	NaN
30-64 years	-3.4	3.2	0.7	4.6	-5.0	1.5
ER Amphetamine Dextroamphetamine Prescriptions (15 Day Follow-Up)						
September						
0-4 years	0.0	NaN	NaN	50.0	NaN	NaN
5-17 years	-4.1	-0.7	-1.2	-41.6	NaN	NaN
18-29 years	-0.7	-2.6	0.4	16.6	16.0	NaN
30-64 years	-0.7	-0.1	1.0	6.0	0.0	4.3
October						
0-4 years	0.0	NaN	NaN	25.0	NaN	NaN
5-17 years	-1.2	-8.9	6.2	-37.9	NaN	NaN
18-29 years	-0.4	15.2	1.6	2.7	6.9	-0.4
30-64 years	-0.4	2.9	2.0	8.8	-0.3	2.2
November						
0-4 years	0.0	NaN	NaN	0.0	NaN	NaN
5-17 years	2.2	9.7	5.2	-5.0	NaN	NaN
18-29 years	1.8	-3.0	7.1	-1.5	8.0	NaN
30-64 years	-0.2	7.1	2.1	7.2	2.4	5.6
December						
0-4 years	0.0	NaN	NaN	NaN	NaN	NaN
5-17 years	4.8	7.3	12.8	79.8	4.8	NaN

cder_mpl1p_wp093

Table 5. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from September 1, 2021 to February 28, 2022, and from September 1, 2022 to February 28, 2023, by Month and Age Group

	Difference in Proportions (Shortage - Pre-Shortage)	Difference in Differences (Atomoxetine IR Prescriptions Comparison)	Difference in Differences (Fluoxetine Prescriptions Comparison)	Difference in Differences (Diazepam Prescriptions Comparison)	Difference in Differences (Atorvastatin Prescriptions Comparison)	Difference in Differences (ER Morphine Prescriptions Comparison)
18-29 years	1.7	6.5	6.7	-5.6	-14.3	NaN
30-64 years	1.1	8.7	1.5	-0.1	0.9	-1.3
January						
0-4 years	0.0	NaN	NaN	NaN	NaN	NaN
5-17 years	0.0	-0.7	3.1	-9.5	NaN	NaN
18-29 years	-2.7	-13.1	-1.7	-0.5	-13.6	NaN
30-64 years	0.7	-1.3	3.3	5.5	2.7	-3.8
February						
0-4 years	0.0	NaN	NaN	NaN	NaN	NaN
5-17 years	0.5	-1.1	11.4	-59.5	NaN	NaN
18-29 years	2.9	3.5	4.8	-4.6	-23.4	NaN
30-64 years	2.4	13.4	6.2	3.8	2.1	3.4
ER Amphetamine Dextroamphetamine Prescriptions (8 Day Follow-Up)						
September						
0-4 years	0.0	NaN	NaN	50.0	NaN	NaN
5-17 years	-1.3	-0.1	2.3	-55.4	NaN	NaN
18-29 years	-1.1	-2.6	-3.7	17.3	6.5	NaN
30-64 years	-0.7	-1.7	-0.9	5.7	-0.9	5.3
October						
0-4 years	0.0	NaN	NaN	25.0	NaN	NaN
5-17 years	-2.3	-17.2	4.4	-39.0	NaN	NaN
18-29 years	-1.9	6.3	0.3	0.4	4.0	-1.9
30-64 years	-1.0	5.0	0.1	5.7	-0.9	2.3
November						
0-4 years	0.0	NaN	NaN	0.0	NaN	NaN
5-17 years	1.4	3.9	4.1	-5.8	NaN	NaN
18-29 years	2.3	-4.0	5.7	3.2	9.4	NaN

Table 5. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from September 1, 2021 to February 28, 2022, and from September 1, 2022 to February 28, 2023, by Month and Age Group

	Difference in Proportions (Shortage - Pre-Shortage)	Difference in Differences (Atomoxetine IR Prescriptions Comparison)	Difference in Differences (Fluoxetine Prescriptions Comparison)	Difference in Differences (Diazepam Prescriptions Comparison)	Difference in Differences (Atorvastatin Prescriptions Comparison)	Difference in Differences (ER Morphine Prescriptions Comparison)
30-64 years	-0.3	7.5	1.8	7.3	0.8	2.4
December						
0-4 years	-33.3	NaN	NaN	NaN	NaN	NaN
5-17 years	3.9	4.0	11.1	78.9	3.9	NaN
18-29 years	2.1	6.3	6.8	-6.4	-9.3	NaN
30-64 years	1.7	4.0	0.9	1.2	0.3	1.3
January						
0-4 years	-100.0	NaN	NaN	NaN	NaN	NaN
5-17 years	0.5	-2.2	-0.0	-9.0	NaN	NaN
18-29 years	-2.5	-6.9	-3.0	-4.0	3.0	NaN
30-64 years	1.4	-6.9	5.5	6.1	1.9	-3.8
February						
0-4 years	-50.0	NaN	NaN	NaN	NaN	NaN
5-17 years	-2.1	-13.9	2.2	-23.3	NaN	NaN
18-29 years	2.3	2.8	5.3	5.7	-9.6	NaN
30-64 years	2.1	8.8	6.2	10.1	0.5	7.0
Atomoxetine IR Prescriptions (15 Day Follow-Up)						
September						
0-4 years	NaN					
5-17 years	-3.4					
18-29 years	1.8					
30-64 years	-0.7					
October						
0-4 years	NaN					
5-17 years	7.7					
18-29 years	-15.7					
30-64 years	-3.4					

Table 5. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from September 1, 2021 to February 28, 2022, and from September 1, 2022 to February 28, 2023, by Month and Age Group

	Difference in Proportions (Shortage - Pre-Shortage)	Difference in Differences (Atomoxetine IR Prescriptions Comparison)	Difference in Differences (Fluoxetine Prescriptions Comparison)	Difference in Differences (Diazepam Prescriptions Comparison)	Difference in Differences (Atorvastatin Prescriptions Comparison)	Difference in Differences (ER Morphine Prescriptions Comparison)
November						
0-4 years	NaN					
5-17 years	-7.5					
18-29 years	4.8					
30-64 years	-7.3					
December						
0-4 years	NaN					
5-17 years	-2.4					
18-29 years	-4.8					
30-64 years	-7.6					
January						
0-4 years	NaN					
5-17 years	0.7					
18-29 years	10.4					
30-64 years	1.9					
February						
0-4 years	NaN					
5-17 years	1.6					
18-29 years	-0.5					
30-64 years	-11.1					
Atomoxetine IR Prescriptions (8 Day Follow-Up)						
September						
0-4 years	NaN					
5-17 years	-1.2					
18-29 years	1.5					
30-64 years	1.0					
October						

cder_mpl1p_wp093

Table 5. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from September 1, 2021 to February 28, 2022, and from September 1, 2022 to February 28, 2023, by Month and Age Group

	Difference in Proportions (Shortage - Pre-Shortage)	Difference in Differences (Atomoxetine IR Prescriptions Comparison)	Difference in Differences (Fluoxetine Prescriptions Comparison)	Difference in Differences (Diazepam Prescriptions Comparison)	Difference in Differences (Atorvastatin Prescriptions Comparison)	Difference in Differences (ER Morphine Prescriptions Comparison)
0-4 years	NaN					
5-17 years	14.9					
18-29 years	-8.2					
30-64 years	-5.9					
November						
0-4 years	NaN					
5-17 years	-2.5					
18-29 years	6.2					
30-64 years	-7.8					
December						
0-4 years	NaN					
5-17 years	-0.1					
18-29 years	-4.2					
30-64 years	-2.4					
January						
0-4 years	NaN					
5-17 years	2.7					
18-29 years	4.4					
30-64 years	8.2					
February						
0-4 years	NaN					
5-17 years	11.8					
18-29 years	-0.4					
30-64 years	-6.6					
Fluoxetine Prescriptions (15 Day Follow-Up)						
September						
0-4 years	NaN					

cder_mpl1p_wp093

Table 5. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from September 1, 2021 to February 28, 2022, and from September 1, 2022 to February 28, 2023, by Month and Age Group

	Difference in Proportions (Shortage - Pre-Shortage)	Difference in Differences (Atomoxetine IR Prescriptions Comparison)	Difference in Differences (Fluoxetine Prescriptions Comparison)	Difference in Differences (Diazepam Prescriptions Comparison)	Difference in Differences (Atorvastatin Prescriptions Comparison)	Difference in Differences (ER Morphine Prescriptions Comparison)
5-17 years	-3.0					
18-29 years	-1.1					
30-64 years	-1.8					
October						
0-4 years	NaN					
5-17 years	-7.4					
18-29 years	-2.0					
30-64 years	-2.5					
November						
0-4 years	NaN					
5-17 years	-3.1					
18-29 years	-5.2					
30-64 years	-2.3					
December						
0-4 years	NaN					
5-17 years	-8.0					
18-29 years	-5.0					
30-64 years	-0.4					
January						
0-4 years	NaN					
5-17 years	-3.0					
18-29 years	-1.0					
30-64 years	-2.7					
February						
0-4 years	NaN					
5-17 years	-10.9					
18-29 years	-1.9					

cder_mpl1p_wp093

Table 5. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from September 1, 2021 to February 28, 2022, and from September 1, 2022 to February 28, 2023, by Month and Age Group

	Difference in Proportions (Shortage - Pre-Shortage)	Difference in Differences (Atomoxetine IR Prescriptions Comparison)	Difference in Differences (Fluoxetine Prescriptions Comparison)	Difference in Differences (Diazepam Prescriptions Comparison)	Difference in Differences (Atorvastatin Prescriptions Comparison)	Difference in Differences (ER Morphine Prescriptions Comparison)
30-64 years	-3.8					
Fluoxetine Prescriptions (8 Day Follow-Up)						
September						
0-4 years	NaN					
5-17 years	-3.5					
18-29 years	2.7					
30-64 years	0.2					
October						
0-4 years	NaN					
5-17 years	-6.8					
18-29 years	-2.2					
30-64 years	-1.0					
November						
0-4 years	NaN					
5-17 years	-2.8					
18-29 years	-3.4					
30-64 years	-2.1					
December						
0-4 years	NaN					
5-17 years	-7.2					
18-29 years	-4.7					
30-64 years	0.8					
January						
0-4 years	NaN					
5-17 years	0.6					
18-29 years	0.5					
30-64 years	-4.1					

cder_mpl1p_wp093

Table 5. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from September 1, 2021 to February 28, 2022, and from September 1, 2022 to February 28, 2023, by Month and Age Group

