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

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## Overview for Request: cdrh\_mpl1r\_wp003\_nsdv\_v01, Report 2

**Request ID:** cdrh\_mpl1r\_wp003\_nsdv\_v01

**Request Description:** This report describes subsequent gynecological surgery among patients with hysteroscopic sterilization who had no subsequent tubal ligation, and additionally among patients with multiple hysteroscopic sterilization events and no subsequent tubal ligation. Gynecological events are defined as hysterectomy or salpingectomy. This report was conducted as a sensitivity analysis. This is report 2 of 2. Report 1, the main analysis, describes the number of patients who had hysteroscopic sterilization or laparoscopic tubal ligation followed by a subsequent gynecological surgery event.

**Sentinel Modular Program Tool Used:** Cohort Identification and Descriptive Analysis (CIDA) tool, version 5.0.3

**Data Source:** Data from January 1, 2008 to September 30, 2015 from 16 Data Partners contributing to the Sentinel Distributed Database (SDD) was included in this report. See Appendix A for a list of dates of available data for each Data Partner. This request was distributed to Data Partners on October 10, 2017.

**Study Design:** This request was designed to identify exposures and outcomes. The number of patients, exposure episodes, episodes with an event, eligible members, exposed members per 1,000 eligible members, years at risk, member years, and episodes with an event per 10,000 years at risk were calculated for this request.

**Exposure of Interest:** The exposure of interest was incident procedures of hysteroscopic sterilization in any care setting. These procedures were defined using International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) procedure codes, Current Procedural Terminology, Fourth Edition (CPT-4) codes, and Healthcare Common Procedure Coding System (HCPCS) codes. Please refer to Appendix B for specific codes.

**Cohort Eligibility Criteria:** Females 21 to 50 years of age were included in this request. Patients were required to be continuously enrolled in plans with medical coverage for at least 6 months (183 days) before their index procedure, during which gaps in coverage of up to 45 days were allowed. Members with no evidence of hysteroscopic sterilization or laparoscopic tubal ligation in their history of enrollment were considered. Members were excluded if they had evidence of the outcome of interest in their enrollment history or on the same day as the index procedure. Only the first valid incident procedure per member was included. The following age groups were included in the cohort: 21-30, 31-40, and 41-50 years.

**Sensitivity Analyses:** Sensitivity analyses for hysteroscopic sterilization exposure additionally selected members with the following post-index conditions:

**Subsequent Tubal Ligation** : Patients were excluded if they had a laparoscopic tubal ligation in any care setting at any time on the day of or following the index procedure of hysteroscopic sterilization.

**Multiple Hysteroscopic Sterilization Events** : Patients were included only if they had an additional hysteroscopic sterilization procedure in any care setting occurring 1 day to 3 months after the index procedure. Follow-up time (years at risk) for this cohort starts at the **first** procedure.

Please see Appendix B for procedure codes used to define the inclusion and exclusion criteria in this request.

**Outcomes of Interest:** Patients with an incident hysteroscopic sterilization were evaluated for occurrence of the outcomes of interest, hysterectomy or salpingectomy in any care setting. *These outcomes were evaluated separately, and together as 'hysterectomy or salpingectomy.'* The outcomes were defined by ICD-9-CM procedure codes, CPT-4 codes, and HCPCS codes. Please see Appendix C for a list of procedure codes used to define the outcomes of interest in this request.

**Follow-Up Time:** Follow-up began on the day of the incident exposure (i.e. hysteroscopic sterilization) and continued until the first occurrence of any of the following: 1) disenrollment; 2) death; 3) the end date of the data provided by each Data Partner; 4) the end of the query period; 5) the outcome of interest; or in the case of a hysterectomy outcome: 6) a non-outcome hysterectomy in any care setting. Non-outcome hysterectomies were defined with ICD-9-CM procedure codes and CPT-4 codes. Please refer to Appendix D for specific codes.

**Overview for Request: cdrh\_mpl1r\_wp003\_nsdv\_v01, Report 2, continued**

**Baseline Characteristics:** This request was also designed to calculate the size of each cohort and the background rates of select characteristics among those cohorts. In addition to age, sex, race, year, Charlson/Elixhauser combined comorbidity score<sup>1</sup>, and health service utilization, the following characteristics were assessed during the baseline period: pelvic pain, uterine fibroids, and prior pregnancy both in the prior 6 months and the patient's entire history. The characteristics were defined with ICD-9-CM procedure and diagnosis codes, and CPT-4 codes. Please see Appendix E for specific codes.

**Please refer to Appendix F for detailed specifications of parameters used in the analyses for this request.**

**Limitations:** Algorithms used to define exposures, outcomes, and inclusion criteria are imperfect; thus, it is possible that there may be misclassification. Therefore, data should be interpreted with this limitation in mind.

**Notes:** Please contact the Sentinel Operations Center Query Fulfillment Team (qf@sentinelssystem.org) for questions and to provide comments/suggestions for future enhancements to this document.

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

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

**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).

**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.

**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.

**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. Baseline Characteristic for Females with Incident Hysteroscopic Sterilization, with No Subsequent Tubal Ligation Ever and No Prior Hysterectomy in the Sentinel Distributed Database (SDD) between January 1, 2008 and September 30, 2015**

Hysteroscopic Sterilization (With No Subsequent Tubal Ligation Ever)		
Characteristic	Number	
Number of episodes	99,862	
Number of unique patients	99,862	
Demographics	Mean	Standard Deviation
Mean Age (years)	37.2	5.7
	Number of Patients	Percent
Age (years)		
21-30	15,742	15.8%
31-40	56,505	56.6%
41-50	27,615	27.7%
Gender		
Female	99,862	100.0%
Race		
American Indian or Alaska Native	233	0.2%
Asian	2,309	2.3%
Black or African American	6,626	6.6%
Native Hawaiian or Other Pacific Islander	152	0.2%
Unknown	61,225	61.3%
White	29,317	29.4%
Year		
2008	7,778	7.8%
2009	14,444	14.5%
2010	15,816	15.8%
2011	15,793	15.8%
2012	15,159	15.2%
2013	14,813	14.8%
2014	10,204	10.2%
2015	5,855	5.9%
Characteristic:	Mean	Standard Deviation
Charlson/Elixhauser combined comorbidity score <sup>1</sup>	0.2	0.6
Recorded history of:	Number of Patients	Percent
Pelvic Pain	8,733	8.7%
Pregnancy - Entire History	39,782	39.8%
Pregnancy - Prior 6 Months	23,892	23.9%
Uterine Fibroids	4,463	4.5%
Health Service Utilization Intensity:	Mean	Standard Deviation
Mean number of ambulatory encounters (AV)	8.1	6.3
Mean number of emergency room encounters (ED)	0.2	0.6
Mean number of inpatient hospital encounters (IP)	0.3	0.5
Mean number of non-acute institutional encounters (IS)	0	0.1
Mean number of other ambulatory encounters (OA)	1.7	2.6
Mean number of filled prescriptions	5.4	7.4
Mean number of generics	3.2	3.6
Mean number of unique drug classes	3	3.3

<sup>1</sup>The Charlson/Elixhauser Combined Comorbidity Score is calculated based on comorbidities observed during a requester-defined window around the exposure episode start date (index date).



**Table 1b. Baseline Characteristics for Females with Multiple Hysteroscopic Sterilizations, with No Subsequent Tubal Ligation Ever and No Prior Hysterectomy in the Sentinel Distributed Database (SDD) between January 1, 2008 and September 30, 2015**

Multiple Hysteroscopic Sterilizations (With No Subsequent Tubal Ligation Ever)		
Characteristic	Number	
Number of episodes	3,241	
Number of unique patients	3,241	
Demographics	Mean	Standard Deviation
Mean Age (years)	37.3	5.8
	Number of Patients	Percent
Age (years)		
21-30	497	15.3%
31-40	1,810	55.8%
41-50	934	28.8%
Gender		
Female	3,241	100.0%
Race		
American Indian or Alaska Native	4	0.1%
Asian	81	2.5%
Black or African American	298	9.2%
Native Hawaiian or Other Pacific Islander	3	0.1%
Unknown	1,872	57.8%
White	983	30.3%
Year		
2008	305	9.4%
2009	481	14.8%
2010	461	14.2%
2011	519	16.0%
2012	522	16.1%
2013	467	14.4%
2014	311	9.6%
2015	175	5.4%
Characteristic:	Mean	Standard Deviation
Charlson/Elixhauser combined comorbidity score <sup>1</sup>	0.2	0.7
Recorded history of:	Number of Patients	Percent
Pelvic Pain	340	10.5%
Pregnancy - Entire History	1,187	36.6%
Pregnancy - Prior 6 Months	711	21.9%
Uterine Fibroids	202	6.2%
Health Service Utilization Intensity:	Mean	Standard Deviation
Mean number of ambulatory encounters (AV)	8.2	6.6
Mean number of emergency room encounters (ED)	0.2	0.7
Mean number of inpatient hospital encounters (IP)	0.3	0.5
Mean number of non-acute institutional encounters (IS)	0	0.1
Mean number of other ambulatory encounters (OA)	1.8	2.5
Mean number of filled prescriptions	5.3	7.9
Mean number of generics	3	3.6
Mean number of unique drug classes	2.8	3.3

<sup>1</sup>The Charlson/Elixhauser Combined Comorbidity Score is calculated based on comorbidities observed during a requester-defined window around the exposure episode start date (index date).

**Table 1c. Baseline Characteristics for Females with Incident Hysteroscopic Sterilization, with No Subsequent Tubal Ligation Ever and No Prior Salpingectomy in the Sentinel Distributed Database (SDD) between January 1, 2008 and September 30, 2015**

Hysteroscopic Sterilization (With No Subsequent Tubal Ligation Ever)		
Characteristic	Number	
Number of episodes	99,496	
Number of unique patients	99,496	
Demographics	Mean	Standard Deviation
Mean Age (years)	37.2	5.7
	Number of Patients	Percent
Age (years)		
21-30	15,665	15.7%
31-40	56,279	56.6%
41-50	27,552	27.7%
Gender		
Female	99,496	100.0%
Race		
American Indian or Alaska Native	233	0.2%
Asian	2,298	2.3%
Black or African American	6,597	6.6%
Native Hawaiian or Other Pacific Islander	152	0.2%
Unknown	60,997	61.3%
White	29,219	29.4%
Year		
2008	7,762	7.8%
2009	14,417	14.5%
2010	15,771	15.9%
2011	15,732	15.8%
2012	15,101	15.2%
2013	14,732	14.8%
2014	10,155	10.2%
2015	5,826	5.9%
Characteristic:	Mean	Standard Deviation
Charlson/Elixhauser combined comorbidity score <sup>1</sup>	0.2	0.6
Recorded history of:	Number of Patients	Percent
Pelvic Pain	8,617	8.7%
Pregnancy - Entire History	39,604	39.8%
Pregnancy - Prior 6 Months	23,790	23.9%
Uterine Fibroids	4,446	4.5%
Health Service Utilization Intensity:	Mean	Standard Deviation
Mean number of ambulatory encounters (AV)	8.1	6.3
Mean number of emergency room encounters (ED)	0.2	0.6
Mean number of inpatient hospital encounters (IP)	0.3	0.5
Mean number of non-acute institutional encounters (IS)	0	0.1
Mean number of other ambulatory encounters (OA)	1.7	2.6
Mean number of filled prescriptions	5.4	7.4
Mean number of generics	3.2	3.6
Mean number of unique drug classes	3	3.3

<sup>1</sup>The Charlson/Elixhauser Combined Comorbidity Score is calculated based on comorbidities observed during a requester-defined window around the exposure episode start date (index date).

**Table 1d. Baseline Characteristics for Females with Multiple Hysteroscopic Sterilizations, with No Subsequent Tubal Ligation Ever and No Prior Salpingectomy in the Sentinel Distributed Database (SDD) between January 1, 2008 and September 30, 2015**

Multiple Hysteroscopic Sterilizations (With No Subsequent Tubal Ligation Ever)		
Characteristic	Number	
Number of episodes	3,233	
Number of unique patients	3,233	
Demographics	Mean	Standard Deviation
Mean Age (years)	37.3	5.8
	Number of Patients	Percent
Age (years)		
21-30	496	15.3%
31-40	1,803	55.8%
41-50	934	28.9%
Gender		
Female	3,233	100.0%
Race		
American Indian or Alaska Native	4	0.1%
Asian	79	2.4%
Black or African American	296	9.2%
Native Hawaiian or Other Pacific Islander	3	0.1%
Unknown	1,867	57.7%
White	984	30.4%
Year		
2008	305	9.4%
2009	481	14.9%
2010	460	14.2%
2011	519	16.1%
2012	522	16.1%
2013	463	14.3%
2014	309	9.6%
2015	174	5.4%
Characteristic:	Mean	Standard Deviation
Charlson/Elixhauser combined comorbidity score <sup>1</sup>	0.2	0.7
Recorded history of:	Number of Patients	Percent
Pelvic Pain	337	10.4%
Pregnancy - Entire History	1,183	36.6%
Pregnancy - Prior 6 Months	708	21.9%
Uterine Fibroids	200	6.2%
Health Service Utilization Intensity:	Mean	Standard Deviation
Mean number of ambulatory encounters (AV)	8.2	6.6
Mean number of emergency room encounters (ED)	0.2	0.7
Mean number of inpatient hospital encounters (IP)	0.3	0.5
Mean number of non-acute institutional encounters (IS)	0	0.1
Mean number of other ambulatory encounters (OA)	1.8	2.5
Mean number of filled prescriptions	5.3	7.9
Mean number of generics	3	3.6
Mean number of unique drug classes	2.8	3.3

<sup>1</sup>The Charlson/Elixhauser Combined Comorbidity Score is calculated based on comorbidities observed during a requester-defined window around the exposure episode start date (index date).

**Table 1e. Baseline Characteristics for Females with Incident Hysteroscopic Sterilization, with No Subsequent Tubal Ligation Ever and No Prior Hysterectomy or Salpingectomy in the Sentinel Distributed Database (SDD) between January 1, 2008 and September 30, 2015**

Hysteroscopic Sterilization (With No Subsequent Tubal Ligation Ever)		
Characteristic	Number	
Number of episodes	99,441	
Number of unique patients	99,441	
Demographics	Mean	Standard Deviation
Mean Age (years)	37.2	5.7
	Number of Patients	Percent
Age (years)		
21-30	15,659	15.7%
31-40	56,256	56.6%
41-50	27,526	27.7%
Gender		
Female	99,441	100.0%
Race		
American Indian or Alaska Native	232	0.2%
Asian	2,295	2.3%
Black or African American	6,596	6.6%
Native Hawaiian or Other Pacific Islander	152	0.2%
Unknown	60,966	61.3%
White	29,200	29.4%
Year		
2008	7,761	7.8%
2009	14,410	14.5%
2010	15,760	15.8%
2011	15,722	15.8%
2012	15,096	15.2%
2013	14,722	14.8%
2014	10,150	10.2%
2015	5,820	5.9%
Characteristic:	Mean	Standard Deviation
Charlson/Elixhauser combined comorbidity score <sup>1</sup>	0.2	0.6
Recorded history of:	Number of Patients	Percent
Pelvic Pain	8,606	8.7%
Pregnancy - Entire History	39,585	39.8%
Pregnancy - Prior 6 Months	23,784	23.9%
Uterine Fibroids	4,429	4.5%
Health Service Utilization Intensity:	Mean	Standard Deviation
Mean number of ambulatory encounters (AV)	8.1	6.3
Mean number of emergency room encounters (ED)	0.2	0.6
Mean number of inpatient hospital encounters (IP)	0.3	0.5
Mean number of non-acute institutional encounters (IS)	0	0.1
Mean number of other ambulatory encounters (OA)	1.7	2.6
Mean number of filled prescriptions	5.4	7.4
Mean number of generics	3.2	3.6
Mean number of unique drug classes	3	3.3

<sup>1</sup>The Charlson/Elixhauser Combined Comorbidity Score is calculated based on comorbidities observed during a requester-defined window around the exposure episode start date (index date).

**Table 1f. Baseline Characteristics for Females with Multiple Hysteroscopic Sterilizations, with No Subsequent Tubal Ligation Ever and No Prior Hysterectomy or Salpingectomy in the Sentinel Distributed Database (SDD) between January 1, 2008 and September 30, 2015**

Multiple Hysteroscopic Sterilizations (With No Subsequent Tubal Ligation Ever)		
Characteristic	Number	
Number of episodes	3,232	
Number of unique patients	3,232	
Demographics	Mean	Standard Deviation
Mean Age (years)	37.3	5.8
	Number of Patients	Percent
Age (years)		
21-30	496	15.3%
31-40	1,803	55.8%
41-50	933	28.9%
Gender		
Female	3,232	100.0%
Race		
American Indian or Alaska Native	4	0.1%
Asian	79	2.4%
Black or African American	296	9.2%
Native Hawaiian or Other Pacific Islander	3	0.1%
Unknown	1,867	57.8%
White	983	30.4%
Year		
2008	305	9.4%
2009	481	14.9%
2010	460	14.2%
2011	518	16.0%
2012	522	16.2%
2013	463	14.30%
2014	309	9.6%
2015	174	5.4%
Characteristic:	Mean	Standard Deviation
Charlson/Elixhauser combined comorbidity score <sup>1</sup>	0.2	0.7
Recorded history of:	Number of Patients	Percent
Pelvic Pain	337	10.4%
Pregnancy - Entire History	1,182	36.6%
Pregnancy - Prior 6 Months	708	21.9%
Uterine Fibroids	200	6.2%
Health Service Utilization Intensity:	Mean	Standard Deviation
Mean number of ambulatory encounters (AV)	8.2	6.6
Mean number of emergency room encounters (ED)	0.2	0.7
Mean number of inpatient hospital encounters (IP)	0.3	0.5
Mean number of non-acute institutional encounters (IS)	0	0.1
Mean number of other ambulatory encounters (OA)	1.7	2.5
Mean number of filled prescriptions	5.3	7.9
Mean number of generics	3	3.6
Mean number of unique drug classes	2.8	3.3

<sup>1</sup>The Charlson/Elixhauser Combined Comorbidity Score is calculated based on comorbidities observed during a requester-defined window around the exposure episode start date (index date).

