

Disclaimer

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

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

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

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

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Overview for Request cder_mpl2p_wp012: Report 4 of 4

Request ID: cder_mpl2p_wp020_nsdv_v01

Request Description: In this report we estimated the risk of hospitalized depression comparing brand name sertraline to its authorized generic in the Sentinel Distributed Database. This is report 4 of 4. Report 1 assesses the risk of intentional self-harm. Report 2 assesses the risk of intentional self-harm and includes covariates for socioeconomic status in the propensity score models. Report 3 assesses the risk of hospitalized depression as well, but does not include covariates for socioeconomic status in the propensity score models.

Sentinel Modular Program Module Used: Cohort Identification and Descriptive Analysis (CIDA) and Propensity Score Analysis (PSA) modules, Version 7.3.3, with additional programming

Data Source: The study period spanned from June 30, 2006 to September 30, 2015. We distributed the analytic package to 16 Data Partners (DP) on March 2, 2020. Only the results from nine DPs whose propensity score models converged are included in this report. See Appendix A for a list of the latest dates of available data for each DP included in this report.

Study Design: This study used a retrospective new-user cohort design.

Exposures: We defined the exposures of interest, new use of brand name sertraline compared to authorized generic sertraline, using outpatient dispensing data and National Drug Codes (NDCs). Please refer to Appendix B for generic medical product names used to define exposures.

Secondary Outcome of Interest: We defined hospitalized depression as evidence of a primary inpatient diagnosis of a mood or depressive disorder. We excluded members with evidence of an inpatient or emergency department self-harm diagnosis on the same day. Both components of the outcome definition used International Classification of Disease, Ninth Revision, with Clinical Modification (ICD-9-CM) diagnosis codes. Please see Appendix C for specific diagnosis codes used to define intentional self-harm in this report.

Cohort Eligibility Criteria: We included members' first valid exposure that occurred between June 30, 2006 and September 30, 2015. We required members to be continuously enrolled in health plans with medical and drug coverage for at least 180 days prior to their first qualifying sertraline dispensing date (i.e., index date). The following age groups were included in the cohort: 12-17, 18-24, 25-54, 55+ years. New use was defined as no evidence of any sertraline dispensing in the 180 days prior to index. We required members to have no evidence of a traumatic brain injury diagnosis in the 180 days preceding and including the index date. We required members to have evidence of a mood or depressive disorder diagnosis in the 90 days preceding and including the index date in order to be included in the cohorts. Please see Appendix D for specific ICD-9-CM diagnosis codes used to define traumatic brain injury and mood or depressive disorder. We examined three separate cohorts:

- 1) Risk window 1-14 days: We excluded members if they had evidence of the outcome of interest on the first day of their sertraline treatment episode.
- 2) Risk window 1-365 days: We excluded members if they had evidence of the outcome of interest on the first day of their sertraline treatment episode.
- 3) Risk window 15-365 days: We excluded members if they had evidence of the outcome of interest in the first 14 days of their sertraline treatment episode.

Overview for Request cder_mpl2p_wp012: Report 4 of 4

Follow-up Time: Follow-up time began on the day of first dispensing and continued for the duration of the exposure episode. Exposure episode lengths were defined using outpatient pharmacy dispensing days supplied to create a sequence of continuous exposure. Exposure episodes were considered continuous if gaps in days supplied were 15 days or less. An episode extension of 15 days was added to the end of each exposure episode. Follow-up continued until the first occurrence of any of the following: 1) outcome occurrence; 2) evidence of a dispensing for another antidepressant; 3) evidence of a dispensing for the opposite study drug; 4) disenrollment; 5) recorded death; 6) end of exposure episode; 7) end of query period; 8) end of risk window (defined above). Please see Appendix E for a list of NDCs used to define censoring criteria.

Propensity Score Estimation: The PSA tool calculated propensity scores and identified matched cohorts based on propensity scores within each Data Partner. The following covariates were assessed in the 180 days prior to index date and included in the propensity score estimation: age, year, sex, Charlson/Elixhauser combined comorbidity score¹, health service and drug utilization, recorded history of analgesic opiate use, antipsychotic medication use, anxiety, anxiolytic or hypnotic medication use, behavioral disorders, lithium and other mood stabilizer use, non-sertraline antidepressant use, other psychological disorders, sleep disorder, substance abuse disorder. In addition to the covariates described above, we used the publicly available data from the United States Census Bureau's annual American Community Survey to estimate median income, median home value, and percent of residents who are unemployed for each member by their recorded ZIP code. Please see Appendices F and G for NDC, ICD-9-CM, Healthcare Common Procedure Coding System (HCPCS) codes, and Current Procedural Terminology, Fourth Edition (CPT-4) codes.