	Difference in Proportions (Shortage - Pre-Shortage)	Difference in Differences (Atomoxetine IR Prescriptions Comparison)	Difference in Differences (Fluoxetine Prescriptions Comparison)	Difference in Differences (Diazepam Prescriptions Comparison)	Difference in Differences (Atorvastatin Prescriptions Comparison)	Difference in Differences (ER Morphine Prescriptions Comparison)
February						
0-4 years	NaN					
5-17 years	-4.4					
18-29 years	-3.0					
30-64 years	-4.0					
Diazepam Prescriptions (15 Day Follow-Up)						
September						
0-4 years	-50.0					
5-17 years	37.5					
18-29 years	-17.3					
30-64 years	-6.8					
October						
0-4 years	-25.0					
5-17 years	36.7					
18-29 years	-3.2					
30-64 years	-9.2					
November						
0-4 years	0.0					
5-17 years	7.1					
18-29 years	3.4					
30-64 years	-7.4					
December						
0-4 years	NaN					
5-17 years	-75.0					
18-29 years	7.3					
30-64 years	1.2					
January						

cder_mpl1p_wp093

Table 5. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from September 1, 2021 to February 28, 2022, and from September 1, 2022 to February 28, 2023, by Month and Age Group

	Difference in Proportions (Shortage - Pre-Shortage)	Difference in Differences (Atomoxetine IR Prescriptions Comparison)	Difference in Differences (Fluoxetine Prescriptions Comparison)	Difference in Differences (Diazepam Prescriptions Comparison)	Difference in Differences (Atorvastatin Prescriptions Comparison)	Difference in Differences (ER Morphine Prescriptions Comparison)
0-4 years	NaN					
5-17 years	9.5					
18-29 years	-2.2					
30-64 years	-4.9					
February						
0-4 years	NaN					
5-17 years	60.0					
18-29 years	7.5					
30-64 years	-1.4					
Diazepam Prescriptions (8 Day Follow-Up)						
September						
0-4 years	-50.0					
5-17 years	54.2					
18-29 years	-18.4					
30-64 years	-6.5					
October						
0-4 years	-25.0					
5-17 years	36.7					
18-29 years	-2.3					
30-64 years	-6.7					
November						
0-4 years	0.0					
5-17 years	7.1					
18-29 years	-1.0					
30-64 years	-7.5					
December						
0-4 years	NaN					

cder_mpl1p_wp093

Table 5. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from September 1, 2021 to February 28, 2022, and from September 1, 2022 to February 28, 2023, by Month and Age Group

	Difference in Proportions (Shortage - Pre-Shortage)	Difference in Differences (Atomoxetine IR Prescriptions Comparison)	Difference in Differences (Fluoxetine Prescriptions Comparison)	Difference in Differences (Diazepam Prescriptions Comparison)	Difference in Differences (Atorvastatin Prescriptions Comparison)	Difference in Differences (ER Morphine Prescriptions Comparison)
5-17 years	-75.0					
18-29 years	8.5					
30-64 years	0.5					
January						
0-4 years	NaN					
5-17 years	9.5					
18-29 years	1.5					
30-64 years	-4.7					
February						
0-4 years	NaN					
5-17 years	21.2					
18-29 years	-3.3					
30-64 years	-8.0					
Atorvastatin Prescriptions (15 Day Follow-Up)						
September						
0-4 years	NaN					
5-17 years	NaN					
18-29 years	-16.7					
30-64 years	-0.7					
October						
0-4 years	NaN					
5-17 years	NaN					
18-29 years	-7.4					
30-64 years	-0.2					
November						
0-4 years	NaN					
5-17 years	NaN					

cder_mpl1p_wp093

Table 5. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from September 1, 2021 to February 28, 2022, and from September 1, 2022 to February 28, 2023, by Month and Age Group

	Difference in Proportions (Shortage - Pre-Shortage)	Difference in Differences (Atomoxetine IR Prescriptions Comparison)	Difference in Differences (Fluoxetine Prescriptions Comparison)	Difference in Differences (Diazepam Prescriptions Comparison)	Difference in Differences (Atorvastatin Prescriptions Comparison)	Difference in Differences (ER Morphine Prescriptions Comparison)
18-29 years	-6.2					
30-64 years	-2.6					
December						
0-4 years	NaN					
5-17 years	0.0					
18-29 years	16.0					
30-64 years	0.2					
January						
0-4 years	NaN					
5-17 years	NaN					
18-29 years	10.9					
30-64 years	-2.1					
February						
0-4 years	NaN					
5-17 years	NaN					
18-29 years	26.4					
30-64 years	0.2					
Atorvastatin Prescriptions (8 Day Follow-Up)						
September						
0-4 years	NaN					
5-17 years	NaN					
18-29 years	-7.5					
30-64 years	0.2					
October						
0-4 years	NaN					
5-17 years	NaN					
18-29 years	-5.9					

Table 5. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from September 1, 2021 to February 28, 2022, and from September 1, 2022 to February 28, 2023, by Month and Age Group

	Difference in Proportions (Shortage - Pre-Shortage)	Difference in Differences (Atomoxetine IR Prescriptions Comparison)	Difference in Differences (Fluoxetine Prescriptions Comparison)	Difference in Differences (Diazepam Prescriptions Comparison)	Difference in Differences (Atorvastatin Prescriptions Comparison)	Difference in Differences (ER Morphine Prescriptions Comparison)
30-64 years	-0.1					
November						
0-4 years	NaN					
5-17 years	NaN					
18-29 years	-7.1					
30-64 years	-1.0					
December						
0-4 years	NaN					
5-17 years	0.0					
18-29 years	11.4					
30-64 years	1.4					
January						
0-4 years	NaN					
5-17 years	NaN					
18-29 years	-5.5					
30-64 years	-0.6					
February						
0-4 years	NaN					
5-17 years	NaN					
18-29 years	11.9					
30-64 years	1.6					
ER Morphine Prescriptions (15 Day Follow-Up)						
September						
0-4 years	NaN					
5-17 years	NaN					
18-29 years	NaN					
30-64 years	-5.0					

cder_mpl1p_wp093

Table 5. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from September 1, 2021 to February 28, 2022, and from September 1, 2022 to February 28, 2023, by Month and Age Group

	Difference in Proportions (Shortage - Pre-Shortage)	Difference in Differences (Atomoxetine IR Prescriptions Comparison)	Difference in Differences (Fluoxetine Prescriptions Comparison)	Difference in Differences (Diazepam Prescriptions Comparison)	Difference in Differences (Atorvastatin Prescriptions Comparison)	Difference in Differences (ER Morphine Prescriptions Comparison)
October						
0-4 years	NaN					
5-17 years	NaN					
18-29 years	0.0					
30-64 years	-2.6					
November						
0-4 years	NaN					
5-17 years	NaN					
18-29 years	NaN					
30-64 years	-5.8					
December						
0-4 years	NaN					
5-17 years	NaN					
18-29 years	NaN					
30-64 years	2.4					
January						
0-4 years	NaN					
5-17 years	NaN					
18-29 years	NaN					
30-64 years	4.4					
February						
0-4 years	NaN					
5-17 years	NaN					
18-29 years	NaN					
30-64 years	-1.1					
ER Morphine Prescriptions (8 Day Follow-Up)						
September						

cder_mpl1p_wp093

	Difference in Proportions (Shortage - Pre-Shortage)	Difference in Differences (Atomoxetine IR Prescriptions Comparison)	Difference in Differences (Fluoxetine Prescriptions Comparison)	Difference in Differences (Diazepam Prescriptions Comparison)	Difference in Differences (Atorvastatin Prescriptions Comparison)	Difference in Differences (ER Morphine Prescriptions Comparison)
0-4 years	NaN					
5-17 years	NaN					
18-29 years	NaN					
30-64 years	-6.0					
October						
0-4 years	NaN					
5-17 years	NaN					
18-29 years	0.0					
30-64 years	-3.3					
November						
0-4 years	NaN					
5-17 years	NaN					
18-29 years	NaN					
30-64 years	-2.6					
December						
0-4 years	NaN					
5-17 years	NaN					
18-29 years	NaN					
30-64 years	0.4					
January						
0-4 years	NaN					
5-17 years	NaN					
18-29 years	NaN					
30-64 years	5.2					
February						
0-4 years	NaN					
5-17 years	NaN					

Table 5. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from September 1, 2021 to February 28, 2022, and from September 1, 2022 to February 28, 2023, by Month and Age Group

	Difference in Proportions (Shortage - Pre-Shortage)	Difference in Differences (Atomoxetine IR Prescriptions Comparison)	Difference in Differences (Fluoxetine Prescriptions Comparison)	Difference in Differences (Diazepam Prescriptions Comparison)	Difference in Differences (Atorvastatin Prescriptions Comparison)	Difference in Differences (ER Morphine Prescriptions Comparison)
18-29 years	NaN					
30-64 years	-4.9					

NaN = Not a number

Shaded cells represent difference-in-differences between comparator drugs and are not reported.

Table 6. Summary of Episode-Level[1] Cohort Attrition in the Sentinel Distributed Database (SDD) from September 1, 2021 to February 28, 2022 and from September 1, 2022 to February 28, 2023

	IR Amphetamine Dextroamphetamine Prescriptions (15 Day Follow-Up), Pre-Shortage Period		IR Amphetamine Dextroamphetamine Prescriptions (15 Day Follow-Up), Shortage Period		IR Amphetamine Dextroamphetamine Prescriptions (8 Day Follow-Up), Pre-Shortage Period		IR Amphetamine Dextroamphetamine Prescriptions (8 Day Follow-Up), Shortage Period	
	Remaining	Excluded	Remaining	Excluded	Remaining	Excluded	Remaining	Excluded
Members meeting enrollment and demographic requirements								
Enrolled at any point during the query period	2,042,262	N/A	2,045,438	N/A	2,042,262	N/A	2,045,438	N/A
Had required coverage type (medical and/or drug coverage)	1,733,114	309,148	1,719,915	325,523	1,733,114	309,148	1,719,915	325,523
Enrolled during specified age range	1,513,738	219,376	1,497,071	222,844	1,513,738	219,376	1,497,071	222,844
Had requestable medical charts	1,513,738	0	1,497,071	0	1,513,738	0	1,497,071	0
Met demographic requirements (sex, race, and Hispanic origin)	1,513,682	56	1,497,000	71	1,513,682	56	1,497,000	71
Members with a valid index event								
Had any cohort-defining claim during the query period	5,661	1,508,021	6,258	1,490,742	5,661	1,508,021	6,258	1,490,742
Cohort episodes with a valid index date								
Total number of claims with cohort-identifying codes during the query period	16,076	N/A	19,277	N/A	16,076	N/A	19,277	N/A
Claim recorded during specified age range	16,045	31	19,249	28	16,045	31	19,249	28
Episode defining index claim recorded during the query period	15,137	908	17,237	2,012	15,490	555	17,866	1,383

Table 6. Summary of Episode-Level[1] Cohort Attrition in the Sentinel Distributed Database (SDD) from September 1, 2021 to February 28, 2022 and from September 1, 2022 to February 28, 2023