**Table 2. Summary of Incident Permanent Sterilization with Hysteroscopic Sterilization or Laparoscopic Tubal Ligation and Outcomes of Gynecologic Surgery in the Sentinel Distributed Database (SDD), from January 1, 2008 to September 30, 2015**

	Members with an Incident Sterilization Episode	Eligible Members <sup>1</sup>	Number of Exposed Members per 1,000 Eligible Members	Years at Risk	Incident Sterilization Episodes with an Event	Incident Sterilization Episodes with an Event per 10,000 Years at Risk	Member-Years <sup>1</sup>
<b>Hysterectomy Outcome</b>							
Hysteroscopic Sterilization (With No Subsequent Tubal Ligation Ever)	99,862	40,791,065	2.45	219,346.0	4,032	183.82	89,444,640.7
Multiple Hysteroscopic Sterilizations (With No Subsequent Tubal Ligation Ever) <sup>2,3</sup>	3,241	101,560	31.91	6,981.1	161	230.62	23,698.1
<b>Salpingectomy Outcome</b>							
Hysteroscopic Sterilization (With No Subsequent Tubal Ligation Ever)	99,496	40,919,455	2.43	223,689.3	1,356	60.62	90,738,476.4
Multiple Hysteroscopic Sterilizations (With No Subsequent Tubal Ligation Ever) <sup>2,3</sup>	3,233	101,255	31.93	7,196.6	52	72.26	23,623.4
<b>Hysterectomy or Salpingectomy Outcome</b>							
Hysteroscopic Sterilization (With No Subsequent Tubal Ligation Ever)	99,441	40,742,047	2.44	217,393.3	4,805	221.03	89,041,735.5
Multiple Hysteroscopic Sterilizations (With No Subsequent Tubal Ligation Ever) <sup>2,3</sup>	3,232	101,230	31.93	6,922.5	194	280.25	23,616.8

<sup>1</sup>Eligible Members and Member-Years are reflective of the number of patients that met all cohort entry criteria on at least one day during the query period

<sup>2</sup>The cohort of 'Multiple Hysteroscopic Sterilizations' required the patient to have at least one hysteroscopic sterilizations during query period to be considered an eligible member, resulting in a much lower number of eligible members as defined by the program

<sup>3</sup>Follow-up time (years at risk) for this cohort starts at the **first** procedure

**Table 3. Summary of Incident Permanent Sterilization with Hysteroscopic Sterilization or Laparoscopic Tubal Ligation and Outcomes of Gynecologic Surgery in the Sentinel Distributed Database (SDD), from January 1, 2008 to September 30, 2015, by Age Group**

Age Group (Years)	Members with an Incident Sterilization Episode	Eligible Members <sup>1</sup>	Number of Exposed Members per 1,000 Eligible Members	Years at Risk	Incident Sterilization Episodes with an Event	Incident Sterilization Episodes with an Event per 10,000 Years at Risk	Member-Years <sup>1</sup>
<b>Hysterectomy Outcome</b>							
<b>Hysteroscopic Sterilization (With No Subsequent Tubal Ligation Ever)</b>							
21-30	15,742	16,586,600	0.95	30,961.3	518	167.31	26,876,374.0
31-40	56,505	15,014,439	3.76	124,001.4	2,233	180.08	28,786,581.3
41-50	27,615	15,692,901	1.76	64,383.3	1,281	198.96	33,781,685.5
<b>Multiple Hysteroscopic Sterilizations (With No Subsequent Tubal Ligation Ever)<sup>2,3</sup></b>							
21-30	497	16,993	29.25	949.7	25	263.24	3,814.5
31-40	1,810	58,831	30.77	3,796.7	86	226.51	13,460.0
41-50	934	28,090	33.25	2,234.8	50	223.73	6,423.7
<b>Salpingectomy Outcome</b>							
<b>Hysteroscopic Sterilization (With No Subsequent Tubal Ligation Ever)</b>							
21-30	15,665	16,580,772	0.94	31,379.3	233	74.25	26,849,719.5
31-40	56,279	15,052,979	3.74	126,087.4	801	63.53	29,047,541.0
41-50	27,552	15,862,834	1.74	66,222.6	322	48.62	34,841,216.0
<b>Multiple Hysteroscopic Sterilizations (With No Subsequent Tubal Ligation Ever)<sup>2,3</sup></b>							
21-30	496	16,929	29.30	990.0	16	161.62	3,798.9
31-40	1,803	58,643	30.75	3,893.5	29	74.48	13,414.3
41-50	934	28,033	33.32	2,313.1	7	30.26	6,410.2

**Table 3. Summary of Incident Permanent Sterilization with Hysteroscopic Sterilization or Laparoscopic Tubal Ligation and Outcomes of Gynecologic Surgery in the Sentinel Distributed Database (SDD), from January 1, 2008 to September 30, 2015, by Age Group**

Age Group (Years)	Members with an Incident Sterilization Episode	Eligible Members <sup>1</sup>	Number of Exposed Members per 1,000 Eligible Members	Years at Risk	Incident Sterilization Episodes with an Event	Incident Sterilization Episodes with an Event per 10,000 Years at Risk	Member-Years <sup>1</sup>
<b>Hysterectomy or Salpingectomy Outcome</b>							
<b>Hysteroscopic Sterilization (With No Subsequent Tubal Ligation Ever)</b>							
21-30	15,659	16,572,804	0.94	30,629.0	655	213.85	26,815,543.5
31-40	56,256	14,983,910	3.75	122,814.8	2,692	219.19	28,635,792.3
41-50	27,526	15,656,012	1.76	63,949.5	1,458	227.99	33,590,399.8
<b>Multiple Hysteroscopic Sterilizations (With No Subsequent Tubal Ligation Ever)<sup>2,3</sup></b>							
21-30	496	16,926	29.30	942.8	34	360.63	3,798.3
31-40	1,803	58,630	30.75	3,752.2	105	279.84	13,411.0
41-50	933	28,022	33.30	2,227.5	55	246.91	6,407.5

<sup>1</sup> Eligible Members and Member-Years are reflective of the number of patients that met all cohort entry criteria on at least one day during the query period

<sup>2</sup> The cohort of 'Multiple Hysteroscopic Sterilizations' required the patient to have at least one hysteroscopic sterilizations during query period to be considered an eligible member, resulting in a much lower number of eligible members as defined by the program

<sup>3</sup> Follow-up time (years at risk) for this cohort starts at the **first** procedure



**Table 4. Summary of Incident Permanent Sterilization with Hysteroscopic Sterilization or Laparoscopic Tubal Ligation and Outcomes of Gynecologic Surgery in the Sentinel Distributed Database (SDD), from January 1, 2008 to September 30, 2015, by Year**

Year	Members with an Incident Sterilization Episode	Eligible Members <sup>1</sup>	Number of Exposed Members per 1,000 Eligible Members	Years at Risk	Incident Sterilization Episodes with an Event	Incident Sterilization Episodes with an Event per 10,000 Years at Risk	Member-Years <sup>1</sup>
<b>Hysterectomy Outcome</b>							
<b>Hysteroscopic Sterilization (With No Subsequent Tubal Ligation Ever)</b>							
2008	7,778	15,059,740	0.52	24,816.3	426	171.66	8,837,379.7
2009	14,444	15,828,198	0.91	43,415.4	824	189.79	11,969,145.3
2010	15,816	15,366,322	1.03	44,712.5	763	170.65	11,660,991.7
2011	15,793	15,352,367	1.03	39,012.7	773	198.14	11,671,280.2
2012	15,159	15,774,334	0.96	31,618.4	618	195.46	11,929,422.7
2013	14,813	15,946,269	0.93	23,516.0	406	172.65	12,198,268.9
2014	10,204	16,190,364	0.63	10,211.1	181	177.26	12,085,223.8
2015	5,855	15,271,180	0.38	2,043.6	41	200.63	9,092,928.3
<b>Multiple Hysteroscopic Sterilizations (With No Subsequent Tubal Ligation Ever)<sup>2,3</sup></b>							
2008	305	10,284	29.66	921.2	19	206.25	1,868.6
2009	481	17,644	27.26	1,375.5	38	276.26	3,508.7
2010	461	19,092	24.15	1,274.9	28	219.63	3,774.8
2011	519	19,097	27.18	1,241.1	36	290.07	3,782.3
2012	522	18,323	28.49	1,052.5	20	190.02	3,602.6
2013	467	17,108	27.30	736.9	11	149.27	3,423.9
2014	311	12,094	25.72	318.0	7	220.13	2,369.3
2015	175	7,421	23.58	60.9	2	328.41	1,367.9
<b>Salpingectomy Outcome</b>							
<b>Hysteroscopic Sterilization (With No Subsequent Tubal Ligation Ever)</b>							
2008	7,762	15,145,216	0.51	25,578.9	112	43.79	8,919,159.1
2009	14,417	15,946,041	0.90	44,759.2	192	42.90	12,098,540.1
2010	15,771	15,520,242	1.02	45,735.9	197	43.07	11,821,497.6
2011	15,732	15,532,397	1.01	39,804.5	218	54.77	11,853,219.3
2012	15,101	15,971,345	0.95	32,057.7	201	62.70	12,125,095.8
2013	14,732	16,156,159	0.91	23,539.8	229	97.28	12,401,889.9
2014	10,155	16,400,915	0.62	10,180.6	145	142.43	12,283,512.5
2015	5,826	15,473,478	0.38	2,032.7	62	305.01	9,235,562.0
<b>Multiple Hysteroscopic Sterilizations (With No Subsequent Tubal Ligation Ever)<sup>2,3</sup></b>							
2008	305	10,266	29.71	958.7	6	62.58	1,865.3
2009	481	17,608	27.32	1,456.7	7	48.05	3,502.0
2010	460	19,040	24.16	1,328.8	7	52.68	3,765.4
2011	519	19,041	27.26	1,277.2	10	78.30	3,769.3
2012	522	18,269	28.57	1,066.3	6	56.27	3,590.7
2013	463	17,039	27.17	730.8	9	123.15	3,408.6
2014	309	12,054	25.63	318.4	5	157.04	2,360.4
2015	174	7,391	23.54	59.7	2	335.01	1,361.7

**Table 4. Summary of Incident Permanent Sterilization with Hysteroscopic Sterilization or Laparoscopic Tubal Ligation and Outcomes of Gynecologic Surgery in the Sentinel Distributed Database (SDD), from January 1, 2008 to September 30, 2015, by Year**

Year	Members with an Incident Sterilization Episode	Eligible Members <sup>1</sup>	Number of Exposed Members per 1,000 Eligible Members	Years at Risk	Incident Sterilization Episodes with an Event	Incident Sterilization Episodes with an Event per 10,000 Years at Risk	Member-Years <sup>1</sup>
<b>Hysterectomy or Salpingectomy Outcome</b>							
<b>Hysteroscopic Sterilization (With No Subsequent Tubal Ligation Ever)</b>							
2008	7,761	15,034,738	0.52	24,626.5	482	195.72	8,814,272.6
2009	14,410	15,793,018	0.91	43,160.8	905	209.68	11,931,308.1
2010	15,760	15,319,988	1.03	44,349.2	863	194.59	11,613,981.1
2011	15,722	15,297,858	1.03	38,624.0	879	227.58	11,617,390.6
2012	15,096	15,713,406	0.96	31,320.5	733	234.03	11,870,084.8
2013	14,722	15,880,298	0.93	23,206.1	555	239.16	12,134,381.5
2014	10,150	16,120,061	0.63	10,085.1	294	291.52	12,019,082.2
2015	5,820	15,199,353	0.38	2,021.1	94	465.09	9,041,234.5
<b>Multiple Hysteroscopic Sterilizations (With No Subsequent Tubal Ligation Ever)<sup>2,3</sup></b>							
2008	305	10,265	29.71	915.4	23	251.26	1,865.0
2009	481	17,607	27.32	1,370.3	39	284.61	3,501.5
2010	460	19,034	24.17	1,264.7	34	268.84	3,764.0
2011	518	19,036	27.21	1,228.4	41	333.77	3,768.3
2012	522	18,265	28.58	1,048.3	23	219.40	3,590.1
2013	463	17,032	27.18	721.8	19	263.23	3,407.0
2014	309	12,049	25.65	314.2	11	350.10	2,359.4
2015	174	7,388	23.55	59.4	4	673.40	1,361.5

<sup>1</sup>Eligible Members and Member-Years are reflective of the number of patients that met all cohort entry criteria on at least one day during the query period

<sup>2</sup>The cohort of 'Multiple Hysteroscopic Sterilizations' required the patient to have at least one hysteroscopic sterilizations during query period to be considered an eligible member, resulting in a much lower number of eligible members as defined by the program

<sup>3</sup>Follow-up time (years at risk) for this cohort starts at the **first** procedure

**Table 5. Summary of Incident Permanent Sterilization with Hysteroscopic Sterilization or Laparoscopic Tubal Ligation and Outcomes of Gynecologic Surgery in the Sentinel Distributed Database (SDD), from January 1, 2008 to September 30, 2015, by Year and Month**

Month	Members with an Incident Sterilization Episode		Number of Exposed Members per 1,000 Years at Risk		Incident Sterilization Episodes with an Event	Incident Sterilization Episodes with an Event per 10,000 Years at Risk	Member-Years <sup>1</sup>
	Eligible Members <sup>1</sup>	Eligible Members	Eligible Members	Years at Risk	an Event	Years at Risk	
<b>Hysterectomy Outcome</b>							
<b>Hysteroscopic Sterilization (With No Subsequent Tubal Ligation Ever)</b>							
2008							
January	242	5,394,859	0.04	865.2	25	288.95	447,346.2
February	296	5,317,327	0.06	1,111.6	17	152.93	418,672.9
March	300	5,353,307	0.06	1,001.4	18	179.75	450,300.8
April	363	5,365,703	0.07	1,271.0	21	165.22	436,909.4
May	350	5,345,242	0.07	1,203.1	17	141.30	450,021.6
June	378	5,301,733	0.07	1,216.5	24	197.29	432,357.2
July	899	12,589,913	0.07	2,967.3	46	155.02	1,040,562.6
August	950	12,723,078	0.07	3,004.0	37	123.17	1,055,967.5
September	932	12,406,627	0.08	2,884.4	54	187.21	1,011,541.2
October	986	12,561,113	0.08	3,106.1	54	173.85	1,043,315.5
November	976	12,347,995	0.08	2,942.0	54	183.55	1,007,610.2
December	1,106	12,697,515	0.09	3,243.7	59	181.89	1,042,774.6
2009							
January	744	11,805,251	0.06	2,419.6	40	165.32	976,521.5
February	840	11,599,613	0.07	2,649.8	49	184.92	882,875.0
March	989	11,678,610	0.08	3,168.7	68	214.60	982,415.4
April	1,067	11,702,610	0.09	3,421.0	60	175.39	954,413.2
May	1,121	11,687,109	0.10	3,464.5	68	196.28	984,703.2
June	1,196	11,611,207	0.10	3,545.8	62	174.85	947,337.2
July	1,331	12,733,240	0.10	4,106.2	77	187.52	1,065,740.3
August	1,277	12,801,427	0.10	3,804.6	66	173.47	1,064,929.8
September	1,333	12,475,874	0.11	3,892.3	72	184.98	1,017,903.1
October	1,383	12,539,395	0.11	4,046.1	82	202.66	1,045,057.5
November	1,321	12,342,593	0.11	3,753.0	87	231.81	1,007,768.9
December	1,842	12,595,404	0.15	5,143.8	93	180.80	1,039,480.2
2010							
January	959	11,586,340	0.08	2,969.4	50	168.38	960,941.4
February	1,012	11,400,449	0.09	3,010.2	59	196.00	868,256.5
March	1,269	11,455,657	0.11	3,675.5	65	176.85	964,361.4
April	1,309	11,449,241	0.11	3,827.2	69	180.29	933,968.5
May	1,276	11,406,791	0.11	3,705.7	69	186.20	961,438.8
June	1,282	11,317,137	0.11	3,747.0	60	160.13	923,271.4
July	1,335	12,312,618	0.11	3,674.0	61	166.03	1,030,980.4
August	1,224	12,374,775	0.10	3,522.8	71	201.54	1,028,722.8
September	1,414	12,076,823	0.12	3,994.6	67	167.73	985,058.7
October	1,404	12,166,354	0.12	3,881.2	63	162.32	1,013,027.7
November	1,467	11,983,445	0.12	3,916.3	60	153.21	978,176.3
December	1,865	12,291,360	0.15	4,788.7	69	144.09	1,012,787.7

**Table 5. Summary of Incident Permanent Sterilization with Hysteroscopic Sterilization or Laparoscopic Tubal Ligation and Outcomes of Gynecologic Surgery in the Sentinel Distributed Database (SDD), from January 1, 2008 to September 30, 2015, by Year and Month**

Month	Members with		Number of Exposed		Incident	Incident Sterilization	
	an Incident Sterilization Episode	Eligible Members <sup>1</sup>	Members per 1,000 Eligible Members	Years at Risk	Sterilization Episodes with an Event	Episodes with an Event per 10,000 Years at Risk	Member-Years <sup>1</sup>
<b>2011</b>							
January	911	11,458,488	0.08	2,586.1	46	177.87	948,870.5
February	1,012	11,291,208	0.09	2,709.9	57	210.34	859,823.3
March	1,365	11,388,816	0.12	3,609.6	71	196.70	958,136.1
April	1,270	11,414,299	0.11	3,319.5	63	189.79	930,943.7
May	1,197	11,405,114	0.10	3,034.3	71	233.99	960,831.9
June	1,315	11,354,668	0.12	3,284.6	60	182.67	926,153.7
July	1,189	12,340,761	0.10	3,083.6	58	188.09	1,033,324.7
August	1,342	12,418,411	0.11	3,162.1	68	215.05	1,032,368.9
September	1,430	12,150,639	0.12	3,424.4	71	207.34	990,843.6
October	1,363	12,270,271	0.11	3,134.0	69	220.17	1,021,169.6
November	1,487	12,098,705	0.12	3,423.5	52	151.89	987,133.7
December	1,912	12,413,755	0.15	4,241.0	87	205.14	1,021,680.6
<b>2012</b>							
January	973	11,529,868	0.08	2,315.8	55	237.50	955,529.4
February	1,139	11,377,776	0.10	2,564.1	46	179.40	896,953.7
March	1,238	11,433,669	0.11	2,773.8	49	176.65	961,776.0
April	1,187	11,462,225	0.10	2,658.8	51	191.82	935,302.7
May	1,239	11,448,389	0.11	2,670.7	57	213.43	964,797.7
June	1,199	11,422,823	0.10	2,610.3	52	199.21	932,211.0
July	1,138	12,720,524	0.09	2,352.9	42	178.50	1,067,640.0
August	1,373	12,816,012	0.11	2,845.0	43	151.14	1,063,718.2
September	1,231	12,548,999	0.10	2,443.0	48	196.48	1,023,226.1
October	1,390	12,658,863	0.11	2,736.9	58	211.92	1,054,134.2
November	1,424	12,491,388	0.11	2,724.1	57	209.24	1,019,236.5
December	1,628	12,778,054	0.13	2,923.1	60	205.26	1,054,897.2
<b>2013</b>							
January	923	12,074,832	0.08	1,783.2	25	140.20	994,154.9
February	1,094	11,911,723	0.09	2,021.9	43	212.67	906,604.8
March	1,215	12,078,059	0.10	2,213.9	37	167.13	1,015,473.3
April	1,318	12,077,690	0.11	2,287.1	42	183.64	984,738.1
May	1,324	12,065,561	0.11	2,168.3	33	152.19	1,016,340.2
June	1,223	11,986,596	0.10	1,974.3	42	212.73	977,776.7
July	1,232	12,827,672	0.10	1,919.8	35	182.31	1,074,643.6
August	1,352	12,869,164	0.11	2,051.0	34	165.77	1,069,928.9
September	1,362	12,591,644	0.11	1,983.3	37	186.56	1,026,349.9
October	1,351	12,688,547	0.11	1,879.0	33	175.63	1,056,975.3
November	1,204	12,512,826	0.10	1,680.3	25	148.78	1,020,840.2
December	1,215	12,816,147	0.09	1,554.0	20	128.70	1,054,443.1

**Table 5. Summary of Incident Permanent Sterilization with Hysteroscopic Sterilization or Laparoscopic Tubal Ligation and Outcomes of Gynecologic Surgery in the Sentinel Distributed Database (SDD), from January 1, 2008 to September 30, 2015, by Year and Month**