Analysis: The matching ratio for the propensity score was 1:n (n≤10). Patients in the exposed and comparator cohorts were nearest neighbor matched, without replacement, to up to 10 exposed patients. The matching caliper was 0.05. For each comparison, we used case-centered logistic regression to calculate relative risks and 95% confidence intervals. We performed a subgroup analysis by stratifying members from the unmatched cohorts based on their age at index: 12-17, 18-24, 25-54, or 55+ years. We rematched patients within each age group and estimated relative risks and 95% confidence intervals for each subgroup.

Please see Appendix H for the specifications of parameters used in this request.

Limitations: Algorithms to define exposures, outcomes, inclusion and exclusion criteria, and covariates are imperfect and may be misclassified. Therefore, data should be interpreted with this limitation in mind.

Notes: Please contact the Sentinel Operations Center (info@sentinel-system.org) for questions and to provide comments/suggestions for future enhancements to this document.

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

² Patrick AR, Miller M, Barber CW, Wang PS, Canning CF, Schneeweiss S. Identification of Hospitalizations for Intentional Self-Harm when E-Codes are Incompletely Recorded. *Pharmacoepidemiol Drug Saf.* 2010; 19(12): 1263-1275

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

Amount Supplied - number of units (pills, tablets, vials) dispensed. Net amount per NDC per dispensing.

Blackout Period - number of days at the beginning of a treatment episode that events are to be ignored. If an event occurs during the blackout period, the episode is excluded.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Event Deduplication - specifies how events are counted by the Modular Program (MP) algorithm: 0: Counts all occurrences of a health outcome of interest (HOI) during an exposure episode; 1: de-duplicates occurrences of the same HOI code and code type on the same day; 2: de-duplicates occurrences of the same HOI group on the same day (e.g., de-duplicates at the group level).

Exposure Episode Length - number of days after exposure initiation that is considered "exposed time."

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

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

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

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

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

Minimum Days Supplied - specifies a minimum number of days in length of the days supplied for the episode to be considered.

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

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

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

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

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

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

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

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

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

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

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

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

*all terms may not be used in this report

**Glossary of Terms for Analyses Using
Propensity Score Analysis (PSA) Module***

Covariate - requester defined binary variable to include in the propensity score estimation model (e.g., diabetes, heart failure, etc.) during requester-defined lookback period. Requester may also choose to add any of the following categorical, continuous, or count metrics to the propensity score estimation model:

1. Age (continuous)
2. Sex
3. Time period (i.e., monitoring period for sequential analyses)
4. Year of exposure
5. Comorbidity score
6. Medical utilization – number of inpatient stays
7. Medical utilization – number of institutional stays
8. Medical utilization – number of emergency department visits
9. Medical utilization – number of outpatient visits
10. Health care utilization – number of other ambulatory encounters (e.g., telemedicine, email consults)
11. Drug utilization – number of dispensings
12. Drug utilization – number of unique generics dispensed
13. Drug Utilization – number of unique drug classes dispensed

Covariate Evaluation Window - specified number of days relative to index date to evaluate the occurrence of covariates of interest. Note: members are required to have continuous enrollment during the covariate evaluation window, regardless of the value included in the "Continuous enrollment before exposure" field.

Individual Level Data Return - program may return individual-level, de-identified datasets to the Sentinel Operations Center (SOC). While the datasets contain a single row per patient for each specified analysis, patient identifiers such as a patient ID are not included in the output. Individual-level datasets are returned to the SOC, aggregated, and used to calculate effect estimates via Cox (proportional hazards) regression.

Mahalanobis Distance - provides a measure of balance across all variables while accounting for their correlation.

Matching Caliper - maximum allowed difference in propensity scores between treatment and control patients. Requester may select any caliper (e.g., 0.01, 0.025, and 0.05).

Matching Ratio - patients in exposed and comparator groups are nearest neighbor matched by a 1:1 or 1:n (up to 10) matching ratio.

Matched Conditional and Unconditional Analysis - in a conditional matched analysis, a Cox model, stratified by Data Partner site and matched set, is run on the matched population. This can be done for both the both 1:1 and 1:n matched cohorts. In an unconditional analysis, a Cox model, stratified by Data Partner site only, is run on the matched population. This can be done for the 1:1 matched cohort only.

