

Disclaimer

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

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

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

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

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Overview for Request: to07_add_preg_ahr_wp008

Request ID: to07_add_preg_ahr_wp008_nsdp_v01

<u>Request Description</u>: This report contains the prevalence of antiemetic use among women of reproductive age who delivered a liveborn infant, between January 1, 2001 to December 31, 2014 in the Mini-Sentinel Distributed Database (MSDD). Results for antiemetic use are also presented for a matched comparator cohort with no live-birth deliveries during the request period.

Sentinel Modular Program Tool Used: Pregnancy Tool Prototype

Data Source: Data from January 1, 2001 to December 31, 2014, from 15 Data Partners contributing to the MSDD were included in this report. This request was distributed to Data Partners on November 10, 2015. Please see Appendix A for a list of available data from each Data Partner.

Study Design: This request was designed to calculate descriptive statistics regarding characteristics of the pregnant population with live-birth deliveries and a matched non-pregnant comparator group, and to determine the frequency of pregnancy episodes and non-pregnant episodes exposed to antiemetic medications of interest. Results were stratified by trimester, calendar year of delivery, and maternal age.

Exposures of Interest: The exposures of interest in this report were antiemetics, including ondansetron, doxylamine succinate/pyridoxine HCl, granisetron, metoclopramide HCl, netupitant/palonosetron HCl, palonosetron, prochlorperazine, and promethazine HCl. These were defined using National Drug Codes (NDCs) and Healthcare Common Procedure Coding System (HCPCS) injection procedure codes. Please see Appendices B and C for a list of generic names and HCPCS codes used to define exposures in this request.

<u>Cohort Eligibility Criteria:</u> Women included in the cohort were required to be continuously enrolled in plans with both medical and drug coverage for at least 480 days prior to the admission date of delivery, during which gaps in coverage of up to 45 days were allowed. The following age groups were included in the cohorts: < 20, 20-24, 25-29, 30-34, 35-39, 40-44, and 45-54 years. For the pregnant cohort, deliveries were limited to those that occurred in the inpatient setting, and were defined using International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) diagnosis codes and Current Procedural Terminology, Fourth Edition (CPT-4) procedure codes. Please see Appendix D for a list of diagnosis and procedure codes used to define live-birth delivery. A comparator group of non-pregnant women (women who did not deliver a live-born infant) with similar eligibility criteria was identified, matching on age, enrollment criteria, and restriction criteria for pre-existing baseline conditions or use of a medication in the period prior to pregnancy.

Baseline Characteristics: The following characteristics were assessed in the 180 days prior to pregnancy episode start: preexisting conditions (multiple sclerosis and lupus) and prior dispensings of an antidiabetic medication. Please see Appendices E and F for a list of ICD-9-CM and generic drug names used to define baseline characteristics in this request. The frequency of pregnancy episodes with pre- and post-term births were also presented in the baseline tables, stratified by the specific ICD-9-CM diagnosis codes used to define gestational age and birth outcomes. Please see Appendix G for the list of ICD-9-CM diagnosis codes used to define pre- and post-term birth and gestational age.

<u>Limitations</u>: Algorithms used to defines exposures and covariates are imperfect; thus, it is possible that there may be misclassification. Therefore, data should be interpreted with this limitation in mind.

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



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Glossary of Terms in Modular Program 8*

Age Stratifications - Age group categories for reporting. Specifying this parameter will (1) restrict to certain age groups and (2) specify how age groups will be stratified in the result tables. For example, to have results stratified by 20 year increments for members 40-99 years of age, AGESTRAT=40-59 60-79 80-99 would be entered.

Approval Date - Approval date of new molecular entity of interest.

Days of Supply Groups - Days of supply categories for reporting. This parameter will specify how claim days of supply will be stratified in result tables examining distribution of days supplied. For example, to have results stratified by 15 days increments for claims with 15-60 days of supply, DISPDAYSSUPSTRAT=15-29 30-44 45-60 would be entered.

Enrollment Days - Optional parameter to ensure a minimum number of days of continuous enrollment prior to the start of the first treatment episode.

Enrollment Gap - Sets the number of days that will be bridged between two consecutive enrollment periods to create a "continuously enrolled" period. For example, if ENROLGAP=30 and a member is eligible for medical and drug coverage in periods 1/1/2007-3/27/2007 and 4/1/2007-12/21/2007 (i.e., a 4-day gap between two consecutive enrollment episodes), the member will be considered continuously enrolled from 1/1/2007 to 12/21/2007. Any gaps in enrollment greater than 30 days will result in a new enrollment period, and all the days in the gap will be considered un-enrolled. A recommended enrollment gap is 45 days.

Episode Gap Type - Specifies the type of algorithm to use for the calculation of episode gaps. Valid values are: (1) F: Fixed episode gap. The value specified in EPISODEGAP will be used to determine if two consecutive claims are in the same episode; and (2) P: Percentage episode gap. The value specified in EPISODEGAP will represent a percentage of the previous dispensing's days of supply to determine if two consecutive claims are in the same episode.

Episode Gap - For a given claim, if EPISODEGAPTYPE is Fixed (F), a gap of more than EPISODEGAP days between the claim date and the date of the last day of supply of the previous claim triggers a new treatment episode. If EPISODEGAPTYPE is Percentage (P), a gap of more than EPISODEGAP percent of the previous claim days of supply days between the claim date and the date of the last day of supply of the previous claim triggers a new treatment episode.

Exposure - NDC and/or procedure and/or diagnosis code values for the exposure(s) of interest.

Exposure Extension Period - Extends the length of the treatment episode by a specified number of days. A treatment episode can be extended EXPEXTPER days after the last day of supply of the treatment episode's last claim.

New Molecular Entity (NME) Indicator - Specifies whether exposures should be treated as a NME; that is, the MP algorithm will not look prior to the query period start date (either approval or launch date) when applying the washout (WASHPER) condition. This parameter has no impact on how ENRDAYS is processed, i.e., when ENRDAYS is specified the program will always look for enrollment prior to the query period start date if necessary.

Maximum Days Supplied - Maximum days of supply for a claim to be valid.

Minimum Days Supplied - Minimum days of supply for a dispensing to be valid.

Minimum Episode Duration - Used to reject members with first treatment episode of fewer than a certain number of days.

Stockpiling Type - Specifies the type of stockpiling algorithm to use. Valid values are: (1) S: Standard algorithm. Slides overlapping dispensings to create a continuous sequence of non-overlapping dispensings; and (2) R: Revised algorithm. If a second dispensing occurs at least XX% (i.e., XX% or more) of the time through the previous dispensing, the length of the second dispensing is added to the end of the first dispensing; if the second dispensing occurs less than XX% of the time through the first dispensing then the second dispensing time is begun at the time it is dispensed and the first one is truncated.

Stockpiling Percent - Used in conjunction with Stockpiling Type to specify the percentage to be applied when Stockpiling Type = R

Study End Date - Query period end date.



Total Days of Supply Thresholds - Total days of supply threshold(s) for reporting. This parameter will specify how members' total days of supply (for all observed dispensings) will be stratified in the result tables examining distribution of members by number of total days supplied. For example, to have results stratified by 60 total days of supply, TOTALDAYSSUPTHRESH=060 120 180 240 300 would be entered.

Washout Period - Length of washout period in days. The washout period is a period of time before an incident exposure index date during which a member cannot have any evidence of exposure(s) of interest.

*all terms may not be used in this report



Table 1. Baseline Characteristics of Women with Live-Birth Deliveries and their Matched Non-Pregnant Comparators¹ in the Mini-Sentinel Distributed Database (MSDD) between January 1, 2001 and December 31, 2014

| | Pregnan | t Cohort | Matched Comparator Cohort | | |
|------------------------------|-----------|----------|---------------------------|---------|--|
| Characteristic | Number | Percent | Number | Percent | |
| Patients | 1,753,306 | 100.00% | 1,739,741 | 100.00% | |
| Episodes | 2,101,482 | 100.00% | 2,101,482 | 100.00% | |
| Demographics | Number | Percent | Number | Percent | |
| Age group (years) | | | | | |
| < 20 | 126,298 | 6.01% | 126,298 | 6.01% | |
| 20-24 | 291,136 | 13.85% | 290,998 | 13.85% | |
| 25-29 | 545,817 | 25.97% | 545,771 | 25.97% | |
| 30-34 | 679,811 | 32.35% | 679,931 | 32.35% | |
| 35-39 | 364,461 | 17.34% | 364,525 | 17.35% | |
| 40-44 | 84,823 | 4.04% | 84,812 | 4.04% | |
| 45-54 | 9,136 | 0.43% | 9,147 | 0.44% | |
| Year | | | | | |
| 2001 | 41,747 | 1.99% | 41,747 | 1.99% | |
| 2002 | 62,183 | 2.96% | 62,183 | 2.96% | |
| 2003 | 62,160 | 2.96% | 62,160 | 2.96% | |
| 2004 | 61,431 | 2.92% | 61,431 | 2.92% | |
| 2005 | 64,428 | 3.07% | 64,428 | 3.07% | |
| 2006 | 67,901 | 3.23% | 67,901 | 3.23% | |
| 2007 | 122,487 | 5.83% | 122,487 | 5.83% | |
| 2008 | 146,340 | 6.96% | 146,340 | 6.96% | |
| 2009 | 246,077 | 11.71% | 246,077 | 11.71% | |
| 2010 | 275,689 | 13.12% | 275,689 | 13.12% | |
| 2011 | 263,593 | 12.54% | 263,593 | 12.54% | |
| 2012 | 252,698 | 12.02% | 252,698 | 12.02% | |
| 2013 | 245,194 | 11.67% | 245,194 | 11.67% | |
| 2014 | 189,554 | 9.02% | 189,554 | 9.02% | |
| Pre-Existing Conditions | Number | Percent | Number | Percent | |
| upus | 2,612 | 0.12% | 0 | 0.00% | |
| Multiple sclerosis | 2,443 | 0.12% | 0 | 0.00% | |
| Medications Used in the Pre- | Number | Deveent | Number | Percent | |
| Pregnancy Period | Number | Percent | Number | Percent | |
| Antidiabetic medications | 17,394 | 0.83% | 0 | 0.00% | |
| Pre-Term Birth Codes | Number | Percent | Number | Percent | |
| 544.21 | 147,424 | 7.02% | - | - | |
| 765.0* | 1,663 | 0.08% | - | - | |
| 765.1* | 25,826 | 1.23% | - | - | |
| 765.20 | 1,113 | 0.05% | - | - | |
| 765.21 | 790 | 0.04% | - | - | |
| 765.22 | 272 | 0.01% | - | - | |
| 765.23 | 518 | 0.02% | - | - | |
| 765.24 | 586 | 0.03% | - | - | |
| 765.25 | 856 | 0.04% | - | - | |



 Table 1. Baseline Characteristics of Women with Live-Birth Deliveries and their Matched Non-Pregnant Comparators¹ in the

 Mini-Sentinel Distributed Database (MSDD) between January 1, 2001 and December 31, 2014

| | Pregnan | t Cohort | Matched Comparator Cohort | | |
|---------------------------------|---------|----------|---------------------------|---------|--|
| Pre-Term Birth Codes, continued | Number | Percent | Number | Percent | |
| 765.26 | 1,600 | 0.08% | - | - | |
| 765.27 | 4,287 | 0.20% | - | - | |
| 765.28 | 14,433 | 0.69% | - | - | |
| Any code for preterm birth | 158,873 | 7.56% | - | - | |
| Post-Term Birth Codes | Number | Percent | Number | Percent | |
| 645.1* | 286,463 | 13.63% | - | - | |
| 545.2* | 5,194 | 0.25% | - | - | |
| 766.21 | 7,654 | 0.36% | - | - | |
| 766.22 | 126 | 0.01% | - | - | |
| Any code for postterm birth | 291,660 | 13.88% | - | - | |

¹Women in matched comparator cohort may have been pregnant at some point during the request period. Women were eligible for the "non-pregnant" cohort if they had no evidence of a live-born delivery during the time period of their pregnant comparator's pregnancy.



Table 2a. Pregnancy Episodes with Antiemetic Use among Pregancies with Live-Birth Deliveries in the Mini-Sentinel Distributed Database (MSDD), by Trimester

| | 90 Days Before Pregnancy Start | Any Trimester | First Trimester | Second Trimester | Third Trimester | First, Second, and Third Trimester |
|---|-----------------------------------|------------------|-------------------------|------------------|-----------------|---------------------------------------|
| Total Unique Episodes | 2,101,482 | 2,101,482 | 2,101,482 | 2,101,482 | 2,101,005 | 2,101,005 |
| Any Dolasetron mesylate | 346 (0.02%) | 3,127 (0.15%) | 2,147 (0.10%) | 1,556 (0.07%) | 575 (0.03%) | 164 (0.01%) |
| Injectable | 327 (0.02%) | 709 (0.03%) | 382 (0.02%) | 198 (0.01%) | 168 (0.01%) | 5 (0.00%) |
| Oral | 20 (0.00%) | 2,456 (0.12%) | 1,793 (0.09%) | 1,365 (0.06%) | 407 (0.02%) | 158 (0.01%) |
| Any Doxylamine succinate/Pyridoxine HCL | 4 (0.00%) | 3,350 (0.16%) | 2,476 (0.12%) | 2,221 (0.11%) | 758 (0.04%) | 321 (0.02%) |
| Oral | 4 (0.00%) | 3,350 (0.16%) | 2,476 (0.12%) | 2,221 (0.11%) | 758 (0.04%) | 321 (0.02%) |
| Any Granisetron | 152 (0.01%) | 343 (0.02%) | 160 (0.01%) | 129 (0.01%) | 118 (0.01%) | 10 (0.00%) |
| Injectable | 147 (0.01%) | 254 (0.01%) | 97 (0.00%) | 76 (0.00%) | 100 (0.00%) | 2 (0.00%) |
| Oral | 4 (0.00%) | 86 (0.00%) | 61 (0.00%) | 52 (0.00%) | 15 (0.00%) | 8 (0.00%) |
| Transdermal | 1 (0.00%) | 8 (0.00%) | 4 (0.00%) | 4 (0.00%) | 4 (0.00%) | 0 (0.00%) |
| Any Metoclopramide HCL | 8,958 (0.43%) | 87,018 (4.14%) | 53 <i>,</i> 897 (2.56%) | 36,227 (1.72%) | 19,859 (0.95%) | 2,137 (0.10%) |
| Injectable | 4,107 (0.20%) | 15,937 (0.76%) | 5,839 (0.28%) | 4,084 (0.19%) | 6,693 (0.32%) | 41 (0.00%) |
| Oral | 5,096 (0.24%) | 75,578 (3.60%) | 50,379 (2.40%) | 33,268 (1.58%) | 13,708 (0.65%) | 1,951 (0.09%) |
| Any Netupitant/Palonosetron HCL | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) |
| Oral | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) |
| Any Ondansetron | 32,777 (1.56%) | 304,436 (14.49%) | 217,452 (10.35%) | 142,623 (6.79%) | 77,076 (3.67%) | 24,834 (1.18%) |
| Injectable | 21,422 (1.02%) | 75,056 (3.57%) | 30,423 (1.45%) | 22,485 (1.07%) | 30,839 (1.47%) | 827 (0.04%) |
| Oral | 13,485 (0.64%) | 260,288 (12.39%) | 201,982 (9.61%) | 128,104 (6.10%) | 51,072 (2.43%) | 22,183 (1.06%) |
| Palonosetron | 24 (0.00%) | 83 (0.00%) | 15 (0.00%) | 40 (0.00%) | 61 (0.00%) | 2 (0.00%) |
| Injectable | 24 (0.00%) | 83 (0.00%) | 15 (0.00%) | 40 (0.00%) | 61 (0.00%) | 2 (0.00%) |
| Any Prochlorperazine | 3,014 (0.14%) | 15,639 (0.74%) | 9,791 (0.47%) | 5,712 (0.27%) | 2,553 (0.12%) | 174 (0.01%) |
| Injectable | 661 (0.03%) | 1,556 (0.07%) | 715 (0.03%) | 461 (0.02%) | 409 (0.02%) | 0 (0.00%) |
| Oral | 2,030 (0.10%) | 11,292 (0.54%) | 7,016 (0.33%) | 4,268 (0.20%) | 1,860 (0.09%) | 133 (0.01%) |
| Rectal | 453 (0.02%) | 3,678 (0.18%) | 2,581 (0.12%) | 1,191 (0.06%) | 368 (0.02%) | 27 (0.00%) |
| Any Promethazine HCL | 35,299 (1.68%) | 226,918 (10.80%) | 149,552 (7.12%) | 87,408 (4.16%) | 60,018 (2.86%) | 12,638 (0.60%) |
| Injectable | 6,997 (0.33%) | 28,998 (1.38%) | 9,890 (0.47%) | 7,288 (0.35%) | 14,280 (0.68%) | 277 (0.01%) |
| Oral | 27,803 (1.32%) | 187,865 (8.94%) | 127,717 (6.08%) | 73,345 (3.49%) | 44,074 (2.10%) | 10,309 (0.49%) |
| Rectal | 3,928 (0.19%) | 45,781 (2.18%) | 29,737 (1.42%) | 14,682 (0.70%) | 6,838 (0.33%) | 465 (0.02%) |