	IR Amphetamine Dextroamphetamine Prescriptions (15 Day Follow-Up), Pre-Shortage Period		IR Amphetamine Dextroamphetamine Prescriptions (15 Day Follow-Up), Shortage Period		IR Amphetamine Dextroamphetamine Prescriptions (8 Day Follow-Up), Pre-Shortage Period		IR Amphetamine Dextroamphetamine Prescriptions (8 Day Follow-Up), Shortage Period	
	Remaining	Excluded	Remaining	Excluded	Remaining	Excluded	Remaining	Excluded
Cohort episodes with required pre-index history								
Had sufficient pre-index continuous enrollment	14,876	261	16,980	257	15,225	265	17,602	264
Met inclusion and exclusion criteria	14,876	0	16,980	0	15,225	0	17,602	0
Met event incidence criteria	14,876	0	16,980	0	15,225	0	17,602	0
Had sufficient post-index continuous enrollment	13,514	1,362	15,464	1,516	14,503	722	16,799	803
Met minimum episode duration criteria	13,514	0	15,464	0	14,503	0	16,799	0
Episode duration was longer than blackout period	13,514	0	15,464	0	14,503	0	16,799	0
Did not have an event during blackout period	13,514	0	15,464	0	14,503	0	16,799	0
Final cohort								
Number of members	5,306	N/A	5,920	N/A	5,441	N/A	6,030	N/A
Number of episodes	13,514	N/A	15,464	N/A	14,503	N/A	16,799	N/A

Table 6. Summary of Episode-Level[1] Cohort Attrition in the Sentinel Distributed Database (SDD) from September 1, 2021 to February 28, 2022 and from September 1, 2022 to February 28, 2023

	ER Amphetamine Dextroamphetamine Prescriptions (15 Day Follow-Up), Pre-Shortage Period		ER Amphetamine Dextroamphetamine Prescriptions (15 Day Follow-Up), Shortage Period		ER Amphetamine Dextroamphetamine Prescriptions (8 Day Follow-Up), Pre-Shortage Period		ER Amphetamine Dextroamphetamine Prescriptions (8 Day Follow-Up), Shortage Period	
	Remaining	Excluded	Remaining	Excluded	Remaining	Excluded	Remaining	Excluded
Members meeting enrollment and demographic requirements								
Enrolled at any point during the query period	2,042,262	N/A	2,045,438	N/A	2,042,262	N/A	2,045,438	N/A
Had required coverage type (medical and/or drug coverage)	1,733,114	309,148	1,719,915	325,523	1,733,114	309,148	1,719,915	325,523
Enrolled during specified age range	1,513,738	219,376	1,497,071	222,844	1,513,738	219,376	1,497,071	222,844
Had requestable medical charts	1,513,738	0	1,497,071	0	1,513,738	0	1,497,071	0
Met demographic requirements (sex, race, and Hispanic origin)	1,513,682	56	1,497,000	71	1,513,682	56	1,497,000	71
Members with a valid index event								
Had any cohort-defining claim during the query period	8,322	1,505,360	9,434	1,487,566	8,322	1,505,360	9,434	1,487,566
Cohort episodes with a valid index date								
Total number of claims with cohort-identifying codes during the query period	24,126	N/A	28,909	N/A	24,126	N/A	28,909	N/A
Claim recorded during specified age range	24,105	21	28,873	36	24,105	21	28,873	36
Episode defining index claim recorded during the query period	22,562	1,543	26,765	2,108	23,155	950	27,557	1,316

Table 6. Summary of Episode-Level[1] Cohort Attrition in the Sentinel Distributed Database (SDD) from September 1, 2021 to February 28, 2022 and from September 1, 2022 to February 28, 2023

	ER Amphetamine Dextroamphetamine Prescriptions (15 Day Follow-Up), Pre-Shortage Period		ER Amphetamine Dextroamphetamine Prescriptions (15 Day Follow-Up), Shortage Period		ER Amphetamine Dextroamphetamine Prescriptions (8 Day Follow-Up), Pre-Shortage Period		ER Amphetamine Dextroamphetamine Prescriptions (8 Day Follow-Up), Shortage Period	
	Remaining	Excluded	Remaining	Excluded	Remaining	Excluded	Remaining	Excluded
Cohort episodes with required pre-index history								
Had sufficient pre-index continuous enrollment	22,224	338	26,415	350	22,813	342	27,194	363
Met inclusion and exclusion criteria	22,224	0	26,415	0	22,813	0	27,194	0
Met event incidence criteria	22,224	0	26,415	0	22,813	0	27,194	0
Had sufficient post-index continuous enrollment	20,272	1,952	23,927	2,488	21,745	1,068	25,899	1,295
Met minimum episode duration criteria	20,272	0	23,927	0	21,745	0	25,899	0
Episode duration was longer than blackout period	20,272	0	23,927	0	21,745	0	25,899	0
Did not have an event during blackout period	20,272	0	23,927	0	21,745	0	25,899	0
Final cohort								
Number of members	7,842	N/A	8,880	N/A	8,020	N/A	9,093	N/A
Number of episodes	20,272	N/A	23,927	N/A	21,745	N/A	25,899	N/A

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Table 6. Summary of Episode-Level[1] Cohort Attrition in the Sentinel Distributed Database (SDD) from September 1, 2021 to February 28, 2022 and from September 1, 2022 to February 28, 2023

	Atomoxetine IR Prescriptions (15 Day Follow-Up), Pre-Shortage Period		Atomoxetine IR Prescriptions (15 Day Follow-Up), Shortage Period		Atomoxetine IR Prescriptions (8 Day Follow-Up), Pre-Shortage Period		Atomoxetine IR Prescriptions (8 Day Follow-Up), Shortage Period	
	Remaining	Excluded	Remaining	Excluded	Remaining	Excluded	Remaining	Excluded
Members meeting enrollment and demographic requirements								
Enrolled at any point during the query period	2,042,262	N/A	2,045,438	N/A	2,042,262	N/A	2,045,438	N/A
Had required coverage type (medical and/or drug coverage)	1,733,114	309,148	1,719,915	325,523	1,733,114	309,148	1,719,915	325,523
Enrolled during specified age range	1,513,738	219,376	1,497,071	222,844	1,513,738	219,376	1,497,071	222,844
Had requestable medical charts	1,513,738	0	1,497,071	0	1,513,738	0	1,497,071	0
Met demographic requirements (sex, race, and Hispanic origin)	1,513,682	56	1,497,000	71	1,513,682	56	1,497,000	71
Members with a valid index event								
Had any cohort-defining claim during the query period	1,125	1,512,557	1,320	1,495,680	1,125	1,512,557	1,320	1,495,680
Cohort episodes with a valid index date								
Total number of claims with cohort-identifying codes during the query period	1,902	N/A	2,162	N/A	1,902	N/A	2,162	N/A
Claim recorded during specified age range	1,898	4	2,156	6	1,898	4	2,156	6
Episode defining index claim recorded during the query period	1,763	135	2,010	146	1,823	75	2,074	82

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Table 6. Summary of Episode-Level[1] Cohort Attrition in the Sentinel Distributed Database (SDD) from September 1, 2021 to February 28, 2022 and from September 1, 2022 to February 28, 2023

	Atomoxetine IR Prescriptions (15 Day Follow-Up), Pre-Shortage Period		Atomoxetine IR Prescriptions (15 Day Follow-Up), Shortage Period		Atomoxetine IR Prescriptions (8 Day Follow-Up), Pre-Shortage Period		Atomoxetine IR Prescriptions (8 Day Follow-Up), Shortage Period	
	Remaining	Excluded	Remaining	Excluded	Remaining	Excluded	Remaining	Excluded
Cohort episodes with required pre-index history								
Had sufficient pre-index continuous enrollment	1,728	35	1,978	32	1,788	35	2,042	32
Met inclusion and exclusion criteria	1,728	0	1,978	0	1,788	0	2,042	0
Met event incidence criteria	1,728	0	1,978	0	1,788	0	2,042	0
Had sufficient post-index continuous enrollment	1,581	147	1,797	181	1,707	81	1,942	100
Met minimum episode duration criteria	1,581	0	1,797	0	1,707	0	1,942	0
Episode duration was longer than blackout period	1,581	0	1,797	0	1,707	0	1,942	0
Did not have an event during blackout period	1,581	0	1,797	0	1,707	0	1,942	0
Final cohort								
Number of members	1,041	N/A	1,211	N/A	1,076	N/A	1,245	N/A
Number of episodes	1,581	N/A	1,797	N/A	1,707	N/A	1,942	N/A

Table 6. Summary of Episode-Level[1] Cohort Attrition in the Sentinel Distributed Database (SDD) from September 1, 2021 to February 28, 2022 and from September 1, 2022 to February 28, 2023

	Fluoxetine Prescriptions (15 Day Follow-Up), Pre-Shortage Period		Fluoxetine Prescriptions (15 Day Follow-Up), Shortage Period		Fluoxetine Prescriptions (8 Day Follow-Up), Pre-Shortage Period		Fluoxetine Prescriptions (8 Day Follow-Up), Shortage Period	
	Remaining	Excluded	Remaining	Excluded	Remaining	Excluded	Remaining	Excluded
Members meeting enrollment and demographic requirements								
Enrolled at any point during the query period	2,042,262	N/A	2,045,438	N/A	2,042,262	N/A	2,045,438	N/A
Had required coverage type (medical and/or drug coverage)	1,733,114	309,148	1,719,915	325,523	1,733,114	309,148	1,719,915	325,523
Enrolled during specified age range	1,513,738	219,376	1,497,071	222,844	1,513,738	219,376	1,497,071	222,844
Had requestable medical charts	1,513,738	0	1,497,071	0	1,513,738	0	1,497,071	0
Met demographic requirements (sex, race, and Hispanic origin)	1,513,682	56	1,497,000	71	1,513,682	56	1,497,000	71
Members with a valid index event								
Had any cohort-defining claim during the query period	12,094	1,501,588	11,593	1,485,407	12,094	1,501,588	11,593	1,485,407
Cohort episodes with a valid index date								
Total number of claims with cohort-identifying codes during the query period	18,441	N/A	17,747	N/A	18,441	N/A	17,747	N/A
Claim recorded during specified age range	18,346	95	17,687	60	18,346	95	17,687	60
Episode defining index claim recorded during the query period	17,150	1,196	16,516	1,171	17,672	674	16,986	701
Cohort episodes with required pre-index history								
Had sufficient pre-index continuous enrollment	16,838	312	16,237	279	17,355	317	16,696	290

Table 6. Summary of Episode-Level[1] Cohort Attrition in the Sentinel Distributed Database (SDD) from September 1, 2021 to February 28, 2022 and from September 1, 2022 to February 28, 2023