Propensity Score Stratification - option to stratify propensity scores based on requester-defined percentiles in the unmatched population. In a stratified analysis, a Cox model, stratified by Data Partner site, is run on the stratified population. Note that all patients identified in exposure and comparator cohorts are used in the analysis.

PSM Tool - performs effect estimation by comparing exposure propensity-score matched parallel new user cohorts. Propensity score estimation and matching are conducted within each Sentinel Data Partner site via distributed programming code; data are returned to the SOC, aggregated, and used to calculate effect estimates.

Risk-set Level Data Return - alternative to the patient-level data return approach. In this approach, the PSM tool will produce de-identified, risk-set level datasets instead of or in addition to individual-level output. Whereas each observation in the patient-level datasets represents one patient in the cohort, each observation in the risk set dataset represents one event. Risk sets are created at the Data Partner site, returned to the SOC, aggregated, and used to calculate effect estimates via case-centered logistic regression.

Subgroup Analysis - may be conducted using any requester-defined covariates. Subgroup analyses may be performed in the unmatched and the matched population.

Glossary of Terms for Analyses Using
Propensity Score Analysis (PSA) Module*

Zero Cell Correction - indicator for whether to screen variables with a zero correction added to each cell in the confounder/outcome 2x2 table. Recommended when the number of exposed outcomes is fewer than 150.

*all terms may not be used in this report

Table 1a. Cohort of New Initiators of Brand Name Sertraline and Authorized Generic Sertraline in the Sentinel Distributed Database (SDD) from June 30, 2006 to September 30, 2015, Risk Window 1-14 Days, Evaluating Socioeconomic Status (Secondary Outcome: Hospitalized Depression) (Unmatched, Aggregated), Ratio: 1:many, Caliper: 0.05

Characteristic	Medical Product				Covariate Balance	
	Brand Name Sertraline		Authorized Generic Sertraline		Absolute Difference	Standardized Difference
	Number	Percent	Number	Percent		
Number of patients	9,997	100.0%	567,284	100.0%	-	-
Demographics	Mean	Standard Deviation	Mean	Standard Deviation		
Mean age (years)	43.6	16.6	49.8	16.9	-6.212	-0.371
Age (years)	Number	Percent	Number	Percent		
12-17	812	8.1%	34,280	6.0%	2.08	0.081
18-24	986	9.9%	47,724	8.4%	1.45	0.05
25-54	5,581	55.8%	254,426	44.8%	10.977	0.221
55+	2,618	26.2%	230,854	40.7%	-14.507	-0.311
Sex						
Female	7,408	74.1%	395,526	69.7%	4.379	0.098
Male	2,589	25.9%	171,758	30.3%	-4.379	-0.098
Year						
2006	5,303	53.0%	6,920	1.2%	51.826	1.434
2007	701	7.0%	21,784	3.8%	3.172	0.14
2008	663	6.6%	34,669	6.1%	0.521	0.021
2009	763	7.6%	57,998	10.2%	-2.592	-0.091
2010	602	6.0%	85,242	15.0%	-9.005	-0.297
2011	543	5.4%	86,287	15.2%	-9.779	-0.326
2012	452	4.5%	74,211	13.1%	-8.56	-0.306
2013	434	4.3%	74,712	13.2%	-8.829	-0.316
2014	327	3.3%	76,828	13.5%	-10.272	-0.377
2015	209	2.1%	48,633	8.6%	-6.482	-0.292
	Mean	Standard Deviation	Mean	Standard Deviation		
Median household income	71,992.7	27,735.5	63,799.1	23,889.8	8,193.551	0.317
Median value of home	327,375.8	214,578.8	263,380.5	171,071.7	63,995.303	0.33
Percent unemployed	8	3.3	8.6	3.9	-0.628	-0.174
Recorded History of:						
Prior combined comorbidity score	0.7	1.3	1.2	2.1	-0.483	-0.279
	Number	Percent	Number	Percent		
Anxiety	2,573	25.7%	158,707	28.0%	-2.239	-0.051
Behavioral disorders	461	4.6%	24,985	4.4%	0.207	0.01
Other psychological disorders	2,506	25.1%	146,684	25.9%	-0.79	-0.018
Sleep disorder	957	9.6%	68,125	12.0%	-2.436	-0.079
Substance abuse	512	5.1%	44,914	7.9%	-2.796	-0.113