Month	Members with an Incident Sterilization Episode		Number of Exposed Members per 1,000 Years at Risk		Incident Sterilization Episodes with an Event	Incident Sterilization Episodes with an Event per 10,000 Years at Risk	Member-Years <sup>1</sup>
	Episode	Eligible Members <sup>1</sup>	Eligible Members	Risk			
<b>2014</b>							
January	718	11,867,099	0.06	955.1	17	177.99	981,351.3
February	754	11,698,927	0.06	967.8	16	165.32	890,662.4
March	848	11,792,011	0.07	1,051.4	14	133.16	992,105.4
April	920	11,811,216	0.08	1,071.1	24	224.07	962,869.3
May	828	11,790,792	0.07	908.6	18	198.11	993,183.4
June	795	11,787,730	0.07	815.5	14	171.67	961,004.1
July	862	12,903,998	0.07	863.3	21	243.25	1,079,358.2
August	859	12,801,280	0.07	800.6	12	149.89	1,062,646.7
September	898	12,543,746	0.07	782.2	14	178.98	1,022,614.0
October	1,000	12,774,878	0.08	787.4	10	127.00	1,058,558.2
November	809	12,551,865	0.06	601.7	3	49.86	1,024,224.2
December	913	12,809,101	0.07	606.4	18	296.83	1,056,646.8
<b>2015</b>							
January	566	11,976,297	0.05	359.5	6	166.90	990,382.2
February	614	11,745,449	0.05	351.0	9	256.41	894,255.4
March	753	11,980,559	0.06	374.6	11	293.65	1,007,085.5
April	761	12,010,739	0.06	328.7	5	152.11	979,294.1
May	628	12,017,507	0.05	220.5	4	181.41	1,012,334.9
June	651	12,016,598	0.05	181.4	2	110.25	979,844.5
July	638	13,043,013	0.05	128.1	2	156.13	1,091,655.9
August	609	13,155,672	0.05	73.0	2	273.97	1,087,980.3
September	635	12,877,930	0.05	26.9	0	0.00	1,050,095.4
<b>Multiple Hysteroscopic Sterilizations (With No Subsequent Tubal Ligation Ever) <sup>2,3</sup></b>							
<b>2008</b>							
January	12	1,176	10.20	35.2	3	852.27	74.8
February	12	1,217	9.86	40.9	2	489.00	74.3
March	8	1,337	5.98	18.7	0	0.00	84.3
April	10	1,396	7.16	27.2	2	735.29	85.4
May	10	1,435	6.97	32.0	0	0.00	91.0
June	13	1,459	8.91	45.6	0	0.00	90.7
July	31	3,570	8.68	103.5	2	193.24	225.4
August	38	3,754	10.12	121.6	1	82.24	240.1
September	36	3,837	9.38	95.8	3	313.15	241.3
October	47	3,683	12.76	143.8	0	0.00	238.0
November	35	3,579	9.78	90.4	3	331.86	213.6
December	53	3,598	14.73	166.6	3	180.07	209.8

**Table 5. Summary of Incident Permanent Sterilization with Hysteroscopic Sterilization or Laparoscopic Tubal Ligation and Outcomes of Gynecologic Surgery in the Sentinel Distributed Database (SDD), from January 1, 2008 to September 30, 2015, by Year and Month**

Month	Members with	Eligible Members <sup>1</sup>	Number of Exposed		Incident	Incident Sterilization	
	an Incident Sterilization Episode		Members per 1,000 Eligible Members	Years at Risk	Sterilization Episodes with an Event	Episodes with an Event per 10,000 Years at Risk	Member-Years <sup>1</sup>
2009							
January	21	3,628	5.79	72.3	2	276.63	229.1
February	38	3,884	9.78	102.4	1	97.66	225.9
March	39	4,216	9.25	129.9	1	76.98	266.3
April	48	4,324	11.10	134.1	5	372.86	271.8
May	46	4,472	10.29	111.9	4	357.46	285.1
June	39	4,491	8.68	127.3	3	235.66	277.5
July	48	5,094	9.42	153.6	4	260.42	323.7
August	28	5,204	5.38	59.8	1	167.22	335.1
September	35	5,594	6.26	97.9	2	204.29	345.7
October	42	5,406	7.77	126.0	3	238.10	353.7
November	45	5,032	8.94	108.7	6	551.98	311.6
December	52	4,964	10.48	151.7	6	395.52	283.2
2010							
January	26	4,487	5.79	81.5	1	122.70	285.7
February	33	4,726	6.98	96.8	4	413.22	277.7
March	22	4,928	4.46	78.7	0	0.00	316.2
April	33	4,871	6.77	96.5	1	103.63	304.2
May	37	4,754	7.78	88.2	2	226.76	301.8
June	39	4,641	8.40	118.7	3	252.74	281.7
July	40	5,224	7.66	116.5	2	171.67	327.2
August	36	5,382	6.69	88.3	3	339.75	347.8
September	53	5,905	8.98	155.3	2	128.78	364.8
October	51	5,481	9.30	121.4	5	411.86	365.5
November	54	5,128	10.53	151.5	1	66.01	314.3
December	37	5,045	7.33	81.6	4	490.20	288.0
2011							
January	26	4,496	5.78	63.8	3	470.22	291.0
February	26	4,668	5.57	65.3	3	459.42	280.2
March	46	4,930	9.33	110.7	6	542.01	308.2
April	38	4,720	8.05	109.3	2	182.98	293.4
May	47	4,651	10.11	134.8	3	222.55	292.9
June	39	4,648	8.39	92.3	0	0.00	279.4
July	39	5,144	7.58	95.0	3	315.79	327.4
August	44	5,431	8.10	116.3	1	85.98	349.0
September	46	5,930	7.76	91.0	3	329.67	367.3
October	48	5,611	8.55	108.8	2	183.82	372.5
November	51	5,272	9.67	119.3	1	83.82	326.4
December	69	5,115	13.49	134.4	9	669.64	294.6

**Table 5. Summary of Incident Permanent Sterilization with Hysteroscopic Sterilization or Laparoscopic Tubal Ligation and Outcomes of Gynecologic Surgery in the Sentinel Distributed Database (SDD), from January 1, 2008 to September 30, 2015, by Year and Month**

Month	Members with	Eligible Members <sup>1</sup>	Number of Exposed		Incident	Incident Sterilization	
	an Incident Sterilization Episode		Members per 1,000 Eligible Members	Years at Risk	Sterilization Episodes with an Event	Episodes with an Event per 10,000 Years at Risk	Member-Years <sup>1</sup>
2012							
January	35	4,471	7.83	81.3	3	369.00	287.9
February	43	4,561	9.43	100.0	2	200.00	281.5
March	38	4,716	8.06	87.2	2	229.36	297.2
April	42	4,464	9.41	79.4	4	503.78	278.5
May	45	4,450	10.11	96.9	0	0.00	278.2
June	49	4,446	11.02	112.6	0	0.00	268.0
July	41	4,946	8.29	74.0	2	270.27	317.6
August	38	5,212	7.29	71.9	1	139.08	330.9
September	46	5,531	8.32	85.5	0	0.00	343.7
October	45	5,174	8.70	76.6	1	130.55	340.2
November	45	4,893	9.20	87.0	2	229.89	299.9
December	55	4,771	11.53	100.2	3	299.40	278.9
2013							
January	28	4,491	6.23	53.6	0	0.00	286.9
February	29	4,589	6.32	53.0	2	377.36	276.8
March	42	4,903	8.57	77.4	1	129.20	310.7
April	45	4,760	9.45	73.8	1	135.50	295.1
May	63	4,728	13.32	98.6	3	304.26	295.3
June	34	4,736	7.18	53.6	1	186.57	284.3
July	39	5,062	7.70	65.1	2	307.22	328.8
August	30	5,159	5.82	46.4	0	0.00	332.8
September	43	4,953	8.68	60.2	1	166.11	312.3
October	41	4,304	9.53	58.6	0	0.00	278.3
November	32	3,727	8.59	45.6	0	0.00	222.8
December	41	3,489	11.75	51.0	0	0.00	199.8
2014							
January	19	3,217	5.91	26.2	0	0.00	203.9
February	20	3,218	6.22	25.0	1	400.00	193.2
March	28	3,264	8.58	35.8	1	279.33	208.8
April	25	3,137	7.97	30.2	1	331.13	191.9
May	25	3,045	8.21	26.7	1	374.53	190.3
June	31	2,998	10.34	29.4	0	0.00	181.8
July	26	3,415	7.61	27.2	1	367.65	217.8
August	30	3,482	8.62	28.3	0	0.00	226.6
September	24	3,493	6.87	24.2	1	413.22	221.6
October	34	3,182	10.69	28.8	0	0.00	203.2
November	23	2,839	8.10	17.5	0	0.00	170.4
December	26	2,767	9.40	18.7	1	534.76	159.7

**Table 5. Summary of Incident Permanent Sterilization with Hysteroscopic Sterilization or Laparoscopic Tubal Ligation and Outcomes of Gynecologic Surgery in the Sentinel Distributed Database (SDD), from January 1, 2008 to September 30, 2015, by Year and Month**

Month	Members with an Incident Sterilization Episode		Number of Exposed Members per 1,000 Years at Risk		Incident Sterilization Episodes with an Event	Incident Sterilization Episodes with an Event per 10,000 Years at Risk	Member-Years <sup>1</sup>
	Eligible Members <sup>1</sup>	Eligible Members	Eligible Members	Years at Risk	Episodes with an Event	Years at Risk	
<b>2015</b>							
January	19	2,650	7.17	12.9	0	0.00	168.8
February	22	2,635	8.35	11.9	1	840.34	156.0
March	18	2,704	6.66	8.5	1	1,176.47	171.0
April	24	2,461	9.75	9.7	0	0.00	153.2
May	21	2,299	9.13	7.5	0	0.00	146.6
June	12	2,275	5.27	3.5	0	0.00	138.3
July	18	2,383	7.55	3.4	0	0.00	152.3
August	22	2,295	9.59	2.6	0	0.00	148.2
September	19	2,173	8.74	0.8	0	0.00	133.6
<b>Salpingectomy Outcome</b>							
<b>Hysteroscopic Sterilization (With No Subsequent Tubal Ligation Ever)</b>							
<b>2008</b>							
January	242	5,453,418	0.04	927.6	6	64.68	452,372.8
February	292	5,377,303	0.05	1,123.9	6	53.39	423,489.3
March	300	5,414,598	0.06	1,068.9	1	9.36	455,569.9
April	361	5,428,263	0.07	1,311.8	6	45.74	442,104.9
May	349	5,408,948	0.06	1,223.9	4	32.68	455,480.7
June	378	5,366,228	0.07	1,258.9	6	47.66	437,742.0
July	899	12,677,447	0.07	3,051.3	14	45.88	1,048,138.5
August	949	12,816,128	0.07	3,085.9	9	29.16	1,064,004.6
September	930	12,502,633	0.07	2,959.2	15	50.69	1,019,613.3
October	984	12,661,769	0.08	3,184.6	10	31.40	1,051,989.6
November	974	12,451,976	0.08	3,030.4	16	52.80	1,016,365.1
December	1,104	12,806,975	0.09	3,352.5	19	56.67	1,052,288.6
<b>2009</b>							
January	743	11,912,663	0.06	2,506.5	3	11.97	985,771.0
February	837	11,709,925	0.07	2,737.6	11	40.18	891,474.9
March	989	11,791,988	0.08	3,287.9	19	57.79	992,222.6
April	1,064	11,819,813	0.09	3,515.6	11	31.29	964,173.3
May	1,121	11,807,252	0.09	3,596.4	14	38.93	995,048.8
June	1,197	11,734,185	0.10	3,663.2	19	51.87	957,648.6
July	1,329	12,863,818	0.10	4,214.1	24	56.95	1,076,995.5
August	1,272	12,936,664	0.10	3,914.4	9	22.99	1,076,536.1
September	1,325	12,613,814	0.11	3,981.8	18	45.21	1,029,376.7
October	1,381	12,680,698	0.11	4,164.0	18	43.23	1,057,162.7
November	1,321	12,486,272	0.11	3,877.3	24	61.90	1,019,799.3
December	1,838	12,744,512	0.14	5,300.4	22	41.51	1,052,330.5



**Table 5. Summary of Incident Permanent Sterilization with Hysteroscopic Sterilization or Laparoscopic Tubal Ligation and Outcomes of Gynecologic Surgery in the Sentinel Distributed Database (SDD), from January 1, 2008 to September 30, 2015, by Year and Month**

Month	Members with		Number of Exposed		Incident	Incident Sterilization	
	an Incident Sterilization Episode	Eligible Members <sup>1</sup>	Members per 1,000 Eligible Members	Years at Risk	Sterilization Episodes with an Event	Episodes with an Event per 10,000 Years at Risk	Member-Years <sup>1</sup>
2010							
January	952	11,729,818	0.08	3,013.7	12	39.82	973,226.1
February	1,009	11,546,043	0.09	3,108.4	14	45.04	879,542.8
March	1,267	11,603,792	0.11	3,803.7	10	26.29	977,089.1
April	1,306	11,600,216	0.11	3,911.0	12	30.68	946,492.1
May	1,272	11,560,083	0.11	3,791.2	18	47.48	974,594.4
June	1,279	11,472,466	0.11	3,820.2	17	44.50	936,207.8
July	1,332	12,473,991	0.11	3,754.1	18	47.95	1,044,820.4
August	1,216	12,539,485	0.10	3,622.3	17	46.93	1,042,834.3
September	1,408	12,243,788	0.11	4,094.1	18	43.97	998,881.1
October	1,402	12,335,534	0.11	3,968.6	14	35.28	1,027,479.3
November	1,467	12,154,576	0.12	3,991.5	24	60.13	992,428.0
December	1,861	12,467,636	0.15	4,857.0	23	47.35	1,027,902.4
2011							
January	909	11,627,345	0.08	2,650.8	11	41.50	963,277.6
February	1,010	11,461,615	0.09	2,776.1	17	61.24	872,975.9
March	1,357	11,561,091	0.12	3,695.7	16	43.29	972,881.6
April	1,266	11,588,637	0.11	3,385.5	17	50.21	945,370.8
May	1,194	11,580,961	0.10	3,124.7	22	70.41	975,893.3
June	1,310	11,532,457	0.11	3,314.0	23	69.40	940,894.0
July	1,184	12,523,212	0.09	3,132.9	17	54.26	1,048,932.4
August	1,332	12,603,846	0.11	3,247.6	16	49.27	1,048,194.1
September	1,425	12,337,482	0.12	3,491.7	20	57.28	1,006,286.3
October	1,362	12,459,005	0.11	3,210.0	16	49.84	1,037,267.7
November	1,481	12,289,166	0.12	3,459.1	19	54.93	1,002,928.1
December	1,902	12,608,504	0.15	4,316.4	24	55.60	1,038,317.5
2012							
January	972	11,714,741	0.08	2,381.5	11	46.19	971,279.5
February	1,135	11,563,880	0.10	2,602.8	12	46.10	911,814.7
March	1,237	11,621,046	0.11	2,811.4	18	64.03	977,780.9
April	1,184	11,650,832	0.10	2,705.2	13	48.06	950,898.9
May	1,235	11,638,446	0.11	2,717.4	9	33.12	981,029.4
June	1,196	11,614,215	0.10	2,651.4	15	56.57	948,050.2
July	1,133	12,916,662	0.09	2,364.2	26	109.97	1,084,403.2
August	1,369	13,014,596	0.11	2,877.8	13	45.17	1,080,613.1
September	1,220	12,747,912	0.10	2,468.0	17	68.88	1,039,649.0
October	1,381	12,859,239	0.11	2,766.6	23	83.13	1,071,202.3
November	1,416	12,692,976	0.11	2,741.1	21	76.61	1,035,931.4
December	1,623	12,983,488	0.13	2,970.4	23	77.43	1,072,443.1

**Table 5. Summary of Incident Permanent Sterilization with Hysteroscopic Sterilization or Laparoscopic Tubal Ligation and Outcomes of Gynecologic Surgery in the Sentinel Distributed Database (SDD), from January 1, 2008 to September 30, 2015, by Year and Month**

Month	Members with		Number of Exposed		Incident	Incident Sterilization	
	an Incident Sterilization Episode	Eligible Members <sup>1</sup>	Members per 1,000 Eligible Members	Years at Risk	Sterilization Episodes with an Event	Episodes with an Event per 10,000 Years at Risk	Member-Years <sup>1</sup>
2013							
January	920	12,271,749	0.07	1,789.7	15	83.81	1,010,883.7
February	1,091	12,108,863	0.09	2,044.6	17	83.15	921,774.7
March	1,205	12,276,708	0.10	2,213.1	16	72.30	1,032,396.8
April	1,312	12,276,976	0.11	2,293.2	26	113.38	1,001,178.2
May	1,317	12,265,890	0.11	2,158.6	26	120.45	1,033,406.3
June	1,215	12,187,241	0.10	1,985.2	22	110.82	994,365.2
July	1,223	13,032,671	0.09	1,923.1	18	93.60	1,092,105.4
August	1,349	13,075,849	0.10	2,054.5	23	111.95	1,087,482.0
September	1,347	12,797,725	0.11	1,972.7	20	101.38	1,043,343.8
October	1,343	12,895,708	0.10	1,875.3	17	90.65	1,074,584.3
November	1,202	12,720,390	0.09	1,685.0	14	83.09	1,037,998.8
December	1,208	13,026,223	0.09	1,544.7	15	97.11	1,072,370.9
2014							
January	716	12,062,720	0.06	955.5	14	146.52	997,953.2
February	753	11,894,082	0.06	972.3	10	102.85	905,667.3
March	842	11,987,479	0.07	1,046.5	12	114.67	1,008,747.8
April	914	12,006,894	0.08	1,075.1	11	102.32	978,988.1
May	828	11,986,866	0.07	912.5	10	109.59	1,009,866.8
June	787	11,983,274	0.07	807.1	12	148.68	977,142.6
July	856	13,105,179	0.07	857.3	15	174.97	1,096,459.5
August	856	13,001,605	0.07	796.9	12	150.58	1,079,621.0
September	888	12,743,152	0.07	770.3	11	142.80	1,039,034.6
October	996	12,975,448	0.08	781.6	13	166.33	1,075,544.6
November	808	12,751,534	0.06	596.9	12	201.04	1,040,709.3
December	911	13,010,392	0.07	608.7	13	213.57	1,073,777.6
2015							
January	568	12,167,867	0.05	360.2	8	222.10	1,006,600.0
February	614	11,934,699	0.05	349.6	14	400.46	908,789.9
March	749	12,170,133	0.06	373.5	9	240.96	1,023,201.0
April	759	12,200,162	0.06	325.7	15	460.55	994,866.6
May	623	12,206,773	0.05	217.9	8	367.14	1,028,411.9
June	646	12,205,026	0.05	179.8	2	111.23	995,373.0
July	634	13,235,655	0.05	127.2	2	157.23	1,108,012.7
August	604	13,349,489	0.05	72.5	2	275.86	1,104,369.9
September	629	13,070,680	0.05	26.4	2	757.58	1,065,936.9

**Table 5. Summary of Incident Permanent Sterilization with Hysteroscopic Sterilization or Laparoscopic Tubal Ligation and Outcomes of Gynecologic Surgery in the Sentinel Distributed Database (SDD), from January 1, 2008 to September 30, 2015, by Year and Month**