	Fluoxetine Prescriptions (15 Day Follow-Up), Pre-Shortage Period		Fluoxetine Prescriptions (15 Day Follow-Up), Shortage Period		Fluoxetine Prescriptions (8 Day Follow-Up), Pre-Shortage Period		Fluoxetine Prescriptions (8 Day Follow-Up), Shortage Period	
	Remaining	Excluded	Remaining	Excluded	Remaining	Excluded	Remaining	Excluded
Met inclusion and exclusion criteria	16,838	0	16,237	0	17,355	0	16,696	0
Met event incidence criteria	16,838	0	16,237	0	17,355	0	16,696	0
Had sufficient post-index continuous enrollment	15,411	1,427	14,917	1,320	16,568	787	15,961	735
Met minimum episode duration criteria	15,411	0	14,917	0	16,568	0	15,961	0
Episode duration was longer than blackout period	15,411	0	14,917	0	16,568	0	15,961	0
Did not have an event during blackout period	15,411	0	14,917	0	16,568	0	15,961	0
Final cohort								
Number of members	11,016	N/A	10,639	N/A	11,414	N/A	10,972	N/A
Number of episodes	15,411	N/A	14,917	N/A	16,568	N/A	15,961	N/A

Table 6. Summary of Episode-Level[1] Cohort Attrition in the Sentinel Distributed Database (SDD) from September 1, 2021 to February 28, 2022 and from September 1, 2022 to February 28, 2023

	Diazepam Prescriptions (15 Day Follow-Up), Pre-Shortage Period		Diazepam Prescriptions (15 Day Follow-Up), Shortage Period		Diazepam Prescriptions (8 Day Follow-Up), Pre-Shortage Period		Diazepam Prescriptions (8 Day Follow-Up), Shortage Period	
	Remaining	Excluded	Remaining	Excluded	Remaining	Excluded	Remaining	Excluded
Members meeting enrollment and demographic requirements								
Enrolled at any point during the query period	2,042,262	N/A	2,045,438	N/A	2,042,262	N/A	2,045,438	N/A
Had required coverage type (medical and/or drug coverage)	1,733,114	309,148	1,719,915	325,523	1,733,114	309,148	1,719,915	325,523
Enrolled during specified age range	1,513,738	219,376	1,497,071	222,844	1,513,738	219,376	1,497,071	222,844
Had requestable medical charts	1,513,738	0	1,497,071	0	1,513,738	0	1,497,071	0
Met demographic requirements (sex, race, and Hispanic origin)	1,513,682	56	1,497,000	71	1,513,682	56	1,497,000	71
Members with a valid index event								
Had any cohort-defining claim during the query period	1,956	1,511,726	2,168	1,494,832	1,956	1,511,726	2,168	1,494,832
Cohort episodes with a valid index date								
Total number of claims with cohort-identifying codes during the query period	2,832	N/A	2,960	N/A	2,832	N/A	2,960	N/A
Claim recorded during specified age range	2,816	16	2,940	20	2,816	16	2,940	20
Episode defining index claim recorded during the query period	2,451	365	2,643	297	2,539	277	2,735	205
Cohort episodes with required pre-index history								
Had sufficient pre-index continuous enrollment	2,401	50	2,594	49	2,489	50	2,686	49

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Table 6. Summary of Episode-Level[1] Cohort Attrition in the Sentinel Distributed Database (SDD) from September 1, 2021 to February 28, 2022 and from September 1, 2022 to February 28, 2023

	Diazepam Prescriptions (15 Day Follow-Up), Pre-Shortage Period		Diazepam Prescriptions (15 Day Follow-Up), Shortage Period		Diazepam Prescriptions (8 Day Follow-Up), Pre-Shortage Period		Diazepam Prescriptions (8 Day Follow-Up), Shortage Period	
	Remaining	Excluded	Remaining	Excluded	Remaining	Excluded	Remaining	Excluded
Met inclusion and exclusion criteria	2,401	0	2,594	0	2,489	0	2,686	0
Met event incidence criteria	2,401	0	2,594	0	2,489	0	2,686	0
Had sufficient post-index continuous enrollment	2,161	240	2,378	216	2,374	115	2,569	117
Met minimum episode duration criteria	2,161	0	2,378	0	2,374	0	2,569	0
Episode duration was longer than blackout period	2,161	0	2,378	0	2,374	0	2,569	0
Did not have an event during blackout period	2,161	0	2,378	0	2,374	0	2,569	0
Final cohort								
Number of members	1,736	N/A	1,952	N/A	1,836	N/A	2,035	N/A
Number of episodes	2,161	N/A	2,378	N/A	2,374	N/A	2,569	N/A

Table 6. Summary of Episode-Level[1] Cohort Attrition in the Sentinel Distributed Database (SDD) from September 1, 2021 to February 28, 2022 and from September 1, 2022 to February 28, 2023

	Atorvastatin Prescriptions (15 Day Follow-Up), Pre-Shortage Period		Atorvastatin Prescriptions (15 Day Follow-Up), Shortage Period		Atorvastatin Prescriptions (8 Day Follow-Up), Pre-Shortage Period		Atorvastatin Prescriptions (8 Day Follow-Up), Shortage Period	
	Remaining	Excluded	Remaining	Excluded	Remaining	Excluded	Remaining	Excluded
Members meeting enrollment and demographic requirements								
Enrolled at any point during the query period	2,042,262	N/A	2,045,438	N/A	2,042,262	N/A	2,045,438	N/A
Had required coverage type (medical and/or drug coverage)	1,733,114	309,148	1,719,915	325,523	1,733,114	309,148	1,719,915	325,523
Enrolled during specified age range	1,513,738	219,376	1,497,071	222,844	1,513,738	219,376	1,497,071	222,844
Had requestable medical charts	1,513,738	0	1,497,071	0	1,513,738	0	1,497,071	0
Met demographic requirements (sex, race, and Hispanic origin)	1,513,682	56	1,497,000	71	1,513,682	56	1,497,000	71
Members with a valid index event								
Had any cohort-defining claim during the query period	20,804	1,492,878	21,350	1,475,650	20,804	1,492,878	21,350	1,475,650
Cohort episodes with a valid index date								
Total number of claims with cohort-identifying codes during the query period	26,555	N/A	27,422	N/A	26,555	N/A	27,422	N/A
Claim recorded during specified age range	26,041	514	26,877	545	26,041	514	26,877	545
Episode defining index claim recorded during the query period	24,317	1,724	25,074	1,803	24,716	1,325	25,497	1,380
Cohort episodes with required pre-index history								
Had sufficient pre-index continuous enrollment	23,856	461	24,599	475	24,244	472	25,012	485

Table 6. Summary of Episode-Level[1] Cohort Attrition in the Sentinel Distributed Database (SDD) from September 1, 2021 to February 28, 2022 and from September 1, 2022 to February 28, 2023

	Atorvastatin Prescriptions (15 Day Follow-Up), Pre-Shortage Period		Atorvastatin Prescriptions (15 Day Follow-Up), Shortage Period		Atorvastatin Prescriptions (8 Day Follow-Up), Pre-Shortage Period		Atorvastatin Prescriptions (8 Day Follow-Up), Shortage Period	
	Remaining	Excluded	Remaining	Excluded	Remaining	Excluded	Remaining	Excluded
Met inclusion and exclusion criteria	23,856	0	24,599	0	24,244	0	25,012	0
Met event incidence criteria	23,856	0	24,599	0	24,244	0	25,012	0
Had sufficient post-index continuous enrollment	21,780	2,076	22,605	1,994	23,127	1,117	23,899	1,113
Met minimum episode duration criteria	21,780	0	22,605	0	23,127	0	23,899	0
Episode duration was longer than blackout period	21,780	0	22,605	0	23,127	0	23,899	0
Did not have an event during blackout period	21,780	0	22,605	0	23,127	0	23,899	0
Final cohort								
Number of members	18,534	N/A	19,127	N/A	19,250	N/A	19,812	N/A
Number of episodes	21,780	N/A	22,605	N/A	23,127	N/A	23,899	N/A

Table 6. Summary of Episode-Level[1] Cohort Attrition in the Sentinel Distributed Database (SDD) from September 1, 2021 to February 28, 2022 and from September 1, 2022 to February 28, 2023

	ER Morphine Prescriptions (15 Day Follow-Up), Pre-Shortage Period		ER Morphine Prescriptions (15 Day Follow-Up), Shortage Period		ER Morphine Prescriptions (8 Day Follow-Up), Pre-Shortage Period		ER Morphine Prescriptions (8 Day Follow-Up), Shortage Period	
	Remaining	Excluded	Remaining	Excluded	Remaining	Excluded	Remaining	Excluded
Members meeting enrollment and demographic requirements								
Enrolled at any point during the query period	2,042,262	N/A	2,045,438	N/A	2,042,262	N/A	2,045,438	N/A
Had required coverage type (medical and/or drug coverage)	1,733,114	309,148	1,719,915	325,523	1,733,114	309,148	1,719,915	325,523
Enrolled during specified age range	1,513,738	219,376	1,497,071	222,844	1,513,738	219,376	1,497,071	222,844
Had requestable medical charts	1,513,738	0	1,497,071	0	1,513,738	0	1,497,071	0
Met demographic requirements (sex, race, and Hispanic origin)	1,513,682	56	1,497,000	71	1,513,682	56	1,497,000	71
Members with a valid index event								
Had any cohort-defining claim during the query period	368	1,513,314	330	1,496,670	368	1,513,314	330	1,496,670
Cohort episodes with a valid index date								
Total number of claims with cohort-identifying codes during the query period	1,548	N/A	1,385	N/A	1,548	N/A	1,385	N/A
Claim recorded during specified age range	1,518	30	1,346	39	1,518	30	1,346	39
Episode defining index claim recorded during the query period	1,330	188	1,183	163	1,412	106	1,251	95
Cohort episodes with required pre-index history								
Had sufficient pre-index continuous enrollment	1,314	16	1,173	10	1,396	16	1,240	11

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Table 6. Summary of Episode-Level[1] Cohort Attrition in the Sentinel Distributed Database (SDD) from September 1, 2021 to February 28, 2022 and from September 1, 2022 to February 28, 2023

	ER Morphine Prescriptions (15 Day Follow-Up), Pre-Shortage Period		ER Morphine Prescriptions (15 Day Follow-Up), Shortage Period		ER Morphine Prescriptions (8 Day Follow-Up), Pre-Shortage Period		ER Morphine Prescriptions (8 Day Follow-Up), Shortage Period	
	Remaining	Excluded	Remaining	Excluded	Remaining	Excluded	Remaining	Excluded
Met inclusion and exclusion criteria	1,314	0	1,173	0	1,396	0	1,240	0
Met event incidence criteria	1,314	0	1,173	0	1,396	0	1,240	0
Had sufficient post-index continuous enrollment	1,201	113	1,068	105	1,323	73	1,177	63
Met minimum episode duration criteria	1,201	0	1,068	0	1,323	0	1,177	0
Episode duration was longer than blackout period	1,201	0	1,068	0	1,323	0	1,177	0
Did not have an event during blackout period	1,201	0	1,068	0	1,323	0	1,177	0
Final cohort								
Number of members	339	N/A	303	N/A	347	N/A	312	N/A
Number of episodes	1,201	N/A	1,068	N/A	1,323	N/A	1,177	N/A

Table 6. Summary of Episode-Level[1] Cohort Attrition in the Sentinel Distributed Database (SDD) from September 1, 2021 to February 28, 2022 and from September 1, 2022 to February 28, 2023