Table 1a. Cohort of New Initiators of Brand Name Sertraline and Authorized Generic Sertraline in the Sentinel Distributed Database (SDD) from June 30, 2006 to September 30, 2015, Risk Window 1-14 Days, Evaluating Socioeconomic Status (Secondary Outcome: Hospitalized Depression) (Unmatched, Aggregated), Ratio: 1:many, Caliper: 0.05

	Medical Product				Covariate Balance	
	Brand Name Sertraline		Authorized Generic Sertraline			
	Mean	Standard Deviation	Mean	Standard Deviation		
Health Service Utilization Intensity:						
Mean number of ambulatory encounters	10.7	10.7	10.5	12	0.193	0.017
Mean number of inpatient hospital encounters	0.2	0.7	0.3	0.8	-0.093	-0.129
Mean number of filled prescriptions	12.2	13.6	15.6	15.6	-3.373	-0.23
Mean number of generics	5.5	4.9	6.5	5	-0.992	-0.2
Mean number of unique drug classes	5	4.3	6	4.5	-0.927	-0.212
History of use:	Number	Percent	Number	Percent		
Analgesic opiates	2,661	26.6%	202,452	35.7%	-9.07	-0.197
Antipsychotics	727	7.3%	49,407	8.7%	-1.437	-0.053
Anxiolytics/Hypnotics	2,907	29.1%	152,244	26.8%	2.241	0.05
Lithium and other mood stabilizers	1,111	11.1%	53,895	9.5%	1.613	0.053
Non-sertraline antidepressants	4,042	40.4%	223,916	39.5%	0.961	0.02

Table 1b. Cohort of New Initiators of Brand Name Sertraline and Authorized Generic Sertraline in the Sentinel Distributed Database (SDD) from June 30, 2006 to September 30, 2015, Risk Window 1-14 Days, Evaluating Socioeconomic Status (Secondary Outcome: Hospitalized Depression) (Matched, Aggregated), Ratio: 1:many, Caliper: 0.05

Characteristic	Medical Product				Covariate Balance	
	Brand Name Sertraline		Authorized Generic Sertraline		Absolute Difference	Standardized Difference
	Number	Percent	Number	Percent		
Number of patients	9,529	95.3%	53,739	9.5%	-	-
Demographics	Mean	Standard Deviation	Mean	Standard Deviation		
Mean age (years)	44.1	16.7	43.9	17.2	0.123	0.007
	Number	Percent	Number	Percent		
Age (years)						
12-17	741	7.8%	720	7.6%	0.222	0.008
18-24	915	9.6%	894	9.4%	0.216	0.007
25-54	5,305	55.7%	5,395	56.6%	-0.942	-0.019
55+	2,568	26.9%	2,520	26.4%	0.504	0.012
Sex						
Female	7,037	73.8%	6,990	73.4%	0.497	0.011
Male	2,492	26.2%	2,539	26.6%	-0.497	-0.011
Year						
2006	4,836	50.8%	4,835	50.7%	0.009	0
2007	700	7.3%	778	8.2%	-0.813	-0.032
2008	663	7.0%	669	7.0%	-0.059	-0.002
2009	763	8.0%	769	8.1%	-0.059	-0.002
2010	602	6.3%	581	6.1%	0.219	0.009
2011	543	5.7%	520	5.5%	0.243	0.011
2012	452	4.7%	453	4.8%	-0.01	0
2013	434	4.6%	419	4.4%	0.153	0.008
2014	327	3.4%	309	3.2%	0.188	0.011
2015	209	2.2%	197	2.1%	0.131	0.009
	Mean	Standard Deviation	Mean	Standard Deviation		
Median household income	73,027.9	28,200.0	72,292.7	27,619.0	735.234	0.026
Median value of home	334,524.8	219,035.0	330,598.5	218,389.0	3,926.269	0.018
Percent unemployed	7.9	3.3	8	3.4	-0.034	-0.01
Recorded History of:						
Prior combined comorbidity score	0.7	1.3	0.7	1.4	0.022	0.016
	Number	Percent	Number	Percent		
Anxiety	2,512	26.4%	2,481	26.0%	0.326	0.007
Behavioral disorders	442	4.6%	444	4.7%	-0.017	-0.001
Other psychological disorders	2,377	24.9%	2,342	24.6%	0.368	0.009
Sleep disorder	936	9.8%	968	10.2%	-0.341	-0.011
Substance abuse	458	4.8%	453	4.8%	0.051	0.002