Month	Members with an Incident Sterilization Episode		Number of Exposed Members per 1,000 Years at Risk		Incident Sterilization Episodes with an Event	Incident Sterilization Episodes with an Event per 10,000 Years at Risk	Member-Years <sup>1</sup>
	Eligible Members <sup>1</sup>	Eligible Members <sup>1</sup>	Eligible Members	Risk	an Event	Years at Risk	Member-Years <sup>1</sup>
<b>Multiple Hysteroscopic Sterilizations (With No Subsequent Tubal Ligation Ever)<sup>2,3</sup></b>							
<b>2008</b>							
January	12	1,170	10.26	40.6	1	246.31	74.4
February	12	1,210	9.92	41.9	1	238.66	74.1
March	8	1,334	6.00	18.7	0	0.00	84.0
April	10	1,393	7.18	33.7	0	0.00	85.2
May	10	1,434	6.97	32.0	0	0.00	90.9
June	13	1,457	8.92	45.6	0	0.00	90.6
July	31	3,565	8.70	106.6	0	0.00	225.1
August	38	3,748	10.14	118.2	2	169.20	239.8
September	36	3,830	9.40	102.7	0	0.00	240.9
October	47	3,678	12.78	143.8	0	0.00	237.7
November	35	3,573	9.80	100.0	2	200.00	213.2
December	53	3,593	14.75	175.0	0	0.00	209.5
<b>2009</b>							
January	21	3,624	5.79	79.7	0	0.00	228.8
February	38	3,879	9.80	108.7	0	0.00	225.8
March	39	4,214	9.25	134.4	0	0.00	266.1
April	48	4,319	11.11	142.5	1	70.18	271.6
May	46	4,466	10.30	114.2	1	87.57	284.7
June	39	4,482	8.70	138.5	0	0.00	277.0
July	48	5,080	9.45	160.3	2	124.77	322.6
August	28	5,190	5.39	65.2	0	0.00	334.2
September	35	5,581	6.27	98.2	1	101.83	345.0
October	42	5,395	7.78	130.2	0	0.00	353.2
November	45	5,021	8.96	118.5	1	84.39	310.8
December	52	4,950	10.51	166.3	1	60.13	282.3
<b>2010</b>							
January	26	4,473	5.81	82.6	0	0.00	284.8
February	33	4,716	7.00	106.9	0	0.00	277.1
March	22	4,918	4.47	78.7	0	0.00	315.6
April	33	4,862	6.79	97.6	0	0.00	303.5
May	36	4,739	7.60	94.1	0	0.00	300.8
June	39	4,625	8.43	121.3	2	164.88	280.7
July	40	5,211	7.68	121.7	1	82.17	326.1
August	36	5,369	6.71	92.5	1	108.11	347.1
September	53	5,893	8.99	157.3	1	63.57	364.2
October	51	5,471	9.32	131.7	0	0.00	365.0
November	54	5,117	10.55	154.0	1	64.94	313.5
December	37	5,028	7.36	90.3	1	110.74	287.2

**Table 5. Summary of Incident Permanent Sterilization with Hysteroscopic Sterilization or Laparoscopic Tubal Ligation and Outcomes of Gynecologic Surgery in the Sentinel Distributed Database (SDD), from January 1, 2008 to September 30, 2015, by Year and Month**

Month	Members with		Number of Exposed		Incident	Incident Sterilization	
	an Incident Sterilization Episode	Eligible Members <sup>1</sup>	Members per 1,000 Eligible Members	Years at Risk	Sterilization Episodes with an Event	Episodes with an Event per 10,000 Years at Risk	Member-Years <sup>1</sup>
2011							
January	25	4,479	5.58	68.7	1	145.56	289.9
February	26	4,652	5.59	70.0	1	142.86	279.2
March	46	4,913	9.36	126.1	1	79.30	307.0
April	38	4,705	8.08	110.7	0	0.00	292.5
May	47	4,635	10.14	137.5	0	0.00	291.8
June	39	4,630	8.42	86.9	2	230.15	278.2
July	39	5,127	7.61	94.6	2	211.42	326.1
August	44	5,414	8.13	116.9	0	0.00	348.0
September	46	5,912	7.78	89.8	2	222.72	366.4
October	49	5,596	8.76	113.0	0	0.00	371.4
November	51	5,255	9.71	122.7	0	0.00	325.1
December	69	5,101	13.53	140.4	1	71.23	293.9
2012							
January	35	4,465	7.84	84.3	0	0.00	287.5
February	43	4,555	9.44	101.6	0	0.00	281.2
March	38	4,708	8.07	88.5	1	112.99	296.7
April	42	4,451	9.44	83.9	0	0.00	277.7
May	45	4,437	10.14	94.2	1	106.16	277.4
June	49	4,427	11.07	112.6	0	0.00	267.1
July	41	4,923	8.33	74.1	3	404.86	316.1
August	38	5,189	7.32	72.5	0	0.00	329.3
September	46	5,507	8.35	85.5	0	0.00	342.2
October	45	5,156	8.73	79.0	0	0.00	338.8
November	45	4,876	9.23	88.8	0	0.00	298.8
December	55	4,756	11.56	101.4	1	98.62	277.9
2013							
January	28	4,475	6.26	53.6	0	0.00	285.7
February	29	4,570	6.35	53.4	1	187.27	275.6
March	42	4,879	8.61	76.7	2	260.76	309.4
April	44	4,737	9.29	73.6	1	135.87	293.6
May	63	4,704	13.39	99.7	1	100.30	293.6
June	34	4,711	7.22	52.8	1	189.39	282.8
July	38	5,037	7.54	64.3	1	155.52	327.1
August	30	5,137	5.84	46.4	0	0.00	331.2
September	42	4,928	8.52	59.7	0	0.00	310.8
October	40	4,287	9.33	55.9	1	178.89	277.3
November	32	3,716	8.61	43.8	1	228.31	222.1
December	41	3,478	11.79	51.0	0	0.00	199.4

**Table 5. Summary of Incident Permanent Sterilization with Hysteroscopic Sterilization or Laparoscopic Tubal Ligation and Outcomes of Gynecologic Surgery in the Sentinel Distributed Database (SDD), from January 1, 2008 to September 30, 2015, by Year and Month**

Month	Members with	Eligible Members <sup>1</sup>	Number of Exposed		Incident	Incident Sterilization	
	an Incident Sterilization Episode		Members per 1,000 Eligible Members	Years at Risk	Sterilization Episodes with an Event	Episodes with an Event per 10,000 Years at Risk	Member-Years <sup>1</sup>
2014							
January	19	3,207	5.92	26.2	0	0.00	203.4
February	20	3,208	6.23	26.1	1	383.14	192.5
March	28	3,249	8.62	36.1	0	0.00	207.9
April	25	3,121	8.01	30.9	0	0.00	191.0
May	25	3,031	8.25	27.5	0	0.00	189.2
June	31	2,979	10.41	29.4	0	0.00	180.8
July	25	3,398	7.36	26.2	1	381.68	216.7
August	30	3,467	8.65	28.3	0	0.00	225.5
September	23	3,479	6.61	23.1	1	432.90	220.8
October	34	3,177	10.70	28.8	0	0.00	202.8
November	23	2,836	8.11	17.2	1	581.40	170.2
December	26	2,762	9.41	18.7	1	534.76	159.5
2015							
January	18	2,645	6.81	12.2	0	0.00	168.4
February	22	2,627	8.37	11.7	1	854.70	155.6
March	18	2,695	6.68	8.2	1	1,219.51	170.5
April	24	2,454	9.78	9.7	0	0.00	152.7
May	21	2,291	9.17	7.5	0	0.00	146.2
June	12	2,261	5.31	3.5	0	0.00	137.3
July	18	2,366	7.61	3.4	0	0.00	151.2
August	22	2,279	9.65	2.6	0	0.00	147.1
September	19	2,159	8.80	0.8	0	0.00	132.9

**Table 5. Summary of Incident Permanent Sterilization with Hysteroscopic Sterilization or Laparoscopic Tubal Ligation and Outcomes of Gynecologic Surgery in the Sentinel Distributed Database (SDD), from January 1, 2008 to September 30, 2015, by Year and Month**

Month	Members with an Incident Sterilization Episode		Number of Exposed Members per 1,000 Eligible Members		Incident Sterilization Episodes with an Event	Incident Sterilization Episodes with an Event per 10,000 Years at Risk		Member-Years <sup>1</sup>
	Eligible Members <sup>1</sup>	Eligible Members	Years at Risk	Years at Risk				
<b>Hysterectomy or Salpingectomy Outcome</b>								
<b>Hysteroscopic Sterilization (With No Subsequent Tubal Ligation Ever)</b>								
2008								
January	242	5,378,651	0.04	859.3	27	314.21	445,962.1	
February	292	5,300,750	0.06	1,094.7	19	173.56	417,341.7	
March	300	5,336,319	0.06	999.9	19	190.02	448,842.3	
April	361	5,348,345	0.07	1,263.3	21	166.23	435,465.2	
May	349	5,327,511	0.07	1,192.2	19	159.37	448,498.7	
June	378	5,283,706	0.07	1,205.2	28	232.33	430,858.6	
July	899	12,565,067	0.07	2,958.5	50	169.00	1,038,423.0	
August	949	12,696,735	0.07	2,991.0	44	147.11	1,053,691.4	
September	929	12,379,284	0.08	2,851.6	61	213.91	1,009,240.1	
October	984	12,532,268	0.08	3,075.4	61	198.35	1,040,821.4	
November	974	12,317,980	0.08	2,916.3	62	212.60	1,005,083.6	
December	1,104	12,665,765	0.09	3,219.0	71	220.57	1,040,044.5	
2009								
January	743	11,774,368	0.06	2,416.3	42	173.82	973,870.5	
February	837	11,567,910	0.07	2,636.6	53	201.02	880,397.5	
March	989	11,645,754	0.08	3,142.4	76	241.85	979,571.1	
April	1,064	11,668,477	0.09	3,400.1	61	179.41	951,561.7	
May	1,120	11,651,815	0.10	3,455.2	74	214.17	981,660.0	
June	1,196	11,574,926	0.10	3,530.6	77	218.09	944,307.1	
July	1,327	12,694,838	0.10	4,051.4	90	222.15	1,062,445.0	
August	1,272	12,761,861	0.10	3,791.0	68	179.37	1,061,536.7	
September	1,325	12,435,482	0.11	3,856.9	79	204.83	1,014,535.5	
October	1,380	12,497,770	0.11	4,025.5	90	223.57	1,041,490.2	
November	1,319	12,300,075	0.11	3,733.8	94	251.75	1,004,219.1	
December	1,838	12,551,340	0.15	5,121.1	101	197.22	1,035,713.6	
2010								
January	952	11,544,520	0.08	2,911.1	60	206.11	957,367.3	
February	1,009	11,357,920	0.09	2,994.6	65	217.06	864,961.8	
March	1,266	11,412,390	0.11	3,661.4	69	188.45	960,643.7	
April	1,305	11,405,096	0.11	3,808.3	73	191.69	930,301.9	
May	1,270	11,361,839	0.11	3,676.4	74	201.28	957,577.9	
June	1,279	11,271,463	0.11	3,710.6	73	196.73	919,484.4	
July	1,331	12,265,257	0.11	3,650.0	72	197.26	1,026,927.7	
August	1,215	12,326,404	0.10	3,487.9	73	209.29	1,024,592.5	
September	1,408	12,027,965	0.12	3,963.8	76	191.74	981,007.4	
October	1,400	12,116,526	0.12	3,853.9	70	181.63	1,008,771.8	
November	1,465	11,932,947	0.12	3,885.8	75	193.01	973,979.5	
December	1,860	12,239,468	0.15	4,745.5	83	174.90	1,008,365.4	

**Table 5. Summary of Incident Permanent Sterilization with Hysteroscopic Sterilization or Laparoscopic Tubal Ligation and Outcomes of Gynecologic Surgery in the Sentinel Distributed Database (SDD), from January 1, 2008 to September 30, 2015, by Year and Month**

Month	Members with		Number of Exposed		Incident	Incident Sterilization	
	an Incident Sterilization Episode	Eligible Members <sup>1</sup>	Members per 1,000 Eligible Members	Years at Risk	Sterilization Episodes with an Event	Episodes with an Event per 10,000 Years at Risk	Member-Years <sup>1</sup>
2011							
January	908	11,409,192	0.08	2,569.0	51	198.52	944,669.7
February	1,010	11,241,390	0.09	2,676.1	66	246.63	855,969.4
March	1,355	11,338,193	0.12	3,572.0	77	215.57	953,804.4
April	1,266	11,362,947	0.11	3,295.9	72	218.45	926,693.2
May	1,193	11,353,112	0.11	3,007.1	79	262.71	956,379.1
June	1,309	11,302,021	0.12	3,239.9	76	234.58	921,794.7
July	1,184	12,286,456	0.10	3,046.9	68	223.18	1,028,691.2
August	1,332	12,363,163	0.11	3,126.0	74	236.72	1,027,662.2
September	1,425	12,095,037	0.12	3,395.7	80	235.59	986,246.5
October	1,360	12,213,855	0.11	3,110.7	78	250.75	1,016,360.3
November	1,478	12,041,666	0.12	3,386.8	62	183.06	982,404.6
December	1,902	12,355,316	0.15	4,197.7	96	228.70	1,016,715.1
2012							
January	971	11,474,764	0.08	2,303.1	58	251.83	950,841.3
February	1,135	11,322,302	0.10	2,550.0	52	203.92	892,520.1
March	1,236	11,377,667	0.11	2,748.4	59	214.67	956,986.0
April	1,184	11,405,523	0.10	2,642.6	59	223.26	930,612.4
May	1,234	11,391,027	0.11	2,650.8	61	230.12	959,892.5
June	1,195	11,364,905	0.11	2,591.7	58	223.79	927,428.3
July	1,133	12,660,890	0.09	2,322.1	59	254.08	1,062,547.9
August	1,369	12,755,419	0.11	2,823.8	54	191.23	1,058,555.8
September	1,220	12,488,080	0.10	2,407.1	57	236.80	1,018,192.1
October	1,381	12,597,233	0.11	2,691.3	74	274.96	1,048,883.7
November	1,415	12,429,219	0.11	2,693.6	67	248.74	1,014,098.8
December	1,623	12,714,822	0.13	2,896.1	75	258.97	1,049,526.0
2013							
January	920	12,014,836	0.08	1,764.2	35	198.39	989,056.3
February	1,090	11,851,395	0.09	2,004.3	52	259.44	901,958.1
March	1,204	12,017,015	0.10	2,185.9	46	210.44	1,010,260.6
April	1,311	12,016,053	0.11	2,253.2	60	266.29	979,640.5
May	1,316	12,003,189	0.11	2,131.2	49	229.92	1,011,009.8
June	1,214	11,923,804	0.10	1,944.1	57	293.19	972,593.3
July	1,222	12,763,356	0.10	1,891.7	47	248.45	1,069,164.3
August	1,349	12,803,945	0.11	2,029.6	50	246.35	1,064,380.9
September	1,346	12,526,252	0.11	1,948.5	50	256.61	1,020,949.8
October	1,342	12,622,406	0.11	1,856.2	42	226.27	1,051,346.6
November	1,200	12,446,169	0.10	1,664.6	35	210.26	1,015,328.1
December	1,208	12,748,319	0.09	1,532.6	32	208.80	1,048,693.3

**Table 5. Summary of Incident Permanent Sterilization with Hysteroscopic Sterilization or Laparoscopic Tubal Ligation and Outcomes of Gynecologic Surgery in the Sentinel Distributed Database (SDD), from January 1, 2008 to September 30, 2015, by Year and Month**

Month	Members with	Eligible Members <sup>1</sup>	Number of Exposed		Incident	Incident Sterilization	
	an Incident Sterilization Episode		Members per 1,000 Eligible Members	Years at Risk	Sterilization Episodes with an Event	Episodes with an Event per 10,000 Years at Risk	Member-Years <sup>1</sup>
<b>2014</b>							
January	716	11,804,048	0.06	945.0	26	275.13	975,999.7
February	752	11,635,794	0.06	959.8	22	229.21	885,799.3
March	842	11,728,374	0.07	1,039.3	23	221.30	986,677.6
April	914	11,747,243	0.08	1,060.4	32	301.77	957,586.5
May	827	11,726,376	0.07	901.7	26	288.34	987,687.0
June	787	11,722,850	0.07	799.3	24	300.26	955,646.4
July	856	12,836,810	0.07	849.6	32	376.65	1,073,644.3
August	855	12,734,119	0.07	790.7	22	278.23	1,056,944.9
September	888	12,476,532	0.07	765.6	23	300.42	1,017,058.8
October	995	12,706,592	0.08	776.6	21	270.41	1,052,758.1
November	807	12,483,319	0.06	595.1	15	252.06	1,018,552.7
December	911	12,739,457	0.07	601.9	28	465.19	1,050,726.9
<b>2015</b>							
January	564	11,910,202	0.05	356.7	11	308.38	984,769.6
February	612	11,679,465	0.05	346.2	20	577.70	889,170.5
March	749	11,913,813	0.06	370.4	19	512.96	1,001,383.4
April	759	11,943,207	0.06	325.1	19	584.44	973,717.3
May	623	11,949,299	0.05	217.2	12	552.49	1,006,514.8
June	646	11,947,878	0.05	179.6	4	222.72	974,164.1
July	634	12,971,741	0.05	127.1	4	314.71	1,085,586.7
August	604	13,083,313	0.05	72.4	3	414.36	1,081,837.7
September	629	12,805,279	0.05	26.4	2	757.58	1,044,090.4
<b>Multiple Hysteroscopic Sterilizations (With No Subsequent Tubal Ligation Ever) <sup>2,3</sup></b>							
<b>2008</b>							
January	12	1,170	10.26	35.2	3	852.27	74.4
February	12	1,210	9.92	40.9	2	489.00	74.1
March	8	1,334	6.00	18.7	0	0.00	84.0
April	10	1,393	7.18	27.2	2	735.29	85.2
May	10	1,434	6.97	32.0	0	0.00	90.9
June	13	1,457	8.92	45.6	0	0.00	90.6
July	31	3,564	8.70	103.5	2	193.24	225.0
August	38	3,747	10.14	117.8	3	254.67	239.7
September	36	3,829	9.40	95.8	3	313.15	240.8
October	47	3,678	12.78	143.8	0	0.00	237.7
November	35	3,573	9.80	88.3	5	566.25	213.2
December	53	3,593	14.75	166.6	3	180.07	209.5



**Table 5. Summary of Incident Permanent Sterilization with Hysteroscopic Sterilization or Laparoscopic Tubal Ligation and Outcomes of Gynecologic Surgery in the Sentinel Distributed Database (SDD), from January 1, 2008 to September 30, 2015, by Year and Month**

Month	Members with	Eligible Members <sup>1</sup>	Number of Exposed		Incident	Incident Sterilization	
	an Incident Sterilization Episode		Members per 1,000 Eligible Members	Years at Risk	Sterilization Episodes with an Event	Episodes with an Event per 10,000 Years at Risk	Member-Years <sup>1</sup>
2009							
January	21	3,624	5.79	72.3	2	276.63	228.8
February	38	3,879	9.80	102.4	1	97.66	225.8
March	39	4,214	9.25	129.9	1	76.98	266.1
April	48	4,318	11.12	134.1	5	372.86	271.5
May	46	4,464	10.30	111.9	4	357.46	284.6
June	39	4,480	8.71	127.3	3	235.66	276.8
July	48	5,078	9.45	153.4	4	260.76	322.5
August	28	5,190	5.39	59.8	1	167.22	334.2
September	35	5,581	6.27	97.9	2	204.29	345.0
October	42	5,395	7.78	126.0	3	238.10	353.2
November	45	5,021	8.96	108.7	6	551.98	310.8
December	52	4,950	10.51	146.6	7	477.49	282.3
2010							
January	26	4,472	5.81	81.5	1	122.70	284.7
February	33	4,713	7.00	96.8	4	413.22	276.9
March	22	4,915	4.48	78.7	0	0.00	315.3
April	33	4,859	6.79	96.5	1	103.63	303.2
May	36	4,736	7.60	88.0	2	227.27	300.7
June	39	4,624	8.43	115.7	5	432.15	280.5
July	40	5,208	7.68	116.4	3	257.73	326.0
August	36	5,367	6.71	85.7	4	466.74	347.0
September	53	5,892	9.00	151.3	3	198.28	364.2
October	51	5,470	9.32	121.4	5	411.86	364.8
November	54	5,117	10.55	151.1	2	132.36	313.5
December	37	5,027	7.36	81.6	4	490.20	287.1
2011							
January	25	4,478	5.58	60.8	3	493.42	289.8
February	26	4,651	5.59	65.3	3	459.42	279.1
March	46	4,911	9.37	110.8	7	631.77	306.9
April	38	4,704	8.08	109.3	2	182.98	292.4
May	47	4,634	10.14	134.8	3	222.55	291.7
June	39	4,629	8.43	86.9	2	230.15	278.2
July	39	5,126	7.61	94.3	4	424.18	326.0
August	44	5,412	8.13	116.3	1	85.98	347.8
September	46	5,910	7.78	88.7	4	450.96	366.2
October	48	5,594	8.58	108.8	2	183.82	371.2
November	51	5,253	9.71	119.3	1	83.82	325.1
December	69	5,100	13.53	133.0	9	676.69	293.9