Table 2b. Pregnancy Episodes with Antiemetic Use among Matched Comparator Cohort¹ in the Mini-Sentinel Distributed Database (MSDD), by Corresponding Trimester Time Periods²

| | 90 Days Before Pregnancy Start | Any Trimester | First Trimester | Second Trimester | Third Trimester | First, Second, and Third Trimester |
|---|-----------------------------------|----------------|-----------------|------------------|-----------------|---------------------------------------|
| Total Unique Episodes | 2,101,482 | 2,101,482 | 2,101,482 | 2,101,482 | 2,101,005 | 2,101,005 |
| Any Dolasetron mesylate | 310 (0.01%) | 786 (0.04%) | 307 (0.01%) | 295 (0.01%) | 284 (0.01%) | 20 (0.00%) |
| Injectable | 254 (0.01%) | 658 (0.03%) | 250 (0.01%) | 244 (0.01%) | 215 (0.01%) | 8 (0.00%) |
| Oral | 62 (0.00%) | 137 (0.01%) | 63 (0.00%) | 53 (0.00%) | 70 (0.00%) | 12 (0.00%) |
| Any Doxylamine succinate/Pyridoxine HCL | 8 (0.00%) | 115 (0.01%) | 16 (0.00%) | 42 (0.00%) | 82 (0.00%) | 0 (0.00%) |
| Oral | 8 (0.00%) | 115 (0.01%) | 16 (0.00%) | 42 (0.00%) | 82 (0.00%) | 0 (0.00%) |
| Any Granisetron | 219 (0.01%) | 513 (0.02%) | 187 (0.01%) | 203 (0.01%) | 226 (0.01%) | 21 (0.00%) |
| Injectable | 189 (0.01%) | 445 (0.02%) | 149 (0.01%) | 176 (0.01%) | 193 (0.01%) | 13 (0.00%) |
| Oral | 35 (0.00%) | 69 (0.00%) | 33 (0.00%) | 29 (0.00%) | 33 (0.00%) | 8 (0.00%) |
| Transdermal | 7 (0.00%) | 20 (0.00%) | 8 (0.00%) | 9 (0.00%) | 11 (0.00%) | 0 (0.00%) |
| Any Metoclopramide HCL | 7,522 (0.36%) | 19,662 (0.94%) | 7,772 (0.37%) | 7,747 (0.37%) | 8,027 (0.38%) | 884 (0.04%) |
| Injectable | 2,686 (0.13%) | 8,751 (0.42%) | 2,980 (0.14%) | 3,008 (0.14%) | 3,111 (0.15%) | 31 (0.00%) |
| Oral | 5,076 (0.24%) | 11,748 (0.56%) | 5,041 (0.24%) | 4,982 (0.24%) | 5,135 (0.24%) | 823 (0.04%) |
| Any Netupitant/Palonosetron HCL | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) |
| Oral | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) |
| Any Ondansetron | 25,157 (1.20%) | 74,774 (3.56%) | 27,126 (1.29%) | 28,450 (1.35%) | 30,667 (1.46%) | 1,880 (0.09%) |
| Injectable | 14,632 (0.70%) | 44,475 (2.12%) | 15,742 (0.75%) | 16,088 (0.77%) | 16,961 (0.81%) | 540 (0.03%) |
| Oral | 12,369 (0.59%) | 37,284 (1.77%) | 13,435 (0.64%) | 14,507 (0.69%) | 16,089 (0.77%) | 1,212 (0.06%) |
| Palonosetron | 224 (0.01%) | 453 (0.02%) | 215 (0.01%) | 239 (0.01%) | 243 (0.01%) | 42 (0.00%) |
| Injectable | 224 (0.01%) | 453 (0.02%) | 215 (0.01%) | 239 (0.01%) | 243 (0.01%) | 42 (0.00%) |
| Any Prochlorperazine | 3,852 (0.18%) | 10,086 (0.48%) | 3,793 (0.18%) | 3,867 (0.18%) | 3,778 (0.18%) | 220 (0.01%) |
| Injectable | 701 (0.03%) | 2,056 (0.10%) | 706 (0.03%) | 721 (0.03%) | 723 (0.03%) | 9 (0.00%) |
| Oral | 2,698 (0.13%) | 6,988 (0.33%) | 2,679 (0.13%) | 2,734 (0.13%) | 2,643 (0.13%) | 179 (0.01%) |
| Rectal | 592 (0.03%) | 1,582 (0.08%) | 579 (0.03%) | 569 (0.03%) | 571 (0.03%) | 22 (0.00%) |
| Any Promethazine HCL | 34,690 (1.65%) | 86,363 (4.11%) | 35,388 (1.68%) | 35,185 (1.67%) | 35,574 (1.69%) | 4,141 (0.20%) |
| Injectable | 6,977 (0.33%) | 19,247 (0.92%) | 7,297 (0.35%) | 7,385 (0.35%) | 7,426 (0.35%) | 570 (0.03%) |
| Oral | 27,525 (1.31%) | 68,957 (3.28%) | 28,047 (1.33%) | 27,808 (1.32%) | 28,334 (1.35%) | 3,127 (0.15%) |
| Rectal | 3,744 (0.18%) | 10,250 (0.49%) | 3,721 (0.18%) | 3,651 (0.17%) | 3,595 (0.17%) | 67 (0.00%) |

¹Women in matched comparator cohort may have been pregnant at some point during the request period. Women were eligible for the "non-pregnant" cohort if they had no evidence of a live-born delivery during the time period of their pregnant comparator's pregnancy.

²Trimester time periods in the non-pregnant cohort are determined by the corresponding trimester period in each woman's matched pregnant comparator.



Table 3a. Pregnancy Episodes with Antiemetic Use in Any Trimester among Pregancies with Live-Birth Deliveries in the Mini-Sentinel Distributed Database (MSDD), by Year

| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 |
|---|----------------|----------------|----------------|----------------|----------------|-----------------|-----------------|
| Total Unique Episodes | 41,747 | 62,183 | 62,160 | 61,431 | 64,428 | 67,901 | 122,487 |
| Any Dolasetron mesylate | 10 (0.02%) | 31 (0.05%) | 69 (0.11%) | 250 (0.41%) | 602 (0.93%) | 915 (1.35%) | 898 (0.73%) |
| Injectable | 7 (0.02%) | 22 (0.04%) | 32 (0.05%) | 40 (0.07%) | 140 (0.22%) | 194 (0.29%) | 193 (0.16%) |
| Oral | 3 (0.01%) | 9 (0.01%) | 37 (0.06%) | 211 (0.34%) | 469 (0.73%) | 732 (1.08%) | 720 (0.59%) |
| Any Doxylamine succinate/Pyridoxine HCL | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) |
| Oral | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) |
| Any Granisetron | 0 (0.00%) | 3 (0.00%) | 2 (0.00%) | 59 (0.10%) | 37 (0.06%) | 56 (0.08%) | 58 (0.05%) |
| Injectable | 0 (0.00%) | 2 (0.00%) | 1 (0.00%) | 55 (0.09%) | 37 (0.06%) | 51 (0.08%) | 47 (0.04%) |
| Oral | 0 (0.00%) | 1 (0.00%) | 1 (0.00%) | 4 (0.01%) | 0 (0.00%) | 7 (0.01%) | 12 (0.01%) |
| Transdermal | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) |
| Any Metoclopramide HCL | 1,345 (3.22%) | 2,310 (3.71%) | 2,676 (4.31%) | 2,925 (4.76%) | 3,523 (5.47%) | 4,097 (6.03%) | 6,873 (5.61%) |
| Injectable | 37 (0.09%) | 143 (0.23%) | 166 (0.27%) | 326 (0.53%) | 409 (0.63%) | 586 (0.86%) | 1,289 (1.05%) |
| Oral | 1,328 (3.18%) | 2,220 (3.57%) | 2,564 (4.12%) | 2,690 (4.38%) | 3,267 (5.07%) | 3,717 (5.47%) | 6,051 (4.94%) |
| Any Netupitant/Palonosetron HCL | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) |
| Oral | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) |
| Any Ondansetron | 399 (0.96%) | 951 (1.53%) | 1,541 (2.48%) | 2,019 (3.29%) | 2,754 (4.27%) | 2,928 (4.31%) | 9,188 (7.50%) |
| Injectable | 51 (0.12%) | 179 (0.29%) | 224 (0.36%) | 461 (0.75%) | 811 (1.26%) | 1,232 (1.81%) | 3,566 (2.91%) |
| Oral | 365 (0.87%) | 832 (1.34%) | 1,408 (2.27%) | 1,723 (2.80%) | 2,257 (3.50%) | 2,119 (3.12%) | 6,690 (5.46%) |
| Palonosetron | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 3 (0.00%) |
| Injectable | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 3 (0.00%) |
| Any Prochlorperazine | 879 (2.11%) | 1,192 (1.92%) | 914 (1.47%) | 713 (1.16%) | 721 (1.12%) | 787 (1.16%) | 1,048 (0.86%) |
| Injectable | 37 (0.09%) | 42 (0.07%) | 8 (0.01%) | 13 (0.02%) | 40 (0.06%) | 58 (0.09%) | 116 (0.09%) |
| Oral | 596 (1.43%) | 835 (1.34%) | 627 (1.01%) | 477 (0.78%) | 508 (0.79%) | 580 (0.85%) | 718 (0.59%) |
| Rectal | 318 (0.76%) | 437 (0.70%) | 335 (0.54%) | 266 (0.43%) | 222 (0.34%) | 191 (0.28%) | 285 (0.23%) |
| Any Promethazine HCL | 5,775 (13.83%) | 8,890 (14.30%) | 9,010 (14.49%) | 7,160 (11.66%) | 9,885 (15.34%) | 10,886 (16.03%) | 17,124 (13.98%) |
| Injectable | 159 (0.38%) | 299 (0.48%) | 389 (0.63%) | 592 (0.96%) | 951 (1.48%) | 1,660 (2.44%) | 2,972 (2.43%) |
| Oral | 4,527 (10.84%) | 7,140 (11.48%) | 7,240 (11.65%) | 5,528 (9.00%) | 8,144 (12.64%) | 8,841 (13.02%) | 13,698 (11.18%) |
| Rectal | 2,112 (5.06%) | 3,104 (4.99%) | 3,011 (4.84%) | 2,260 (3.68%) | 2,841 (4.41%) | 2,869 (4.23%) | 4,015 (3.28%) |



Table 3a. Pregnancy Episodes with Antiemetic Use in Any Trimester among Pregancies with Live-Birth Deliveries in the Mini-Sentinel Distributed Database (MSDD), by Year

| | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
|---|------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Total Unique Episodes | 146,340 | 246,077 | 275,689 | 263,593 | 252,698 | 245,194 | 189,554 |
| Any Dolasetron mesylate | 150 (0.10%) | 75 (0.03%) | 55 (0.02%) | 19 (0.01%) | 19 (0.01%) | 20 (0.01%) | 14 (0.01%) |
| Injectable | 26 (0.02%) | 18 (0.01%) | 17 (0.01%) | 7 (0.00%) | 2 (0.00%) | 7 (0.00%) | 4 (0.00%) |
| Oral | 125 (0.09%) | 59 (0.02%) | 39 (0.01%) | 12 (0.00%) | 17 (0.01%) | 13 (0.01%) | 10 (0.01%) |
| Any Doxylamine succinate/Pyridoxine HCL | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 115 (0.05%) | 3,235 (1.71%) |
| Oral | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 115 (0.05%) | 3,235 (1.71%) |
| Any Granisetron | 22 (0.02%) | 30 (0.01%) | 20 (0.01%) | 12 (0.00%) | 19 (0.01%) | 15 (0.01%) | 10 (0.01%) |
| Injectable | 10 (0.01%) | 16 (0.01%) | 8 (0.00%) | 5 (0.00%) | 7 (0.00%) | 7 (0.00%) | 8 (0.00%) |
| Oral | 12 (0.01%) | 14 (0.01%) | 11 (0.00%) | 5 (0.00%) | 10 (0.00%) | 7 (0.00%) | 2 (0.00%) |
| Transdermal | 0 (0.00%) | 0 (0.00%) | 1 (0.00%) | 3 (0.00%) | 3 (0.00%) | 1 (0.00%) | 0 (0.00%) |
| Any Metoclopramide HCL | 7 <i>,</i> 832 (5.35%) | 11,498 (4.67%) | 11,331 (4.11%) | 9,450 (3.59%) | 8,480 (3.36%) | 8,204 (3.35%) | 6,474 (3.42%) |
| Injectable | 1,442 (0.99%) | 2,234 (0.91%) | 2,214 (0.80%) | 2,108 (0.80%) | 1,801 (0.71%) | 1,752 (0.71%) | 1,430 (0.75%) |
| Oral | 6,895 (4.71%) | 9,877 (4.01%) | 9,709 (3.52%) | 7,823 (2.97%) | 7,094 (2.81%) | 6,919 (2.82%) | 5,424 (2.86%) |
| Any Netupitant/Palonosetron HCL | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) |
| Oral | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) |
| Any Ondansetron | 15,198 (10.39%) | 32,737 (13.30%) | 43,461 (15.76%) | 47,581 (18.05%) | 49,639 (19.64%) | 54,144 (22.08%) | 41,896 (22.10%) |
| Injectable | 5 <i>,</i> 436 (3.71%) | 9,109 (3.70%) | 11,292 (4.10%) | 11,510 (4.37%) | 11,180 (4.42%) | 11,426 (4.66%) | 8,579 (4.53%) |
| Oral | 11,614 (7.94%) | 27,104 (11.01%) | 36,540 (13.25%) | 40,817 (15.48%) | 43,309 (17.14%) | 48,006 (19.58%) | 37,504 (19.79%) |
| Palonosetron | 3 (0.00%) | 11 (0.00%) | 10 (0.00%) | 11 (0.00%) | 18 (0.01%) | 16 (0.01%) | 11 (0.01%) |
| Injectable | 3 (0.00%) | 11 (0.00%) | 10 (0.00%) | 11 (0.00%) | 18 (0.01%) | 16 (0.01%) | 11 (0.01%) |
| Any Prochlorperazine | 1,146 (0.78%) | 1,535 (0.62%) | 1,693 (0.61%) | 1,683 (0.64%) | 1,316 (0.52%) | 1,096 (0.45%) | 916 (0.48%) |
| Injectable | 139 (0.09%) | 244 (0.10%) | 261 (0.09%) | 337 (0.13%) | 60 (0.02%) | 56 (0.02%) | 145 (0.08%) |
| Oral | 801 (0.55%) | 1,070 (0.43%) | 1,209 (0.44%) | 1,172 (0.44%) | 1,075 (0.43%) | 908 (0.37%) | 716 (0.38%) |
| Rectal | 275 (0.19%) | 292 (0.12%) | 320 (0.12%) | 251 (0.10%) | 223 (0.09%) | 160 (0.07%) | 103 (0.05%) |
| Any Promethazine HCL | 18,466 (12.62%) | 25,865 (10.51%) | 27,898 (10.12%) | 25,421 (9.64%) | 22,666 (8.97%) | 21,709 (8.85%) | 16,163 (8.53%) |
| Injectable | 3,029 (2.07%) | 3,738 (1.52%) | 3,855 (1.40%) | 3,360 (1.27%) | 3,089 (1.22%) | 2,834 (1.16%) | 2,071 (1.09%) |
| Oral | 15,040 (10.28%) | 21,271 (8.64%) | 23,151 (8.40%) | 21,483 (8.15%) | 19,269 (7.63%) | 18,600 (7.59%) | 13,933 (7.35%) |
| Rectal | 3,847 (2.63%) | 4,705 (1.91%) | 4,707 (1.71%) | 3,901 (1.48%) | 3,262 (1.29%) | 3,010 (1.23%) | 2,137 (1.13%) |



Table 3b. Episodes with Antiemetic Use among Matched Comparator Cohort¹ in the Mini-Sentinel Distributed Database (MSDD), by Year

| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 |
|---|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Total Unique Episodes | 41,747 | 62,183 | 62,160 | 61,431 | 64,428 | 67,901 | 122,487 |
| Any Dolasetron mesylate | 16 (0.04%) | 34 (0.05%) | 45 (0.07%) | 65 (0.11%) | 153 (0.24%) | 177 (0.26%) | 173 (0.14%) |
| Injectable | 15 (0.04%) | 32 (0.05%) | 37 (0.06%) | 51 (0.08%) | 130 (0.20%) | 146 (0.22%) | 145 (0.12%) |
| Oral | 1 (0.00%) | 3 (0.00%) | 9 (0.01%) | 14 (0.02%) | 25 (0.04%) | 31 (0.05%) | 33 (0.03%) |
| Any Doxylamine succinate/Pyridoxine HCL | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) |
| Oral | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) |
| Any Granisetron | 2 (0.00%) | 2 (0.00%) | 4 (0.01%) | 56 (0.09%) | 56 (0.09%) | 52 (0.08%) | 70 (0.06%) |
| Injectable | 0 (0.00%) | 1 (0.00%) | 2 (0.00%) | 54 (0.09%) | 55 (0.09%) | 50 (0.07%) | 64 (0.05%) |
| Oral | 2 (0.00%) | 1 (0.00%) | 2 (0.00%) | 2 (0.00%) | 2 (0.00%) | 3 (0.00%) | 7 (0.01%) |
| Transdermal | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) |
| Any Metoclopramide HCL | 337 (0.81%) | 518 (0.83%) | 665 (1.07%) | 703 (1.14%) | 877 (1.36%) | 898 (1.32%) | 1,620 (1.32%) |
| Injectable | 24 (0.06%) | 88 (0.14%) | 108 (0.17%) | 217 (0.35%) | 292 (0.45%) | 351 (0.52%) | 738 (0.60%) |
| Oral | 315 (0.75%) | 438 (0.70%) | 567 (0.91%) | 505 (0.82%) | 624 (0.97%) | 595 (0.88%) | 964 (0.79%) |
| Any Netupitant/Palonosetron HCL | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) |
| Oral | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) |
| Any Ondansetron | 60 (0.14%) | 135 (0.22%) | 231 (0.37%) | 430 (0.70%) | 782 (1.21%) | 952 (1.40%) | 2,573 (2.10%) |
| Injectable | 30 (0.07%) | 94 (0.15%) | 149 (0.24%) | 339 (0.55%) | 663 (1.03%) | 839 (1.24%) | 2,152 (1.76%) |
| Oral | 33 (0.08%) | 43 (0.07%) | 94 (0.15%) | 107 (0.17%) | 155 (0.24%) | 147 (0.22%) | 536 (0.44%) |
| Palonosetron | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 3 (0.00%) | 3 (0.00%) | 27 (0.02%) |
| Injectable | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 3 (0.00%) | 3 (0.00%) | 27 (0.02%) |
| Any Prochlorperazine | 376 (0.90%) | 511 (0.82%) | 473 (0.76%) | 373 (0.61%) | 389 (0.60%) | 458 (0.67%) | 739 (0.60%) |
| Injectable | 29 (0.07%) | 28 (0.05%) | 8 (0.01%) | 10 (0.02%) | 42 (0.07%) | 85 (0.13%) | 168 (0.14%) |
| Oral | 284 (0.68%) | 377 (0.61%) | 359 (0.58%) | 284 (0.46%) | 278 (0.43%) | 303 (0.45%) | 465 (0.38%) |
| Rectal | 85 (0.20%) | 134 (0.22%) | 135 (0.22%) | 90 (0.15%) | 87 (0.14%) | 97 (0.14%) | 151 (0.12%) |
| Any Promethazine HCL | 2,107 (5.05%) | 3,276 (5.27%) | 3,531 (5.68%) | 2,854 (4.65%) | 3,956 (6.14%) | 4,030 (5.94%) | 6,339 (5.18%) |
| Injectable | 145 (0.35%) | 301 (0.48%) | 325 (0.52%) | 515 (0.84%) | 709 (1.10%) | 979 (1.44%) | 1,848 (1.51%) |
| Oral | 1,741 (4.17%) | 2,789 (4.49%) | 2,982 (4.80%) | 2,296 (3.74%) | 3,272 (5.08%) | 3,170 (4.67%) | 4,748 (3.88%) |
| Rectal | 470 (1.13%) | 590 (0.95%) | 655 (1.05%) | 426 (0.69%) | 669 (1.04%) | 627 (0.92%) | 884 (0.72%) |

¹Women in matched comparator cohort may have been pregnant at some point during the request period. Women were eligible for the "non-pregnant" cohort if they had no evidence of a live-born delivery during the time period of their pregnant comparator's pregnancy.