	IR Amphetamine Dextroamphetamine Dispensings, Pre-Shortage Period		IR Amphetamine Dextroamphetamine Dispensings, Shortage Period		ER Amphetamine Dextroamphetamine Dispensings, Pre-Shortage Period		ER Amphetamine Dextroamphetamine Dispensings, Shortage Period	
	Remaining	Excluded	Remaining	Excluded	Remaining	Excluded	Remaining	Excluded
Members meeting enrollment and demographic requirements								
Enrolled at any point during the query period	2,042,262	N/A	2,045,438	N/A	2,042,262	N/A	2,045,438	N/A
Had required coverage type (medical and/or drug coverage)	1,733,114	309,148	1,719,915	325,523	1,733,114	309,148	1,719,915	325,523
Enrolled during specified age range	1,513,738	219,376	1,497,071	222,844	1,513,738	219,376	1,497,071	222,844
Had requestable medical charts	1,513,738	0	1,497,071	0	1,513,738	0	1,497,071	0
Met demographic requirements (sex, race, and Hispanic origin)	1,513,682	56	1,497,000	71	1,513,682	56	1,497,000	71
Members with a valid index event								
Had any cohort-defining claim during the query period	16,192	1,497,490	17,334	1,479,666	19,802	1,493,880	22,356	1,474,644
Cohort episodes with a valid index date								
Total number of claims with cohort-identifying codes during the query period	54,508	N/A	56,565	N/A	68,449	N/A	77,806	N/A
Claim recorded during specified age range	54,445	63	56,508	57	68,403	46	77,746	60
Episode defining index claim recorded during the query period	15,417	39,028	17,329	39,179	17,355	51,048	20,427	57,319
Cohort episodes with required pre-index history								
Had sufficient pre-index continuous enrollment	14,596	821	16,464	865	16,352	1,003	19,243	1,184

Table 6. Summary of Episode-Level[1] Cohort Attrition in the Sentinel Distributed Database (SDD) from September 1, 2021 to February 28, 2022 and from September 1, 2022 to February 28, 2023

	IR Amphetamine Dextroamphetamine Dispensings, Pre-Shortage Period		IR Amphetamine Dextroamphetamine Dispensings, Shortage Period		ER Amphetamine Dextroamphetamine Dispensings, Pre-Shortage Period		ER Amphetamine Dextroamphetamine Dispensings, Shortage Period	
	Remaining	Excluded	Remaining	Excluded	Remaining	Excluded	Remaining	Excluded
Met inclusion and exclusion criteria	14,596	0	16,464	0	16,352	0	19,243	0
Met event incidence criteria	14,596	0	16,464	0	16,352	0	19,243	0
Had sufficient post-index continuous enrollment	13,266	1,330	14,979	1,485	14,887	1,465	17,488	1,755
Met minimum episode duration criteria	13,266	0	14,979	0	14,887	0	17,488	0
Episode duration was longer than blackout period	13,266	0	14,979	0	14,887	0	17,488	0
Did not have an event during blackout period	13,266	0	14,979	0	14,887	0	17,488	0
Final cohort								
Number of members	9,504	N/A	10,862	N/A	10,896	N/A	12,773	N/A
Number of episodes	13,266	N/A	14,979	N/A	14,887	N/A	17,488	N/A

[1]Cohorts are formed by first evaluating enrollment and demographic requirements as well as index events among members, then evaluating index dates, pre-index history, and post-index follow-up among episodes. Because of this, the number remaining often increases from the member- to episode-level steps.

N/A = Not applicable

Appendix A. Dates of Available Data for Each Data Partner (DP) as of Request Distribution Dates (August 26, 2024, October 8, 2024, and November 4, 2024)

Masked DP ID	DP Start Date	DP End Date[1]
DP01	01/01/2000	02/28/2023
DP02	01/01/2000	02/28/2023
DP03	01/01/2004	02/28/2023

[1]End Date represents the query end date.

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

Generic Name	Brand Name
Immediate Release (IR) Amphetamine Dextroamphetamine	
dextroamphetamine sulf-saccharate/amphetamine sulf-aspartate	Adderall
dextroamphetamine sulf-saccharate/amphetamine sulf-aspartate	dextroamphetamine-amphetamine
Extended Release (ER) Amphetamine Dextroamphetamine	
dextroamphetamine sulf-saccharate/amphetamine sulf-aspartate	Adderall XR
dextroamphetamine sulf-saccharate/amphetamine sulf-aspartate	Mydayis
dextroamphetamine sulf-saccharate/amphetamine sulf-aspartate	dextroamphetamine-amphetamine
IR Methylphenidate	
methylphenidate HCl	Methylin
methylphenidate HCl	Ritalin
methylphenidate HCl	methylphenidate HCl
ER Methylphenidate	
methylphenidate	Cotempla XR-ODT
methylphenidate	Daytrana
methylphenidate	methylphenidate
methylphenidate HCl	Adhansia XR
methylphenidate HCl	Aptensio XR
methylphenidate HCl	Concerta
methylphenidate HCl	Jornay PM
methylphenidate HCl	Metadate CD
methylphenidate HCl	Metadate ER
methylphenidate HCl	QuilliChew ER
methylphenidate HCl	Quillivant XR
methylphenidate HCl	Relexxii
methylphenidate HCl	Ritalin LA
methylphenidate HCl	methylphenidate HCl
Lisdexamfetamine	
lisdexamfetamine dimesylate	Vyvanse
lisdexamfetamine dimesylate	lisdexamfetamine
Atomoxetine	
atomoxetine HCl	Strattera
atomoxetine HCl	atomoxetine
Fluoxetine	
fluoxetine HCl	Prozac
fluoxetine HCl	Sarafem
fluoxetine HCl	fluoxetine
Diazepam	
diazepam	Diazepam Intensol
diazepam	Valium
diazepam	diazepam
Atorvastatin	
atorvastatin calcium	AtorvaliQ
atorvastatin calcium	Lipitor
atorvastatin calcium	atorvastatin
ER Morphine	
morphine sulfate	Kadian
morphine sulfate	MS Contin
morphine sulfate	morphine

Appendix C. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Healthcare Common Procedure Coding System, Level II (HCPCS), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Category	Code Type
Depression			
0545F	Plan for follow-up care for major depressive disorder, documented (MDD ADOL)	Procedure	CPT-2
1040F	DSM-5 criteria for major depressive disorder documented at the initial evaluation (MDD, MDD ADOL)	Procedure	CPT-2
2060F	Patient interviewed directly on or before date of diagnosis of major depressive disorder (MDD ADOL)	Procedure	CPT-2
3088F	Major depressive disorder, mild (MDD)	Procedure	CPT-2
3089F	Major depressive disorder, moderate (MDD)	Procedure	CPT-2
3090F	Major depressive disorder, severe without psychotic features (MDD)	Procedure	CPT-2
3091F	Major depressive disorder, severe with psychotic features (MDD)	Procedure	CPT-2
3092F	Major depressive disorder, in remission (MDD)	Procedure	CPT-2
3093F	Documentation of new diagnosis of initial or recurrent episode of major depressive disorder (MDD)	Procedure	CPT-2
3353F	Mild to moderate depressive symptoms as categorized by using a standardized depression screening/assessment tool (MDD)	Procedure	CPT-2
3354F	Clinically significant depressive symptoms as categorized by using a standardized depression screening/assessment tool (MDD)	Procedure	CPT-2
4063F	Antidepressant pharmacotherapy considered and not prescribed (MDD ADOL)	Procedure	CPT-2
4064F	Antidepressant pharmacotherapy prescribed (MDD, MDD ADOL)	Procedure	CPT-2
90867	Therapeutic repetitive transcranial magnetic stimulation (TMS) treatment; initial, including cortical mapping, motor threshold determination, delivery and management	Procedure	CPT-4
90868	Therapeutic repetitive transcranial magnetic stimulation (TMS) treatment; subsequent delivery and management, per session	Procedure	CPT-4
90869	Therapeutic repetitive transcranial magnetic stimulation (TMS) treatment; subsequent motor threshold re-determination with delivery and management	Procedure	CPT-4
F06.31	Mood disorder due to known physiological condition with depressive features	Diagnosis	ICD-10-CM
F06.32	Mood disorder due to known physiological condition with major depressive-like	Diagnosis	ICD-10-CM
F32.0	Major depressive disorder, single episode, mild	Diagnosis	ICD-10-CM
F32.1	Major depressive disorder, single episode, moderate	Diagnosis	ICD-10-CM
F32.2	Major depressive disorder, single episode, severe without psychotic features	Diagnosis	ICD-10-CM
F32.3	Major depressive disorder, single episode, severe with psychotic features	Diagnosis	ICD-10-CM
F32.4	Major depressive disorder, single episode, in partial remission	Diagnosis	ICD-10-CM
F32.5	Major depressive disorder, single episode, in full remission	Diagnosis	ICD-10-CM
F32.8	Other depressive episodes	Diagnosis	ICD-10-CM
F32.89	Other specified depressive episodes	Diagnosis	ICD-10-CM
F32.9	Major depressive disorder, single episode, unspecified	Diagnosis	ICD-10-CM
F33.0	Major depressive disorder, recurrent, mild	Diagnosis	ICD-10-CM
F33.1	Major depressive disorder, recurrent, moderate	Diagnosis	ICD-10-CM
F33.2	Major depressive disorder, recurrent severe without psychotic features	Diagnosis	ICD-10-CM
F33.3	Major depressive disorder, recurrent, severe with psychotic symptoms	Diagnosis	ICD-10-CM
F33.40	Major depressive disorder, recurrent, in remission, unspecified	Diagnosis	ICD-10-CM
F33.41	Major depressive disorder, recurrent, in partial remission	Diagnosis	ICD-10-CM
F33.42	Major depressive disorder, recurrent, in full remission	Diagnosis	ICD-10-CM