**Table 5. Summary of Incident Permanent Sterilization with Hysteroscopic Sterilization or Laparoscopic Tubal Ligation and Outcomes of Gynecologic Surgery in the Sentinel Distributed Database (SDD), from January 1, 2008 to September 30, 2015, by Year and Month**

Month	Members with	Eligible Members <sup>1</sup>	Number of Exposed		Incident	Incident Sterilization	
	an Incident Sterilization Episode		Members per 1,000 Eligible Members	Years at Risk	Sterilization Episodes with an Event	Episodes with an Event per 10,000 Years at Risk	Member-Years <sup>1</sup>
2012							
January	35	4,464	7.84	81.3	3	369.00	287.4
February	43	4,553	9.44	100.0	2	200.00	281.0
March	38	4,706	8.07	87.2	2	229.36	296.6
April	42	4,450	9.44	79.4	4	503.78	277.6
May	45	4,436	10.14	94.2	1	106.16	277.3
June	49	4,427	11.07	112.6	0	0.00	267.1
July	41	4,923	8.33	72.4	4	552.49	316.1
August	38	5,189	7.32	71.9	1	139.08	329.3
September	46	5,507	8.35	85.5	0	0.00	342.2
October	45	5,156	8.73	76.6	1	130.55	338.8
November	45	4,875	9.23	87.0	2	229.89	298.8
December	55	4,754	11.57	100.2	3	299.40	277.8
2013							
January	28	4,472	6.26	53.6	0	0.00	285.5
February	29	4,567	6.35	53.0	2	377.36	275.4
March	42	4,876	8.61	76.4	3	392.67	309.2
April	44	4,734	9.29	72.4	2	276.24	293.4
May	63	4,702	13.40	96.7	4	413.65	293.4
June	34	4,709	7.22	51.5	2	388.35	282.7
July	38	5,035	7.55	62.7	3	478.47	327.0
August	30	5,135	5.84	46.4	0	0.00	331.1
September	42	4,926	8.53	58.4	1	171.23	310.7
October	40	4,286	9.33	55.9	1	178.89	277.2
November	32	3,715	8.61	43.8	1	228.31	222.1
December	41	3,478	11.79	51.0	0	0.00	199.4
2014							
January	19	3,207	5.92	26.2	0	0.00	203.4
February	20	3,208	6.23	25.0	2	800.00	192.5
March	28	3,249	8.62	35.8	1	279.33	207.9
April	25	3,121	8.01	30.2	1	331.13	191.0
May	25	3,030	8.25	26.7	1	374.53	189.2
June	31	2,978	10.41	29.4	0	0.00	180.7
July	25	3,397	7.36	25.4	2	787.40	216.6
August	30	3,465	8.66	28.3	0	0.00	225.4
September	23	3,478	6.61	22.5	2	888.89	220.8
October	34	3,174	10.71	28.8	0	0.00	202.7
November	23	2,832	8.12	17.2	1	581.40	170.0
December	26	2,759	9.42	18.7	1	534.76	159.2

**Table 5. Summary of Incident Permanent Sterilization with Hysteroscopic Sterilization or Laparoscopic Tubal Ligation and Outcomes of Gynecologic Surgery in the Sentinel Distributed Database (SDD), from January 1, 2008 to September 30, 2015, by Year and Month**

Month	Members with	Eligible Members <sup>1</sup>	Number of Exposed		Incident	Incident Sterilization	
	an Incident Sterilization Episode		Members per 1,000 Eligible Members	Years at Risk	Sterilization Episodes with an Event	Episodes with an Event per 10,000 Years at Risk	Member-Years <sup>1</sup>
2015							
January	18	2,642	6.81	12.2	0	0.00	168.2
February	22	2,626	8.38	11.5	2	1,739.13	155.5
March	18	2,695	6.68	8.2	2	2,439.02	170.5
April	24	2,454	9.78	9.7	0	0.00	152.7
May	21	2,291	9.17	7.5	0	0.00	146.2
June	12	2,261	5.31	3.5	0	0.00	137.3
July	18	2,366	7.61	3.4	0	0.00	151.2
August	22	2,279	9.65	2.6	0	0.00	147.1
September	19	2,159	8.80	0.8	0	0.00	132.9

<sup>1</sup>Eligible Members and Member-Years are reflective of the number of patients that met all cohort entry criteria on at least one day during the query

<sup>2</sup>The cohort of 'Multiple Hysteroscopic Sterilizations' required the patient to have at least one hysteroscopic sterilization during query period to be

<sup>3</sup>Follow-up time (years at risk) for this cohort starts at the **first** procedure

**Appendix A. Dates of Available Data for Each Data Partner (DP) as of Request Distribution Date (October 10, 2017)**

<b>DP ID</b>	<b>DP Start Date<sup>1</sup></b>	<b>DP End Date<sup>1</sup></b>
DP01	01/01/2000	09/30/2015
DP02	01/01/2000	09/30/2015
DP03	01/01/2004	09/30/2015
DP04	01/01/2008	09/30/2015
DP05	01/01/2000	09/30/2015
DP06	01/01/2000	09/30/2015
DP07	01/01/2006	09/30/2015
DP08	01/01/2000	09/30/2015
DP09	06/01/2007	09/30/2015
DP10	01/01/2000	10/31/2014
DP11	01/01/2005	09/30/2015
DP12	01/01/2000	09/30/2015
DP13	01/01/2000	09/30/2015
DP14	01/01/2008	09/30/2015
DP15	01/01/2000	05/31/2015
DP16	01/01/2012	09/30/2015

<sup>1</sup>Start Date and End Date are first calculated by individual table (enrollment, dispensing, etc). MaxDate is defined as the greatest year-month with a record count that is within 80% of the previous year-month. After MinDate and MaxDates are calculated by individual tables, the overall DPMaxDate is the minimum of all the table MaxDates.

**Appendix B. List of Current Procedural Terminology, Fourth Edition (CPT-4), Healthcare Common Procedure Coding System (HCPCS), and International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Codes Used to Define Exposures in this Request**

<b>Code</b>	<b>Description</b>	<b>Code Type</b>	<b>Code Category</b>
<b>Hysteroscopic Sterilization</b>			
58565	Hysteroscopy, surgical; with bilateral fallopian tube cannulation to induce occlusion by placement of permanent implants	CPT-4	Procedure
A4264	Permanent implantable contraceptive intratubal occlusion device(s) and delivery system	HCPCS	Procedure
<b>Laparoscopic Tubal Ligation</b>			
66.2	Bilateral endoscopic destruction or occlusion of fallopian tubes	ICD-9-CM	Procedure
66.21	Bilateral endoscopic ligation and crushing of fallopian tubes	ICD-9-CM	Procedure
66.22	Bilateral endoscopic ligation and division of fallopian tubes	ICD-9-CM	Procedure
66.29	Other bilateral endoscopic destruction or occlusion of fallopian tubes	ICD-9-CM	Procedure
66.3	Other bilateral destruction or occlusion of fallopian tubes	ICD-9-CM	Procedure
66.39	Other bilateral destruction or occlusion of fallopian tubes	ICD-9-CM	Procedure
66.32	Other bilateral ligation and division of fallopian tubes	ICD-9-CM	Procedure
66.31	Other bilateral ligation and crushing of fallopian tubes	ICD-9-CM	Procedure
66.92	Unilateral destruction or occlusion of fallopian tube	ICD-9-CM	Procedure
58670	Laparoscopy, surgical; with fulguration of oviducts (with or without transection)	CPT-4	Procedure
58671	Laparoscopy, surgical; with occlusion of oviducts by device (eg, band, clip, or Falope ring)	CPT-4	Procedure
58600	Ligation or transection of fallopian tube(s), abdominal or vaginal approach, unilateral or bilateral	CPT-4	Procedure
58605	Ligation or transection of fallopian tube(s), abdominal or vaginal approach, postpartum, unilateral or bilateral, during same hospitalization (separate procedure)	CPT-4	Procedure
58611	Ligation or transection of fallopian tube(s) when done at the time of cesarean delivery or intra-abdominal surgery (not a separate procedure) (List separately in addition to code for primary procedure)	CPT-4	Procedure
58615	Occlusion of fallopian tube(s) by device (eg, band, clip, Falope ring) vaginal or suprapubic approach	CPT-4	Procedure

**Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), Current Procedural Terminology, Fourth Edition (CPT-4), and Healthcare Common Procedure Coding System (HCPCS) Procedure Codes Used to Define Outcomes in this Request**

Code	Description	Code Type	Code Category
<b>Hysterectomy</b>			
68.31	Laparoscopic supracervical hysterectomy [LSH]	ICD-9-CM	Procedure
68.39	Other and unspecified subtotal abdominal hysterectomy	ICD-9-CM	Procedure
68.41	Laparoscopic total abdominal hysterectomy	ICD-9-CM	Procedure
68.49	Other and unspecified total abdominal hysterectomy	ICD-9-CM	Procedure
68.51	Laparoscopically assisted vaginal hysterectomy (LAVH)	ICD-9-CM	Procedure
68.59	Other and unspecified vaginal hysterectomy	ICD-9-CM	Procedure
68.9	Other and unspecified hysterectomy	ICD-9-CM	Procedure
58150	Total abdominal hysterectomy (corpus and cervix), with or without removal of tube(s), with or without removal of ovary(s);	CPT-4	Procedure
58180	Supracervical abdominal hysterectomy (subtotal hysterectomy), with or without removal of tube(s), with or without removal of ovary(s)	CPT-4	Procedure
58260	Vaginal hysterectomy, for uterus 250 g or less;	CPT-4	Procedure
58262	Vaginal hysterectomy, for uterus 250 g or less; with removal of tube(s), and/or ovary(s)	CPT-4	Procedure
58290	Vaginal hysterectomy, for uterus greater than 250 g;	CPT-4	Procedure
58291	Vaginal hysterectomy, for uterus greater than 250 g; with removal of tube(s) and/or ovary(s)	CPT-4	Procedure
58541	Laparoscopy, surgical, supracervical hysterectomy, for uterus 250 g or less;	CPT-4	Procedure
58542	Laparoscopy, surgical, supracervical hysterectomy, for uterus 250 g or less; with removal of tube(s) and/or ovary(s)	CPT-4	Procedure
58543	Laparoscopy, surgical, supracervical hysterectomy, for uterus greater than 250 g;	CPT-4	Procedure
58544	Laparoscopy, surgical, supracervical hysterectomy, for uterus greater than 250 g; with removal of tube(s) and/or ovary(s)	CPT-4	Procedure
58550	Laparoscopy, surgical, with vaginal hysterectomy, for uterus 250 g or less;	CPT-4	Procedure
58552	Laparoscopy, surgical, with vaginal hysterectomy, for uterus 250 g or less; with removal of tube(s) and/or ovary(s)	CPT-4	Procedure
58553	Laparoscopy, surgical, with vaginal hysterectomy, for uterus greater than 250 g;	CPT-4	Procedure
58554	Laparoscopy, surgical, with vaginal hysterectomy, for uterus greater than 250 g; with removal of tube(s) and/or ovary(s)	CPT-4	Procedure
58570	Laparoscopy, surgical, with total hysterectomy, for uterus 250 g or less;	CPT-4	Procedure
58571	Laparoscopy, surgical, with total hysterectomy, for uterus 250 g or less; with removal of tube(s) and/or ovary(s)	CPT-4	Procedure
58572	Laparoscopy, surgical, with total hysterectomy, for uterus greater than 250 g;	CPT-4	Procedure
58573	Laparoscopy, surgical, with total hysterectomy, for uterus greater than 250 g; with removal of tube(s) and/or ovary(s)	CPT-4	Procedure
S2078	Laparoscopic supracervical hysterectomy (subtotal hysterectomy), with or without removal of tube(s), with or without removal of ovary(s)	HCPCS	Procedure
<b>Salpingectomy</b>			
66.4	Total unilateral salpingectomy	ICD-9-CM	Procedure
66.51	Removal of both fallopian tubes at same operative episode	ICD-9-CM	Procedure
66.52	Removal of remaining fallopian tube	ICD-9-CM	Procedure
66.6	Other salpingectomy	ICD-9-CM	Procedure
66.63	Bilateral partial salpingectomy, not otherwise specified	ICD-9-CM	Procedure
66.69	Other partial salpingectomy	ICD-9-CM	Procedure
66.01	Salpingotomy	ICD-9-CM	Procedure

**Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), Current Procedural Terminology, Fourth Edition (CPT-4), and Healthcare Common Procedure Coding System (HCPCS) Procedure Codes Used to Define Outcomes in this Request**

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<b>Code</b>	<b>Description</b>	<b>Code Type</b>	<b>Code Category</b>
66.02	Salpingostomy	ICD-9-CM	Procedure
66.73	Salpingo-salpingostomy	ICD-9-CM	Procedure
66.74	Salpingo-uterostomy	ICD-9-CM	Procedure
58661	Laparoscopy, surgical; with removal of adnexal structures (partial or total oophorectomy and/or salpingectomy)	CPT-4	Procedure
58700	Salpingectomy, complete or partial, unilateral or bilateral (separate procedure)	CPT-4	Procedure
58988	Laparoscopy, Surgical; With Removal Of Adnexal Structures (partial Or Total Oophorectomy And/or Salpingectomy)	CPT-4	Procedure

**Appendix D. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and Current Procedural Terminology, Fourth Edition (CPT-4) Codes Used to Define Censoring Criteria in this Request**

Code	Description	Code Type	Code Category
<b>Non-Outcome Hysterectomy</b>			
68.6	Radical abdominal hysterectomy	ICD-9-CM	Procedure
68.61	Laparoscopic radical abdominal hysterectomy	ICD-9-CM	Procedure
68.69	Other and unspecified radical abdominal hysterectomy	ICD-9-CM	Procedure
68.7	Radical vaginal hysterectomy	ICD-9-CM	Procedure
68.71	Laparoscopic radical vaginal hysterectomy [LRVH]	ICD-9-CM	Procedure
68.79	Other and unspecified radical vaginal hysterectomy	ICD-9-CM	Procedure
58152	Total abdominal hysterectomy (corpus and cervix), with or without removal of tube(s), with or without removal of ovary(s); with colpo-urethrocystopexy (eg, Marshall-Marchetti-Krantz, Burch)	CPT-4	Procedure
58200	Total abdominal hysterectomy, including partial vaginectomy, with para-aortic and pelvic lymph node sampling, with or without removal of tube(s), with or without removal of ovary(s)	CPT-4	Procedure
58210	Radical abdominal hysterectomy, with bilateral total pelvic lymphadenectomy and para-aortic lymph node sampling (biopsy), with or without removal of tube(s), with or without removal of ovary(s)	CPT-4	Procedure
58240	Pelvic exenteration for gynecologic malignancy, with total abdominal hysterectomy or cervicectomy, with or without removal of tube(s), with or without removal of ovary(s), with removal of bladder and ureteral transplantations, and/or abdominoperineal resection of rectum and colon and colostomy, or any combination thereof	CPT-4	Procedure
58263	Vaginal hysterectomy, for uterus 250 g or less; with removal of tube(s), and/or ovary(s), with repair of enterocele	CPT-4	Procedure
58267	Vaginal hysterectomy, for uterus 250 g or less; with colpo-urethrocystopexy (Marshall-Marchetti-Krantz type, Pereyra type) with or without endoscopic control	CPT-4	Procedure
58270	Vaginal hysterectomy, for uterus 250 g or less; with repair of enterocele	CPT-4	Procedure
58275	Vaginal hysterectomy, with total or partial vaginectomy;	CPT-4	Procedure
58280	Vaginal hysterectomy, with total or partial vaginectomy; with repair of enterocele	CPT-4	Procedure
58285	Vaginal hysterectomy, radical (Schauta type operation)	CPT-4	Procedure
58292	Vaginal hysterectomy, for uterus greater than 250 g; with removal of tube(s) and/or ovary(s), with repair of enterocele	CPT-4	Procedure
58293	Vaginal hysterectomy, for uterus greater than 250 g; with colpo-urethrocystopexy (Marshall-Marchetti-Krantz type, Pereyra type) with or without endoscopic control	CPT-4	Procedure
58294	Vaginal hysterectomy, for uterus greater than 250 g; with repair of enterocele	CPT-4	Procedure
58548	Laparoscopy, surgical, with radical hysterectomy, with bilateral total pelvic lymphadenectomy and para-aortic lymph node sampling (biopsy), with removal of tube(s) and ovary(s), if performed	CPT-4	Procedure
58951	Resection (initial) of ovarian, tubal or primary peritoneal malignancy with bilateral salpingo-oophorectomy and omentectomy; with total abdominal hysterectomy, pelvic and limited para-aortic lymphadenectomy	CPT-4	Procedure
58953	Bilateral salpingo-oophorectomy with omentectomy, total abdominal hysterectomy and radical dissection for debulking;	CPT-4	Procedure
58954	Bilateral salpingo-oophorectomy with omentectomy, total abdominal hysterectomy and radical dissection for debulking; with pelvic lymphadenectomy and limited para-aortic lymphadenectomy	CPT-4	Procedure
58956	Bilateral salpingo-oophorectomy with total omentectomy, total abdominal hysterectomy for malignancy	CPT-4	Procedure



**Appendix E. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and Current Procedural Terminology, Fourth Edition (CPT-4) Codes Used to Define Baseline Characteristics in this Request**