Table 1b. Cohort of New Initiators of Brand Name Sertraline and Authorized Generic Sertraline in the Sentinel Distributed Database (SDD) from June 30, 2006 to September 30, 2015, Risk Window 1-14 Days, Evaluating Socioeconomic Status (Secondary Outcome: Hospitalized Depression) (Matched, Aggregated), Ratio: 1:many, Caliper: 0.05

	Medical Product				Covariate Balance	
	Brand Name Sertraline		Authorized Generic Sertraline			
	Mean	Standard Deviation	Mean	Standard Deviation		
Health Service Utilization Intensity:						
Mean number of ambulatory encounters	10.7	10.7	10.5	11.7	0.228	0.02
Mean number of inpatient hospital encounters	0.2	0.6	0.2	0.6	-0.006	-0.009
Mean number of filled prescriptions	12	13.5	11.9	12.9	0.123	0.009
Mean number of generics	5.4	4.8	5.3	4.7	0.061	0.013
Mean number of unique drug classes	5	4.2	4.9	4.1	0.049	0.012
History of use:	Number	Percent	Number	Percent		
Analgesic opiates	2,436	25.6%	2,464	25.9%	-0.292	-0.007
Antipsychotics	646	6.8%	625	6.6%	0.225	0.009
Anxiolytics/Hypnotics	2,769	29.1%	2,767	29.0%	0.025	0.001
Lithium and other mood stabilizers	1,028	10.8%	996	10.5%	0.333	0.011
Non-sertraline antidepressants	3,821	40.1%	3,817	40.1%	0.046	0.001

Table 1c. Cohort of New Initiators of Brand Name Sertraline and Authorized Generic Sertraline in the Sentinel Distributed Database (SDD) from June 30, 2006 to September 30, 2015, Risk Window 1-365 Days, Evaluating Socioeconomic Status (Secondary Outcome: Hospitalized Depression) (Unmatched, Aggregated), Ratio: 1:many, Caliper: 0.05

Characteristic	Medical Product				Covariate Balance	
	Brand Name Sertraline		Authorized Generic Sertraline		Absolute Difference	Standardized Difference
	Number	Percent	Number	Percent		
Number of patients	9,997	100.0%	567,284	100.0%	-	-
Demographics	Mean	Standard Deviation	Mean	Standard Deviation		
Mean age (years)	43.6	16.6	49.8	16.9	-6.212	-0.371
Age (years)	Number	Percent	Number	Percent		
12-17	812	8.1%	34,280	6.0%	2.08	0.081
18-24	986	9.9%	47,724	8.4%	1.45	0.05
25-54	5,581	55.8%	254,426	44.8%	10.977	0.221
55+	2,618	26.2%	230,854	40.7%	-14.507	-0.311
Sex						
Female	7,408	74.1%	395,526	69.7%	4.379	0.098
Male	2,589	25.9%	171,758	30.3%	-4.379	-0.098
Year						
2006	5,303	53.0%	6,920	1.2%	51.826	1.434
2007	701	7.0%	21,784	3.8%	3.172	0.14
2008	663	6.6%	34,669	6.1%	0.521	0.021
2009	763	7.6%	57,998	10.2%	-2.592	-0.091
2010	602	6.0%	85,242	15.0%	-9.005	-0.297
2011	543	5.4%	86,287	15.2%	-9.779	-0.326
2012	452	4.5%	74,211	13.1%	-8.56	-0.306
2013	434	4.3%	74,712	13.2%	-8.829	-0.316
2014	327	3.3%	76,828	13.5%	-10.272	-0.377
2015	209	2.1%	48,633	8.6%	-6.482	-0.292
	Mean	Standard Deviation	Mean	Standard Deviation		
Median household income	71,992.7	27,735.5	63,799.1	23,889.8	8,193.551	0.317
Median value of home	327,375.8	214,578.8	263,380.5	171,071.7	63,995.303	0.33
Percent unemployed	8	3.3	8.6	3.9	-0.628	-0.174
Recorded History of:						
Prior combined comorbidity score	0.7	1.3	1.2	2.1	-0.483	-0.279
	Number	Percent	Number	Percent		
Anxiety	2,573	25.7%	158,707	28.0%	-2.239	-0.051
Behavioral disorders	461	4.6%	24,985	4.4%	0.207	0.01
Other psychological disorders	2,506	25.1%	146,684	25.9%	-0.79	-0.018
Sleep disorder	957	9.6%	68,125	12.0%	-2.436	-0.079
Substance abuse	512	5.1%	44,914	7.9%	-2.796	-0.113