Code	Description	Code Category	Code Type
F33.8	Other recurrent depressive disorders	Diagnosis	ICD-10-CM
F33.9	Major depressive disorder, recurrent, unspecified	Diagnosis	ICD-10-CM
F34.1	Dysthymic disorder	Diagnosis	ICD-10-CM
G8126	Patient with a diagnosis of major depression documented as being treated with antidepressant medication during the entire 84 day (12 week) acute treatment phase	Procedure	HCPCS
G8127	Patient with a diagnosis of major depression not documented as being treated with antidepressant medication during the entire 84 day (12 week) acute treatment phase	Procedure	HCPCS
G8128	Clinician documented that patient was not an eligible candidate for antidepressant medication during the entire 12 week acute treatment phase measure	Procedure	HCPCS
G8129	Patient documented as being treated with antidepressant medication for at least 6 months continuous treatment phase	Procedure	HCPCS
G8130	Patient not documented as being treated with antidepressant medication for at least 6 months continuous treatment phase	Procedure	HCPCS
G8131	Clinician documented that patient was not an eligible candidate for antidepressant medication for continuous treatment phase	Procedure	HCPCS
G8466	Clinician documented that patient is not an eligible candidate for suicide risk assessment; major depressive disorder, in remission	Procedure	HCPCS
G8467	Documentation of new diagnosis of initial or recurrent episode of major depressive disorder	Procedure	HCPCS
G8930	Assessment of depression severity at the initial evaluation	Procedure	HCPCS
G8931	Assessment of depression severity not documented, reason not given	Procedure	HCPCS
G8959	Clinician treating major depressive disorder communicates to clinician treating comorbid condition	Procedure	HCPCS
G8960	Clinician treating major depressive disorder did not communicate to clinician treating comorbid condition, reason not given	Procedure	HCPCS
G9193	Clinician documented that patient with a diagnosis of major depression was not an eligible candidate for antidepressant medication treatment or patient did not have a diagnosis of major depression	Procedure	HCPCS
G9194	Patient with a diagnosis of major depression documented as being treated with antidepressant medication during the entire 180 day (6 month) continuation treatment phase	Procedure	HCPCS
G9195	Patient with a diagnosis of major depression not documented as being treated with antidepressant medication during the entire 180 day (6 months) continuation treatment phase	Procedure	HCPCS
G9212	DSM-IVTM criteria for major depressive disorder documented at the initial evaluation	Procedure	HCPCS
G9213	DSM-IV-TR criteria for major depressive disorder not documented at the initial evaluation, reason not otherwise specified	Procedure	HCPCS

Code	Description	Code Category	Code Type
G9232	Clinician treating major depressive disorder did not communicate to clinician treating comorbid condition for specified patient reason (e.g., patient is unable to communicate the diagnosis of a comorbid condition; the patient is unwilling to communicate the diagnosis of a comorbid condition; or the patient is unaware of the comorbid condition, or any other specified patient reason)	Procedure	HCPCS
G9509	Adult patients 18 years of age or older with major depression or dysthymia who reached remission at twelve months as demonstrated by a twelve-month (+/-60 days) PHQ-9 or PHQ-9M score of less than 5	Procedure	HCPCS
G9573	Adult patients 18 years of age or older with major depression or dysthymia who did not reach remission at six months as demonstrated by a six-month (+/-60 days) PHQ-9 or PHQ-9M score of less than five	Procedure	HCPCS
G9574	Adult patients 18 years of age or older with major depression or dysthymia who did not reach remission at six months as demonstrated by a six-month (+/-60 days) PHQ-9 or PHQ-9M score of less than five; either PHQ-9 or PHQ-9M score was not assessed or is greater than or equal to five	Procedure	HCPCS
G9717	Documentation stating the patient has had a diagnosis of depression or has had a diagnosis of bipolar disorder	Procedure	HCPCS
M1019	Adolescent patients 12 to 17 years of age with major depression or dysthymia who reached remission at 12 months as demonstrated by a 12 month (+/-60 days) PHQ-9 or PHQ-9M score of less than 5	Procedure	HCPCS
S3005	Performance measurement, evaluation of patient self assessment, depression	Procedure	HCPCS
Anxiety			
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
F40.298	Other specified phobia	Diagnosis	ICD-10-CM

Appendix C. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Healthcare Common Procedure Coding System, Level II (HCPCS), and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Category	Code Type
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
F42.2	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
F44.9	Dissociative and conversion disorder, unspecified	Diagnosis	ICD-10-CM
F45.8	Other somatoform disorders	Diagnosis	ICD-10-CM
R45.7	State of emotional shock and stress, unspecified	Diagnosis	ICD-10-CM
Attention Deficit Hyperactivity Disorder			
F90.0	Attention-deficit hyperactivity disorder, predominantly inattentive type	Diagnosis	ICD-10-CM
F90.1	Attention-deficit hyperactivity disorder, predominantly hyperactive type	Diagnosis	ICD-10-CM
F90.2	Attention-deficit hyperactivity disorder, combined type	Diagnosis	ICD-10-CM
F90.8	Attention-deficit hyperactivity disorder, other type	Diagnosis	ICD-10-CM
F90.9	Attention-deficit hyperactivity disorder, unspecified type	Diagnosis	ICD-10-CM
Narcolepsy			
G47.411	Narcolepsy With Cataplexy	Diagnosis	ICD-10-CM
G47.419	Narcolepsy Without Cataplexy	Diagnosis	ICD-10-CM
G47.421	Narcolepsy in conditions classified elsewhere with cataplexy	Diagnosis	ICD-10-CM
G47.429	Narcolepsy in conditions classified elsewhere without cataplexy	Diagnosis	ICD-10-CM
Binge-Eating Disorder			
F50.81	Binge eating disorder	Diagnosis	ICD-10-CM

Appendix D. Specifications Defining Parameters for this Request

This requested executed the Cohort Identification and Descriptive Analysis (CIDA) tool version 13.1.2 to estimate the extent of the unmet need for attention-deficit/hyperactivity disorder (ADHD) stimulants due to shortages in the Sentinel Distributed Database (SDD).

Query period:	run01: September 1, 2021-February 28, 2022 run02: September 1, 2022- February 28, 2023 Entire episode (index through outcome assessment) must occur within the query period
Coverage requirement:	Medical & Drug Coverage
Pre-index enrollment requirement:	30 days
Post-episode requirement for Type 2 analyses:	None
Enrollment gap:	None allowed
Age groups:	0-4, 5-17, 18-29, 30-64
Stratifications:	Month, Month*Age group
Restrictions:	Data Partners that populate the Prescribing Table
Envelope macro:	Reclassify encounters during inpatient stay as inpatient

Exposure

Scenario	Index Exposure	Cohort Definition	Incident Exposure Washout Period	Build Episodes on Point Exposure?	Maximum Episode Exposure Duration	Post-Index Enrollment Requirement	Care Setting	Create Baseline Table?
1	Order date for **Immediate Release (IR) amphetamine-dextroamphetamine** from the Prescribing Table	02: Cohort includes all valid exposure episodes during the query period	14 days	**Y:** Define exposure as a point exposure	15 days including index date	14 days after index	Any caresetting	Yes
2	Order date for **Extended Release (ER) amphetamine-dextroamphetamine** from the Prescribing Table	02: Cohort includes all valid exposure episodes during the query period	14 days	**Y:** Define exposure as a point exposure	15 days including index date	14 days after index	Any caresetting	Yes
3	Order date for **atomoxetine IR** from the Prescribing Table	02: Cohort includes all valid exposure episodes during the query period	14 days	**Y:** Define exposure as a point exposure	15 days including index date	14 days after index	Any caresetting	Yes

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Appendix D. Specifications Defining Parameters for this Request

This requested executed the Cohort Identification and Descriptive Analysis (CIDA) tool version 13.1.2 to estimate the extent of the unmet need for attention-deficit/hyperactivity disorder (ADHD) stimulants due to shortages in the Sentinel Distributed Database (SDD).

Query period:	run01: September 1, 2021-February 28, 2022 run02: September 1, 2022- February 28, 2023 Entire episode (index through outcome assessment) must occur within the query period
Coverage requirement:	Medical & Drug Coverage
Pre-index enrollment requirement:	30 days
Post-episode requirement for Type 2 analyses:	None
Enrollment gap:	None allowed
Age groups:	0-4, 5-17, 18-29, 30-64
Stratifications:	Month, Month*Age group
Restrictions:	Data Partners that populate the Prescribing Table
Envelope macro:	Reclassify encounters during inpatient stay as inpatient

Exposure

Scenario	Index Exposure	Cohort Definition	Incident Exposure Washout Period	Build Episodes on Point Exposure?	Maximum Episode Exposure Duration	Post-Index Enrollment Requirement	Care Setting	Create Baseline Table?
4	Order date for **fluoxetine** from the Prescribing Table	02: Cohort includes all valid exposure episodes during the query period	14 days	Y: Define exposure as a point exposure	15 days including index date	14 days after index	Any caresetting	Yes
5	Order date for **diazepam** from the Prescribing Table	02: Cohort includes all valid exposure episodes during the query period	14 days	Y: Define exposure as a point exposure	15 days including index date	14 days after index	Any caresetting	Yes
6	Order date for **atorvastatin** from the Prescribing Table	02: Cohort includes all valid exposure episodes during the query period	14 days	Y: Define exposure as a point exposure	15 days including index date	14 days after index	Any caresetting	Yes

Appendix D. Specifications Defining Parameters for this Request

This requested executed the Cohort Identification and Descriptive Analysis (CIDA) tool version 13.1.2 to estimate the extent of the unmet need for attention-deficit/hyperactivity disorder (ADHD) stimulants due to shortages in the Sentinel Distributed Database (SDD).

Query period:	run01: September 1, 2021-February 28, 2022 run02: September 1, 2022- February 28, 2023 Entire episode (index through outcome assessment) must occur within the query period
Coverage requirement:	Medical & Drug Coverage
Pre-index enrollment requirement:	30 days
Post-episode requirement for Type 2 analyses:	None
Enrollment gap:	None allowed
Age groups:	0-4, 5-17, 18-29, 30-64
Stratifications:	Month, Month*Age group
Restrictions:	Data Partners that populate the Prescribing Table
Envelope macro:	Reclassify encounters during inpatient stay as inpatient

Exposure

Scenario	Index Exposure	Cohort Definition	Incident Exposure Washout Period	Build Episodes on Point Exposure?	Maximum Episode Exposure Duration	Post-Index Enrollment Requirement	Care Setting	Create Baseline Table?
7	Order date for **ER morphine** from the Prescribing Table	02: Cohort includes all valid exposure episodes during the query period	14 days	Y: Define exposure as a point exposure	15 days including index date	14 days after index	Any caresetting	Yes
8	Order date for **IR amphetamine-dextroamphetamine** from the Prescribing Table	02: Cohort includes all valid exposure episodes during the query period	7 days	Y: Define exposure as a point exposure	8 days including index date	7 days after index	Any caresetting	Yes
9	Order date for **ER amphetamine-dextroamphetamine** from the Prescribing Table	02: Cohort includes all valid exposure episodes during the query period	7 days	Y: Define exposure as a point exposure	8 days including index date	7 days after index	Any caresetting	Yes

Appendix D. Specifications Defining Parameters for this Request
This requested executed the Cohort Identification and Descriptive Analysis (CIDA) tool version 13.1.2 to estimate the extent of the unmet need for attention-deficit/hyperactivity disorder (ADHD) stimulants due to shortages in the Sentinel Distributed Database (SDD).