Code	Description	Code Type	Code Category
<b>Pelvic Pain</b>			
625.8	Other specified symptom associated with female genital organs	ICD-9-CM	Diagnosis
625.9	Unspecified symptom associated with female genital organs	ICD-9-CM	Diagnosis
719.45	Pain in joint, pelvic region and thigh	ICD-9-CM	Diagnosis
<b>Uterine Fibroids</b>			
218.0	Submucous leiomyoma of uterus	ICD-9-CM	Diagnosis
218.1	Intramural leiomyoma of uterus	ICD-9-CM	Diagnosis
218.2	Subserous leiomyoma of uterus	ICD-9-CM	Diagnosis
218.9	Leiomyoma of uterus, unspecified	ICD-9-CM	Diagnosis
<b>Delivery</b>			
59400	Routine obstetric care including antepartum care, vaginal delivery (with or without episiotomy, and/or forceps) and postpartum care	CPT-4	Procedure
59409	Vaginal delivery only (with or without episiotomy and/or forceps);	CPT-4	Procedure
59410	Vaginal delivery only (with or without episiotomy and/or forceps); including postpartum care	CPT-4	Procedure
59510	Routine obstetric care including antepartum care, cesarean delivery, and postpartum care	CPT-4	Procedure
59514	Cesarean delivery only;	CPT-4	Procedure
59515	Cesarean delivery only; including postpartum care	CPT-4	Procedure
59610	Routine obstetric care including antepartum care, vaginal delivery (with or without episiotomy, and/or forceps) and postpartum care, after previous cesarean delivery	CPT-4	Procedure
59612	Vaginal delivery only, after previous cesarean delivery (with or without episiotomy and/or forceps);	CPT-4	Procedure
59614	Vaginal delivery only, after previous cesarean delivery (with or without episiotomy and/or forceps); including postpartum care	CPT-4	Procedure
59618	Routine obstetric care including antepartum care, cesarean delivery, and postpartum care, following attempted vaginal delivery after previous cesarean delivery	CPT-4	Procedure
59620	Cesarean delivery only, following attempted vaginal delivery after previous cesarean delivery;	CPT-4	Procedure
59622	Cesarean delivery only, following attempted vaginal delivery after previous cesarean delivery; including postpartum care	CPT-4	Procedure
650	Normal delivery	ICD-9-CM	Diagnosis
763.0	Fetus or newborn affected by breech delivery and extraction	ICD-9-CM	Diagnosis
763.2	Fetus or newborn affected by forceps delivery	ICD-9-CM	Diagnosis
763.3	Fetus or newborn affected by delivery by vacuum extractor	ICD-9-CM	Diagnosis
763.4	Fetus or newborn affected by cesarean delivery	ICD-9-CM	Diagnosis
763.6	Fetus or newborn affected by precipitate delivery	ICD-9-CM	Diagnosis
768.0	Fetal death from asphyxia or anoxia before onset of labor or at unspecified time	ICD-9-CM	Diagnosis
768.1	Fetal death from asphyxia or anoxia during labor	ICD-9-CM	Diagnosis
641.01	Placenta previa without hemorrhage, with delivery	ICD-9-CM	Diagnosis
641.11	Hemorrhage from placenta previa, with delivery	ICD-9-CM	Diagnosis
641.21	Premature separation of placenta, with delivery	ICD-9-CM	Diagnosis
641.31	Antepartum hemorrhage associated with coagulation defects, with delivery	ICD-9-CM	Diagnosis
641.81	Other antepartum hemorrhage, with delivery	ICD-9-CM	Diagnosis
641.91	Unspecified antepartum hemorrhage, with delivery	ICD-9-CM	Diagnosis
642.01	Benign essential hypertension with delivery	ICD-9-CM	Diagnosis
642.02	Benign essential hypertension, with delivery, with current postpartum complication	ICD-9-CM	Diagnosis
642.11	Hypertension secondary to renal disease, with delivery	ICD-9-CM	Diagnosis

**Appendix E. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and Current Procedural Terminology, Fourth Edition (CPT-4) Codes Used to Define Baseline Characteristics in this Request**

<b>Code</b>	<b>Description</b>	<b>Code Type</b>	<b>Code Category</b>
642.12	Hypertension secondary to renal disease, with delivery, with current postpartum complication	ICD-9-CM	Diagnosis
642.21	Other pre-existing hypertension, with delivery	ICD-9-CM	Diagnosis
642.22	Other pre-existing hypertension, with delivery, with current postpartum complication	ICD-9-CM	Diagnosis
642.31	Transient hypertension of pregnancy, with delivery	ICD-9-CM	Diagnosis
642.32	Transient hypertension of pregnancy, with delivery, with current postpartum complication	ICD-9-CM	Diagnosis
642.41	Mild or unspecified pre-eclampsia, with delivery	ICD-9-CM	Diagnosis
642.42	Mild or unspecified pre-eclampsia, with delivery, with current postpartum complication	ICD-9-CM	Diagnosis
642.51	Severe pre-eclampsia, with delivery	ICD-9-CM	Diagnosis
642.52	Severe pre-eclampsia, with delivery, with current postpartum complication	ICD-9-CM	Diagnosis
642.61	Eclampsia, with delivery	ICD-9-CM	Diagnosis
642.62	Eclampsia, with delivery, with current postpartum complication	ICD-9-CM	Diagnosis
642.71	Pre-eclampsia or eclampsia superimposed on pre-existing hypertension, with delivery	ICD-9-CM	Diagnosis
642.72	Pre-eclampsia or eclampsia superimposed on pre-existing hypertension, with delivery, with current postpartum complication	ICD-9-CM	Diagnosis
642.91	Unspecified hypertension, with delivery	ICD-9-CM	Diagnosis
642.92	Unspecified hypertension, with delivery, with current postpartum complication	ICD-9-CM	Diagnosis
643.01	Mild hyperemesis gravidarum, delivered	ICD-9-CM	Diagnosis
643.11	Hyperemesis gravidarum with metabolic disturbance, delivered	ICD-9-CM	Diagnosis
643.21	Late vomiting of pregnancy, delivered	ICD-9-CM	Diagnosis
643.81	Other vomiting complicating pregnancy, delivered	ICD-9-CM	Diagnosis
643.91	Unspecified vomiting of pregnancy, delivered	ICD-9-CM	Diagnosis
644.21	Early onset of delivery, delivered, with or without mention of antepartum condition	ICD-9-CM	Diagnosis
645.01	Prolonged pregnancy, with delivery	ICD-9-CM	Diagnosis
645.11	Post term pregnancy, delivered, with or without mention of antepartum condition	ICD-9-CM	Diagnosis
645.21	Prolonged pregnancy, delivered, with or without mention of antepartum condition	ICD-9-CM	Diagnosis
646.01	Papyraceous fetus, delivered, with or without mention of antepartum condition	ICD-9-CM	Diagnosis
646.11	Edema or excessive weight gain in pregnancy, with delivery, with or without mention of antepartum complication	ICD-9-CM	Diagnosis
646.12	Edema or excessive weight gain in pregnancy, with delivery, with current postpartum complication	ICD-9-CM	Diagnosis
646.21	Unspecified renal disease in pregnancy, with delivery	ICD-9-CM	Diagnosis
646.22	Unspecified renal disease in pregnancy, with delivery, with current postpartum complication	ICD-9-CM	Diagnosis
646.31	Pregnancy complication, recurrent pregnancy loss, with or without mention of antepartum condition	ICD-9-CM	Diagnosis
646.41	Peripheral neuritis in pregnancy, with delivery	ICD-9-CM	Diagnosis
646.42	Peripheral neuritis in pregnancy, with delivery, with current postpartum complication	ICD-9-CM	Diagnosis
646.51	Asymptomatic bacteriuria in pregnancy, with delivery	ICD-9-CM	Diagnosis
646.52	Asymptomatic bacteriuria in pregnancy, with delivery, with current postpartum complication	ICD-9-CM	Diagnosis
646.61	Infections of genitourinary tract in pregnancy, with delivery	ICD-9-CM	Diagnosis
646.62	Infections of genitourinary tract in pregnancy, with delivery, with current postpartum complication	ICD-9-CM	Diagnosis
646.71	Liver and biliary tract disorders in pregnancy, delivered, with or without mention of antepartum condition	ICD-9-CM	Diagnosis
646.81	Other specified complication of pregnancy, with delivery	ICD-9-CM	Diagnosis
646.82	Other specified complications of pregnancy, with delivery, with current postpartum complication	ICD-9-CM	Diagnosis

**Appendix E. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and Current Procedural Terminology, Fourth Edition (CPT-4) Codes Used to Define Baseline Characteristics in this Request**

<b>Code</b>	<b>Description</b>	<b>Code Type</b>	<b>Code Category</b>
646.91	Unspecified complication of pregnancy, with delivery	ICD-9-CM	Diagnosis
647.01	Maternal syphilis, complicating pregnancy, with delivery	ICD-9-CM	Diagnosis
647.02	Maternal syphilis, complicating pregnancy, with delivery, with current postpartum complication	ICD-9-CM	Diagnosis
647.11	Maternal gonorrhea with delivery	ICD-9-CM	Diagnosis
647.12	Maternal gonorrhea, with delivery, with current postpartum complication	ICD-9-CM	Diagnosis
647.21	Other maternal venereal diseases with delivery	ICD-9-CM	Diagnosis
647.22	Other maternal venereal diseases with delivery, with current postpartum complication	ICD-9-CM	Diagnosis
647.31	Maternal tuberculosis with delivery	ICD-9-CM	Diagnosis
647.32	Maternal tuberculosis with delivery, with current postpartum complication	ICD-9-CM	Diagnosis
647.41	Maternal malaria with delivery	ICD-9-CM	Diagnosis
647.42	Maternal malaria with delivery, with current postpartum complication	ICD-9-CM	Diagnosis
647.51	Maternal rubella with delivery	ICD-9-CM	Diagnosis
647.52	Maternal rubella with delivery, with current postpartum complication	ICD-9-CM	Diagnosis
647.61	Other maternal viral disease with delivery	ICD-9-CM	Diagnosis
647.62	Other maternal viral disease with delivery, with current postpartum complication	ICD-9-CM	Diagnosis
647.81	Other specified maternal infectious and parasitic disease with delivery	ICD-9-CM	Diagnosis
647.82	Other specified maternal infectious and parasitic disease with delivery, with current postpartum complication	ICD-9-CM	Diagnosis
647.91	Unspecified maternal infection or infestation with delivery	ICD-9-CM	Diagnosis
647.92	Unspecified maternal infection or infestation with delivery, with current postpartum complication	ICD-9-CM	Diagnosis
648.01	Maternal diabetes mellitus with delivery	ICD-9-CM	Diagnosis
648.02	Maternal diabetes mellitus with delivery, with current postpartum complication	ICD-9-CM	Diagnosis
648.11	Maternal thyroid dysfunction with delivery, with or without mention of antepartum condition	ICD-9-CM	Diagnosis
648.12	Maternal thyroid dysfunction with delivery, with current postpartum complication	ICD-9-CM	Diagnosis
648.21	Maternal anemia, with delivery	ICD-9-CM	Diagnosis
648.22	Maternal anemia with delivery, with current postpartum complication	ICD-9-CM	Diagnosis
648.31	Maternal drug dependence, with delivery	ICD-9-CM	Diagnosis
648.32	Maternal drug dependence, with delivery, with current postpartum complication	ICD-9-CM	Diagnosis
648.41	Maternal mental disorders, with delivery	ICD-9-CM	Diagnosis
648.42	Maternal mental disorders, with delivery, with current postpartum complication	ICD-9-CM	Diagnosis
648.51	Maternal congenital cardiovascular disorders, with delivery	ICD-9-CM	Diagnosis
648.52	Maternal congenital cardiovascular disorders, with delivery, with current postpartum complication	ICD-9-CM	Diagnosis
648.61	Other maternal cardiovascular diseases, with delivery	ICD-9-CM	Diagnosis
648.62	Other maternal cardiovascular diseases, with delivery, with current postpartum complication	ICD-9-CM	Diagnosis
648.71	Bone and joint disorders of maternal back, pelvis, and lower limbs, with delivery	ICD-9-CM	Diagnosis
648.72	Bone and joint disorders of maternal back, pelvis, and lower limbs, with delivery, with current postpartum complication	ICD-9-CM	Diagnosis
648.81	Abnormal maternal glucose tolerance, with delivery	ICD-9-CM	Diagnosis
648.82	Abnormal maternal glucose tolerance, with delivery, with current postpartum complication	ICD-9-CM	Diagnosis
648.91	Other current maternal conditions classifiable elsewhere, with delivery	ICD-9-CM	Diagnosis
648.92	Other current maternal conditions classifiable elsewhere, with delivery, with current postpartum complication	ICD-9-CM	Diagnosis

**Appendix E. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and Current Procedural Terminology, Fourth Edition (CPT-4) Codes Used to Define Baseline Characteristics in this Request**

<b>Code</b>	<b>Description</b>	<b>Code Type</b>	<b>Code Category</b>
649.01	Tobacco use disorder complicating pregnancy, childbirth, or the puerperium, delivered, with or without mention of antepartum condition	ICD-9-CM	Diagnosis
649.02	Tobacco use disorder complicating pregnancy, childbirth, or the puerperium, delivered, with mention of postpartum complication	ICD-9-CM	Diagnosis
649.11	Obesity complicating pregnancy, childbirth, or the puerperium, delivered, with or without mention of antepartum condition	ICD-9-CM	Diagnosis
649.12	Obesity complicating pregnancy, childbirth, or the puerperium, delivered, with mention of postpartum complication	ICD-9-CM	Diagnosis
649.21	Bariatric surgery status complicating pregnancy, childbirth, or the puerperium, delivered, with or without mention of antepartum condition	ICD-9-CM	Diagnosis
649.22	Bariatric surgery status complicating pregnancy, childbirth, or the puerperium, delivered, with mention of postpartum complication	ICD-9-CM	Diagnosis
649.31	Coagulation defects complicating pregnancy, childbirth, or the puerperium, delivered, with or without mention of antepartum condition	ICD-9-CM	Diagnosis
649.32	Coagulation defects complicating pregnancy, childbirth, or the puerperium, delivered, with mention of postpartum complication	ICD-9-CM	Diagnosis
649.41	Epilepsy complicating pregnancy, childbirth, or the puerperium, delivered, with or without mention of antepartum condition	ICD-9-CM	Diagnosis
649.42	Epilepsy complicating pregnancy, childbirth, or the puerperium, delivered, with mention of postpartum complication	ICD-9-CM	Diagnosis
649.51	Spotting complicating pregnancy, delivered, with or without mention of antepartum condition	ICD-9-CM	Diagnosis
649.61	Uterine size date discrepancy, delivered, with or without mention of antepartum condition	ICD-9-CM	Diagnosis
649.62	Uterine size date discrepancy, delivered, with mention of postpartum complication	ICD-9-CM	Diagnosis
649.71	Cervical shortening, delivered, with or without mention of antepartum condition	ICD-9-CM	Diagnosis
649.81	Onset (spontaneous) of labor after 37 completed weeks of gestation but before 39 completed weeks gestation, with delivery by (planned) cesarean section, delivered, with or without mention of antepartum condition	ICD-9-CM	Diagnosis
649.82	Onset (spontaneous) of labor after 37 completed weeks of gestation but before 39 completed weeks gestation, with delivery by (planned) cesarean section, delivered, with mention of postpartum complication	ICD-9-CM	Diagnosis
651.01	Twin pregnancy, delivered	ICD-9-CM	Diagnosis
651.11	Triplet pregnancy, delivered	ICD-9-CM	Diagnosis
651.21	Quadruplet pregnancy, delivered	ICD-9-CM	Diagnosis
651.31	Twin pregnancy with fetal loss and retention of one fetus, delivered	ICD-9-CM	Diagnosis
651.41	Triplet pregnancy with fetal loss and retention of one or more, delivered	ICD-9-CM	Diagnosis
651.51	Quadruplet pregnancy with fetal loss and retention of one or more, delivered	ICD-9-CM	Diagnosis
651.61	Other multiple pregnancy with fetal loss and retention of one or more fetus(es), delivered	ICD-9-CM	Diagnosis
651.71	Multiple gestation following (elective) fetal reduction, delivered, with or without mention of antepartum condition	ICD-9-CM	Diagnosis
651.81	Other specified multiple gestation, delivered	ICD-9-CM	Diagnosis
651.91	Unspecified multiple gestation, delivered	ICD-9-CM	Diagnosis
652.01	Unstable lie of fetus, delivered	ICD-9-CM	Diagnosis
652.11	Breech or other malpresentation successfully converted to cephalic presentation, delivered	ICD-9-CM	Diagnosis
652.21	Breech presentation without mention of version, delivered	ICD-9-CM	Diagnosis
652.31	Transverse or oblique fetal presentation, delivered	ICD-9-CM	Diagnosis

**Appendix E. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and Current Procedural Terminology, Fourth Edition (CPT-4) Codes Used to Define Baseline Characteristics in this Request**

<b>Code</b>	<b>Description</b>	<b>Code Type</b>	<b>Code Category</b>
652.41	Fetal face or brow presentation, delivered	ICD-9-CM	Diagnosis
652.51	High fetal head at term, delivered	ICD-9-CM	Diagnosis
652.61	Multiple gestation with malpresentation of one fetus or more, delivered	ICD-9-CM	Diagnosis
652.71	Prolapsed arm of fetus, delivered	ICD-9-CM	Diagnosis
652.81	Other specified malposition or malpresentation of fetus, delivered	ICD-9-CM	Diagnosis
652.91	Unspecified malposition or malpresentation of fetus, delivered	ICD-9-CM	Diagnosis
653.01	Major abnormality of bony pelvis, not further specified, delivered	ICD-9-CM	Diagnosis
653.11	Generally contracted pelvis in pregnancy, delivered	ICD-9-CM	Diagnosis
653.21	Inlet contraction of pelvis in pregnancy, delivered	ICD-9-CM	Diagnosis
653.31	Outlet contraction of pelvis in pregnancy, delivered	ICD-9-CM	Diagnosis
653.41	Fetopelvic disproportion, delivered	ICD-9-CM	Diagnosis
653.51	Unusually large fetus causing disproportion, delivered	ICD-9-CM	Diagnosis
653.61	Hydrocephalic fetus causing disproportion, delivered	ICD-9-CM	Diagnosis
653.71	Other fetal abnormality causing disproportion, delivered	ICD-9-CM	Diagnosis
653.81	Fetal disproportion of other origin, delivered	ICD-9-CM	Diagnosis
653.91	Unspecified fetal disproportion, delivered	ICD-9-CM	Diagnosis
654.01	Congenital abnormalities of pregnant uterus, delivered	ICD-9-CM	Diagnosis
654.02	Congenital abnormalities of pregnant uterus, delivered, with mention of postpartum complication	ICD-9-CM	Diagnosis
654.11	Tumors of body of uterus, delivered	ICD-9-CM	Diagnosis
654.12	Tumors of body of uterus, delivered, with mention of postpartum complication	ICD-9-CM	Diagnosis
654.21	Previous cesarean delivery, delivered, with or without mention of antepartum condition	ICD-9-CM	Diagnosis
654.31	Retroverted and incarcerated gravid uterus, delivered	ICD-9-CM	Diagnosis
654.32	Retroverted and incarcerated gravid uterus, delivered, with mention of postpartum complication	ICD-9-CM	Diagnosis
654.41	Other abnormalities in shape or position of gravid uterus and of neighboring structures, delivered	ICD-9-CM	Diagnosis
654.42	Other abnormalities in shape or position of gravid uterus and of neighboring structures, delivered, with mention of postpartum complication	ICD-9-CM	Diagnosis
654.51	Cervical incompetence, delivered	ICD-9-CM	Diagnosis
654.52	Cervical incompetence, delivered, with mention of postpartum complication	ICD-9-CM	Diagnosis
654.61	Other congenital or acquired abnormality of cervix, with delivery	ICD-9-CM	Diagnosis
654.62	Other congenital or acquired abnormality of cervix, delivered, with mention of postpartum complication	ICD-9-CM	Diagnosis
654.71	Congenital or acquired abnormality of vagina, with delivery	ICD-9-CM	Diagnosis
654.72	Congenital or acquired abnormality of vagina, delivered, with mention of postpartum complication	ICD-9-CM	Diagnosis
654.81	Congenital or acquired abnormality of vulva, with delivery	ICD-9-CM	Diagnosis
654.82	Congenital or acquired abnormality of vulva, delivered, with mention of postpartum complication	ICD-9-CM	Diagnosis
654.91	Other and unspecified abnormality of organs and soft tissues of pelvis, with delivery	ICD-9-CM	Diagnosis
654.92	Other and unspecified abnormality of organs and soft tissues of pelvis, delivered, with mention of postpartum complication	ICD-9-CM	Diagnosis
655.01	Central nervous system malformation in fetus, with delivery	ICD-9-CM	Diagnosis
655.11	Chromosomal abnormality in fetus, affecting management of mother, with delivery	ICD-9-CM	Diagnosis