Table 3b. Episodes with Antiemetic Use among Matched Comparator Cohort¹ in the Mini-Sentinel Distributed Database (MSDD), by Year

| | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
|---|---------------|----------------|----------------|----------------|----------------|----------------|----------------|
| Total Unique Episodes | 146,340 | 246,077 | 275,689 | 263,593 | 252,698 | 245,194 | 189,554 |
| Any Dolasetron mesylate | 39 (0.03%) | 24 (0.01%) | 29 (0.01%) | 20 (0.01%) | 5 (0.00%) | 4 (0.00%) | 2 (0.00%) |
| Injectable | 32 (0.02%) | 22 (0.01%) | 26 (0.01%) | 12 (0.00%) | 5 (0.00%) | 4 (0.00%) | 1 (0.00%) |
| Oral | 7 (0.00%) | 2 (0.00%) | 3 (0.00%) | 8 (0.00%) | 0 (0.00%) | 0 (0.00%) | 1 (0.00%) |
| Any Doxylamine succinate/Pyridoxine HCL | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 6 (0.00%) | 109 (0.06%) |
| Oral | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 6 (0.00%) | 109 (0.06%) |
| Any Granisetron | 32 (0.02%) | 43 (0.02%) | 41 (0.01%) | 34 (0.01%) | 55 (0.02%) | 39 (0.02%) | 27 (0.01%) |
| Injectable | 26 (0.02%) | 36 (0.01%) | 34 (0.01%) | 27 (0.01%) | 46 (0.02%) | 28 (0.01%) | 22 (0.01%) |
| Oral | 7 (0.00%) | 11 (0.00%) | 12 (0.00%) | 5 (0.00%) | 4 (0.00%) | 7 (0.00%) | 4 (0.00%) |
| Transdermal | 0 (0.00%) | 1 (0.00%) | 0 (0.00%) | 4 (0.00%) | 6 (0.00%) | 7 (0.00%) | 2 (0.00%) |
| Any Metoclopramide HCL | 1,844 (1.26%) | 2,671 (1.09%) | 2,541 (0.92%) | 1,998 (0.76%) | 1,848 (0.73%) | 1,773 (0.72%) | 1,369 (0.72%) |
| Injectable | 803 (0.55%) | 1,202 (0.49%) | 1,272 (0.46%) | 1,034 (0.39%) | 969 (0.38%) | 915 (0.37%) | 738 (0.39%) |
| Oral | 1,134 (0.77%) | 1,596 (0.65%) | 1,378 (0.50%) | 1,056 (0.40%) | 957 (0.38%) | 917 (0.37%) | 702 (0.37%) |
| Any Netupitant/Palonosetron HCL | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) |
| Oral | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) |
| Any Ondansetron | 4,111 (2.81%) | 7,898 (3.21%) | 10,292 (3.73%) | 11,312 (4.29%) | 11,772 (4.66%) | 13,213 (5.39%) | 11,013 (5.81%) |
| Injectable | 3,257 (2.23%) | 5,596 (2.27%) | 6,805 (2.47%) | 6,903 (2.62%) | 6,499 (2.57%) | 6,500 (2.65%) | 4,649 (2.45%) |
| Oral | 1,122 (0.77%) | 2,921 (1.19%) | 4,415 (1.60%) | 5,499 (2.09%) | 6,482 (2.57%) | 8,159 (3.33%) | 7,571 (3.99%) |
| Palonosetron | 28 (0.02%) | 72 (0.03%) | 93 (0.03%) | 75 (0.03%) | 67 (0.03%) | 50 (0.02%) | 35 (0.02%) |
| Injectable | 28 (0.02%) | 72 (0.03%) | 93 (0.03%) | 75 (0.03%) | 67 (0.03%) | 50 (0.02%) | 35 (0.02%) |
| Any Prochlorperazine | 829 (0.57%) | 1,227 (0.50%) | 1,362 (0.49%) | 1,305 (0.50%) | 758 (0.30%) | 685 (0.28%) | 601 (0.32%) |
| Injectable | 207 (0.14%) | 328 (0.13%) | 391 (0.14%) | 439 (0.17%) | 88 (0.03%) | 70 (0.03%) | 163 (0.09%) |
| Oral | 545 (0.37%) | 803 (0.33%) | 873 (0.32%) | 828 (0.31%) | 599 (0.24%) | 561 (0.23%) | 429 (0.23%) |
| Rectal | 135 (0.09%) | 158 (0.06%) | 179 (0.06%) | 117 (0.04%) | 95 (0.04%) | 71 (0.03%) | 48 (0.03%) |
| Any Promethazine HCL | 7,033 (4.81%) | 10,068 (4.09%) | 10,957 (3.97%) | 9,730 (3.69%) | 8,798 (3.48%) | 7,948 (3.24%) | 5,736 (3.03%) |
| Injectable | 1,953 (1.33%) | 2,580 (1.05%) | 2,604 (0.94%) | 2,230 (0.85%) | 2,059 (0.81%) | 1,705 (0.70%) | 1,294 (0.68%) |
| Oral | 5,370 (3.67%) | 7,755 (3.15%) | 8,623 (3.13%) | 7,818 (2.97%) | 7,165 (2.84%) | 6,477 (2.64%) | 4,751 (2.51%) |
| Rectal | 897 (0.61%) | 1,191 (0.48%) | 1,161 (0.42%) | 926 (0.35%) | 742 (0.29%) | 610 (0.25%) | 402 (0.21%) |

¹Women in matched comparator cohort may have been pregnant at some point during the request period. Women were eligible for the "non-pregnant" cohort if they had no evidence of a live-born delivery during the time period of their pregnant comparator's pregnancy.



Table 4a. Pregnancy Episodes with Antiemetic Use in the First Trimester among Pregancies with Live-Birth Deliveries in the Mini-Sentinel Distributed Database (MSDD), by Year

| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 |
|---|---------------|---------------|---------------|---------------|---------------|------------------------|---|
| Total Unique Episodes | 41,747 | 62,183 | 62,160 | 61,431 | 64,428 | 67,901 | 122,487 |
| Any Dolasetron mesylate | 4 (0.01%) | 11 (0.02%) | 38 (0.06%) | 140 (0.23%) | 405 (0.63%) | 640 (0.94%) | 682 (0.56%) |
| Injectable | 3 (0.01%) | 10 (0.02%) | 16 (0.03%) | 16 (0.03%) | 59 (0.09%) | 107 (0.16%) | 140 (0.11%) |
| Oral | 1 (0.00%) | 1 (0.00%) | 22 (0.04%) | 125 (0.20%) | 350 (0.54%) | 539 (0.79%) | 555 (0.45%) |
| Any Doxylamine succinate/Pyridoxine HCL | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) |
| Oral | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) |
| Any Granisetron | 0 (0.00%) | 3 (0.00%) | 1 (0.00%) | 13 (0.02%) | 22 (0.03%) | 19 (0.03%) | 33 (0.03%) |
| Injectable | 0 (0.00%) | 2 (0.00%) | 0 (0.00%) | 12 (0.02%) | 22 (0.03%) | 14 (0.02%) | 25 (0.02%) |
| Oral | 0 (0.00%) | 1 (0.00%) | 1 (0.00%) | 1 (0.00%) | 0 (0.00%) | 5 (0.01%) | 9 (0.01%) |
| Transdermal | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) |
| Any Metoclopramide HCL | 836 (2.00%) | 1,378 (2.22%) | 1,626 (2.62%) | 1,775 (2.89%) | 2,217 (3.44%) | 2 <i>,</i> 469 (3.64%) | 4,309 (3.52%) |
| Injectable | 22 (0.05%) | 78 (0.13%) | 84 (0.14%) | 129 (0.21%) | 183 (0.28%) | 239 (0.35%) | 528 (0.43%) |
| Oral | 827 (1.98%) | 1,331 (2.14%) | 1,575 (2.53%) | 1,698 (2.76%) | 2,111 (3.28%) | 2,330 (3.43%) | 4,029 (3.29%) |
| Any Netupitant/Palonosetron HCL | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) |
| Oral | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) |
| Any Ondansetron | 275 (0.66%) | 623 (1.00%) | 909 (1.46%) | 1,232 (2.01%) | 1,681 (2.61%) | 1,676 (2.47%) | 5,645 (4.61%) |
| Injectable | 28 (0.07%) | 90 (0.14%) | 92 (0.15%) | 187 (0.30%) | 349 (0.54%) | 534 (0.79%) | 1,298 (1.06%) |
| Oral | 259 (0.62%) | 574 (0.92%) | 867 (1.39%) | 1,131 (1.84%) | 1,491 (2.31%) | 1,354 (1.99%) | 4,897 (4.00%) |
| Palonosetron | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 1 (0.00%) |
| Injectable | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 1 (0.00%) |
| Any Prochlorperazine | 564 (1.35%) | 775 (1.25%) | 602 (0.97%) | 450 (0.73%) | 481 (0.75%) | 496 (0.73%) | 691 (0.56%) |
| Injectable | 24 (0.06%) | 23 (0.04%) | 5 (0.01%) | 6 (0.01%) | 15 (0.02%) | 31 (0.05%) | 63 (0.05%) |
| Oral | 366 (0.88%) | 514 (0.83%) | 396 (0.64%) | 285 (0.46%) | 340 (0.53%) | 356 (0.52%) | 470 (0.38%) |
| Rectal | 229 (0.55%) | 322 (0.52%) | 243 (0.39%) | 186 (0.30%) | 154 (0.24%) | 133 (0.20%) | 200 (0.16%) |
| Any Promethazine HCL | 3,567 (8.54%) | 5,567 (8.95%) | 5,646 (9.08%) | 4,448 (7.24%) | 6,278 (9.74%) | 6,770 (9.97%) | , |
| Injectable | 72 (0.17%) | 127 (0.20%) | 172 (0.28%) | 204 (0.33%) | 370 (0.57%) | 584 (0.86%) | 1,189 (0.97%) |
| Oral | 2,716 (6.51%) | 4,341 (6.98%) | 4,418 (7.11%) | 3,368 (5.48%) | 5,102 (7.92%) | 5,472 (8.06%) | 9,112 (7.44%) |
| Rectal | 1,314 (3.15%) | 1,942 (3.12%) | 1,868 (3.01%) | 1,510 (2.46%) | 1,800 (2.79%) | 1,873 (2.76%) | 2,625 (2.14%) |



Table 4a. Pregnancy Episodes with Antiemetic Use in the First Trimester among Pregancies with Live-Birth Deliveries in the Mini-Sentinel Distributed Database (MSDD), by Year

| | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
|---|----------------|----------------|-----------------|-----------------|---------------------|-----------------|-----------------|
| Total Unique Episodes | 146,340 | 246,077 | 275,689 | 263,593 | 252,698 | 245,194 | 189,554 |
| Any Dolasetron mesylate | 94 (0.06%) | 54 (0.02%) | 38 (0.01%) | 11 (0.00%) | 14 (0.01%) | 10 (0.00%) | 6 (0.00%) |
| Injectable | 9 (0.01%) | 8 (0.00%) | 8 (0.00%) | 3 (0.00%) | 0 (0.00%) | 1 (0.00%) | 2 (0.00%) |
| Oral | 86 (0.06%) | 48 (0.02%) | 31 (0.01%) | 8 (0.00%) | 14 (0.01%) | 9 (0.00%) | 4 (0.00%) |
| Any Doxylamine succinate/Pyridoxine HCL | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 32 (0.01%) | 2,444 (1.29%) |
| Oral | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 32 (0.01%) | 2,444 (1.29%) |
| Any Granisetron | 14 (0.01%) | 15 (0.01%) | 12 (0.00%) | 7 (0.00%) | 9 (0.00%) | 7 (0.00%) | 5 (0.00%) |
| Injectable | 5 (0.00%) | 4 (0.00%) | 3 (0.00%) | 3 (0.00%) | 1 (0.00%) | 3 (0.00%) | 3 (0.00%) |
| Oral | 9 (0.01%) | 11 (0.00%) | 8 (0.00%) | 2 (0.00%) | 8 (0.00%) | 4 (0.00%) | 2 (0.00%) |
| Transdermal | 0 (0.00%) | 0 (0.00%) | 1 (0.00%) | 2 (0.00%) | 1 (0.00%) | 0 (0.00%) | 0 (0.00%) |
| Any Metoclopramide HCL | 4,963 (3.39%) | 7,283 (2.96%) | 7,153 (2.59%) | 5,847 (2.22%) | 5,236 (2.07%) | 4,932 (2.01%) | 3,873 (2.04%) |
| Injectable | 580 (0.40%) | 744 (0.30%) | 744 (0.27%) | 671 (0.25%) | 646 (0.26%) | 647 (0.26%) | 544 (0.29%) |
| Oral | 4,644 (3.17%) | 6,850 (2.78%) | 6,707 (2.43%) | 5,429 (2.06%) | 4,799 (1.90%) | 4,517 (1.84%) | 3,532 (1.86%) |
| Any Netupitant/Palonosetron HCL | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) |
| Oral | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) |
| Any Ondansetron | 9,894 (6.76%) | 22,587 (9.18%) | 30,585 (11.09%) | 34,395 (13.05%) | 36,653 (14.50%) | 40,082 (16.35%) | 31,215 (16.47%) |
| Injectable | 2,104 (1.44%) | 3,381 (1.37%) | 4,411 (1.60%) | 4,642 (1.76%) | 4,702 (1.86%) | 4,791 (1.95%) | 3,814 (2.01%) |
| Oral | 8,691 (5.94%) | 20,905 (8.50%) | 28,339 (10.28%) | 32,006 (12.14%) | 34,260 (13.56%) | 37,727 (15.39%) | 29,481 (15.55%) |
| Palonosetron | 1 (0.00%) | 1 (0.00%) | 2 (0.00%) | 1 (0.00%) | 3 (0.00%) | 3 (0.00%) | 3 (0.00%) |
| Injectable | 1 (0.00%) | 1 (0.00%) | 2 (0.00%) | 1 (0.00%) | 3 (0.00%) | 3 (0.00%) | 3 (0.00%) |
| Any Prochlorperazine | 717 (0.49%) | 927 (0.38%) | 1,036 (0.38%) | 1,007 (0.38%) | 827 (0.33%) | 673 (0.27%) | 545 (0.29%) |
| Injectable | 71 (0.05%) | 100 (0.04%) | 110 (0.04%) | 153 (0.06%) | 41 (0.02%) | 9 (0.00%) | 64 (0.03%) |
| Oral | 495 (0.34%) | 662 (0.27%) | 754 (0.27%) | 711 (0.27%) | 659 (0.26%) | 567 (0.23%) | 441 (0.23%) |
| Rectal | 185 (0.13%) | 204 (0.08%) | 223 (0.08%) | 175 (0.07%) | 155 (0.06%) | 107 (0.04%) | 65 (0.03%) |
| Any Promethazine HCL | 12,060 (8.24%) | 17,226 (7.00%) | 18,626 (6.76%) | 17,197 (6.52%) | 15,419 (6.10%) | 14,779 (6.03%) | 10,844 (5.72%) |
| Injectable | 1,160 (0.79%) | 1,218 (0.49%) | 1,219 (0.44%) | 1,045 (0.40%) | 953 (0.38%) | 917 (0.37%) | 660 (0.35%) |
| Oral | 10,144 (6.93%) | 14,795 (6.01%) | 16,254 (5.90%) | 15,255 (5.79%) | , 13,725 (5.43%) | 13,243 (5.40%) | 9,772 (5.16%) |
| Rectal | 2,574 (1.76%) | 3,124 (1.27%) | 3,065 (1.11%) | 2,571 (0.98%) | 2,153 (0.85%) | 1,935 (0.79%) | 1,383 (0.73%) |



Table 4b. Episodes with Antiemetic Use in Time Corresponding to First Trimester¹ among Matched Comparator Cohort² in the Mini-Sentinel Distributed Database (MSDD), by Year

| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 |
|---|-------------|---------------|---------------|---------------|--------------------|--------------------|---------------|
| Total Unique Episodes | 41,747 | 62,183 | 62,160 | 61,431 | 64,428 | 67,901 | 122,487 |
| Any Dolasetron mesylate | 7 (0.02%) | 12 (0.02%) | 9 (0.01%) | 20 (0.03%) | 59 (0.09%) | 58 (0.09%) | 88 (0.07%) |
| Injectable | 6 (0.01%) | 12 (0.02%) | 9 (0.01%) | 17 (0.03%) | 49 (0.08%) | 44 (0.06%) | 69 (0.06%) |
| Oral | 1 (0.00%) | 1 (0.00%) | 0 (0.00%) | 3 (0.00%) | 10 (0.02%) | 14 (0.02%) | 24 (0.02%) |
| Any Doxylamine succinate/Pyridoxine HCL | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) |
| Oral | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) |
| Any Granisetron | 1 (0.00%) | 2 (0.00%) | 0 (0.00%) | 16 (0.03%) | 20 (0.03%) | 17 (0.03%) | 28 (0.02%) |
| Injectable | 0 (0.00%) | 1 (0.00%) | 0 (0.00%) | 16 (0.03%) | 19 (0.03%) | 16 (0.02%) | 26 (0.02%) |
| Oral | 1 (0.00%) | 1 (0.00%) | 0 (0.00%) | 0 (0.00%) | 1 (0.00%) | 1 (0.00%) | 2 (0.00%) |
| Transdermal | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) |
| Any Metoclopramide HCL | 165 (0.40%) | 206 (0.33%) | 298 (0.48%) | 290 (0.47%) | 367 (0.57%) | 349 (0.51%) | 614 (0.50%) |
| Injectable | 7 (0.02%) | 28 (0.05%) | 39 (0.06%) | 66 (0.11%) | 103 (0.16%) | 119 (0.18%) | 256 (0.21%) |
| Oral | 158 (0.38%) | 181 (0.29%) | 261 (0.42%) | 228 (0.37%) | 276 (0.43%) | 243 (0.36%) | 380 (0.31%) |
| Any Netupitant/Palonosetron HCL | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) |
| Oral | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) |
| Any Ondansetron | 17 (0.04%) | 37 (0.06%) | 82 (0.13%) | 138 (0.22%) | 253 (0.39%) | 323 (0.48%) | 815 (0.67%) |
| Injectable | 6 (0.01%) | 24 (0.04%) | 51 (0.08%) | 108 (0.18%) | 200 (0.31%) | 270 (0.40%) | 665 (0.54%) |
| Oral | 11 (0.03%) | 13 (0.02%) | 33 (0.05%) | 34 (0.06%) | 63 (0.10%) | 68 (0.10%) | 177 (0.14%) |
| Palonosetron | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 1 (0.00%) | 2 (0.00%) | 8 (0.01%) |
| Injectable | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 1 (0.00%) | 2 (0.00%) | 8 (0.01%) |
| Any Prochlorperazine | 137 (0.33%) | 200 (0.32%) | 188 (0.30%) | 136 (0.22%) | 148 (0.23%) | 144 (0.21%) | 252 (0.21%) |
| Injectable | 13 (0.03%) | 15 (0.02%) | 2 (0.00%) | 4 (0.01%) | 13 (0.02%) | 25 (0.04%) | 51 (0.04%) |
| Oral | 101 (0.24%) | 148 (0.24%) | 138 (0.22%) | 99 (0.16%) | 109 (0.17%) | 100 (0.15%) | 159 (0.13%) |
| Rectal | 30 (0.07%) | 45 (0.07%) | 56 (0.09%) | 37 (0.06%) | 32 (0.05%) | 31 (0.05%) | 58 (0.05%) |
| Any Promethazine HCL | 890 (2.13%) | 1,383 (2.22%) | 1,468 (2.36%) | 1,232 (2.01%) | , 1,689 (2.62%) | , 1,649 (2.43%) | 2,606 (2.13%) |
| Injectable | 49 (0.12%) | 124 (0.20%) | 102 (0.16%) | 178 (0.29%) | 274 (0.43%) | 314 (0.46%) | 702 (0.57%) |
| Oral | 736 (1.76%) | 1,173 (1.89%) | 1,230 (1.98%) | 1,005 (1.64%) | 1,376 (2.14%) | 1,301 (1.92%) | 1,915 (1.56%) |
| Rectal | 189 (0.45%) | 218 (0.35%) | 248 (0.40%) | 152 (0.25%) | 231 (0.36%) | 230 (0.34%) | 338 (0.28%) |

¹Trimester time periods in the non-pregnant cohort are determined by the corresponding trimester period in each woman's matched pregnant comparator.