Table 1c. Cohort of New Initiators of Brand Name Sertraline and Authorized Generic Sertraline in the Sentinel Distributed Database (SDD) from June 30, 2006 to September 30, 2015, Risk Window 1-365 Days, Evaluating Socioeconomic Status (Secondary Outcome: Hospitalized Depression) (Unmatched, Aggregated), Ratio: 1:many, Caliper: 0.05

	Medical Product				Covariate Balance	
	Brand Name Sertraline		Authorized Generic Sertraline			
	Mean	Standard Deviation	Mean	Standard Deviation		
Health Service Utilization Intensity:						
Mean number of ambulatory encounters	10.7	10.7	10.5	12	0.193	0.017
Mean number of inpatient hospital encounters	0.2	0.7	0.3	0.8	-0.093	-0.129
Mean number of filled prescriptions	12.2	13.6	15.6	15.6	-3.373	-0.23
Mean number of generics	5.5	4.9	6.5	5	-0.992	-0.2
Mean number of unique drug classes	5	4.3	6	4.5	-0.927	-0.212
History of use:	Number	Percent	Number	Percent		
Analgesic opiates	2,661	26.6%	202,452	35.7%	-9.07	-0.197
Antipsychotics	727	7.3%	49,407	8.7%	-1.437	-0.053
Anxiolytics/Hypnotics	2,907	29.1%	152,244	26.8%	2.241	0.05
Lithium and other mood stabilizers	1,111	11.1%	53,895	9.5%	1.613	0.053
Non-sertraline antidepressants	4,042	40.4%	223,916	39.5%	0.961	0.02

Table 1d. Cohort of New Initiators of Brand Name Sertraline and Authorized Generic Sertraline in the Sentinel Distributed Database (SDD) from June 30, 2006 to September 30, 2015, Risk Window 1-365 Days, Evaluating Socioeconomic Status (Secondary Outcome: Hospitalized Depression) (Matched, Aggregated), Ratio: 1:many, Caliper: 0.05

Characteristic	Medical Product				Covariate Balance	
	Brand Name Sertraline		Authorized Generic Sertraline		Absolute Difference	Standardized Difference
	Number	Percent	Number	Percent		
Number of patients	9,529	95.3%	53,739	9.5%	-	-
Demographics	Mean	Standard Deviation	Mean	Standard Deviation		
Mean age (years)	44.1	16.7	43.9	17.2	0.123	0.007
	Number	Percent	Number	Percent		
Age (years)						
12-17	741	7.8%	720	7.6%	0.222	0.008
18-24	915	9.6%	894	9.4%	0.216	0.007
25-54	5,305	55.7%	5,395	56.6%	-0.942	-0.019
55+	2,568	26.9%	2,520	26.4%	0.504	0.012
Sex						
Female	7,037	73.8%	6,990	73.4%	0.497	0.011
Male	2,492	26.2%	2,539	26.6%	-0.497	-0.011
Year						
2006	4,836	50.8%	4,835	50.7%	0.009	0
2007	700	7.3%	778	8.2%	-0.813	-0.032
2008	663	7.0%	669	7.0%	-0.059	-0.002
2009	763	8.0%	769	8.1%	-0.059	-0.002
2010	602	6.3%	581	6.1%	0.219	0.009
2011	543	5.7%	520	5.5%	0.243	0.011
2012	452	4.7%	453	4.8%	-0.01	0
2013	434	4.6%	419	4.4%	0.153	0.008
2014	327	3.4%	309	3.2%	0.188	0.011
2015	209	2.2%	197	2.1%	0.131	0.009
	Mean	Standard Deviation	Mean	Standard Deviation		
Median household income	73,027.9	28,200.0	72,292.7	27,619.0	735.234	0.026
Median value of home	334,524.8	219,035.0	330,598.5	218,389.0	3,926.269	0.018
Percent unemployed	7.9	3.3	8	3.4	-0.034	-0.01
Recorded History of:						
Prior combined comorbidity score	0.7	1.3	0.7	1.4	0.022	0.016
	Number	Percent	Number	Percent		
Anxiety	2,512	26.4%	2,481	26.0%	0.326	0.007
Behavioral disorders	442	4.6%	444	4.7%	-0.017	-0.001
Other psychological disorders	2,377	24.9%	2,342	24.6%	0.368	0.009
Sleep disorder	936	9.8%	968	10.2%	-0.341	-0.011
Substance abuse	458	4.8%	453	4.8%	0.051	0.002