**Appendix E. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and Current Procedural Terminology, Fourth Edition (CPT-4) Codes Used to Define Baseline Characteristics in this Request**

<b>Code</b>	<b>Description</b>	<b>Code Type</b>	<b>Code Category</b>
655.21	Hereditary disease in family possibly affecting fetus, affecting management of mother, with delivery	ICD-9-CM	Diagnosis
655.31	Suspected damage to fetus from viral disease in mother, affecting management of mother, with delivery	ICD-9-CM	Diagnosis
655.41	Suspected damage to fetus from other disease in mother, affecting management of mother, with delivery	ICD-9-CM	Diagnosis
655.51	Suspected damage to fetus from drugs, affecting management of mother, delivered	ICD-9-CM	Diagnosis
655.61	Suspected damage to fetus from radiation, affecting management of mother, delivered	ICD-9-CM	Diagnosis
655.71	Decreased fetal movements, affecting management of mother, delivered	ICD-9-CM	Diagnosis
655.81	Other known or suspected fetal abnormality, not elsewhere classified, affecting management of mother, delivery	ICD-9-CM	Diagnosis
655.91	Unspecified fetal abnormality affecting management of mother, delivery	ICD-9-CM	Diagnosis
656.01	Fetal-maternal hemorrhage, with delivery	ICD-9-CM	Diagnosis
656.11	Rhesus isoimmunization affecting management of mother, delivered	ICD-9-CM	Diagnosis
656.21	Isoimmunization from other and unspecified blood-group incompatibility, affecting management of mother, delivered	ICD-9-CM	Diagnosis
656.31	Fetal distress affecting management of mother, delivered	ICD-9-CM	Diagnosis
656.41	Intrauterine death affecting management of mother, delivered	ICD-9-CM	Diagnosis
656.51	Poor fetal growth, affecting management of mother, delivered	ICD-9-CM	Diagnosis
656.61	Excessive fetal growth affecting management of mother, delivered	ICD-9-CM	Diagnosis
656.71	Other placental conditions affecting management of mother, delivered	ICD-9-CM	Diagnosis
656.81	Other specified fetal and placental problems affecting management of mother, delivered	ICD-9-CM	Diagnosis
656.91	Unspecified fetal and placental problem affecting management of mother, delivered	ICD-9-CM	Diagnosis
657.01	Polyhydramnios, with delivery	ICD-9-CM	Diagnosis
658.01	Oligohydramnios, delivered	ICD-9-CM	Diagnosis
658.11	Premature rupture of membranes in pregnancy, delivered	ICD-9-CM	Diagnosis
658.21	Delayed delivery after spontaneous or unspecified rupture of membranes, delivered	ICD-9-CM	Diagnosis
658.31	Delayed delivery after artificial rupture of membranes, delivered	ICD-9-CM	Diagnosis
658.41	Infection of amniotic cavity, delivered	ICD-9-CM	Diagnosis
658.81	Other problem associated with amniotic cavity and membranes, delivered	ICD-9-CM	Diagnosis
658.91	Unspecified problem associated with amniotic cavity and membranes, delivered	ICD-9-CM	Diagnosis
659.01	Failed mechanical induction of labor, delivered	ICD-9-CM	Diagnosis
659.11	Failed medical or unspecified induction of labor, delivered	ICD-9-CM	Diagnosis
659.21	Unspecified maternal pyrexia during labor, delivered	ICD-9-CM	Diagnosis
659.31	Generalized infection during labor, delivered	ICD-9-CM	Diagnosis
659.41	Grand multiparity, delivered, with or without mention of antepartum condition	ICD-9-CM	Diagnosis
659.51	Elderly primigravida, delivered	ICD-9-CM	Diagnosis
659.61	Elderly multigravida, delivered, with mention of antepartum condition	ICD-9-CM	Diagnosis
659.71	Abnormality in fetal heart rate or rhythm, delivered, with or without mention of antepartum condition	ICD-9-CM	Diagnosis
659.81	Other specified indication for care or intervention related to labor and delivery, delivered	ICD-9-CM	Diagnosis
659.91	Unspecified indication for care or intervention related to labor and delivery, delivered	ICD-9-CM	Diagnosis
660.01	Obstruction caused by malposition of fetus at onset of labor, delivered	ICD-9-CM	Diagnosis
660.11	Obstruction by bony pelvis during labor and delivery, delivered	ICD-9-CM	Diagnosis
660.21	Obstruction by abnormal pelvic soft tissues during labor and delivery, delivered	ICD-9-CM	Diagnosis

**Appendix E. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and Current Procedural Terminology, Fourth Edition (CPT-4) Codes Used to Define Baseline Characteristics in this Request**

<b>Code</b>	<b>Description</b>	<b>Code Type</b>	<b>Code Category</b>
660.31	Deep transverse arrest and persistent occipitoposterior position during labor and deliver, delivered	ICD-9-CM	Diagnosis
660.41	Shoulder (girdle) dystocia during labor and deliver, delivered	ICD-9-CM	Diagnosis
660.51	Locked twins, delivered	ICD-9-CM	Diagnosis
660.61	Unspecified failed trial of labor, delivered	ICD-9-CM	Diagnosis
660.71	Unspecified failed forceps or vacuum extractor, delivered	ICD-9-CM	Diagnosis
660.81	Other causes of obstructed labor, delivered	ICD-9-CM	Diagnosis
660.91	Unspecified obstructed labor, with delivery	ICD-9-CM	Diagnosis
661.01	Primary uterine inertia, with delivery	ICD-9-CM	Diagnosis
661.11	Secondary uterine inertia, with delivery	ICD-9-CM	Diagnosis
661.21	Other and unspecified uterine inertia, with delivery	ICD-9-CM	Diagnosis
661.31	Precipitate labor, with delivery	ICD-9-CM	Diagnosis
661.41	Hypertonic, incoordinate, or prolonged uterine contractions, with delivery	ICD-9-CM	Diagnosis
661.91	Unspecified abnormality of labor, with delivery	ICD-9-CM	Diagnosis
662.01	Prolonged first stage of labor, delivered	ICD-9-CM	Diagnosis
662.11	Unspecified prolonged labor, delivered	ICD-9-CM	Diagnosis
662.21	Prolonged second stage of labor, delivered	ICD-9-CM	Diagnosis
662.31	Delayed delivery of second twin, triplet, etc., delivered	ICD-9-CM	Diagnosis
663.01	Prolapse of cord, complicating labor and delivery, delivered	ICD-9-CM	Diagnosis
663.11	Cord around neck, with compression, complicating labor and delivery, delivered	ICD-9-CM	Diagnosis
663.21	Other and unspecified cord entanglement, with compression, complicating labor and delivery, delivered	ICD-9-CM	Diagnosis
663.31	Other and unspecified cord entanglement, without mention of compression, complicating labor and delivery, delivered	ICD-9-CM	Diagnosis
663.41	Short cord complicating labor and delivery, delivered	ICD-9-CM	Diagnosis
663.51	Vasa previa complicating labor and delivery, delivered	ICD-9-CM	Diagnosis
663.61	Vascular lesions of cord complicating labor and delivery, delivered	ICD-9-CM	Diagnosis
663.81	Other umbilical cord complications during labor and delivery, delivered	ICD-9-CM	Diagnosis
663.91	Unspecified umbilical cord complication during labor and delivery, delivered	ICD-9-CM	Diagnosis
664.01	First-degree perineal laceration, with delivery	ICD-9-CM	Diagnosis
664.11	Second-degree perineal laceration, with delivery	ICD-9-CM	Diagnosis
664.21	Third-degree perineal laceration, with delivery	ICD-9-CM	Diagnosis
664.31	Fourth-degree perineal laceration, with delivery	ICD-9-CM	Diagnosis
664.41	Unspecified perineal laceration, with delivery	ICD-9-CM	Diagnosis
664.51	Vulvar and perineal hematoma, with delivery	ICD-9-CM	Diagnosis
664.61	Anal sphincter tear complicating delivery, not associated with third-degree perineal laceration, delivered, with or without mention of antepartum condition	ICD-9-CM	Diagnosis
664.81	Other specified trauma to perineum and vulva, with delivery	ICD-9-CM	Diagnosis
664.91	Unspecified trauma to perineum and vulva, with delivery	ICD-9-CM	Diagnosis
665.01	Rupture of uterus before onset of labor, with delivery	ICD-9-CM	Diagnosis
665.11	Rupture of uterus during labor, with delivery	ICD-9-CM	Diagnosis
665.22	Inversion of uterus, delivered with postpartum complication	ICD-9-CM	Diagnosis
665.31	Laceration of cervix, with delivery	ICD-9-CM	Diagnosis
665.41	High vaginal laceration, with delivery	ICD-9-CM	Diagnosis
665.51	Other injury to pelvic organs, with delivery	ICD-9-CM	Diagnosis

**Appendix E. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and Current Procedural Terminology, Fourth Edition (CPT-4) Codes Used to Define Baseline Characteristics in this Request**

<b>Code</b>	<b>Description</b>	<b>Code Type</b>	<b>Code Category</b>
665.61	Damage to pelvic joints and ligaments, with delivery	ICD-9-CM	Diagnosis
665.71	Pelvic hematoma, with delivery	ICD-9-CM	Diagnosis
665.72	Pelvic hematoma, delivered with postpartum complication	ICD-9-CM	Diagnosis
665.81	Other specified obstetrical trauma, with delivery	ICD-9-CM	Diagnosis
665.82	Other specified obstetrical trauma, delivered, with postpartum	ICD-9-CM	Diagnosis
665.91	Unspecified obstetrical trauma, with delivery	ICD-9-CM	Diagnosis
665.92	Unspecified obstetrical trauma, delivered, with postpartum complication	ICD-9-CM	Diagnosis
666.2	Third-stage postpartum hemorrhage, with delivery	ICD-9-CM	Diagnosis
666.12	Other immediate postpartum hemorrhage, with delivery	ICD-9-CM	Diagnosis
666.22	Delayed and secondary postpartum hemorrhage, with delivery	ICD-9-CM	Diagnosis
666.32	Postpartum coagulation defects, with delivery	ICD-9-CM	Diagnosis
667.2	Retained placenta without hemorrhage, with delivery, with mention of postpartum complication	ICD-9-CM	Diagnosis
667.12	Retained portions of placenta or membranes, without hemorrhage, delivered, with mention of postpartum complication	ICD-9-CM	Diagnosis
668.1	Pulmonary complications of the administration of anesthesia or other sedation in labor and delivery, delivered	ICD-9-CM	Diagnosis
668.2	Pulmonary complications of the administration of anesthesia or other sedation in labor and delivery, delivered, with mention of postpartum complication	ICD-9-CM	Diagnosis
668.11	Cardiac complications of the administration of anesthesia or other sedation in labor and delivery, delivered	ICD-9-CM	Diagnosis
668.12	Cardiac complications of the administration of anesthesia or other sedation in labor and delivery, delivered, with mention of postpartum complication	ICD-9-CM	Diagnosis
668.21	Central nervous system complications of the administration of anesthesia or other sedation in labor and delivery, delivered	ICD-9-CM	Diagnosis
668.22	Central nervous system complications of the administration of anesthesia or other sedation in labor and delivery, delivered, with mention of postpartum complication	ICD-9-CM	Diagnosis
668.81	Other complications of the administration of anesthesia or other sedation in labor and delivery, delivered	ICD-9-CM	Diagnosis
668.82	Other complications of the administration of anesthesia or other sedation in labor and delivery, delivered, with mention of postpartum complication	ICD-9-CM	Diagnosis
668.91	Unspecified complication of the administration of anesthesia or other sedation in labor and delivery, delivered	ICD-9-CM	Diagnosis
668.92	Unspecified complication of the administration of anesthesia or other sedation in labor and delivery, delivered, with mention of postpartum complication	ICD-9-CM	Diagnosis
669.1	Maternal distress, with delivery, with or without mention of antepartum condition	ICD-9-CM	Diagnosis
669.2	Maternal distress, with delivery, with mention of postpartum complication	ICD-9-CM	Diagnosis
669.11	Shock during or following labor and delivery, with delivery, with or without mention of antepartum condition	ICD-9-CM	Diagnosis
669.12	Shock during or following labor and delivery, with delivery, with mention of postpartum complication	ICD-9-CM	Diagnosis
669.21	Maternal hypotension syndrome, with delivery, with or without mention of antepartum condition	ICD-9-CM	Diagnosis
669.22	Maternal hypotension syndrome, with delivery, with mention of postpartum complication	ICD-9-CM	Diagnosis
669.32	Acute kidney failure following labor and delivery, delivered, with mention of postpartum complication	ICD-9-CM	Diagnosis



**Appendix E. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and Current Procedural Terminology, Fourth Edition (CPT-4) Codes Used to Define Baseline Characteristics in this Request**

<b>Code</b>	<b>Description</b>	<b>Code Type</b>	<b>Code Category</b>
669.41	Other complications of obstetrical surgery and procedures, with delivery, with or without mention of antepartum condition	ICD-9-CM	Diagnosis
669.42	Other complications of obstetrical surgery and procedures, with delivery, with mention of postpartum complication	ICD-9-CM	Diagnosis
669.51	Forceps or vacuum extractor delivery without mention of indication, delivered, with or without mention of antepartum condition	ICD-9-CM	Diagnosis
669.61	Breech extraction, without mention of indication, delivered, with or without mention of antepartum condition	ICD-9-CM	Diagnosis
669.71	Cesarean delivery, without mention of indication, delivered, with or without mention of antepartum condition	ICD-9-CM	Diagnosis
669.81	Other complication of labor and delivery, delivered, with or without mention of antepartum condition	ICD-9-CM	Diagnosis
669.82	Other complication of labor and delivery, delivered, with mention of postpartum complication	ICD-9-CM	Diagnosis
669.91	Unspecified complication of labor and delivery, with delivery, with or without mention of antepartum condition	ICD-9-CM	Diagnosis
669.92	Unspecified complication of labor and delivery, with delivery, with mention of postpartum complication	ICD-9-CM	Diagnosis
670.2	Major puerperal infection, unspecified, delivered, with mention of postpartum complication	ICD-9-CM	Diagnosis
670.12	Puerperal endometritis, delivered, with mention of postpartum complication	ICD-9-CM	Diagnosis
670.22	Puerperal sepsis, delivered, with mention of postpartum complication	ICD-9-CM	Diagnosis
670.32	Puerperal septic thrombophlebitis, delivered, with mention of postpartum complication	ICD-9-CM	Diagnosis
670.82	Other major puerperal infection, delivered, with mention of postpartum complication	ICD-9-CM	Diagnosis
671.1	Varicose veins of legs, with delivery, with or without mention of antepartum condition	ICD-9-CM	Diagnosis
671.2	Varicose veins of legs, with delivery, with mention of postpartum complication	ICD-9-CM	Diagnosis
671.11	Varicose veins of vulva and perineum, with delivery, with or without mention of antepartum condition	ICD-9-CM	Diagnosis
671.12	Varicose veins of vulva and perineum, with delivery, with mention of postpartum complication	ICD-9-CM	Diagnosis
671.21	Superficial thrombophlebitis with delivery, with or without mention of antepartum condition	ICD-9-CM	Diagnosis
671.22	Superficial thrombophlebitis with delivery, with mention of postpartum complication	ICD-9-CM	Diagnosis
671.31	Deep phlebothrombosis, antepartum, with delivery	ICD-9-CM	Diagnosis
671.42	Deep phlebothrombosis, postpartum, with delivery	ICD-9-CM	Diagnosis
671.51	Other phlebitis and thrombosis with delivery, with or without mention of antepartum condition	ICD-9-CM	Diagnosis
671.52	Other phlebitis and thrombosis with delivery, with mention of postpartum complication	ICD-9-CM	Diagnosis
671.81	Other venous complication, with delivery, with or without mention of antepartum condition	ICD-9-CM	Diagnosis
671.82	Other venous complication, with delivery, with mention of postpartum complication	ICD-9-CM	Diagnosis
671.91	Unspecified venous complication, with delivery, with or without mention of antepartum condition	ICD-9-CM	Diagnosis
671.92	Unspecified venous complication, with delivery, with mention of postpartum complication	ICD-9-CM	Diagnosis
672.2	Puerperal pyrexia of unknown origin, delivered, with mention of postpartum complication	ICD-9-CM	Diagnosis
673.1	Obstetrical air embolism, with delivery, with or without mention of antepartum condition	ICD-9-CM	Diagnosis
673.2	Obstetrical air embolism, with delivery, with mention of postpartum complication	ICD-9-CM	Diagnosis
673.11	Amniotic fluid embolism, with delivery, with or without mention of antepartum condition	ICD-9-CM	Diagnosis
673.12	Amniotic fluid embolism, with delivery, with mention of postpartum complication	ICD-9-CM	Diagnosis
673.21	Obstetrical blood-clot embolism, with delivery, with or without mention of antepartum condition	ICD-9-CM	Diagnosis

**Appendix E. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and Current Procedural Terminology, Fourth Edition (CPT-4) Codes Used to Define Baseline Characteristics in this Request**

<b>Code</b>	<b>Description</b>	<b>Code Type</b>	<b>Code Category</b>
673.22	Obstetrical blood-clot embolism, with mention of postpartum complication	ICD-9-CM	Diagnosis
673.31	Obstetrical pyemic and septic embolism, with delivery, with or without mention of antepartum condition	ICD-9-CM	Diagnosis
673.32	Obstetrical pyemic and septic embolism, with delivery, with mention of postpartum complication	ICD-9-CM	Diagnosis
673.81	Other obstetrical pulmonary embolism, with delivery, with or without mention of antepartum condition	ICD-9-CM	Diagnosis
673.82	Other obstetrical pulmonary embolism, with delivery, with mention of postpartum complication	ICD-9-CM	Diagnosis
674.1	Cerebrovascular disorder, with delivery, with or without mention of antepartum condition	ICD-9-CM	Diagnosis
674.2	Cerebrovascular disorder, with delivery, with mention of postpartum complication	ICD-9-CM	Diagnosis
674.12	Disruption of cesarean wound, with delivery, with mention of postpartum complication	ICD-9-CM	Diagnosis
674.22	Disruption of perineal wound, with delivery, with mention of postpartum complication	ICD-9-CM	Diagnosis
674.32	Other complication of obstetrical surgical wounds, with delivery, with mention of postpartum complication	ICD-9-CM	Diagnosis
674.42	Placental polyp, with delivery, with mention of postpartum complication	ICD-9-CM	Diagnosis
674.51	Peripartum cardiomyopathy, delivered, with or without mention of antepartum condition	ICD-9-CM	Diagnosis
674.52	Peripartum cardiomyopathy, delivered, with mention of postpartum condition	ICD-9-CM	Diagnosis
674.82	Other complication of puerperium, with delivery, with mention of postpartum complication	ICD-9-CM	Diagnosis
674.92	Unspecified complications of puerperium, with delivery, with mention of postpartum complication	ICD-9-CM	Diagnosis
675.1	Infection of nipple associated with childbirth, delivered, with or without mention of antepartum condition	ICD-9-CM	Diagnosis
675.2	Infection of nipple associated with childbirth, delivered with mention of postpartum complication	ICD-9-CM	Diagnosis
675.11	Abscess of breast associated with childbirth, delivered, with or without mention of antepartum condition	ICD-9-CM	Diagnosis
675.12	Abscess of breast associated with childbirth, delivered, with mention of postpartum complication	ICD-9-CM	Diagnosis
675.21	Nonpurulent mastitis, delivered, with or without mention of antepartum condition	ICD-9-CM	Diagnosis
675.22	Nonpurulent mastitis, delivered, with mention of postpartum complication	ICD-9-CM	Diagnosis
675.81	Other specified infection of the breast and nipple associated with childbirth, delivered, with or without mention of antepartum condition	ICD-9-CM	Diagnosis
675.82	Other specified infection of the breast and nipple associated with childbirth, delivered, with mention of postpartum complication	ICD-9-CM	Diagnosis
675.91	Unspecified infection of the breast and nipple, delivered, with or without mention of antepartum condition	ICD-9-CM	Diagnosis
675.92	Unspecified infection of the breast and nipple, delivered, with mention of postpartum complication	ICD-9-CM	Diagnosis
676.1	Retracted nipple, delivered, with or without mention of antepartum condition	ICD-9-CM	Diagnosis
676.2	Retracted nipple, delivered, with mention of postpartum complication	ICD-9-CM	Diagnosis
676.11	Cracked nipple, delivered, with or without mention of antepartum condition	ICD-9-CM	Diagnosis
676.12	Cracked nipple, delivered, with mention of postpartum complication	ICD-9-CM	Diagnosis
676.21	Engorgement of breasts, delivered, with or without mention of antepartum condition	ICD-9-CM	Diagnosis
676.22	Engorgement of breasts, delivered, with mention of postpartum complication	ICD-9-CM	Diagnosis