²Women in matched comparator cohort may have been pregnant at some point during the request period. Women were eligible for the "non-pregnant" cohort if they had no evidence of a live-born delivery during the time period of their pregnant comparator's pregnancy.



Table 4b. Episodes with Antiemetic Use in Time Corresponding to First Trimester¹ among Matched Comparator Cohort² in the Mini-Sentinel Distributed Database (MSDD), by Year

| | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
|---|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Total Unique Episodes | 146,340 | 246,077 | 275,689 | 263,593 | 252,698 | 245,194 | 189,554 |
| Any Dolasetron mesylate | 20 (0.01%) | 9 (0.00%) | 10 (0.00%) | 12 (0.00%) | 3 (0.00%) | 0 (0.00%) | 0 (0.00%) |
| Injectable | 18 (0.01%) | 8 (0.00%) | 9 (0.00%) | 6 (0.00%) | 3 (0.00%) | 0 (0.00%) | 0 (0.00%) |
| Oral | 2 (0.00%) | 1 (0.00%) | 1 (0.00%) | 6 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) |
| Any Doxylamine succinate/Pyridoxine HCL | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 16 (0.01%) |
| Oral | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 16 (0.01%) |
| Any Granisetron | 12 (0.01%) | 18 (0.01%) | 17 (0.01%) | 9 (0.00%) | 22 (0.01%) | 16 (0.01%) | 9 (0.00%) |
| Injectable | 10 (0.01%) | 13 (0.01%) | 11 (0.00%) | 6 (0.00%) | 14 (0.01%) | 11 (0.00%) | 6 (0.00%) |
| Oral | 3 (0.00%) | 6 (0.00%) | 6 (0.00%) | 2 (0.00%) | 4 (0.00%) | 4 (0.00%) | 2 (0.00%) |
| Transdermal | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 1 (0.00%) | 4 (0.00%) | 2 (0.00%) | 1 (0.00%) |
| Any Metoclopramide HCL | 701 (0.48%) | 1,057 (0.43%) | 1,023 (0.37%) | 805 (0.31%) | 703 (0.28%) | 695 (0.28%) | 499 (0.26%) |
| Injectable | 268 (0.18%) | 383 (0.16%) | 451 (0.16%) | 369 (0.14%) | 329 (0.13%) | 315 (0.13%) | 247 (0.13%) |
| Oral | 465 (0.32%) | 711 (0.29%) | 603 (0.22%) | 467 (0.18%) | 397 (0.16%) | 396 (0.16%) | 275 (0.15%) |
| Any Netupitant/Palonosetron HCL | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) |
| Oral | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) |
| Any Ondansetron | 1,411 (0.96%) | 2,790 (1.13%) | 3,652 (1.32%) | 4,210 (1.60%) | 4,411 (1.75%) | 4,913 (2.00%) | 4,074 (2.15%) |
| Injectable | 1,091 (0.75%) | 1,961 (0.80%) | 2,380 (0.86%) | 2,512 (0.95%) | 2,360 (0.93%) | 2,385 (0.97%) | 1,729 (0.91%) |
| Oral | 383 (0.26%) | 994 (0.40%) | 1,553 (0.56%) | 2,019 (0.77%) | 2,420 (0.96%) | 2,960 (1.21%) | 2,707 (1.43%) |
| Palonosetron | 15 (0.01%) | 33 (0.01%) | 43 (0.02%) | 39 (0.01%) | 39 (0.02%) | 22 (0.01%) | 13 (0.01%) |
| Injectable | 15 (0.01%) | 33 (0.01%) | 43 (0.02%) | 39 (0.01%) | 39 (0.02%) | 22 (0.01%) | 13 (0.01%) |
| Any Prochlorperazine | 308 (0.21%) | 472 (0.19%) | 508 (0.18%) | 523 (0.20%) | 295 (0.12%) | 251 (0.10%) | 231 (0.12%) |
| Injectable | 69 (0.05%) | 103 (0.04%) | 124 (0.04%) | 178 (0.07%) | 54 (0.02%) | 12 (0.00%) | 43 (0.02%) |
| Oral | 206 (0.14%) | 328 (0.13%) | 346 (0.13%) | 331 (0.13%) | 216 (0.09%) | 218 (0.09%) | 180 (0.09%) |
| Rectal | 53 (0.04%) | 61 (0.02%) | 57 (0.02%) | 44 (0.02%) | 35 (0.01%) | 25 (0.01%) | 15 (0.01%) |
| Any Promethazine HCL | 2,808 (1.92%) | 4,040 (1.64%) | 4,411 (1.60%) | 3,919 (1.49%) | 3,603 (1.43%) | 3,305 (1.35%) | 2,385 (1.26%) |
| , Injectable | 757 (0.52%) | 965 (0.39%) | 1,009 (0.37%) | 878 (0.33%) | 789 (0.31%) | 642 (0.26%) | 514 (0.27%) |
| Oral | 2,121 (1.45%) | 3,076 (1.25%) | 3,427 (1.24%) | 3,121 (1.18%) | 2,920 (1.16%) | 2,694 (1.10%) | 1,952 (1.03%) |
| Rectal | 297 (0.20%) | 462 (0.19%) | 415 (0.15%) | 304 (0.12%) | 268 (0.11%) | 239 (0.10%) | 130 (0.07%) |

¹Trimester time periods in the non-pregnant cohort are determined by the corresponding trimester period in each woman's matched pregnant comparator.

²Women in matched comparator cohort may have been pregnant at some point during the request period. Women were eligible for the "non-pregnant" cohort if they had no evidence of a live-born delivery during the time period of their pregnant comparator's pregnancy.



Table 5a. Pregnancy Episodes with Antiemetic Use among Pregancies with Live-Birth Deliveries in the Mini-Sentinel Distributed Database (MSDD), by Maternal Age

| | < 20 years | 20-24 years | 25-29 years | 30-34 years | 35-39 years | 40-44 years | 45-54 years |
|---|-----------------|-----------------|-----------------|-----------------|-----------------|----------------|-------------|
| Total Unique Episodes | 126,298 | 291,136 | 545,817 | 679,811 | 364,461 | 84,823 | 9,136 |
| Any Dolasetron mesylate | 163 (0.13%) | 521 (0.18%) | 900 (0.16%) | 908 (0.13%) | 521 (0.14%) | 100 (0.12%) | 14 (0.15%) |
| Injectable | 74 (0.06%) | 179 (0.06%) | 195 (0.04%) | 150 (0.02%) | 87 (0.02%) | 20 (0.02%) | 4 (0.04%) |
| Oral | 93 (0.07%) | 344 (0.12%) | 719 (0.13%) | 770 (0.11%) | 439 (0.12%) | 81 (0.10%) | 10 (0.11%) |
| Any Doxylamine succinate/Pyridoxine HCL | 201 (0.16%) | 487 (0.17%) | 873 (0.16%) | 1,131 (0.17%) | 531 (0.15%) | 115 (0.14%) | 12 (0.13%) |
| Oral | 201 (0.16%) | 487 (0.17%) | 873 (0.16%) | 1,131 (0.17%) | 531 (0.15%) | 115 (0.14%) | 12 (0.13%) |
| Any Granisetron | 35 (0.03%) | 92 (0.03%) | 92 (0.02%) | 74 (0.01%) | 38 (0.01%) | 11 (0.01%) | 1 (0.01%) |
| Injectable | 32 (0.03%) | 83 (0.03%) | 66 (0.01%) | 44 (0.01%) | 22 (0.01%) | 7 (0.01%) | 0 (0.00%) |
| Oral | 4 (0.00%) | 10 (0.00%) | 26 (0.00%) | 28 (0.00%) | 13 (0.00%) | 4 (0.00%) | 1 (0.01%) |
| Transdermal | 0 (0.00%) | 0 (0.00%) | 2 (0.00%) | 3 (0.00%) | 3 (0.00%) | 0 (0.00%) | 0 (0.00%) |
| Any Metoclopramide HCL | 7,405 (5.86%) | 18,107 (6.22%) | 24,365 (4.46%) | 23,342 (3.43%) | 11,276 (3.09%) | 2,299 (2.71%) | 224 (2.45%) |
| Injectable | 1,243 (0.98%) | 3,295 (1.13%) | 4,381 (0.80%) | 4,337 (0.64%) | 2,162 (0.59%) | 461 (0.54%) | 58 (0.63%) |
| Oral | 6,596 (5.22%) | 15,894 (5.46%) | 21,303 (3.90%) | 20,094 (2.96%) | 9,588 (2.63%) | 1,928 (2.27%) | 175 (1.92%) |
| Any Netupitant/Palonosetron HCL | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) |
| Oral | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) |
| Any Ondansetron | 14,661 (11.61%) | 44,542 (15.30%) | 87,616 (16.05%) | 99,684 (14.66%) | 47,370 (13.00%) | 9,735 (11.48%) | 828 (9.06%) |
| Injectable | 6,628 (5.25%) | 16,883 (5.80%) | 20,599 (3.77%) | 19,496 (2.87%) | 9,146 (2.51%) | 2,068 (2.44%) | 236 (2.58%) |
| Oral | 9,910 (7.85%) | 33,591 (11.54%) | 76,140 (13.95%) | 89,289 (13.13%) | 42,195 (11.58%) | 8,494 (10.01%) | 669 (7.32%) |
| Palonosetron | 0 (0.00%) | 4 (0.00%) | 8 (0.00%) | 26 (0.00%) | 20 (0.01%) | 16 (0.02%) | 9 (0.10%) |
| Injectable | 0 (0.00%) | 4 (0.00%) | 8 (0.00%) | 26 (0.00%) | 20 (0.01%) | 16 (0.02%) | 9 (0.10%) |
| Any Prochlorperazine | 1,267 (1.00%) | 3,419 (1.17%) | 4,530 (0.83%) | 4,067 (0.60%) | 1,920 (0.53%) | 382 (0.45%) | 54 (0.59%) |
| Injectable | 111 (0.09%) | 380 (0.13%) | 467 (0.09%) | 393 (0.06%) | 168 (0.05%) | 35 (0.04%) | 2 (0.02%) |
| Oral | 1,011 (0.80%) | 2,603 (0.89%) | 3,243 (0.59%) | 2,829 (0.42%) | 1,288 (0.35%) | 278 (0.33%) | 40 (0.44%) |
| Rectal | 200 (0.16%) | 644 (0.22%) | 1,108 (0.20%) | 1,067 (0.16%) | 556 (0.15%) | 89 (0.10%) | 14 (0.15%) |
| Any Promethazine HCL | 28,373 (22.47%) | 60,836 (20.90%) | 62,264 (11.41%) | 49,466 (7.28%) | 21,441 (5.88%) | 4,165 (4.91%) | 373 (4.08%) |
| Injectable | 3,685 (2.92%) | 8,295 (2.85%) | 7,928 (1.45%) | 5,943 (0.87%) | 2,559 (0.70%) | 520 (0.61%) | 68 (0.74%) |
| Oral | 25,083 (19.86%) | 52,669 (18.09%) | 51,172 (9.38%) | 39,087 (5.75%) | 16,467 (4.52%) | 3,113 (3.67%) | 274 (3.00%) |
| Rectal | 4,819 (3.82%) | 11,499 (3.95%) | 12,819 (2.35%) | 10,664 (1.57%) | 4,904 (1.35%) | 999 (1.18%) | 77 (0.84%) |



Table 5b. Episodes with Antiemetic Use among Matched Comparator Cohort¹ in the Mini-Sentinel Distributed Database (MSDD), by Age

| | < 20 years | 20-24 years | 25-29 years | 30-34 years | 35-39 years | 40-44 years | 45-54 years |
|---|---------------|----------------|----------------|----------------|------------------------|---------------|-------------|
| Total Unique Episodes | 126,298 | 290,998 | 545,771 | 679,931 | 364,525 | 84,812 | 9,147 |
| Any Dolasetron mesylate | 45 (0.04%) | 119 (0.04%) | 211 (0.04%) | 242 (0.04%) | 143 (0.04%) | 26 (0.03%) | 0 (0.00%) |
| Injectable | 39 (0.03%) | 112 (0.04%) | 181 (0.03%) | 202 (0.03%) | 109 (0.03%) | 15 (0.02%) | 0 (0.00%) |
| Oral | 6 (0.00%) | 8 (0.00%) | 34 (0.01%) | 41 (0.01%) | 37 (0.01%) | 11 (0.01%) | 0 (0.00%) |
| Any Doxylamine succinate/Pyridoxine HCL | 7 (0.01%) | 15 (0.01%) | 34 (0.01%) | 43 (0.01%) | 16 (0.00%) | 0 (0.00%) | 0 (0.00%) |
| Oral | 7 (0.01%) | 15 (0.01%) | 34 (0.01%) | 43 (0.01%) | 16 (0.00%) | 0 (0.00%) | 0 (0.00%) |
| Any Granisetron | 42 (0.03%) | 103 (0.04%) | 99 (0.02%) | 126 (0.02%) | 98 (0.03%) | 37 (0.04%) | 8 (0.09%) |
| Injectable | 38 (0.03%) | 96 (0.03%) | 88 (0.02%) | 106 (0.02%) | 80 (0.02%) | 29 (0.03%) | 8 (0.09%) |
| Oral | 8 (0.01%) | 7 (0.00%) | 6 (0.00%) | 21 (0.00%) | 17 (0.00%) | 10 (0.01%) | 0 (0.00%) |
| Transdermal | 0 (0.00%) | 0 (0.00%) | 6 (0.00%) | 4 (0.00%) | 9 (0.00%) | 1 (0.00%) | 0 (0.00%) |
| Any Metoclopramide HCL | 1,022 (0.81%) | 3,210 (1.10%) | 4,940 (0.91%) | 6,137 (0.90%) | 3 <i>,</i> 445 (0.95%) | 823 (0.97%) | 85 (0.93%) |
| Injectable | 348 (0.28%) | 1,307 (0.45%) | 2,265 (0.42%) | 2,853 (0.42%) | 1,599 (0.44%) | 353 (0.42%) | 26 (0.28%) |
| Oral | 706 (0.56%) | 2,074 (0.71%) | 2,887 (0.53%) | 3,540 (0.52%) | 1,986 (0.54%) | 493 (0.58%) | 62 (0.68%) |
| Any Netupitant/Palonosetron HCL | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) |
| Oral | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) |
| Any Ondansetron | 3,767 (2.98%) | 10,641 (3.66%) | 18,938 (3.47%) | 25,183 (3.70%) | 13,061 (3.58%) | 2,871 (3.39%) | 313 (3.42%) |
| Injectable | 2,687 (2.13%) | 7,342 (2.52%) | 11,140 (2.04%) | 13,866 (2.04%) | 7,557 (2.07%) | 1,720 (2.03%) | 163 (1.78%) |
| Oral | 1,350 (1.07%) | 4,082 (1.40%) | 9,535 (1.75%) | 13,900 (2.04%) | 6,793 (1.86%) | 1,445 (1.70%) | 179 (1.96%) |
| Palonosetron | 3 (0.00%) | 12 (0.00%) | 64 (0.01%) | 146 (0.02%) | 172 (0.05%) | 46 (0.05%) | 10 (0.11%) |
| Injectable | 3 (0.00%) | 12 (0.00%) | 64 (0.01%) | 146 (0.02%) | 172 (0.05%) | 46 (0.05%) | 10 (0.11%) |
| Any Prochlorperazine | 393 (0.31%) | 1,365 (0.47%) | 2,640 (0.48%) | 3,277 (0.48%) | 1,899 (0.52%) | 444 (0.52%) | 68 (0.74%) |
| Injectable | 73 (0.06%) | 311 (0.11%) | 538 (0.10%) | 692 (0.10%) | 376 (0.10%) | 58 (0.07%) | 8 (0.09%) |
| Oral | 280 (0.22%) | 954 (0.33%) | 1,824 (0.33%) | 2,223 (0.33%) | 1,317 (0.36%) | 339 (0.40%) | 51 (0.56%) |
| Rectal | 60 (0.05%) | 198 (0.07%) | 384 (0.07%) | 530 (0.08%) | 324 (0.09%) | 76 (0.09%) | 10 (0.11%) |
| Any Promethazine HCL | 9,040 (7.16%) | 19,679 (6.76%) | 21,806 (4.00%) | 22,150 (3.26%) | 11,009 (3.02%) | 2,390 (2.82%) | 289 (3.16%) |
| Injectable | 1,321 (1.05%) | 3,827 (1.32%) | 5,068 (0.93%) | 5,361 (0.79%) | 2,962 (0.81%) | 635 (0.75%) | 73 (0.80%) |
| Oral | 7,718 (6.11%) | 16,624 (5.71%) | 17,351 (3.18%) | 17,084 (2.51%) | 8,195 (2.25%) | 1,768 (2.08%) | 217 (2.37%) |
| Rectal | 1,110 (0.88%) | 2,300 (0.79%) | 2,562 (0.47%) | 2,594 (0.38%) | 1,321 (0.36%) | 323 (0.38%) | 40 (0.44%) |

¹Women in matched comparator cohort may have been pregnant at some point during the request period. Women were eligible for the "non-pregnant" cohort if they had no evidence of a live-born delivery during the time period of their pregnant comparator's pregnancy.