Table 1d. Cohort of New Initiators of Brand Name Sertraline and Authorized Generic Sertraline in the Sentinel Distributed Database (SDD) from June 30, 2006 to September 30, 2015, Risk Window 1-365 Days, Evaluating Socioeconomic Status (Secondary Outcome: Hospitalized Depression) (Matched, Aggregated), Ratio: 1:many, Caliper: 0.05

	Medical Product				Covariate Balance	
	Brand Name Sertraline		Authorized Generic Sertraline			
	Mean	Standard Deviation	Mean	Standard Deviation		
Health Service Utilization Intensity:						
Mean number of ambulatory encounters	10.7	10.7	10.5	11.7	0.228	0.02
Mean number of inpatient hospital encounters	0.2	0.6	0.2	0.6	-0.006	-0.009
Mean number of filled prescriptions	12	13.5	11.9	12.9	0.123	0.009
Mean number of generics	5.4	4.8	5.3	4.7	0.061	0.013
Mean number of unique drug classes	5	4.2	4.9	4.1	0.049	0.012
History of use:	Number	Percent	Number	Percent		
Analgesic opiates	2,436	25.6%	2,464	25.9%	-0.292	-0.007
Antipsychotics	646	6.8%	625	6.6%	0.225	0.009
Anxiolytics/Hypnotics	2,769	29.1%	2,767	29.0%	0.025	0.001
Lithium and other mood stabilizers	1,028	10.8%	996	10.5%	0.333	0.011
Non-sertraline antidepressants	3,821	40.1%	3,817	40.1%	0.046	0.001

Table 1e. Cohort of New Initiators of Brand Name Sertraline and Authorized Generic Sertraline in the Sentinel Distributed Database (SDD) from June 30, 2006 to September 30, 2015, Risk Window 15-365 Days, Evaluating Socioeconomic Status (Secondary Outcome: Hospitalized Depression) (Unmatched, Aggregated), Ratio: 1:many, Caliper: 0.05

Characteristic	Medical Product				Covariate Balance	
	Brand Name Sertraline		Authorized Generic Sertraline		Absolute Difference	Standardized Difference
	Number	Percent	Number	Percent		
Number of patients	9,079	100.0%	517,422	100.0%	-	-
Demographics	Mean	Standard Deviation	Mean	Standard Deviation		
Mean age (years)	43.7	16.7	49.6	16.9	-5.86	-0.349
	Number	Percent	Number	Percent		
Age (years)						
12-17	738	8.1%	32,008	6.2%	1.943	0.075
18-24	882	9.7%	44,823	8.7%	1.052	0.036
25-54	5,063	55.8%	232,633	45.0%	10.806	0.217
55+	2,396	26.4%	207,958	40.2%	-13.801	-0.296
Sex						
Female	6,718	74.0%	360,605	69.7%	4.302	0.096
Male	2,361	26.0%	156,817	30.3%	-4.302	-0.096
Year						
2006	4,867	53.6%	6,333	1.2%	52.383	1.451
2007	617	6.8%	20,109	3.9%	2.91	0.13
2008	616	6.8%	32,027	6.2%	0.595	0.024
2009	681	7.5%	53,605	10.4%	-2.859	-0.1
2010	531	5.8%	78,387	15.1%	-9.301	-0.307
2011	490	5.4%	78,700	15.2%	-9.813	-0.327
2012	408	4.5%	67,470	13.0%	-8.546	-0.306
2013	394	4.3%	67,955	13.1%	-8.794	-0.315
2014	296	3.3%	69,816	13.5%	-10.233	-0.376
2015	179	2.0%	43,020	8.3%	-6.343	-0.29
	Mean	Standard Deviation	Mean	Standard Deviation		
Median household income	71,786.2	27,523.3	63,861.7	23,892.9	7,924.490	0.307
Median value of home	326,752.70	214,193.5	263,892.9	170,933.7	62,859.861	0.324
Percent unemployed	8	3.3	8.7	3.9	-0.623	-0.173
Recorded History of:						
Prior combined comorbidity score	0.7	1.3	1.2	2	-0.457	-0.267
	Number	Percent	Number	Percent		
Anxiety	2,291	25.2%	139,639	27.0%	-1.753	-0.04
Behavioral disorders	411	4.5%	22,269	4.3%	0.223	0.011
Other psychological disorders	2,225	24.5%	128,918	24.9%	-0.408	-0.009
Sleep disorder	849	9.4%	59,222	11.4%	-2.094	-0.069
Substance abuse	440	4.8%	38,598	7.5%	-2.613	-0.109