**Appendix E. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and Current Procedural Terminology, Fourth Edition (CPT-4) Codes Used to Define Baseline Characteristics in this Request**

<b>Code</b>	<b>Description</b>	<b>Code Type</b>	<b>Code Category</b>
676.31	Other and unspecified disorder of breast associated with childbirth, delivered, with or without mention of antepartum condition	ICD-9-CM	Diagnosis
676.32	Other and unspecified disorder of breast associated with childbirth, delivered, with mention of postpartum complication	ICD-9-CM	Diagnosis
676.41	Failure of lactation, with delivery, with or without mention of antepartum condition	ICD-9-CM	Diagnosis
676.42	Failure of lactation, with delivery, with mention of postpartum complication	ICD-9-CM	Diagnosis
676.51	Suppressed lactation, with delivery, with or without mention of antepartum condition	ICD-9-CM	Diagnosis
676.52	Suppressed lactation, with delivery, with mention of postpartum complication	ICD-9-CM	Diagnosis
676.61	Galactorrhea, with delivery, with or without mention of antepartum condition	ICD-9-CM	Diagnosis
676.62	Galactorrhea, with delivery, with mention of postpartum complication	ICD-9-CM	Diagnosis
676.81	Other disorder of lactation, with delivery, with or without mention of antepartum condition	ICD-9-CM	Diagnosis
676.82	Other disorder of lactation, with delivery, with mention of postpartum complication	ICD-9-CM	Diagnosis
676.91	Unspecified disorder of lactation, with delivery, with or without mention of antepartum condition	ICD-9-CM	Diagnosis
74.0	Classical cesarean section	ICD-9-CM	Procedure
73.22	Internal and combined version with extraction	ICD-9-CM	Procedure
73.2	Internal and combined version and extraction	ICD-9-CM	Procedure
72.29	Other mid forceps operation	ICD-9-CM	Procedure
73.4	Medical induction of labor	ICD-9-CM	Procedure
73.99	Other operations to assist delivery	ICD-9-CM	Procedure
73.21	Internal and combined version without extraction	ICD-9-CM	Procedure
73.94	Pubiotomy to assist delivery	ICD-9-CM	Procedure
72.79	Other vacuum extraction	ICD-9-CM	Procedure
73.1	Other surgical induction of labor	ICD-9-CM	Procedure
72.8	Other specified instrumental delivery	ICD-9-CM	Procedure
74.99	Other cesarean section of unspecified type	ICD-9-CM	Procedure
72.2	Mid forceps operation	ICD-9-CM	Procedure
72.21	Mid forceps operation with episiotomy	ICD-9-CM	Procedure
74.9	Cesarean section of unspecified type	ICD-9-CM	Procedure
73	Other procedures inducing or assisting delivery	ICD-9-CM	Procedure
73.93	Incision of cervix to assist delivery	ICD-9-CM	Procedure
72.5	Breech extraction	ICD-9-CM	Procedure
72.52	Other partial breech extraction	ICD-9-CM	Procedure
72.39	Other high forceps operation	ICD-9-CM	Procedure
73.92	Replacement of prolapsed umbilical cord	ICD-9-CM	Procedure
72.0	Low forceps operation	ICD-9-CM	Procedure
73.09	Other artificial rupture of membranes	ICD-9-CM	Procedure
73.3	Failed forceps	ICD-9-CM	Procedure
73.9	Other operations assisting delivery	ICD-9-CM	Procedure
74.1	Low cervical cesarean section	ICD-9-CM	Procedure
74.4	Cesarean section of other specified type	ICD-9-CM	Procedure
73.51	Manual rotation of fetal head	ICD-9-CM	Procedure
72.54	Other total breech extraction	ICD-9-CM	Procedure
72.4	Forceps rotation of fetal head	ICD-9-CM	Procedure
72.1	Low forceps operation with episiotomy	ICD-9-CM	Procedure

**Appendix E. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and Current Procedural Terminology, Fourth Edition (CPT-4) Codes Used to Define Baseline Characteristics in this Request**

<b>Code</b>	<b>Description</b>	<b>Code Type</b>	<b>Code Category</b>
73.6	Episiotomy	ICD-9-CM	Procedure
72.7	Vacuum extraction	ICD-9-CM	Procedure
72.3	High forceps operation	ICD-9-CM	Procedure
72.51	Partial breech extraction with forceps to aftercoming head	ICD-9-CM	Procedure
72.71	Vacuum extraction with episiotomy	ICD-9-CM	Procedure
73.91	External version to assist delivery	ICD-9-CM	Procedure
73.0	Artificial rupture of membranes	ICD-9-CM	Procedure
72.6	Forceps application to aftercoming head	ICD-9-CM	Procedure
73.01	Induction of labor by artificial rupture of membranes	ICD-9-CM	Procedure
74.2	Extraperitoneal cesarean section	ICD-9-CM	Procedure
72.31	High forceps operation with episiotomy	ICD-9-CM	Procedure
72.53	Total breech extraction with forceps to aftercoming head	ICD-9-CM	Procedure
72	Forceps, vacuum, and breech delivery	ICD-9-CM	Procedure
72.9	Unspecified instrumental delivery	ICD-9-CM	Procedure
73.5	Manually assisted delivery	ICD-9-CM	Procedure
73.59	Other manually assisted delivery	ICD-9-CM	Procedure
73.8	Operations on fetus to facilitate delivery	ICD-9-CM	Procedure
676.92	Unspecified disorder of lactation, with delivery, with mention of postpartum complication	ICD-9-CM	Diagnosis
678.1	Fetal hematologic conditions, delivered, with or without mention of antepartum condition	ICD-9-CM	Diagnosis
678.11	Fetal conjoined twins, delivered, with or without mention of antepartum condition	ICD-9-CM	Diagnosis
679.1	Maternal complications from in utero procedure, delivered, with or without mention of antepartum condition	ICD-9-CM	Diagnosis
679.2	Maternal complications from in utero procedure, delivered, with mention of postpartum complication	ICD-9-CM	Diagnosis
679.11	Fetal complications from in utero procedure, delivered, with or without mention of antepartum condition	ICD-9-CM	Diagnosis
679.12	Fetal complications from in utero procedure, delivered, with mention of postpartum complication	ICD-9-CM	Diagnosis
V27	Outcome of delivery	ICD-9-CM	Diagnosis
V27.0	Outcome of delivery, single liveborn	ICD-9-CM	Diagnosis
V27.1	Outcome of delivery, single stillborn	ICD-9-CM	Diagnosis
V27.2	Outcome of delivery, twins, both liveborn	ICD-9-CM	Diagnosis
V27.3	Outcome of delivery, twins, one liveborn and one stillborn	ICD-9-CM	Diagnosis
V27.4	Outcome of delivery, twins, both stillborn	ICD-9-CM	Diagnosis
V27.5	Outcome of delivery, other multiple birth, all liveborn	ICD-9-CM	Diagnosis
V27.6	Outcome of delivery, other multiple birth, some liveborn	ICD-9-CM	Diagnosis
V27.7	Outcome of delivery, other multiple birth, all stillborn	ICD-9-CM	Diagnosis
V27.9	Outcome of delivery, unspecified	ICD-9-CM	Diagnosis
V30	Single liveborn	ICD-9-CM	Diagnosis
V30.0	Single liveborn, born in hospital	ICD-9-CM	Diagnosis
V30.00	Single liveborn, born in hospital, delivered without mention of cesarean delivery	ICD-9-CM	Diagnosis
V30.1	Single liveborn, born in hospital, delivered by cesarean delivery	ICD-9-CM	Diagnosis
V30.10	Single liveborn, born before admission to hospital	ICD-9-CM	Diagnosis
V30.2	Single liveborn, born outside hospital and not hospitalized	ICD-9-CM	Diagnosis
V31	Twin birth, mate liveborn	ICD-9-CM	Diagnosis

**Appendix E. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and Current Procedural Terminology, Fourth Edition (CPT-4) Codes Used to Define Baseline Characteristics in this Request**

<b>Code</b>	<b>Description</b>	<b>Code Type</b>	<b>Code Category</b>
V31.0	Twin, mate liveborn, born in hospital	ICD-9-CM	Diagnosis
V31.00	Twin, mate liveborn, born in hospital, delivered without mention of cesarean delivery	ICD-9-CM	Diagnosis
V31.1	Twin, mate liveborn, born in hospital, delivered by cesarean delivery	ICD-9-CM	Diagnosis
V31.10	Twin birth, mate liveborn, born before admission to hospital	ICD-9-CM	Diagnosis
V31.2	Twin birth, mate liveborn, born outside hospital and not hospitalized	ICD-9-CM	Diagnosis
V32	Twin birth, mate stillborn	ICD-9-CM	Diagnosis
V32.0	Twin, mate stillborn, born in hospital	ICD-9-CM	Diagnosis
V32.00	Twin, mate stillborn, born in hospital, delivered without mention of cesarean delivery	ICD-9-CM	Diagnosis
V32.1	Twin, mate stillborn, born in hospital, delivered by cesarean delivery	ICD-9-CM	Diagnosis
V32.10	Twin birth, mate stillborn, born before admission to hospital	ICD-9-CM	Diagnosis
V32.2	Twin birth, mate stillborn, born outside hospital and not hospitalized	ICD-9-CM	Diagnosis
V33	Twin birth, unspecified whether mate liveborn or stillborn	ICD-9-CM	Diagnosis
V33.0	Twin, unspecified, born in hospital	ICD-9-CM	Diagnosis
V33.00	Twin, unspecified whether mate stillborn or liveborn, born in hospital, delivered without mention of cesarean delivery	ICD-9-CM	Diagnosis
V33.1	Twin, unspecified whether mate stillborn or liveborn, born in hospital, delivered by cesarean delivery	ICD-9-CM	Diagnosis
V33.10	Twin birth, unspecified whether mate liveborn or stillborn, born before admission to hospital	ICD-9-CM	Diagnosis
V33.2	Twin birth, unspecified whether mate liveborn or stillborn, born outside hospital and not hospitalized	ICD-9-CM	Diagnosis
V34	Other multiple birth (three or more), mates all liveborn	ICD-9-CM	Diagnosis
V34.0	Other multiple, mates all liveborn, born in hospital	ICD-9-CM	Diagnosis
V34.00	Other multiple, mates all liveborn, born in hospital, delivered without mention of cesarean delivery	ICD-9-CM	Diagnosis
V34.1	Other multiple, mates all liveborn, born in hospital, delivered by cesarean delivery	ICD-9-CM	Diagnosis
V34.10	Other multiple birth (three or more), mates all liveborn, born before admission to hospital	ICD-9-CM	Diagnosis
V34.2	Other multiple birth (three or more), mates all liveborn, born outside hospital and not hospitalized	ICD-9-CM	Diagnosis
V35	Other multiple birth (three or more), mates all stillborn	ICD-9-CM	Diagnosis
V35.0	Other multiple, mates all stillborn, born in hospital	ICD-9-CM	Diagnosis
V35.00	Other multiple, mates all stillborn, born in hospital, delivered without mention of cesarean delivery	ICD-9-CM	Diagnosis
V35.1	Other multiple, mates all stillborn, born in hospital, delivered by cesarean delivery	ICD-9-CM	Diagnosis
V35.10	Other multiple birth (three or more), mates all stillborn, born before admission to hospital	ICD-9-CM	Diagnosis
V35.2	Other multiple birth (three or more), mates all stillborn, born outside of hospital and not hospitalized	ICD-9-CM	Diagnosis
V36	Other multiple birth (three or more), mates liveborn and stillborn	ICD-9-CM	Diagnosis
V36.0	Other multiple, mates liveborn and stillborn, born in hospital	ICD-9-CM	Diagnosis
V36.00	Other multiple, mates liveborn and stillborn, born in hospital, delivered without mention of cesarean delivery	ICD-9-CM	Diagnosis
V36.1	Other multiple, mates liveborn and stillborn, born in hospital, delivered by cesarean delivery	ICD-9-CM	Diagnosis
V36.10	Other multiple birth (three or more), mates liveborn and stillborn, born before admission to hospital	ICD-9-CM	Diagnosis
V36.2	Other multiple birth (three or more), mates liveborn and stillborn, born outside hospital and not hospitalized	ICD-9-CM	Diagnosis

**Appendix E. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and Current Procedural Terminology, Fourth Edition (CPT-4) Codes Used to Define Baseline Characteristics in this Request**

<b>Code</b>	<b>Description</b>	<b>Code Type</b>	<b>Code Category</b>
V37	Other multiple birth (three or more), unspecified whether mates liveborn or stillborn	ICD-9-CM	Diagnosis
V37.0	Other multiple, unspecified whether mates stillborn or liveborn, born in hospital	ICD-9-CM	Diagnosis
V37.00	Other multiple, unspecified whether mates stillborn or liveborn, born in hospital, delivered without mention of cesarean delivery	ICD-9-CM	Diagnosis
V37.1	Other multiple, unspecified whether mates stillborn or liveborn, born in hospital, delivered by cesarean delivery	ICD-9-CM	Diagnosis
V37.10	Other multiple birth (three or more), unspecified whether mates liveborn or stillborn, born before admission to hospital	ICD-9-CM	Diagnosis
V37.2	Other multiple birth (three or more), unspecified whether mates liveborn or stillborn, born outside of hospital	ICD-9-CM	Diagnosis
V39	Liveborn, unspecified whether single, twin, or multiple	ICD-9-CM	Diagnosis
V39.0	Other liveborn, unspecified whether single, twin, or multiple, born in hospital	ICD-9-CM	Diagnosis
V39.00	Liveborn infant, unspecified whether single, twin, or multiple, born in hospital, delivered without mention of cesarean delivery	ICD-9-CM	Diagnosis
V39.1	Liveborn infant, unspecified whether single, twin, or multiple, born in hospital, delivered by cesarean	ICD-9-CM	Diagnosis
V39.10	Liveborn, unspecified whether single, twin or multiple, born before admission to hospital	ICD-9-CM	Diagnosis
V39.2	Liveborn, unspecified whether single, twin or multiple, born outside hospital and not hospitalized	ICD-9-CM	Diagnosis

**Appendix F. Specifications for Parameters for this Request**

This request utilizes the Cohort Identification and Descriptive Analysis (CIDA) tool, version 5.0.3, to investigate subsequent gynecological surgery among patients with hysteroscopic sterilization who had no subsequent tubal ligation, and additionally among patients with multiple hysteroscopic sterilization events and no subsequent tubal ligation. Gynecological events are defined as hysterectomy or salpingectomy.

**Query Period:** January 1, 2008 to September 30, 2015  
**Coverage Requirement:** Medical  
**Enrollment Requirement:** 183 days  
**Enrollment Gap:** 45 days  
**Sex:** Female  
**Age Groups:** 21-30, 31-40, 41-50 years

Scenario	Exposure						Pre-existing Condition						Outcome			Baseline Characteristics		
	Exposure	Care Setting/ Principal Diagnosis Position (PDX)	Incident with Respect to	Incident Care Setting	Washou t (Days)	Cohort Definition	Episode Length (Days)	Truncation Criteria	Conditions	Care Setting /PDX	Inclusion or Exclusion	Evaluation Start	Evaluation End	Outcome	Care Setting / PDX		Washout (Days)	Blackout (Days)
1	Hysteroscopic Sterilization	Any	Hysteroscopic Sterilization and Laparoscopic Tubal Ligation	Any	Entire History	First valid incident exposure	5,000	Non-outcome hysterectomy, Death, DP End Date, Query End Date	Any Hysterectomy	Any	Exclusion	Entire History	0	Outcome Hysterectomy	Any	0	1	See Appendix B
2	Hysteroscopic Sterilization	Any	Hysteroscopic Sterilization and Laparoscopic Tubal Ligation	Any	Entire History	First valid incident exposure	5,000	Non-outcome hysterectomy, Death, DP End Date, Query End Date	Any Hysterectomy	Any	Exclusion	Entire History	0	Outcome Hysterectomy	Any	0	1	See Appendix B
									Laparoscopic Tubal Ligation	Any	Exclusion	0	Entire History					
									Hysteroscopic Sterilization	Any	Inclusion	1	3 Months					
3	Hysteroscopic Sterilization	Any	Hysteroscopic Sterilization and Laparoscopic Tubal Ligation	Any	Entire History	First valid incident exposure	5,000	Death, DP End Date, Query End Date	Laparoscopic Tubal Ligation	Any	Exclusion	0	Entire History	Salpingectomy	Any	Entire History	1	See Appendix B
4	Hysteroscopic Sterilization	Any	Hysteroscopic Sterilization and Laparoscopic Tubal Ligation	Any	Entire History	First valid incident exposure	5,000	Death, DP End Date, Query End Date	Laparoscopic Tubal Ligation	Any	Exclusion	0	Entire History	Salpingectomy	Any	Entire History	1	See Appendix B
									Hysteroscopic Sterilization	Any	Inclusion	1	3 Months					

Scenario	Exposure						Pre-existing Condition						Outcome			Baseline Characteristics	
	Exposure	Care Setting/ Principal Diagnosis Position (PDX)	Incident with Respect to	Incident Care Setting	Washou t (Days)	Cohort Definition	Episode Length (Days)	Truncation Criteria	Conditions	Care Setting /PDX	Inclusion or Exclusion	Evaluation Start	Evaluation End	Outcome	Care Setting / PDX		Washout (Days)
5	Hysteroscopic Sterilization	Any	Hysteroscopic Sterilization and Laparoscopic Tubal Ligation	Any	Entire History	First valid incident exposure	5,000	Non-outcome hysterectomy, Death, DP End Date, Query End Date	Any Hysterectomy or Salpingectomy	Exclusion	Entire History	0	Outcome Hysterectomy or Salpingectomy	Any	0	1	See Appendix B
									Laparoscopic Tubal Ligation	Exclusion	0	Entire History					
6	Hysteroscopic Sterilization	Any	Hysteroscopic Sterilization and Laparoscopic Tubal Ligation	Any	Entire History	First valid incident exposure	5,000	Non-outcome hysterectomy, Death, DP End Date, Query End Date	Any Hysterectomy or Salpingectomy	Exclusion	Entire History	0	Outcome Hysterectomy or Salpingectomy	Any	0	1	See Appendix B
									Laparoscopic Tubal Ligation	Exclusion	0	Entire History					
									Hysteroscopic Sterilization	Inclusion	1	3 Months					

International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM); Current Procedural Terminology, Fourth Edition (CPT-4); and Healthcare Common Procedure Coding System (HCPCS) Procedure Codes are provided by Optum360.