Query period:	run01: September 1, 2021-February 28, 2022
	run02: September 1, 2022- February 28, 2023
	Entire episode (index through outcome assessment) must occur within the query period
Coverage requirement:	Medical & Drug Coverage
Pre-index enrollment requirement:	30 days
Post-episode requirement for Type 2 analyses:	None
Enrollment gap:	None allowed
Age groups:	0-4, 5-17, 18-29, 30-64
Stratifications:	Month, Month*Age group
Restrictions:	Data Partners that populate the Prescribing Table
Envelope macro:	Reclassify encounters during inpatient stay as inpatient

Exposure

Scenario	Index Exposure	Cohort Definition	Incident Exposure Washout Period	Build Episodes on Point Exposure?	Maximum Episode Exposure Duration	Post-Index Enrollment Requirement	Care Setting	Create Baseline Table?
10	Order date for **atomoxetine IR** from the Prescribing Table	02: Cohort includes all valid exposure episodes during the query period	7 days	**Y:** Define exposure as a point exposure	8 days including index date	7 days after index	Any caresetting	Yes
11	Order date for **fluoxetine** from the Prescribing Table	02: Cohort includes all valid exposure episodes during the query period	7 days	**Y:** Define exposure as a point exposure	8 days including index date	7 days after index	Any caresetting	Yes
12	Order date for **diazepam** from the Prescribing Table	02: Cohort includes all valid exposure episodes during the query period	7 days	**Y:** Define exposure as a point exposure	8 days including index date	7 days after index	Any caresetting	Yes

Appendix D. Specifications Defining Parameters for this Request

This requested executed the Cohort Identification and Descriptive Analysis (CIDA) tool version 13.1.2 to estimate the extent of the unmet need for attention-deficit/hyperactivity disorder (ADHD) stimulants due to shortages in the Sentinel Distributed Database (SDD).

Query period:	run01: September 1, 2021-February 28, 2022
	run02: September 1, 2022- February 28, 2023
	Entire episode (index through outcome assessment) must occur within the query period
Coverage requirement:	Medical & Drug Coverage
Pre-index enrollment requirement:	30 days
Post-episode requirement for Type 2 analyses:	None
Enrollment gap:	None allowed
Age groups:	0-4, 5-17, 18-29, 30-64
Stratifications:	Month, Month*Age group
Restrictions:	Data Partners that populate the Prescribing Table
Envelope macro:	Reclassify encounters during inpatient stay as inpatient

Exposure

Scenario	Index Exposure	Cohort Definition	Incident Exposure Washout Period	Build Episodes on Point Exposure?	Maximum Episode Exposure Duration	Post-Index Enrollment Requirement	Care Setting	Create Baseline Table?
13	Order date for **atorvastatin** from the Prescribing Table	02: Cohort includes all valid exposure episodes during the query period	7 days	**Y:** Define exposure as a point exposure	8 days including index date	7 days after index	Any caresetting	Yes
14	Order date for **ER morphine** from the Prescribing Table	02: Cohort includes all valid exposure episodes during the query period	7 days	**Y:** Define exposure as a point exposure	8 days including index date	7 days after index	Any caresetting	Yes
15	Dispensing of IR amphetamine-dextroamphetamine from the Dispensing Table	02: Cohort includes all valid exposure episodes during the query period	14 days	**Y:** Define exposure as a point exposure	15 days including index date	14 days after index	Any caresetting	Yes

Appendix D. Specifications Defining Parameters for this Request

This requested executed the Cohort Identification and Descriptive Analysis (CIDA) tool version 13.1.2 to estimate the extent of the unmet need for attention-deficit/hyperactivity disorder (ADHD) stimulants due to shortages in the Sentinel Distributed Database (SDD).

Query period:	run01: September 1, 2021-February 28, 2022
	run02: September 1, 2022- February 28, 2023
	Entire episode (index through outcome assessment) must occur within the query period
Coverage requirement:	Medical & Drug Coverage
Pre-index enrollment requirement:	30 days
Post-episode requirement for Type 2 analyses:	None
Enrollment gap:	None allowed
Age groups:	0-4, 5-17, 18-29, 30-64
Stratifications:	Month, Month*Age group
Restrictions:	Data Partners that populate the Prescribing Table
Envelope macro:	Reclassify encounters during inpatient stay as inpatient

Exposure

Scenario	Index Exposure	Cohort Definition	Incident Exposure Washout Period	Build Episodes on Point Exposure?	Maximum Episode Exposure Duration	Post-Index Enrollment Requirement	Care Setting	Create Baseline Table?
16	Dispensing of ER amphetamine-dextroamphetamine from the Dispensing Table	02: Cohort includes all valid exposure episodes during the query period	14 days	**Y:** Define exposure as a point exposure	15 days including index date	14 days after index	Any caresetting	Yes

Appendix D. Specifications Defining Parameters for this Request

This requested executed the Cohort Identification and Descriptive Analysis (CIDA) tool version 13.1.2 to estimate the extent of the unmet need for attention-deficit/hyperactivity disorder (ADHD) stimulants due to shortages in the Sentinel Distributed Database (SDD).

Query period:	run01: September 1, 2021-February 28, 2022
	run02: September 1, 2022- February 28, 2023
	Entire episode (index through outcome assessment) must occur within the query period
Coverage requirement:	Medical & Drug Coverage
Pre-index enrollment requirement:	30 days
Post-episode requirement for Type 2 analyses:	None
Enrollment gap:	None allowed
Age groups:	0-4, 5-17, 18-29, 30-64
Stratifications:	Month, Month*Age group
Restrictions:	Data Partners that populate the Prescribing Table
Envelope macro:	Reclassify encounters during inpatient stay as inpatient

	Exposure	**Health Outcomes of Interest (HOI)**				
Scenario	**End At-Risk Period at Evidence of**	**Event**	**HOI Washout Period**	**Care Setting**	**Exclude Evidence of Days Supply if Event Washout Includes Dispensings**	**Event De-Duplication**
1	*Death *Data Partner (DP) end date *Query end date *Occurence of event	Dispensing of IR amphetamine-dextroamphetamine from the Dispensing Table	None (N/A)	Any caresetting	N/A, no washout	De-duplicates occurrences of the same HOI GROUP on the same day
2	*Death *DP end date *Query end date *Occurence of event	Dispensing of ER amphetamine-dextroamphetamine from the Dispensing Table	None (N/A)	Any caresetting	N/A, no washout	De-duplicates occurrences of the same HOI GROUP on the same day
3	*Death *DP end date *Query end date *Occurence of event	Dispensing of atomoxetine IR from the Dispensing Table	None (N/A)	Any caresetting	N/A, no washout	De-duplicates occurrences of the same HOI GROUP on the same day
4	*Death *DP end date *Query end date *Occurence of event	Dispensing of fluoxetine from the Dispensing Table	None (N/A)	Any caresetting	N/A, no washout	De-duplicates occurrences of the same HOI GROUP on the same day

Appendix D. Specifications Defining Parameters for this Request

This requested executed the Cohort Identification and Descriptive Analysis (CIDA) tool version 13.1.2 to estimate the extent of the unmet need for attention-deficit/hyperactivity disorder (ADHD) stimulants due to shortages in the Sentinel Distributed Database (SDD).

Query period:	run01: September 1, 2021-February 28, 2022
	run02: September 1, 2022- February 28, 2023
	Entire episode (index through outcome assessment) must occur within the query period
Coverage requirement:	Medical & Drug Coverage
Pre-index enrollment requirement:	30 days
Post-episode requirement for Type 2 analyses:	None
Enrollment gap:	None allowed
Age groups:	0-4, 5-17, 18-29, 30-64
Stratifications:	Month, Month*Age group
Restrictions:	Data Partners that populate the Prescribing Table
Envelope macro:	Reclassify encounters during inpatient stay as inpatient

	Exposure	Health Outcomes of Interest (HOI)				
Scenario	**End At-Risk Period at Evidence of**	**Event**	**HOI Washout Period**	**Care Setting**	**Exclude Evidence of Days Supply if Event Washout Includes Dispensings**	**Event De-Duplication**
5	*Death *DP end date *Query end date *Occurence of event	Dispensing of diazepam from the Dispensing Table	None (N/A)	Any caresetting	N/A, no washout	De-duplicates occurrences of the same HOI GROUP on the same day
6	*Death *DP end date *Query end date *Occurence of event	Dispensing of atorvastatin from the Dispensing Table	None (N/A)	Any caresetting	N/A, no washout	De-duplicates occurrences of the same HOI GROUP on the same day
7	*Death *DP end date *Query end date *Occurence of event	Dispensing of ER morphine from the Dispensing Table	None (N/A)	Any caresetting	N/A, no washout	De-duplicates occurrences of the same HOI GROUP on the same day
8	*Death *DP end date *Query end date *Occurence of event	Dispensing of IR amphetamine-dextroamphetamine from the Dispensing Table	None (N/A)	Any caresetting	N/A, no washout	De-duplicates occurrences of the same HOI GROUP on the same day

Appendix D. Specifications Defining Parameters for this Request

This requested executed the Cohort Identification and Descriptive Analysis (CIDA) tool version 13.1.2 to estimate the extent of the unmet need for attention-deficit/hyperactivity disorder (ADHD) stimulants due to shortages in the Sentinel Distributed Database (SDD).

Query period:	run01: September 1, 2021-February 28, 2022 run02: September 1, 2022- February 28, 2023 Entire episode (index through outcome assessment) must occur within the query period
Coverage requirement:	Medical & Drug Coverage
Pre-index enrollment requirement:	30 days
Post-episode requirement for Type 2 analyses:	None
Enrollment gap:	None allowed
Age groups:	0-4, 5-17, 18-29, 30-64
Stratifications:	Month, Month*Age group
Restrictions:	Data Partners that populate the Prescribing Table
Envelope macro:	Reclassify encounters during inpatient stay as inpatient

	Exposure	Health Outcomes of Interest (HOI)				
Scenario	**End At-Risk Period at Evidence of**	**Event**	**HOI Washout Period**	**Care Setting**	**Exclude Evidence of Days Supply if Event Washout Includes Dispensings**	**Event De-Duplication**
9	*Death *DP end date *Query end date *Occurence of event	Dispensing of ER amphetamine-dextroamphetamine from the Dispensing Table	None (N/A)	Any caresetting	N/A, no washout	De-duplicates occurrences of the same HOI GROUP on the same day
10	*Death *DP end date *Query end date *Occurence of event	Dispensing of atomoxetine IR from the Dispensing Table	None (N/A)	Any caresetting	N/A, no washout	De-duplicates occurrences of the same HOI GROUP on the same day
11	*Death *DP end date *Query end date *Occurence of event	Dispensing of fluoxetine from the Dispensing Table	None (N/A)	Any caresetting	N/A, no washout	De-duplicates occurrences of the same HOI GROUP on the same day
12	*Death *DP end date *Query end date *Occurence of event	Dispensing of diazepam from the Dispensing Table	None (N/A)	Any caresetting	N/A, no washout	De-duplicates occurrences of the same HOI GROUP on the same day

Appendix D. Specifications Defining Parameters for this Request

This requested executed the Cohort Identification and Descriptive Analysis (CIDA) tool version 13.1.2 to estimate the extent of the unmet need for attention-deficit/hyperactivity disorder (ADHD) stimulants due to shortages in the Sentinel Distributed Database (SDD).