Appendix A. Date Ranges of Available Data Contributed by Each Data Partner in the Mini-Sentinel Distributed Database as of Request Distribution Date (November 10, 2015)

| Data Partner ID | Data Contribution Period |
|-----------------|--------------------------|
| DP01 | 2009 - 2014 |
| DP02 | 2007 - 2014 |
| DP03 | 2005 - 2014 |
| DP04 | 2001 - 2014 |
| DP05 | 2001 - 2014 |
| DP06 | 2001 - 2014 |
| DP07 | 2001 - 2012 |
| DP08 | 2008 - 2014 |
| DP09 | 2001 - 2014 |
| DP10 | 2001 - 2014 |
| DP11 | 2006 - 2014 |
| DP12 | 2001 - 2014 |
| DP13 | 2001 - 2014 |
| DP14 | 2009 - 2014 |
| DP15 | 2001 - 2014 |



Appendix B. List of Generic Drug Names Used to Define Exposures in this Request

Generic Name

ONDANSETRON DOXYLAMINE SUCCINATE/PYRIDOXINE HCL METOCLOPRAMIDE HCL PROMETHAZINE HCL PROCHLORPERAZINE DOLASETRON MESYLATE GRANISETRON NETUPITANT/PALONOSETRON HCL PALONOSETRON



Appendix C. List of Healthcare Common Procedure Coding System (HCPCS) Procedure Codes Used to Define Exposures in this Request

| Code | Description | Code Type | Code Category |
|-------|---------------------|-----------|---------------|
| | | | |
| J1260 | DOLASETRON MESYLATE | HCPCS | Procedure |
| J1626 | GRANISETRON | HCPCS | Procedure |
| C9210 | PALONOSETRON | HCPCS | Procedure |
| J2469 | PALONOSETRON | HCPCS | Procedure |
| J0780 | PROCHLORPERAZINE | HCPCS | Procedure |
| J2550 | PROMETHAZINE HCL | HCPCS | Procedure |
| J2405 | ONDANSETRON | HCPCS | Procedure |
| J2765 | METOCLOPRAMIDE HCL | HCPCS | Procedure |



| | | | Code | Care |
|-------|--|-----------|-----------|-----------|
| Code | Description | Code Type | Category | Setting |
| 59409 | VAGINAL DELIVERY ONLY | СРТ | Procedure | Innationt |
| | | | | Inpatient |
| 59410 | VAGINAL DELIVERY INCL POSTPARTUM CARE | CPT | Procedure | Inpatient |
| 59510 | ROUTINE OB CARE INCL ANTEPARTUM CAR, CESAREAN DELIVER, POSTPARTUM CARE | СРТ | Procedure | Inpatient |
| 59514 | CESAREAN DELIVERY ONLY | СРТ | Procedure | Inpatient |
| 59515 | CESAREAN DELIVERY, INCL POSTPARTUM CARE | СРТ | Procedure | Inpatient |
| 59610 | OB CARE INCL ANTEPARTUM CAR, VAG DELIVER, POSTPART CARE. AFTER PREV C-SECT | СРТ | Procedure | Inpatient |
| 59612 | VAG DELIVERY ONLY AFTER PREV C-SECT | СРТ | Procedure | Inpatient |
| 59614 | VAG DELIVERY AFTER PREV C-SECT, INCL POSTPARTUM CARE | СРТ | Procedure | Inpatient |
| 59618 | OB CARE INCL ANTEPARTUM CAR, CES DELIVER, POSTPART CARE. AFTER PREV C-SECT | СРТ | Procedure | Inpatient |
| 59620 | CESAREAN DELIVERY ONLY AFTER PREV C-SECT | СРТ | Procedure | Inpatient |
| 59622 | CESAREAN DELIVERY AFTER PREV C-SECT, INCL POSTPARTUM CARE | СРТ | Procedure | Inpatient |
| 72 | FORCEPS, VACUUM, AND BREECH DELIVERY | ICD-9-CM | Procedure | Inpatient |
| 72.0 | LOW FORCEPS OPERATION | ICD-9-CM | Procedure | Inpatient |
| 72.1 | FORCEPS, VACUUM, AND BREECH DELIVERY | ICD-9-CM | Procedure | Inpatient |
| 72.2 | FORCEPS, VACUUM, AND BREECH DELIVERY | ICD-9-CM | Procedure | Inpatient |
| 72.21 | FORCEPS, VACUUM, AND BREECH DELIVERY | ICD-9-CM | Procedure | Inpatient |
| 72.29 | FORCEPS, VACUUM, AND BREECH DELIVERY | ICD-9-CM | Procedure | Inpatient |
| 72.3 | FORCEPS, VACUUM, AND BREECH DELIVERY | ICD-9-CM | Procedure | Inpatient |
| 72.31 | FORCEPS, VACUUM, AND BREECH DELIVERY | ICD-9-CM | Procedure | Inpatient |
| 72.39 | FORCEPS, VACUUM, AND BREECH DELIVERY | ICD-9-CM | Procedure | Inpatient |
| 72.4 | FORCEPS, VACUUM, AND BREECH DELIVERY | ICD-9-CM | Procedure | Inpatient |
| 72.5 | FORCEPS, VACUUM, AND BREECH DELIVERY | ICD-9-CM | Procedure | Inpatient |
| 72.51 | FORCEPS, VACUUM, AND BREECH DELIVERY | ICD-9-CM | Procedure | Inpatient |
| 72.52 | FORCEPS, VACUUM, AND BREECH DELIVERY | ICD-9-CM | Procedure | Inpatient |
| 72.53 | FORCEPS, VACUUM, AND BREECH DELIVERY | ICD-9-CM | Procedure | Inpatient |
| 72.54 | FORCEPS, VACUUM, AND BREECH DELIVERY | ICD-9-CM | Procedure | Inpatient |
| 72.6 | FORCEPS, VACUUM, AND BREECH DELIVERY | ICD-9-CM | Procedure | Inpatient |
| 72.7 | FORCEPS, VACUUM, AND BREECH DELIVERY | ICD-9-CM | Procedure | Inpatient |
| 72.71 | FORCEPS, VACUUM, AND BREECH DELIVERY | ICD-9-CM | Procedure | Inpatient |
| 72.79 | FORCEPS, VACUUM, AND BREECH DELIVERY | ICD-9-CM | Procedure | Inpatient |
| 72.8 | FORCEPS, VACUUM, AND BREECH DELIVERY | ICD-9-CM | Procedure | Inpatient |
| 72.9 | FORCEPS, VACUUM, AND BREECH DELIVERY | ICD-9-CM | Procedure | Inpatient |
| 73 | OTHER PROCEDURES INDUCING OR ASSISTING DELIVERY | ICD-9-CM | Procedure | Inpatient |
| 73.0 | ARTIFICIAL RUPTURE OF MEMBRANES | ICD-9-CM | Procedure | Inpatient |
| 73.01 | OTHER PROCEDURES INDUCING OR ASSISTING DELIVERY | ICD-9-CM | Procedure | Inpatient |
| 73.09 | OTHER PROCEDURES INDUCING OR ASSISTING DELIVERY | ICD-9-CM | Procedure | Inpatient |
| 73.1 | OTHER PROCEDURES INDUCING OR ASSISTING DELIVERY | ICD-9-CM | Procedure | Inpatient |



| | | | Code | Care |
|--------|--|-----------|-----------|-----------|
| Code | Description | Code Type | Category | Setting |
| 73.2 | OTHER PROCEDURES INDUCING OR ASSISTING DELIVERY | ICD-9-CM | Procedure | Inpatient |
| 73.21 | OTHER PROCEDURES INDUCING OR ASSISTING DELIVERY | ICD-9-CM | Procedure | Inpatient |
| 73.22 | OTHER PROCEDURES INDUCING OR ASSISTING DELIVERY | ICD-9-CM | Procedure | Inpatient |
| 73.3 | OTHER PROCEDURES INDUCING OR ASSISTING DELIVERY | ICD-9-CM | Procedure | Inpatient |
| 73.4 | OTHER PROCEDURES INDUCING OR ASSISTING DELIVERY | ICD-9-CM | Procedure | Inpatient |
| 73.5 | OTHER PROCEDURES INDUCING OR ASSISTING DELIVERY | ICD-9-CM | Procedure | Inpatient |
| 73.51 | OTHER PROCEDURES INDUCING OR ASSISTING DELIVERY | ICD-9-CM | Procedure | Inpatient |
| 73.59 | OTHER PROCEDURES INDUCING OR ASSISTING DELIVERY | ICD-9-CM | Procedure | Inpatient |
| 73.6 | OTHER PROCEDURES INDUCING OR ASSISTING DELIVERY | ICD-9-CM | Procedure | Inpatient |
| 73.8 | OTHER PROCEDURES INDUCING OR ASSISTING DELIVERY | ICD-9-CM | Procedure | Inpatient |
| 73.9 | OTHER PROCEDURES INDUCING OR ASSISTING DELIVERY | ICD-9-CM | Procedure | Inpatient |
| 73.91 | OTHER PROCEDURES INDUCING OR ASSISTING DELIVERY | ICD-9-CM | Procedure | Inpatient |
| 73.92 | OTHER PROCEDURES INDUCING OR ASSISTING DELIVERY | ICD-9-CM | Procedure | Inpatient |
| 73.93 | OTHER PROCEDURES INDUCING OR ASSISTING DELIVERY | ICD-9-CM | Procedure | Inpatient |
| 73.94 | OTHER PROCEDURES INDUCING OR ASSISTING DELIVERY | ICD-9-CM | Procedure | Inpatient |
| 73.99 | OTHER PROCEDURES INDUCING OR ASSISTING DELIVERY | ICD-9-CM | Procedure | Inpatient |
| 74.0 | Classical Cesarean Section | ICD-9-CM | Procedure | Inpatient |
| 74.1 | CESAREAN SECTION AND REMOVAL OF FETUS | ICD-9-CM | Procedure | Inpatient |
| 74.2 | CESAREAN SECTION AND REMOVAL OF FETUS | ICD-9-CM | Procedure | Inpatient |
| 74.4 | CESAREAN SECTION AND REMOVAL OF FETUS | ICD-9-CM | Procedure | Inpatient |
| 74.9 | CESAREAN SECTION AND REMOVAL OF FETUS | ICD-9-CM | Procedure | Inpatient |
| 74.99 | CESAREAN SECTION AND REMOVAL OF FETUS | ICD-9-CM | Procedure | Inpatient |
| 641.01 | PLACENTA PREVIA WITHOUT HEMORRHAGE, DELIVERED | ICD-9-CM | Diagnosis | Inpatient |
| 641.11 | HEMORRHAGE FROM PLACENTA PREVIA, DELIVERED | ICD-9-CM | Diagnosis | Inpatient |
| 641.21 | PREMATURE SEPARATION OF PLACENTA, DELIVERED | ICD-9-CM | Diagnosis | Inpatient |
| 641.31 | ANTEPARTUM HEMORRHAGE ASSOC WITH COAG DEFECT, DELIVERED | ICD-9-CM | Diagnosis | Inpatient |
| 641.81 | OTHER ANTEPARTUM HEMORRHAGE, DELIVERED | ICD-9-CM | Diagnosis | Inpatient |
| 641.91 | UNSPECIFIED ANTEPARTUM HEMORRHAGE, DELIVERED | ICD-9-CM | Diagnosis | Inpatient |
| 642.01 | BENIGN ESSENTIAL HYPERTENSION WITH DELIVERY | ICD-9-CM | Diagnosis | Inpatient |
| 642.02 | BENIGN ESSENTIAL HYPERTENSION, WITH DELIVERY, WITH MENTION POSTPARTUM COMP | ICD-9-CM | Diagnosis | Inpatient |
| 642.11 | HYPERTENSION SECONDARY TO RENAL DISEASE, WITH DELIVERY | ICD-9-CM | Diagnosis | Inpatient |
| 642.12 | HYPERTENSION SECONDARY TO RENAL DISEASE, WITH DELIVERY, WITH MENTION POSTPARTUM COMP | ICD-9-CM | Diagnosis | Inpatient |
| 642.21 | OTHER PRE-EXISTING HYPERTENSION, WITH DELIVERY | ICD-9-CM | Diagnosis | Inpatient |
| 642.22 | OTHER PRE-EXISTING HYPERTENSION, WITH DELIVERY, WITH MENTION POSTPARTUM COMP | ICD-9-CM | Diagnosis | Inpatient |
| 642.31 | TRANSIENT HYPERTENSION OF PREGNANCY, WITH DELIVERY | ICD-9-CM | Diagnosis | Inpatient |
| 642.32 | TRANSIENT HYPERTENSION OF PREGNANCY, WITH DELIVERY, WITH MENTION POSTPARTUM COMP | ICD-9-CM | Diagnosis | Inpatient |
| 642.41 | MILD OR UNSPECIFIED PRE-ECLAMPSIA, WITH DELIVERY | ICD-9-CM | Diagnosis | Inpatient |



| | | | Code | Care |
|--------|---|-----------|-----------|-----------|
| Code | Description | Code Type | Category | Setting |
| 642.42 | MILD OR UNSPECIFIED PRE-ECLAMPSIA, WITH DELIVERY, WITH MENTION POSTPARTUM COMP | ICD-9-CM | Diagnosis | Inpatient |
| 642.51 | SEVERE PRE-ECLAMPSIA, WITH DELIVERY | ICD-9-CM | Diagnosis | Inpatient |
| 642.52 | SEVERE PRE-ECLAMPSIA, WITH DELIVERY, WITH MENTION OF POSTPARTUM COMP | ICD-9-CM | Diagnosis | Inpatient |
| 642.61 | ECLAMPSIA, WITH DELIVERY | ICD-9-CM | Diagnosis | Inpatient |
| 642.62 | ECLAMPSIA, WITH DELIVERY, WITH MENTION OF POSTPARTUM COMP | ICD-9-CM | Diagnosis | Inpatient |
| 642.71 | Pre-eclampsia or eclampsia superimposed on pre-existing hypertension, with delivery | ICD-9-CM | Diagnosis | Inpatient |
| 642.72 | Pre-eclampsia or eclampsia superimposed on pre-existing hypertension, with delivery, with mention postpartum complication | ICD-9-CM | Diagnosis | Inpatient |
| 642.91 | UNSPECIFIED HYPERTENSION, WITH DELIVERY | ICD-9-CM | Diagnosis | Inpatient |
| 642.92 | UNSPECIFIED HYPERTENSION, WITH DELIVERY, WITH MENTION POSTPARTUM COMP | ICD-9-CM | Diagnosis | Inpatient |
| 643.01 | Mild hyperemesis gravidarum, delivered | ICD-9-CM | Diagnosis | Inpatient |
| 643.11 | Hyperemesis gravidarum with metabolic disturbance, delivered | ICD-9-CM | Diagnosis | Inpatient |
| 643.21 | LATE VOMITING OF PREGNANCY, DELIVERED | ICD-9-CM | Diagnosis | Inpatient |
| 643.81 | OTHER VOMITING COMPLICATING PREGNANCY, DELIVERED | ICD-9-CM | Diagnosis | Inpatient |
| 643.91 | UNSPECIFIED VOMITING OF PREGNANCY, DELIVERED | ICD-9-CM | Diagnosis | Inpatient |
| 644.21 | EARLY ONSET OF DELIVERY, DELIVERED, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 645.01 | PROLONGED PREGNANCY, WITH DELIVERY, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 645.11 | POST TERM PREGNANCY, DELIVERED, WITH OR WITHOUT MENTION ANTEPARTUM CONDO | ICD-9-CM | Diagnosis | Inpatient |
| 645.21 | PROLONGED PREGNANCY, DELIVERED, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 645.22 | PROLONGED PREGNANCY, DELIVERED, WITH MENT POSTPARTUM COMP | ICD-9-CM | Diagnosis | Inpatient |
| 646.01 | PAPYRACEOUS FETUS, DELIVERED, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 646.11 | EDEMA OR EXCESSIVE WEIGHT GAIN IN PREGNANCY, WITH DELIVERY, WITH OR WITHOUT MENT ANTEPART CON | ICD-9-CM | Diagnosis | Inpatient |
| 646.12 | EDEMA OR EXCESSIVE WEIGHT GAIN IN PREGNANCY, WITH DELIVERY, WITH MENT POSTPARTUM COMP | ICD-9-CM | Diagnosis | Inpatient |
| 646.21 | UNSPECIFIED RENAL DISEASE IN PREGNANCY, WITH DELIVERY, WITH OR WITHOUT MENT ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 646.22 | UNSPECIFIED RENAL DISEASE IN PREGNANCY, WITH DELIVERY, WITH MENT POSTPARTUM COMP | ICD-9-CM | Diagnosis | Inpatient |



| | | | Code | Care |
|--------|---|-----------|-----------|-----------|
| Code | Description | Code Type | Category | Setting |
| 646.31 | HABITUAL ABORTER, DELIVERED, WITH OR WITHOUT MENTION OF ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 646.41 | PERIPHERAL NEURITIS IN PREGNANCY, WITH DELIVERY WITH OR WITHOUT MENT ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 646.42 | PERIPHERAL NEURITIS IN PREGNANCY, WITH DELIVERY, WITH MENTION POSTPARTUM COMP | ICD-9-CM | Diagnosis | Inpatient |
| 646.51 | ASYMPTOMATIC BACTERIURIA IN PREGNANCY, WITH DELIVERY, WITH OR WITHOUT MENT ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 646.52 | ASYMPTOMATIC BACTERIURIA IN PREGNANCY, WITH DELIVERY, WITH MENT POSTPARTUM COMP | ICD-9-CM | Diagnosis | Inpatient |
| 646.61 | INFECTIONS OF GENITOURINARY TRACT IN PREGNANCY, WITH DELIVERY, WITH OR WITHOUT MENT ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 646.62 | INFECTIONS OF GENITOURINARY TRACT IN PREGNANCY, WITH DELIVERY, WITH MENT POSTPARTUM COMP | ICD-9-CM | Diagnosis | Inpatient |
| 646.71 | LIVER DISORDERS IN PREGNANCY, WITH DELIVERY, WITH OR WITHOUT MENT ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 646.81 | OTHER SPECIFIED COMPLICATIONS OF PREGNANCY, WITH DELIVERY, WITH OR WITHOUT MENT ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 646.82 | OTHER SPECIFIED COMPLICATIONS OF PREGNANCY, WITH DELIVERY, WITH MENTION POSTPARTUM COMP | ICD-9-CM | Diagnosis | Inpatient |
| 646.91 | UNSPECIFIED COMPLICATION OF PREGNANCY, WITH DELIVERY, WITH OR WITHOUT MENT ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 647.01 | SYPHILIS OF MOTHER, COMPLICATING PREGNANCY, WITH DELIVERY, WITH OR WITHOUT MENT ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 647.02 | SYPHILIS OF MOTHER, COMPLICATING PREGNANCY, WITH DELIVERY, WITH MENT POSTPARTUM COMP | ICD-9-CM | Diagnosis | Inpatient |
| 647.11 | GONORRHEA OF MOTHER, WITH DELIVERY, WITH OR WITHOUT MENT ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 647.12 | GONORRHEA OF MOTHER, WITH DELIVERY, WITH MENTION OF POSTPARTUM COMP | ICD-9-CM | Diagnosis | Inpatient |
| 647.21 | OTHER VENEREAL DISEASES OF MOTHER, WITH DELIVERY, WITH OR WITHOUT MENT ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 647.22 | OTHER VENEREAL DISEASES OF MOTHER, WITH DELIVERY, WITH MENTION OF POSTPARTUM COMP | ICD-9-CM | Diagnosis | Inpatient |
| 647.31 | TUBERCULOSIS OF MOTHER, WITH DELIVERY, WITH OR WITHOUT MENT ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 647.32 | TUBERCULOSIS OF MOTHER, WITH DELIVERY, WITH MENTION OF POSTPARTUM COMP | ICD-9-CM | Diagnosis | Inpatient |
| 647.41 | MALARIA OF MOTHER, WITH DELIVERY, WITH OR WITHOUT MENT ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |



| | | | Code | Care |
|--------|--|-----------|-----------|-----------|
| Code | Description | Code Type | Category | Setting |
| 647.42 | MALARIA OF MOTHER, WITH DELIVERY, WITH MENTION OF POSTPARTUM COMP | ICD-9-CM | Diagnosis | Inpatient |
| 647.51 | RUBELLA OF MOTHER, WITH DELIVERY, WITH OR WITHOUT MENT ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 647.52 | RUBELLA OF MOTHER, WITH DELIVERY, WITH MENTION OF POSTPARTUM COMP | ICD-9-CM | Diagnosis | Inpatient |
| 647.61 | OTHER VIRAL DISEASES OF MOTHER, WITH DELIVERY, WITH OR WITHOUT MENT ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 647.62 | OTHER VIRAL DISEASES OF MOTHER, WITH DELIVERY, WITH MENTION OF POSTPARTUM COMP | ICD-9-CM | Diagnosis | Inpatient |
| 647.81 | OTHER SPECIFIED INFECTIOUS AND PARASITIC DISEASES OF MOTHER, WITH DELIVERY, WITH OR WITHOUT MENT ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 647.82 | OTHER SPECIFIED INFECTIOUS AND PARASITIC DISEASES OF MOTHER, WITH DELIVERY, WITH MENTION POSTPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 647.91 | UNSPECIFIED INFECTION OR INFESTATION OF MOTHER, WITH DELIVERY, WITH OR WITHOUT MENT ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 647.92 | UNSPECIFIED INFECTION OR INFESTATION OF MOTHER, WITH DELIVERY, WITH MENTION POSTPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 648.01 | DIABETES MELLITUS OF MOTHER, WITH DELIVERY | ICD-9-CM | Diagnosis | Inpatient |
| 648.02 | DIABETES MELLITUS OF MOTHER, WITH DELIVERY, WITH MENTION POSTPARTUM COMP | ICD-9-CM | Diagnosis | Inpatient |
| 648.11 | THYROID DYSFUNCTION OF MOTHER, WITH DELIVERY, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 648.12 | THYROID DYSFUNCTION OF MOTHER, WITH DELIVERY, WITH MENTION POSTPARTUM COMP | ICD-9-CM | Diagnosis | Inpatient |
| 648.21 | ANEMIA OF MOTHER, WITH DELIVERY, WITH OR WITHOUT MENT ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 648.22 | ANEMIA OF MOTHER, WITH DELIVERY, WITH MENTION OF POSTPART COMP | ICD-9-CM | Diagnosis | Inpatient |
| 648.31 | DRUG DEPENDENCE OF MOTHER, WITH DELIVERY, WITH OR WITHOUT MENT ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 648.32 | DRUG DEPENDENCE OF MOTHER, WITH DELIVERY, WITH MENTION OF POSTPARTUM COMP | ICD-9-CM | Diagnosis | Inpatient |
| 648.41 | MENTAL DISORDERS OF MOTHER, WITH DELIVERY, WITH OR WITHOUT MENT ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 648.42 | MENTAL DISORDERS OF MOTHER, WITH DELIVERY, WITH MENTION OF POSTPARTUM COMP | ICD-9-CM | Diagnosis | Inpatient |
| 648.51 | CONGENITAL CARDIOVASCULAR DISORDERS OF MOTHER, WITH DELIVERY, WITH OR WITHOUT MENT ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 648.52 | CONGENITAL CARDIOVASCULAR DISORDERS OF MOTHER, WITH DELIVERY, WITH MENTION POSTPARTUM COMP | ICD-9-CM | Diagnosis | Inpatient |



| | | | Code | Care |
|--------|--|-----------|-----------|-----------|
| Code | Description | Code Type | Category | Setting |
| 648.61 | OTHER CARDIOVASCULAR DISEASES OF MOTHER, WITH DELIVERY, WITH OR WITHOUT MENT ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 648.62 | OTHER CARDIOVASCULAR DISEASES OF MOTHER, WITH DELIVERY, WITH MENTION POSTPARTUM COMP | ICD-9-CM | Diagnosis | Inpatient |
| 648.71 | BONE AND JOINT DISORDERS OF BACK, PELVIS, AND LOWER LIMBS, WITH DELIVERY, WITH OR WITHOUT MENT ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 648.72 | BONE AND JOINT DISORDERS OF BACK, PELVIS, AND LOWER LIMBS, WITH DELIVERY, WITH MENTION POSTPARTUM COMP | ICD-9-CM | Diagnosis | Inpatient |
| 648.81 | ABNORMAL GLUCOSE TOLERANCE OF MOTHER, WITH DELIVERY, WITH OR WITHOUT MENT ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 648.82 | ABNORMAL GLUCOSE TOLERANCE OF MOTHER, WITH DELIVERY, WITH MENTION POSTPARTUM COMP | ICD-9-CM | Diagnosis | Inpatient |
| 648.91 | OTHER CURRENT CONDITIONS CLASSIFIABLE ELSEWHERE OF MOTHER, WITH DELIVERY, WITH OR WITHOUT MENT ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 648.92 | OTHER CURRENT CONDITIONS CLASSIFIABLE ELSEWHERE OF MOTHER, WITH MENTION POSTPARTUM COMP | ICD-9-CM | Diagnosis | Inpatient |
| 649.01 | Tobacco use disorder complicating pregnancy, childbirth, or the puerperium, delivered, with or without mention of antepartum condition | ICD-9-CM | Diagnosis | Inpatient |
| 649.02 | Tobacco use disorder complicating pregnancy, childbirth, or the puerperium, delivered, with mention of postpartum complication | ICD-9-CM | Diagnosis | Inpatient |
| 649.11 | Obesity complicating pregnancy, childbirth, or the puerperium, delivered, with or without mention of antepartum condition | ICD-9-CM | Diagnosis | Inpatient |
| 649.12 | Obesity complicating pregnancy, childbirth, or the puerperium, delivered, with mention of postpartum complication | ICD-9-CM | Diagnosis | Inpatient |
| 649.21 | Bariatric surgery status complicating pregnancy, childbirth, or the puerperium, delivered, with or without mention of antepartum condition | ICD-9-CM | Diagnosis | Inpatient |
| 649.22 | Bariatric surgery status complicating pregnancy, childbirth, or the puerperium, delivered, with mention of postpartum complication | ICD-9-CM | Diagnosis | Inpatient |
| 649.31 | Coagulation defects complicating pregnancy, childbirth, or the puerperium, delivered, with or without mention of antepartum condition | ICD-9-CM | Diagnosis | Inpatient |
| 649.32 | Coagulation defects complicating pregnancy, childbirth, or the puerperium, delivered, with mention of postpartum complication | ICD-9-CM | Diagnosis | Inpatient |
| 649.41 | Epilepsy complicating pregnancy, childbirth, or the puerperium, delivered, with or without mention of antepartum condition | ICD-9-CM | Diagnosis | Inpatient |
| 649.42 | Epilepsy complicating pregnancy, childbirth, or the puerperium, delivered, with mention of postpartum complication | ICD-9-CM | Diagnosis | Inpatient |
| 649.51 | Spotting complicating pregnancy, delivered, with or without mention of antepartum condition | ICD-9-CM | Diagnosis | Inpatient |



| | | | Code | Care |
|--------|---|-----------|-----------|-----------|
| Code | Description | Code Type | Category | Setting |
| 649.61 | Uterine size date discrepancy, delivered, with or without mention of antepartum condition | ICD-9-CM | Diagnosis | Inpatient |
| 649.62 | Uterine size date discrepancy, delivered, with mention of postpartum complication | ICD-9-CM | Diagnosis | Inpatient |
| 649.71 | Cervical shortening, delivered, with or without mention of antepartum condition | ICD-9-CM | Diagnosis | Inpatient |
| 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 | Inpatient |
| 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 | Inpatient |
| 650 | NORMAL DELIVERY | ICD-9-CM | Diagnosis | Inpatient |
| 651.01 | TWIN PREGNANCY, DELIVERED WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 651.11 | TRIPLET PREGNANCY, DELIVERED, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 651.21 | QUADRUPLET PREGNANCY, DELIVERED, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 651.31 | TWIN PREGNANCY WITH FETAL LOSS AND RETENTION OF ONE FETUS, DELIVERED, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 651.41 | TRIPLET PREGNANCY WITH FETAL LOSS AND RETENTION OF ONE OR MORE FETUS(ES), DELIVERED, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 651.51 | QUADRUPLET PREGNANCY WITH FETAL LOSS AND RETENTION OF ONE OR MORE FETUS(ES), DELIVERED, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 651.61 | OTHER MULTIPLE PREGNANCY WITH FETAL LOSS AND RETENTION OF ONE OR MORE FETUS(ES), DELIVERED, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 651.71 | Multiple gestation following (elective) fetal reduction, delivered, with or without mention of antepartum condition | ICD-9-CM | Diagnosis | Inpatient |
| 651.81 | OTHER SPECIFIED MULTIPLE GESTATION, DELIVERED, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 651.91 | UNSPECIFIED MULTIPLE GESTATION, DELIVERED, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 652.01 | UNSTABLE LIE, DELIVERED, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |



| | | | Code | Care |
|--------|---|-----------|-----------|-----------|
| Code | Description | Code Type | Category | Setting |
| 652.11 | BREECH OR OTHER MALPRESENTATION SUCCESSFULLY CONVERTED TO CEPHALIC PRESENTATION, DELIVERED, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 652.21 | BREECH PRESENTATION WITHOUT MENTION OF VERSION, DELIVERED, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 652.31 | TRANSVERSE OR OBLIQUE PRESENTATION, DELIVERED, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 652.41 | FACE OR BROW PRESENTATION, DELIVERED, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 652.51 | HIGH HEAD AT TERM, DELIVERED, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 652.61 | MULTIPLE GESTATION WITH MALPRESENTATION OF ONE FETUS OR MORE, DELIVERED, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 652.71 | PROLAPSED ARM OF FETUS, DELIVERED, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 652.81 | OTHER SPECIFIED MALPOSITION OR MALPRESENTATION, DELIVERED, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 652.91 | UNSPECIFIED MALPOSITION OR MALPRESENTATION, DELIVERED, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 653.01 | MAJOR ABNORMALITY OF BONY PELVIS, NOT FURTHER SPECIFIED, DELIVERED, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 653.11 | GENERALLY CONTRACTED PELVIS, DELIVERED, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 653.21 | INLET CONTRACTION OF PELVIS, DELIVERED, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 653.31 | OUTLET CONTRACTION OF PELVIS, DELIVERED, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 653.41 | FETOPELVIC DISPROPORTION, DELIVERED, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 653.51 | UNUSUALLY LARGE FETUS CAUSING DISPROPORTION, DELIVERED, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 653.61 | HYDROCEPHALIC FETUS CAUSING DISPROPORTION, DELIVERED, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 653.71 | OTHER FETAL ABNORMALITY CAUSING DISPROPORTION, DELIVERED, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 653.81 | DISPROPORTION OF OTHER ORIGIN, DELIVERED, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 653.91 | UNSPECIFIED DISPROPORTION, DELIVERED, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |



| | Description | • • - | Code | Care |
|--------|--|--------------|-----------|-----------|
| Code | | Code Type | Category | Setting |
| 654.01 | CONGENITAL ABNORMALITIES OF UTERUS, WITH DELIVERY, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 654.02 | CONGENITAL ABNORMALITIES OF UTERUS, DELIVERED, WITH MENTION POSTPARTUM COMP | ICD-9-CM | Diagnosis | Inpatient |
| 654.11 | TUMORS OF BODY OF UTERUS, WITH DELIVERY, WITH OR WITHOUT MENT ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 654.12 | TUMORS OF BODY OF UTERUS, DELIVERED, WITH MENTION OF POSTPARTUM COMP | ICD-9-CM | Diagnosis | Inpatient |
| 654.21 | PREVIOUS CESAREAN DELIVERY, DELIVERED, WITH OR WITHOUT MENT ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 654.31 | RETROVERTED AND INCARCERATED GRAVID UTERUS, DELIVERED, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 654.32 | RETROVERTED AND INCARCERATED GRAVID UTERUS, DELIVERED, WITH MENT POSTPARTUM COMP | ICD-9-CM | Diagnosis | Inpatient |
| 654.41 | OTHER ABNORMALITIES IN SHAPE OR POSITION OF GRAVID UTERUS, DELIVERED, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 654.42 | OTHER ABNORMALITIES IN SHAPE OR POSITION OF GRAVID UTERUS, DELIVERED WITH MENTION POSTPARTUM COMP | ICD-9-CM | Diagnosis | Inpatient |
| 654.51 | CERVICAL INCOMPETENCE, WITH DELIVERY, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 654.52 | CERVICAL INCOMPETENCE, DELIVERED, WITH MENTION OF POSTPARTUM COMP | ICD-9-CM | Diagnosis | Inpatient |
| 654.61 | OTHER CONGENITAL OR ACQUIRED ABNORMALITY OF CERVIX, WITH DELIVERY, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 654.62 | OTHER CONGENITAL OR ACQUIRED ABNORMALITY OF CERVIX, DELIVERY, WITH MENTION POSTPARTUM COMP | ICD-9-CM | Diagnosis | Inpatient |
| 654.71 | CONGENITAL OR ACQUIRED ABNORMALITY OF VAGINA, WITH DELIVERY, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 654.72 | CONGENITAL OR ACQUIRED ABNORMALITY OF VAGINA, DELIVERED, WITH MENTION POSTPARTUM COMP | ICD-9-CM | Diagnosis | Inpatient |
| 654.81 | CONGENITAL OR ACQUIRED ABNORMALITY OF VULVA, WITH DELIVERY, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 654.82 | CONGENITAL OR ACQUIRED ABNORMALITY OF VULVA, DELIVERED, WITH MENTION POSTPARTUM COMP | ICD-9-CM | Diagnosis | Inpatient |
| 654.91 | OTHER AND UNSPECIFIED ABNORMALITY OF ORGANS AND SOFT TISSUE, DELIVERED, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 654.92 | OTHER AND UNSPECIFIED ABNORMALITY OF ORGANS AND SOFT TISSUE, DELIVERED WITH MENTION POSTPARTUM COMP | ICD-9-CM | Diagnosis | Inpatient |
| 655.01 | CENTRAL NERVOUS SYSTEM MALFORMATION IN FETUS, WITH DELIVERY, , WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |



| | | | Code | Care |
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| Code | Description | Code Type | Category | Setting |
| 655.11 | CHROMOSOMAL ABNORMALITY IN FETUS, WITH DELIVERY, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 655.21 | HEREDITARY DISEASE IN FAMILY POSSIBLY AFFECTING FETUS, WITH DELIVERY, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 655.31 | SUSPECTED DAMAGE TO FETUS FROM VIRAL DISEASE IN THE MOTHER, WITH DELIVERY, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 655.41 | SUSPECTED DAMAGE TO FETUS FROM OTHER DISEASE IN THE MOTHER, WITH DELIVERY, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 655.51 | SUSPECTED DAMAGE TO FETUS FROM DRUGS, WITH DELIVERY, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 655.61 | SUSPECTED DAMAGE TO FETUS FROM RADIATION, WITH DELIVERY, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 655.71 | DECREASED FETAL MOVEMENTS, DELIVERED, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 655.81 | OTHER KNOWN OR SUSPECTED FETAL ABNORMALITY, NOT ELSEWHERE, WITH DELIVERY, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 655.91 | UNSPECIFIED SUSPECTED FETAL ABNORMALITY, WITH DELIVERY, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 656.01 | FETAL-MATERNAL HEMORRHAGE, WITH DELIVERY, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 656.11 | RHESUS ISOIMMUNIZATION, AFFECTING MANAGEMENT OF MOTHER, DELIVERED, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 656.21 | ISOIMMUNIZATION FROM OTHER AND UNSPECIFIED BLOOD-GROUP, DELIVERED, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 656.31 | FETAL DISTRESS, AFFECTING MANAGEMENT OF MOTHER, DELIVERED, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 656.41 | INTRAUTERINE DEATH, AFFECTING MANAGEMENT OF MOTHER, DELIVERY, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 656.51 | POOR FETAL GROWTH, AFFECTING MANAGEMENT OF MOTHER, DELIVERED, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 656.61 | EXCESSIVE FETAL GROWTH, AFFECTING MANAGEMENT OF MOTHER, DELIVERED, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 656.71 | OTHER PLACENTAL CONDITIONS, AFFECTING MANAGEMENT OF MOTHER, DELIVERED, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 656.81 | OTHER SPECIFIED FETAL AND PLACENTAL PROBLEMS, DELIVERED, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |



| | Description | | Code | Care |
|--------|--|-----------|-----------|-----------|
| Code | Description | Code Type | Category | Setting |
| 656.91 | UNSPECIFIED FETAL AND PLACENTAL PROBLEM, DELIVERED, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 657.01 | POLYHYDRAMNIOS, WITH DELIVERY, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 658.01 | OLIGOHYDRAMNIOS, DELIVERED, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 658.11 | PREMATURE RUPTURE OF MEMBRANES, DELIVERED, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 658.21 | DELAYED DELIVERY AFTER SPONTANEOUS OR UNSPECIFIED RUPTURE, DELIVERED, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 658.31 | DELAYED DELIVERY AFTER ARTIFICIAL RUPTURE OF MEMBRANES, DELIVERED, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 658.41 | INFECTION OF AMNIOTIC CAVITY, DELIVERED , WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 658.81 | OTHER PROBLEMS ASSOCIATED WITH AMNIOTIC CAVITY AND MEMBRANE, DELIVERED, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 658.91 | UNSPECIFIED PROBLEM ASSOCIATED WITH AMNIOTIC CAVITY AND MEMBRANE, DELIVERED, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 659.01 | FAILED MECHANICAL INDUCTION OF LABOR, DELIVERED, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 659.11 | FAILED MEDICAL OR UNSPECIFIED INDUCTION OF LABOR, DELIVERED, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 659.21 | UNSPECIFIED TYPE MATERNAL PYREXIA DURING LABOR, DELIVERED, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 659.31 | GENERALIZED INFECTION DURING LABOR, DELIVERED, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 659.41 | GRAND MULTIPARITY, WITH CURRENT PREGNANCY, DELIVERED, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 659.51 | ELDERLY PRIMIGRAVIDA, DELIVERED, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 659.61 | ELDERLY MULTIGRAVIDA, DELIVERED, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 659.71 | ABNORMALITY IN FETAL HEART RATE/RHYTHM, DELIVERED, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 659.81 | OTHER SPECIFIED INDICATIONS FOR CARE OR INTERVENTION RELATED TO LABOR AND DELIVERY, DELIVERED, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |



| Code | Description | Code Type | Code Category | Care Setting |
|--------|---|-----------|------------------|-----------------|
| 659.91 | UNSPECIFIED INDICATION FOR CARE OR INTERVENTION RELATED TO LABOR AND DELIVERY, DELIVERED, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 660.01 | OBSTRUCTION CAUSED BY MALPOSITION OF FETUS AT ONSET OF LABOR, DELIVERED, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 660.11 | OBSTRUCTION BY BONY PELVIS DURING LABOR, WITH DELIVERY, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 660.21 | OBSTRUCTION BY ABNORMAL PELVIC SOFT TISSUES DURING LABOR, DELIVERED, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 660.31 | DEEP TRANSVERSE ARREST AND PERSISTENT OCCIPITOPOSTERIOR POSITION, DELIVERED, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 660.41 | SHOULDER (GIRDLE) DYSTOCIA, WITH DELIVERY, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 660.51 | LOCKED TWINS, WITH DELIVERY, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 660.61 | FAILED TRIAL OF LABOR, UNSPECIFIED, WITH DELIVERY, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 660.71 | FAILED FORCEPS OR VACUUM EXTRACTOR, UNSPECIFIED, WITH DELIVERY, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 660.81 | OTHER CAUSES OF OBSTRUCTED LABOR, WITH DELIVERY, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 660.91 | UNSPECIFIED OBSTRUCTED LABOR, WITH DELIVERY, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 661.01 | PRIMARY UTERINE INERTIA, WITH DELIVERY, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 661.11 | SECONDARY UTERINE INERTIA, WITH DELIVERY, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 661.21 | OTHER AND UNSPECIFIED UTERINE INERTIA, WITH DELIVERY, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 661.31 | PRECIPITATE LABOR, WITH DELIVERY, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 661.41 | HYPERTONIC, INCOORDINATE, OR PROLONGED UTERINE CONTRACTIONS, WITH DELIVERY, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 661.91 | UNSPECIFIED ABNORMALITY OF LABOR, WITH DELIVERY, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 662.01 | PROLONGED FIRST STAGE OF LABOR, DELIVERED, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |



| ~ · | Description | <u> </u> | Code | Care |
|--------|---|-----------|-----------|-----------|
| Code | | Code Type | Category | Setting |
| 662.11 | PROLONGED LABOR, UNSPECIFIED TYPE, DELIVERED, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 662.21 | PROLONGED SECOND STAGE OF LABOR, DELIVERED, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 662.31 | DELAYED DELIVERY OF SECOND TWIN, TRIPLET, ETC., DELIVERED, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 663.01 | PROLAPSE OF CORD COMPLICATING LABOR AND DELIVERY, DELIVERED, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 663.11 | CORD AROUND NECK, WITH COMPRESSION, COMPLICATING LABOR AND DELIVERY, DELIVERED, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 663.21 | OTHER AND UNSPECIFIED CORD ENTANGLEMENT, WITH COMPRESSION, DELIVERED, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 663.31 | OTHER AND UNSPECIFIED CORD ENTANGLEMENT, WITHOUT MENTION OF COMPRESSION, DELIVERED, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 663.41 | SHORT CORD COMPLICATING LABOR AND DELIVERY, DELIVERED, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 663.51 | VASA PREVIA COMPLICATING LABOR AND DELIVERY, DELIVERED, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 663.61 | VASCULAR LESIONS OF CORD COMPLICATING LABOR AND DELIVERY, DELIVERED, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 663.81 | OTHER UMBILICAL CORD COMPLICATIONS DURING LABOR AND DELIVERY, DELIVERED, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 663.91 | UNSPECIFIED UMBILICAL CORD COMPLICATION DURING LABOR AND DELIVERY, DELIVERED, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 664.01 | FIRST-DEGREE PERINEAL LACERATION, WITH DELIVERY, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 664.11 | SECOND-DEGREE PERINEAL LACERATION, WITH DELIVERY, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 664.21 | THIRD-DEGREE PERINEAL LACERATION, WITH DELIVERY, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 664.31 | FOURTH-DEGREE PERINEAL LACERATION, WITH DELIVERY, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 664.41 | UNSPECIFIED PERINEAL LACERATION, WITH DELIVERY, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 664.51 | VULVAR AND PERINEAL HEMATOMA, WITH DELIVERY, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |



| | | | Code | Care |
|--------|---|-----------|-----------|-----------|
| Code | Description | Code Type | Category | Setting |
| 664.61 | Anal sphincter tear complicating delivery, not associated with third-degree perineal laceration, delivered, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 664.81 | OTHER SPECIFIED TRAUMA TO PERINEUM AND VULVA, WITH DELIVERY, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 664.91 | UNSPECIFIED TRAUMA TO PERINEUM AND VULVA, WITH DELIVERY, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 665.01 | RUPTURE OF UTERUS BEFORE ONSET OF LABOR, WITH DELIVERY, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 665.11 | RUPTURE OF UTERUS DURING LABOR, DELIVERED, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 665.22 | INVERSION OF UTERUS, DELIVERED WITH POSTPARTUM COMPLICATION | ICD-9-CM | Diagnosis | Inpatient |
| 665.31 | LACERATION OF CERVIX, WITH DELIVERY, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 665.41 | HIGH VAGINAL LACERATION, WITH DELIVERY, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 665.51 | OTHER INJURY TO PELVIC ORGANS, WITH DELIVERY, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 665.61 | DAMAGE TO PELVIC JOINTS AND LIGAMENTS, WITH DELIVERY, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 665.71 | PELVIC HEMATOMA, WITH DELIVERY, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 665.72 | PELVIC HEMATOMA, DELIVERED WITH POSTPARTUM COMPLICATION | ICD-9-CM | Diagnosis | Inpatient |
| 665.81 | OTHER SPECIFIED OBSTETRICAL TRAUMA, WITH DELIVERY, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 665.82 | OTHER SPECIFIED OBSTETRICAL TRAUMA, DELIVERED, WITH POSTPARTUM COMP | ICD-9-CM | Diagnosis | Inpatient |
| 665.91 | UNSPECIFIED OBSTETRICAL TRAUMA, WITH DELIVERY, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 665.92 | UNSPECIFIED OBSTETRICAL TRAUMA, DELIVERED, WITH POSTPARTUM COMP | ICD-9-CM | Diagnosis | Inpatient |
| 666.02 | THIRD-STAGE POSTPARTUM HEMORRHAGE, WITH DELIVERY, WITH POSTPARTUM COMP | ICD-9-CM | Diagnosis | Inpatient |
| 666.12 | OTHER IMMEDIATE POSTPARTUM HEMORRHAGE, WITH DELIVERY, WITH MENT POSTPARTUM COMP | ICD-9-CM | Diagnosis | Inpatient |
| 666.22 | DELAYED AND SECONDARY POSTPARTUM HEMORRHAGE, WITH DELIVERY, WITH MENT POSTPARTUM COMP | ICD-9-CM | Diagnosis | Inpatient |
| 666.32 | POSTPARTUM COAGULATION DEFECTS, WITH DELIVERY, WITH MENT POSTPARTUM COMP | ICD-9-CM | Diagnosis | Inpatient |



| | | | Code | Care |
|--------|--|-----------|-----------|-----------|
| Code | Description | Code Type | Category | Setting |
| 667.02 | RETAINED PLACENTA WITHOUT HEMORRHAGE, WITH DELIVERY, WITH MENT POSTPARTUM COMP | ICD-9-CM | Diagnosis | Inpatient |
| 667.12 | RETAINED PORTIONS OF PLACENTA OR MEMBRANES, WITHOUT HEMORRHAGE, WITH DELIVERY, WITH MENT POSTPARTUM COMP | ICD-9-CM | Diagnosis | Inpatient |
| 668.01 | PULMONARY COMPLICATIONS OF ANESTHESIA OR OTHER SEDATION IN LABOR AND DELIVERY, DELIVERY, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 668.02 | PULMONARY COMPLICATIONS OF ANESTHESIA OR OTHER SEDATION IN LABOR AND DELIVERY, DELIVERY, WITH MENT POSTPARTUM COMP | ICD-9-CM | Diagnosis | Inpatient |
| 668.11 | CARDIAC COMPLICATIONS OF ANESTHESIA OR OTHER SEDATION IN LABOR AND DELIVERY, DELIVERY, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 668.12 | CARDIAC COMPLICATIONS OF ANESTHESIA OR OTHER SEDATION IN LABOR AND DELIVERY, DELIVERY, WITH MENT POSTPARTUM COMP | ICD-9-CM | Diagnosis | Inpatient |
| 668.21 | CENTRAL NERVOUS SYSTEM COMPLICATIONS OF ANESTHESIA OR OTHER SEDATION, DELIVERED, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 668.22 | CENTRAL NERVOUS SYSTEM COMPLICATIONS OF ANESTHESIA OR OTHER SEDATION, DELIVERED, WITH MENT POSTPARTUM COMP | ICD-9-CM | Diagnosis | Inpatient |
| 668.81 | OTHER COMPLICATIONS OF ANESTHESIA OR OTHER SEDATION IN LABOR AND DELIVERY, DELIVERED, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 668.82 | OTHER COMPLICATIONS OF ANESTHESIA OR OTHER SEDATION IN LABOR AND DELIVERY, DELIVERED, WITH MENT POSTPARTUM COMP | ICD-9-CM | Diagnosis | Inpatient |
| 668.91 | UNSPECIFIED COMPLICATION OF ANESTHESIA OR OTHER SEDATION, DELIVERED, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 668.92 | UNSPECIFIED COMPLICATION OF ANESTHESIA OR OTHER SEDATION, DELIVERED, WITH MENT POSTPARTUM COMP | ICD-9-CM | Diagnosis | Inpatient |
| 669.01 | MATERNAL DISTRESS, WITH DELIVERY, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 669.02 | MATERNAL DISTRESS, WITH DELIVERY, WITH MENTION OF POSTPARTUM COMP | ICD-9-CM | Diagnosis | Inpatient |
| 669.11 | SHOCK DURING OR FOLLOWING LABOR AND DELIVERY, WITH DELIVERY, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 669.12 | SHOCK DURING OR FOLLOWING LABOR AND DELIVERY, WITH DELIVERY, WITH MENT POSTPARTUM COMP | ICD-9-CM | Diagnosis | Inpatient |
| 669.21 | MATERNAL HYPOTENSION SYNDROME, WITH DELIVERY, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 669.22 | MATERNAL HYPOTENSION SYNDROME, WITH DELIVERY, WITH MENTION POSTPARTUM COMP | ICD-9-CM | Diagnosis | Inpatient |



| | | | Code | Care |
|--------|--|-----------|-----------|-----------|
| Code | Description | Code Type | Category | Setting |
| 669.32 | ACUTE RENAL FAILURE WITH DELIVERY, WITH MENTION OF POSTPARTUM COMP | ICD-9-CM | Diagnosis | Inpatient |
| 669.41 | OTHER COMPLICATIONS OF OBSTETRICAL SURGERY AND PROCEDURES, DELIVERED, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 669.42 | OTHER COMPLICATIONS OF OBSTETRICAL SURGERY AND PROCEDURES, DELIVERED, WITH MENTION POSTPARTUM COMP | ICD-9-CM | Diagnosis | Inpatient |
| 669.51 | FORCEPS OR VACUUM EXTRACTOR DELIVERY WITHOUT MENTION OF INDICATION, DELIVERED, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 669.61 | BREECH EXTRACTION, WITHOUT MENTION OF INDICATION, DELIVERED, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 669.71 | CESAREAN DELIVERY, WITHOUT MENTION OF INDICATION, DELIVERED, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 669.81 | OTHER COMPLICATIONS OF LABOR AND DELIVERY, DELIVERED, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 669.82 | Other complication of labor and delivery, delivered, with mention of postpartum complication | ICD-9-CM | Diagnosis | Inpatient |
| 669.91 | UNSPECIFIED COMPLICATION OF LABOR AND DELIVERY, WITH DELIVERY, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 669.92 | UNSPECIFIED COMPLICATION OF LABOR AND DELIVERY, WITH DELIVERY, WITH MENTION POSTPARTUM COMP | ICD-9-CM | Diagnosis | Inpatient |
| 670.02 | MAJOR PUERPERAL INFECTION, DELIVERED, WITH MENTION POSTPARTUM COMP | ICD-9-CM | Diagnosis | Inpatient |
| 670.12 | PUERPERAL ENDOMETRITIS, DELIVERED, WITH MENTION OF POSTPARTUM COMPLICATION | ICD-9-CM | Diagnosis | Inpatient |
| 670.22 | PUERPERAL SEPSIS, DELIVERED, WITH MENTION OF POSTPARTUM COMPLICATION | ICD-9-CM | Diagnosis | Inpatient |
| 670.32 | PUERPERAL SEPTIC THROMBOPHLEBITIS, DELIVERED, WITH MENTION OF POSTPARTUM COMPLICATION | ICD-9-CM | Diagnosis | Inpatient |
| 670.82 | OTHER MAJOR PUERPERAL INFECTION, DELIVERED, WITH MENTION OF POSTPARTUM COMPLICATION | ICD-9-CM | Diagnosis | Inpatient |
| 671.01 | VARICOSE VEINS OF LEGS, WITH DELIVERY, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 671.02 | VARICOSE VEINS OF LEGS, WITH DELIVERY, WITH MENTION OF POSTPARTUM COMP | ICD-9-CM | Diagnosis | Inpatient |
| 671.11 | VARICOSE VEINS OF VULVA AND PERINEUM, WITH DELIVERY, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 671.12 | VARICOSE VEINS OF VULVA AND PERINEUM, WITH DELIVERY, WITH MENTION POSTPARTUM COMP | ICD-9-CM | Diagnosis | Inpatient |



| | | | Code | Care |
|--------|--|-----------|-----------|-----------|
| Code | Description | Code Type | Category | Setting |
| 671.21 | SUPERFICIAL THROMBOPHLEBITIS WITH DELIVERY, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 671.22 | SUPERFICIAL THROMBOPHLEBITIS WITH DELIVERY, WITH MENTION POSTPARTUM COMP | ICD-9-CM | Diagnosis | Inpatient |
| 671.31 | DEEP PHLEBOTHROMBOSIS, ANTEPARTUM, WITH DELIVERY, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 671.42 | DEEP PHLEBOTHROMBOSIS, POSTPARTUM, WITH DELIVERY, WITH MENTION POSTPARTUM COMP | ICD-9-CM | Diagnosis | Inpatient |
| 671.51 | OTHER PHLEBITIS AND THROMBOSIS WITH DELIVERY, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 671.52 | OTHER PHLEBITIS AND THROMBOSIS WITH DELIVERY, WITH MENTION POSTPARTUM COMP | ICD-9-CM | Diagnosis | Inpatient |
| 671.81 | OTHER VENOUS COMPLICATIONS, WITH DELIVERY, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 671.82 | OTHER VENOUS COMPLICATIONS, WITH DELIVERY, WITH MENTION POSTPARTUM COMP | ICD-9-CM | Diagnosis | Inpatient |
| 671.91 | UNSPECIFIED VENOUS COMPLICATION, WITH DELIVERY, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 671.92 | UNSPECIFIED VENOUS COMPLICATION, WITH DELIVERY, WITH MENTION POSTPARTUM COMP | ICD-9-CM | Diagnosis | Inpatient |
| 672.02 | PYREXIA OF UNKNOWN ORIGIN, WITH DELIVERY, WITH MENTION POSTPARTUM COMP | ICD-9-CM | Diagnosis | Inpatient |
| 673.01 | OBSTETRICAL AIR EMBOLISM, WITH DELIVERY, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 673.02 | OBSTETRICAL AIR EMBOLISM, WITH DELIVERY, WITH MENTION OF POSTPARTUM COMP | ICD-9-CM | Diagnosis | Inpatient |
| 673.11 | AMNIOTIC FLUID EMBOLISM, WITH DELIVERY, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 673.12 | AMNIOTIC FLUID EMBOLISM, WITH DELIVERY, WITH MENTION OF POSTPARTUM COMP | ICD-9-CM | Diagnosis | Inpatient |
| 673.21 | OBSTETRICAL BLOOD-CLOT EMBOLISM, WITH DELIVERY, WITH OR WITHOUT MENTION ANTEPARUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 673.22 | Obstetrical blood-clot embolism, delivered, with mention of postpartum complication | ICD-9-CM | Diagnosis | Inpatient |
| 673.31 | OBSTETRICAL PYEMIC AND SEPTIC EMBOLISM, WITH DELIVERY, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 673.32 | OBSTETRICAL PYEMIC AND SEPTIC EMBOLISM, WITH DELIVERY, WITH MENTION POSTPARTUM COMP | ICD-9-CM | Diagnosis | Inpatient |
| 673.81 | OTHER OBSTETRICAL PULMONARY EMBOLISM, WITH DELIVERY, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |



| | | | Code | Care |
|--------|--|-----------|-----------|-----------|
| Code | Description | Code Type | Category | Setting |
| 673.82 | OTHER OBSTETRICAL PULMONARY EMBOLISM, WITH DELIVERY, WITH MENTION POSTPARTUM COMP | ICD-9-CM | Diagnosis | Inpatient |
| 674.01 | CEREBROVASCULAR DISORDERS, WITH DELIVERY, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 674.02 | CEREBROVASCULAR DISORDERS, WITH DELIVERY, WITH MENTION OF POSTPARTUM COMP | ICD-9-CM | Diagnosis | Inpatient |
| 674.12 | DISRUPTION OF CESAREAN WOUND, WITH DELIVERY, WITH MENTION POSTPARTUM COMP | ICD-9-CM | Diagnosis | Inpatient |
| 674.22 | DISRUPTION OF PERINEAL WOUND, WITH DELIVERY, WITH MENTION POSTPARTUM COMP | ICD-9-CM | Diagnosis | Inpatient |
| 674.32 | OTHER COMPLIC OF OBSTET SURG WOUNDS, WITH DELIVERY, WITH MENTION POSTPARTUM COMP | ICD-9-CM | Diagnosis | Inpatient |
| 674.42 | PLACENTAL POLYP, WITH DELIVERY, WITH MENTION OF POSTPARTUM COMP | ICD-9-CM | Diagnosis | Inpatient |
| 674.51 | Peripartum cardiomyopathy, delivered, with or without mention of antepartum condition | ICD-9-CM | Diagnosis | Inpatient |
| 674.52 | Peripartum cardiomyopathy, delivered, with mention of postpartum condition | ICD-9-CM | Diagnosis | Inpatient |
| 674.82 | OTHER COMPLICATIONS OF PUERPERIUM, WITH DELIVERY, WITH MENT POSTPARTUM COMP | ICD-9-CM | Diagnosis | Inpatient |
| 674.92 | UNSPECIFIED COMPLICATIONS OF PUERPERIUM, WITH DELIVERY, WITH MENTION POSTPARTUM COMP | ICD-9-CM | Diagnosis | Inpatient |
| 675.01 | INFECTION OF NIPPLE, WITH DELIVERY, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 675.02 | INFECTION OF NIPPLE, WITH DELIVERY, WITH MENTION POSTPARTUM COMP | ICD-9-CM | Diagnosis | Inpatient |
| 675.11 | ABSCESS OF BREAST, WITH DELIVERY, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 675.12 | ABSCESS OF BREAST, WITH DELIVERY, WITH MENTION POSTPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 675.21 | NONPURULENT MASTITIS, WITH DELIVERY, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 675.22 | NONPURULENT MASTITIS, WITH DELIVERY, WITH MENTION POSTPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 675.81 | OTHER SPEC INFECT OF BREAST, WITH DELIVERY, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 675.82 | OTHER SPEC INFECT OF BREAST, WITH DELIVERY, WITH MENTION POSTPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 675.91 | UNSPEC INFECT OF BREAST, WITH DELIVERY, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |



| | | | Code | Care |
|--------|---|-----------|-----------|-----------|
| Code | Description | Code Type | Category | Setting |
| 675.92 | UNSPEC INFECT OF BREAST, WITH DELIVERY, WITH MENTION POSTPARTUM COMP | ICD-9-CM | Diagnosis | Inpatient |
| 676.01 | RETRACTED NIPPLE, WITH DELIVERY, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 676.02 | RETRACTED NIPPLE, WITH DELIVERY, WITH MENTION POSTPARTUM COMP | ICD-9-CM | Diagnosis | Inpatient |
| 676.11 | CRACKED NIPPLE, WITH DELIVERY, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 676.12 | CRACKED NIPPLE, WITH DELIVERY, WITH MENTION POSTPARTUM COMP | ICD-9-CM | Diagnosis | Inpatient |
| 676.21 | ENGORGEMENT OF BREASTS, WITH DELIVERY, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 676.22 | ENGORGEMENT OF BREASTS, WITH DELIVERY, WITH MENTION POSTPARTUM COMP | ICD-9-CM | Diagnosis | Inpatient |
| 676.31 | OTHER DISORDER OF BREASTS, WITH DELIVERY, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 676.32 | OTHER DISORDER OF BREASTS, WITH DELIVERY, WITH MENTION POSTPARTUM COMP | ICD-9-CM | Diagnosis | Inpatient |
| 676.41 | FAILURE OF LACTATION, WITH DELIVERY, WITH OR WITHOUT MENT ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 676.42 | FAILURE OF LACTATION, WITH DELIVERY, WITH MENTION OF POSTPARTUM COMP | ICD-9-CM | Diagnosis | Inpatient |
| 676.51 | SUPPRESSED LACTATION, WITH DELIVERY, WITH OR WITHOUT MENTION ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 676.52 | SUPPRESSED LACTATION, WITH DELIVERY, WITH MENTION OF POSTPARTUM COMP | ICD-9-CM | Diagnosis | Inpatient |
| 676.61 | GALACTORRHEA, WITH DELIVERY, WITH OR WITHOUT MENTION OF ANTEPARTUM COND | ICD-9-CM | Diagnosis | Inpatient |
| 676.62 | GALACTORRHEA, WITH DELIVERY, WITH MENTION OF POSTPARTUM C | ICD-9-CM | Diagnosis | Inpatient |
| 676.81 | OTHER DISORDERS OF LACTATION, WITH DELIVERY, WITH OR WITH | ICD-9-CM | Diagnosis | Inpatient |
| 676.82 | OTHER DISORDERS OF LACTATION, WITH DELIVERY, WITH MENTION | ICD-9-CM | Diagnosis | Inpatient |
| 676.91 | UNSPECIFIED DISORDER OF LACTATION, WITH DELIVERY, WITH OR | ICD-9-CM | Diagnosis | Inpatient |
| 676.92 | UNSPECIFIED DISORDER OF LACTATION, WITH DELIVERY, WITH ME | ICD-9-CM | Diagnosis | Inpatient |
| 678.01 | Fetal hematologic conditions, delivered, with or without mention of antepartum condition | ICD-9-CM | Diagnosis | Inpatient |
| 678.11 | Fetal conjoined twins, delivered, with or without mention of antepartum condition | ICD-9-CM | Diagnosis | Inpatient |
| 679.01 | Maternal complications from in utero procedure, delivered with or without mention of antepartum condition | ICD-9-CM | Diagnosis | Inpatient |



| | | | Code | Care |
|--------|---|-----------|-----------|-----------|
| Code | Description | Code Type | Category | Setting |
| 679.02 | Maternal complications from in utero procedure, delivered with mention of postpartum condition | ICD-9-CM | Diagnosis | Inpatient |
| 679.11 | Fetal complications from in utero procedure, delivered, with or without mention of antepartum condition | ICD-9-CM | Diagnosis | Inpatient |
| 679.12 | Fetal complications from in utero procedure, delivered with mention of postpartum condition | ICD-9-CM | Diagnosis | Inpatient |
| 763.0 | BREECH DELIVERY AND EXTRACTION AFFECTING FETUS OR NEWBORN | ICD-9-CM | Diagnosis | Inpatient |
| 763.2 | FORCEPS DELIVERY AFFECTING FETUS OR NEWBORN | ICD-9-CM | Diagnosis | Inpatient |
| 763.3 | DELIVERY BY VACUUM EXTRACTOR AFFECTING FETUS OR NEWBORN | ICD-9-CM | Diagnosis | Inpatient |
| 763.4 | CESAREAN DELIVERY AFFECTING FETUS OR NEWBORN | ICD-9-CM | Diagnosis | Inpatient |
| 763.6 | PRECIPITATE DELIVERY AFFECTING FETUS OR NEWBORN | ICD-9-CM | Diagnosis | Inpatient |
| 768.0 | Fetal death from asphyxia or anoxia before onset of labor or at unspecified time | ICD-9-CM | Diagnosis | Inpatient |
| 768.1 | Fetal death from asphyxia or anoxia during labor | ICD-9-CM | Diagnosis | Inpatient |
| V27 | OUTCOME OF DELIVERY | ICD-9-CM | Diagnosis | Inpatient |
| V27.0 | SINGLE NEWBORN | ICD-9-CM | Diagnosis | Inpatient |
| V27.1 | SINGLE STILLBORN | ICD-9-CM | Diagnosis | Inpatient |
| V27.2 | TWINS, BOTH LIVEBORN | ICD-9-CM | Diagnosis | Inpatient |
| V27.3 | TWINS, ONE LIVEBORN | ICD-9-CM | Diagnosis | Inpatient |
| V27.4 | TWINS, STILLBORN | ICD-9-CM | Diagnosis | Inpatient |
| V27.5 | OTHER MULTIPLE BIRTH, ALL LIVEBORN | ICD-9-CM | Diagnosis | Inpatient |
| V27.6 | OTHER MULTIPLE BIRTH, SOME LIVEBORN | ICD-9-CM | Diagnosis | Inpatient |
| V27.7 | OTHER MULTIPLE BIRTH, ALL STILLBORN | ICD-9-CM | Diagnosis | Inpatient |
| V27.9 | MOTHER WITH UNSPECIFIED OUTCOME OF DELIVERY | ICD-9-CM | Diagnosis | Inpatient |
| V30 | SINGLE LIVEBORN | ICD-9-CM | Diagnosis | Inpatient |
| V30.0 | SINGLE NEWBORN, BORN IN HOSPITAL | ICD-9-CM | Diagnosis | Inpatient |
| V30.00 | SINGLE NEWBORN, BORN IN HOSPITAL, DELIVERED WITHOUT MENTION OF CESAREAN | ICD-9-CM | Diagnosis | Inpatient |
| V30.01 | SINGLE NEWBORN, BORN IN HOSPITAL, CESAREAN | ICD-9-CM | Diagnosis | Inpatient |
| V30.1 | Single liveborn, born before admission to hospital | ICD-9-CM | Diagnosis | Inpatient |
| V30.2 | Single liveborn, born outside hospital and not hospitalized | ICD-9-CM | Diagnosis | Inpatient |
| V31 | TWIN BIRTH, MATE LIVEBORN | ICD-9-CM | Diagnosis | Inpatient |
| V31.0 | TWIN BIRTH MATE LIVEBORN, BORN IN HOSPITAL | ICD-9-CM | Diagnosis | Inpatient |
| V31.00 | TWIN BIRTH MATE LIVEBORN, BORN IN HOSPITAL DELIEVERED WITHOUT MENTION OF CESAREAN | ICD-9-CM | Diagnosis | Inpatient |
| V31.01 | TWIN BIRTH MATE LIVEBORN, BORN IN HOSPITAL DELIVERED BY CESAREAN SECTION | ICD-9-CM | Diagnosis | Inpatient |
| V31.1 | Twin birth, mate liveborn, born before admission to hospital | ICD-9-CM | Diagnosis | Inpatient |
| V31.2 | Twin birth, mate liveborn, born outside hospital and not hospitalized | ICD-9-CM | Diagnosis | Inpatient |
| V32 | Twin birth mate stillborn | ICD-9-CM | Diagnosis | Inpatient |
| V32.0 | TWIN, BORN IN HOSPITAL, MATE STILLBORN | ICD-9-CM | Diagnosis | Inpatient |
| | | | | |



| | | | Code | Care |
|--------|---|-----------|-----------|-----------|
| Code | Description | Code Type | Category | Setting |
| V32.00 | Twin birth mate stillborn born in hospital, delivered without mention of | ICD-9-CM | Diagnosis | Inpatient |
| | cesarean section | | C | · |
| V32.01 | TWIN, BORN IN HOSPITAL, CESAREAN, MATE STILLBORN | ICD-9-CM | Diagnosis | Inpatient |
| V32.1 | Twin birth, mate stillborn, born before admission to hospital | ICD-9-CM | Diagnosis | Inpatient |
| V32.2 | Twin birth, mate stillborn, born outside hospital and not hospitalized | ICD-9-CM | Diagnosis | Inpatient |
| V33 | Twin birth unspecified whether mate liveborn or stillborn | ICD-9-CM | Diagnosis | Inpatient |
| V33.0 | Twin birth unspecified whether mate liveborn or stillborn born in hospital | ICD-9-CM | Diagnosis | Inpatient |
| V33.00 | Twin birth, unspecified whether mate liveborn or stillborn, born in hospital, delivered without mention of cesarean section | ICD-9-CM | Diagnosis | Inpatient |
| V33.01 | TWIN, BORN IN HOSPITAL, CESAREAN | ICD-9-CM | Diagnosis | Inpatient |
| V33.1 | Twin birth, unspecified whether mate liveborn or stillborn, born before admission to hospital | ICD-9-CM | Diagnosis | Inpatient |
| V33.2 | Twin birth, unspecified whether mate liveborn or stillborn, before outside hospital and not hospitalized | ICD-9-CM | Diagnosis | Inpatient |
| V34 | Other multiple birth (three or more) mates all liveborn | ICD-9-CM | Diagnosis | Inpatient |
| V34.0 | OTHER MULTIPLE, BORN IN HOSPITAL | ICD-9-CM | Diagnosis | Inpatient |
| V34.00 | OTHER MULTIPLE, BORN IN HOSPITAL | ICD-9-CM | Diagnosis | Inpatient |
| V34.01 | OTHER MULTIPLE, BORN IN HOSPITAL, CESAREAN | ICD-9-CM | Diagnosis | Inpatient |
| V34.1 | Other multiple birth (three or more), mates all liveborn, born before admission to hospital | ICD-9-CM | Diagnosis | Inpatient |
| V34.2 | Other multiple birth (three or more), mates all liveborn, born outside hospital and not hospitalized | ICD-9-CM | Diagnosis | Inpatient |
| V35 | OTHER MULTIPLE, mates stillborn | ICD-9-CM | Diagnosis | Inpatient |
| V35.0 | OTHER MULTIPLE, BORN IN HOSPITAL, mates stillborn | ICD-9-CM | Diagnosis | Inpatient |
| V35.00 | OTHER MULTIPLE, BORN IN HOSPITAL, mates stillborn | ICD-9-CM | Diagnosis | Inpatient |
| V35.01 | OTHER MULTIPLE, BORN IN HOSPITAL, CESAREAN, mates stillborn | ICD-9-CM | Diagnosis | Inpatient |
| V35.1 | Other multiple birth (three or more), mates all stillborn, born before admission to hospital | ICD-9-CM | Diagnosis | Inpatient |
| V35.2 | Other multiple birth (three or more), mates all stillborn, born outside hospital and not hospitalized | ICD-9-CM | Diagnosis | Inpatient |
| V36 | Other multiple birth (three or more), mates liveborn and stillborn | ICD-9-CM | Diagnosis | Inpatient |
| V36.0 | OTHER MULTIPLE, BORN IN HOSPITAL, mates liveborn and stillborn | ICD-9-CM | Diagnosis | Inpatient |
| V36.00 | OTHER MULTIPLE, BORN IN HOSPITAL, mates liveborn and stillborn | ICD-9-CM | Diagnosis | Inpatient |
| V36.01 | OTHER MULTIPLE, BORN IN HOSPITAL, CESAREAN, mates liveborn and stillborn | ICD-9-CM | Diagnosis | Inpatient |
| V36.1 | Other multiple birth (three or more), mates liveborn and stillborn, born before admission to hospital | ICD-9-CM | Diagnosis | Inpatient |
| V36.2 | Other multiple birth (three or more), mates liveborn and stillborn, born outside hospital and not hospitalized | ICD-9-CM | Diagnosis | Inpatient |



| Code | Description | Code Type | Code Category | Care Setting |
|--------|---|-----------|------------------|-----------------|
| V37 | Other multiple birth (three or more), unspecified whether mates liveborn or stillborn | | Diagnosis | Inpatient |
| V37.0 | OTHER MULTIPLE, BORN IN HOSPITAL | ICD-9-CM | Diagnosis | Inpatient |
| V37.00 | OTHER MULTIPLE, BORN IN HOSPITAL | ICD-9-CM | Diagnosis | Inpatient |
| V37.01 | OTHER MULTIPLE, BORN IN HOSPITAL, CESAREAN | ICD-9-CM | Diagnosis | Inpatient |
| V37.1 | Other multiple birth (three or more), unspecified whether mates liveborn or stillborn, born before admission to hospital | ICD-9-CM | Diagnosis | Inpatient |
| V37.2 | Other multiple birth (three or more), unspecified whether mates liveborn or stillborn, born outside hospital and not hospitalized | ICD-9-CM | Diagnosis | Inpatient |
| V39 | Liveborn, unspecified whether single, twin or multiple | ICD-9-CM | Diagnosis | Inpatient |
| V39.0 | Liveborn, unspecified whether single, twin or multiple, born in hospital | ICD-9-CM | Diagnosis | Inpatient |
| V39.00 | Liveborn, unspecified whether single, twin or multiple, born in hospital without mention of Cesarean | ICD-9-CM | Diagnosis | Inpatient |
| V39.01 | Liveborn, unspecified whether single, twin or multiple, born in hospital delivered byCesarean section | ICD-9-CM | Diagnosis | Inpatient |
| V39.1 | Liveborn, unspecified whether single, twin or multiple, born before admission to hospital | ICD-9-CM | Diagnosis | Inpatient |
| V39.2 | Liveborn, unspecified whether single, twin or multiple, born outside hospital and not hospitalized | ICD-9-CM | Diagnosis | Inpatient |



Appendix E. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes Used to Define Baseline Characteristic Pre-Existing Conditions in this Request

| Code | Description | Code Type | Code Category |
|--------|--------------------|-----------|---------------|
| 340.* | Multiple Sclerosis | ICD-9-CM | Diagnosis |
| 710.0* | Lupus | ICD-9-CM | Diagnosis |



Appendix F. List of Generic Drug Names Used to Define Baseline Characteristic Medication Use in this Request

Generic Name

INSULIN LISPRO INSULIN NPL/INSULIN LISPRO INSULIN REGULAR, HUMAN INSULIN REGULAR, HUMAN BUFFERED NPH, HUMAN INSULIN ISOPHANE INSULIN ZINC HUMAN REC INSULIN ZINC EXTEND HUMAN REC HUM INSULIN NPH/REG INSULIN HM **INSULIN ADMIN/SUPPLIES** INSULIN REGULAR, HUMAN BUFFERED INSULIN NPH HUMAN SEMI-SYNTHETIC **INSULIN NPH/S/S/REGULAR INSULINS/S** INSULIN ZINC HUMAN SEMI-SYNTHETIC INSULIN REG HUMAN SEMI-SYNTHETIC SAXAGLIPTIN HCL SAXAGLIPTIN HCL/METFORMIN HCL SITAGLIPTIN PHOSPHATE/METFORMIN HCL SITAGLIPTIN PHOSPHATE SITAGLIPTIN/SIMVASTATIN ROSIGLITAZONE/GLIMEPIRIDE ROSIGLITAZONE/METFORMIN HCL TOLAZAMIDE TOLBUTAMIDE GLYBURIDE MIGLITOL ACARBOSE **ROSIGLITAZONE MALEATE GLIMEPIRIDE** GLIPIZIDE CHLORPROPAMIDE NATEGLINIDE METFORMIN HCL **GLYBURIDE/METFORMIN HCL** GLIPIZIDE/METFORMIN HCL INSULIN GLARGINE, HUM. REC. ANLOG **INSULIN GLULISINE PIOGLITAZONE HCL PIOGLITAZONE HCL/METFORMIN HCL** REPAGLINIDE **REPAGLINIDE/METFORMIN HCL INSULIN ASPART INSULN ASP PRT/INSULIN ASPART INSULIN DETEMIR** LIRAGLUTIDE **EXENATIDE**

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Appendix F. List of Generic Drug Names Used to Define Baseline Characteristic Medication Use in this Request

Generic Name

PRAMLINTIDE ACETATE ACETOHEXAMIDE LINAGLIPTIN LINAGLIPTIN/METFORMIN HCL PIOGLITAZONE HCL/GLIMEPIRIDE ALOGLIPTINBENZOATE/PIOGLITAZON ALOGLIPTINBENZOATE ALOGLIPTINBENZOATE/METFORMIN HCL



Appendix G. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes Used to Define Pre-/Post-Term Birth and Gestational Age* in this Request

| | | Algorithm-Derived | Gestational Ag |
|--------------|---|-------------------|----------------|
| Code | Definition Weeks | | Days |
| | Pre-term Birth Codes | | |
| 765.21 | Less than 24 completed weeks of gestation | 24 | 168 |
| 765.22 | 24 completed weeks of gestation | | |
| 765.23 | 25-26 completed weeks of gestation | 26 | 182 |
| 765.24 | 27-28 completed weeks of gestation | 28 | 196 |
| 765.0-765.09 | Extreme immaturity | | |
| 765.25 | 29-30 completed weeks of gestation | 30 | 210 |
| 765.26 | 31-32 completed weeks of gestation | 32 | 224 |
| 765.27 | 33-34 completed weeks of gestation | 34 | 238 |
| 765.28 | 35-36 completed weeks of gestation | 36 | 252 |
| 765.1-765.19 | Other preterm infants | 35 | 245 |
| 765.2 | Preterm with unspecified weeks of gestation | | |
| 644.21 | Onset of delivery before 37 completed weeks of | | |
| | gestation | | |
| | Post-term Birth Codes | | |
| 645.1x | Post-term pregnancy, delivered, with or without mention | 41 | 287 |
| | of antepartum condition (over 40 weeks to 42 completed weeks gestation) | | |
| 766.21 | Post-term infant (gestation period over 40 weeks to 42 completed weeks) | 41 | 287 |
| 645.2x | Prolonged pregnancy, delivered (pregnancy which has advanced beyond 42 completed weeks gestation) | 42 | 294 |
| 766.22 | Prolonged gestation of infant (gestation period over 42 completed weeks) | 42 | 294 |

*Gestational age for deliveries without an ICD-9-CM diagnosis code for preterm or postterm birth in the table is assumed to be 273 days.