Query period:	run01: September 1, 2021-February 28, 2022
	run02: September 1, 2022- February 28, 2023
	Entire episode (index through outcome assessment) must occur within the query period
Coverage requirement:	Medical & Drug Coverage
Pre-index enrollment requirement:	30 days
Post-episode requirement for Type 2 analyses:	None
Enrollment gap:	None allowed
Age groups:	0-4, 5-17, 18-29, 30-64
Stratifications:	Month, Month*Age group
Restrictions:	Data Partners that populate the Prescribing Table
Envelope macro:	Reclassify encounters during inpatient stay as inpatient

	Exposure	Health Outcomes of Interest (HOI)				
Scenario	**End At-Risk Period at Evidence of**	**Event**	**HOI Washout Period**	**Care Setting**	**Exclude Evidence of Days Supply if Event Washout Includes Dispensings**	**Event De-Duplication**
13	*Death *DP end date *Query end date *Occurence of event	Dispensing of atorvastatin from the Dispensing Table	None (N/A)	Any caresetting	N/A, no washout	De-duplicates occurrences of the same HOI GROUP on the same day
14	*Death *DP end date *Query end date *Occurence of event	Dispensing of ER morphine from the Dispensing Table	None (N/A)	Any caresetting	N/A, no washout	De-duplicates occurrences of the same HOI GROUP on the same day
15	*Death *DP end date *Query end date *Occurence of event	Dummy	None (N/A)	Any caresetting	N/A, no washout	N/A

Appendix D. Specifications Defining Parameters for this Request
This requested executed the Cohort Identification and Descriptive Analysis (CIDA) tool version 13.1.2 to estimate the extent of the unmet need for attention-deficit/hyperactivity disorder (ADHD) stimulants due to shortages in the Sentinel Distributed Database (SDD).

	run01: September 1, 2021-February 28, 2022
Query period:	run02: September 1, 2022- February 28, 2023
	Entire episode (index through outcome assessment) must occur within the query period
Coverage requirement:	Medical & Drug Coverage
Pre-index enrollment requirement:	30 days
Post-episode requirement for Type 2 analyses:	None
Enrollment gap:	None allowed
Age groups:	0-4, 5-17, 18-29, 30-64
Stratifications:	Month, Month*Age group
Restrictions:	Data Partners that populate the Prescribing Table
Envelope macro:	Reclassify encounters during inpatient stay as inpatient

	Exposure		Health Outcomes of Interest (HOI)				
Scenario	End At-Risk Period at Evidence of		Event	HOI Washout Period	Care Setting	Exclude Evidence of Days Supply if Event Washout Includes Dispensings	Event De-Duplication
16	*Death *DP end date *Query end date *Occurence of event		Dummy	None (N/A)	Any caresetting	N/A, no washout	N/A

International Classification of Diseases, Ninth Revision (ICD-9), International Classification of Diseases, Tenth Revision (ICD-10), Healthcare Common Procedure Coding System (HCPCS), and Current Procedure Terminology (CPT) codes are provided by Optum360.

National Drug Codes (NDC) codes are checked against First Data Bank's FDB MedKnowledge®.

N/A = Not applicable

Appendix E. Specifications Defining Baseline Characteristics for this Request

Baseline Characteristic Name	Characteristic Number	Code Category	Care Setting	Principal Diagnosis Position	Evaluation Period	Evaluation Period End
Depression	1	Diagnosis (DX) / Procedure (PX)	Any caresetting	Any	-30	60
Anxiety	2	DX	Any caresetting	Any	-30	60
Attention-Deficit/Hyperactivity Disorder	3	DX	Any caresetting	Any	-30	60
Conduct or Adjustment Disorders or other related disorders	4	DX	Any caresetting	Any	-30	60
Narcolepsy	5	DX	Any caresetting	Any	-30	60
Binge-Eating Disorder	6	DX	Any caresetting	Any	-30	60
IR Amphetamine/Dextroamphetamine Prescription, 30-day	7	Prescribing	Any caresetting	Any	-30	0
IR Amphetamine/Dextroamphetamine Prescription, 15-day	8	Prescribing	Any caresetting	Any	-15	0
ER Amphetamine/Dextroamphetamine Prescription, 30-day	9	Prescribing	Any caresetting	Any	-30	0
ER Amphetamine/Dextroamphetamine Prescription, 15-day	10	Prescribing	Any caresetting	Any	-15	0
IR Methylphenidate Prescription, 30-day	11	Prescribing	Any caresetting	Any	-30	0
IR Methylphenidate Prescription, 15-day	12	Prescribing	Any caresetting	Any	-15	0
ER Methylphenidate Prescription, 30-day	13	Prescribing	Any caresetting	Any	-30	0
ER Methylphenidate Prescription, 15-day	14	Prescribing	Any caresetting	Any	-15	0
Lisdexamfetamine Prescription, 30-day	15	Prescribing	Any caresetting	Any	-30	0

Appendix E. Specifications Defining Baseline Characteristics for this Request

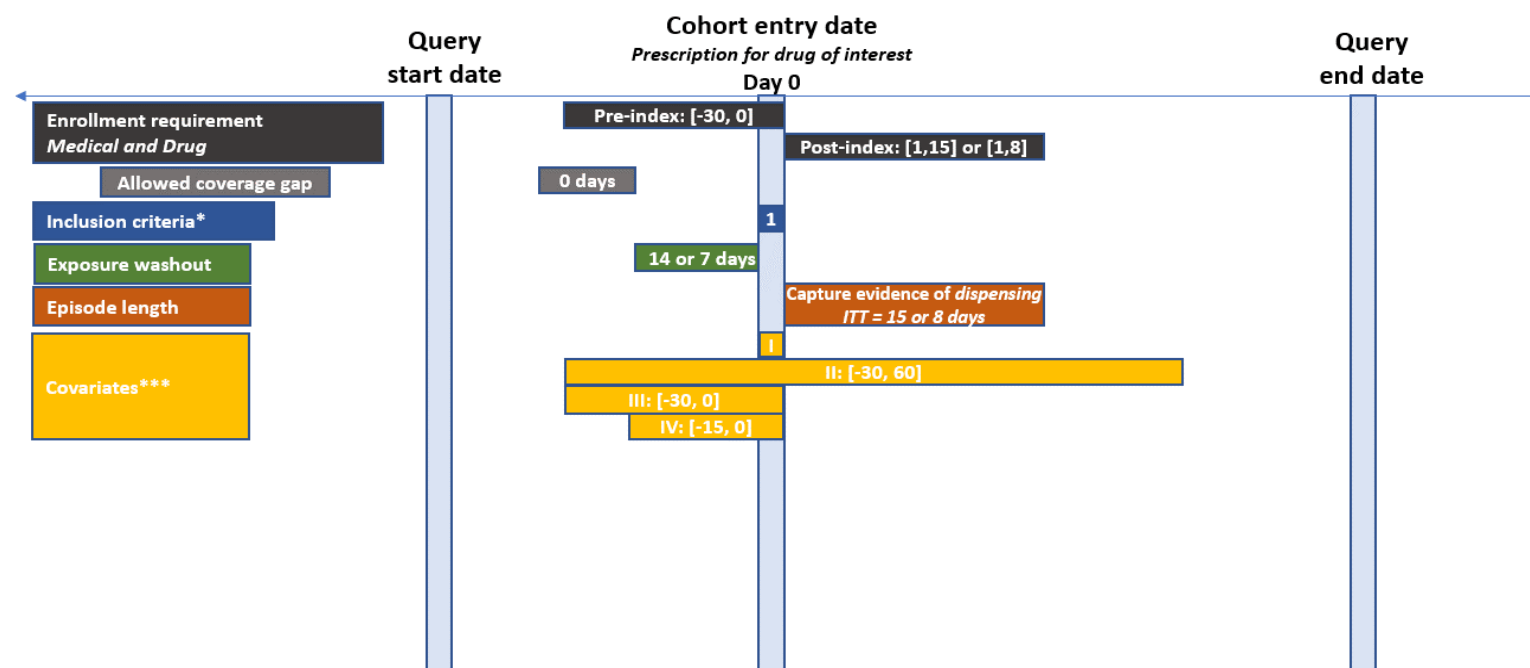| Baseline Characteristic Name	Characteristic Number	Code Category	Care Setting	Principal Diagnosis Position	Evaluation Period	Evaluation Period End
Lisdexamfetamine Prescription, 15-day	16	Prescribing	Any caresetting	Any	-15	0

Appendix E. Specifications Defining Baseline Characteristics for this Request

Baseline Characteristic Name	Number of Instances the Characteristic Should be Found in Evaluation Period	Forced Supply to Attach to a Code (Only Applies to Drug Codes)	Lookback Period Date Only
Depression	1	N/A	N/A - DX code
Anxiety	1	N/A	N/A - DX code
Attention-Deficit/Hyperactivity Disorder	1	N/A	N/A - DX code
Conduct or Adjustment Disorders or other related disorders	1	N/A	N/A - DX code
Narcolepsy	1	N/A	N/A - DX code
Binge-Eating Disorder	1	N/A	N/A - DX code
IR Amphetamine/Dextroamphetamine Prescription, 30-day	1	N/A	N/A - Prescribing
IR Amphetamine/Dextroamphetamine Prescription, 15-day	1	N/A	N/A - Prescribing
ER Amphetamine/Dextroamphetamine Prescription, 30-day	1	N/A	N/A - Prescribing
ER Amphetamine/Dextroamphetamine Prescription, 15-day	1	N/A	N/A - Prescribing
IR Methylphenidate Prescription, 30-day	1	N/A	N/A - Prescribing
IR Methylphenidate Prescription, 15-day	1	N/A	N/A - Prescribing
ER Methylphenidate Prescription, 30-day	1	N/A	N/A - Prescribing
ER Methylphenidate Prescription, 15-day	1	N/A	N/A - Prescribing
Lisdexamfetamine Prescription, 30-day	1	N/A	N/A - Prescribing
Lisdexamfetamine Prescription, 15-day	1	N/A	N/A - Prescribing

N/A = Not applicable

Type 2 design diagram:

Query start date

Cohort entry date
Prescription for drug of interest
Day 0

Query end date

Enrollment requirement
Medical and Drug

Allowed coverage gap

Inclusion criteria*

Exposure washout

Episode length

Covariates***

Pre-index: [-30, 0]

Post-index: [1,15] or [1,8]

0 days

1

14 or 7 days

Capture evidence of *dispensing*
ITT = 15 or 8 days

I

II: [-30, 60]

III: [-30, 0]

IV: [-15, 0]

*Inclusion Criteria
Window 1: Aged 0-64 years

***Covariates:
Window I: Age, sex, race, region
Window II: Depression, anxiety, ADHD, conduct disorders, narcolepsy, binge-eating disorder
Window III: Prescription for IR Amphetamine/Dextroamphetamine; ER Amphetamine/Dextroamphetamine; IR Methylphenidate; ER Methylphenidate; Lisdexamfetamine
Window IV: Prescription for IR Amphetamine/Dextroamphetamine; ER Amphetamine/Dextroamphetamine; IR Methylphenidate; ER Methylphenidate; Lisdexamfetamine