Table 1e. Cohort of New Initiators of Brand Name Sertraline and Authorized Generic Sertraline in the Sentinel Distributed Database (SDD) from June 30, 2006 to September 30, 2015, Risk Window 15-365 Days, Evaluating Socioeconomic Status (Secondary Outcome: Hospitalized Depression) (Unmatched, Aggregated), Ratio: 1:many, Caliper: 0.05

	Medical Product				Covariate Balance	
	Brand Name Sertraline		Authorized Generic Sertraline			
	Mean	Standard Deviation	Mean	Standard Deviation		
Health Service Utilization Intensity:						
Mean number of ambulatory encounters	10.5	10.4	10.3	11.7	0.194	0.018
Mean number of inpatient hospital encounters	0.2	0.6	0.3	0.7	-0.092	-0.132
Mean number of filled prescriptions	11.4	12.8	14.6	14.6	-3.165	-0.231
Mean number of generics	5.2	4.7	6.2	4.9	-0.973	-0.203
Mean number of unique drug classes	4.8	4.1	5.7	4.3	-0.904	-0.213
History of use:	Number	Percent	Number	Percent		
Analgesic opiates	2,349	25.9%	180,483	34.9%	-9.008	-0.197
Antipsychotics	588	6.5%	40,377	7.8%	-1.327	-0.052
Anxiolytics/Hypnotics	2,546	28.0%	132,971	25.7%	2.344	0.053
Lithium and other mood stabilizers	922	10.2%	45,229	8.7%	1.414	0.048
Non-sertraline antidepressants	3,352	36.9%	186,575	36.1%	0.862	0.018

Table 1f. Cohort of New Initiators of Brand Name Sertraline and Authorized Generic Sertraline in the Sentinel Distributed Database (SDD) from June 30, 2006 to September 30, 2015, Risk Window 15-365 Days, Evaluating Socioeconomic Status (Secondary Outcome: Hospitalized Depression) (Matched, Aggregated), Ratio: 1:many, Caliper: 0.05

Characteristic	Medical Product				Covariate Balance	
	Brand Name Sertraline		Authorized Generic Sertraline		Absolute Difference	Standardized Difference
	Number	Percent	Number	Percent		
Number of patients	8,672	95.5%	48,317	9.3%	-	-
Demographics	Mean	Standard Deviation	Mean	Standard Deviation		
Mean age (years)	44.1	16.8	43.9	17.3	0.156	0.009
	Number	Percent	Number	Percent		
Age (years)						
12-17	682	7.9%	666	7.7%	0.183	0.007
18-24	824	9.5%	830	9.6%	-0.073	-0.002
25-54	4,819	55.6%	4,872	56.2%	-0.616	-0.013
55+	2,347	27.1%	2,303	26.6%	0.506	0.012
Sex						
Female	6,392	73.7%	6,328	73.0%	0.737	0.017
Male	2,280	26.3%	2,344	27.0%	-0.737	-0.017
Year						
2006	4,461	51.4%	4,461	51.4%	0	0
2007	616	7.1%	671	7.7%	-0.633	-0.026
2008	616	7.1%	627	7.2%	-0.13	-0.005
2009	681	7.9%	688	7.9%	-0.078	-0.003
2010	531	6.1%	498	5.7%	0.382	0.017
2011	490	5.7%	472	5.4%	0.206	0.009
2012	408	4.7%	412	4.8%	-0.049	-0.002
2013	394	4.5%	399	4.6%	-0.057	-0.003
2014	296	3.4%	283	3.3%	0.147	0.009
2015	179	2.1%	161	1.9%	0.211	0.016
	Mean	Standard Deviation	Mean	Standard Deviation		
Median household income	72,802.7	27,959.6	72,268.0	27,516.8	534.683	0.019
Median value of home	333,556.3	218,511.8	331,450.9	218,778.7	2,105.315	0.01
Percent unemployed	7.9	3.3	8	3.4	-0.016	-0.005
Recorded History of:						
Prior combined comorbidity score	0.7	1.3	0.7	1.4	0.021	0.015
	Number	Percent	Number	Percent		
Anxiety	2,235	25.8%	2,179	25.1%	0.647	0.015
Behavioral disorders	397	4.6%	404	4.7%	-0.083	-0.004
Other psychological disorders	2,116	24.4%	2,090	24.1%	0.302	0.007
Sleep disorder	825	9.5%	823	9.5%	0.023	0.001
Substance abuse	388	4.5%	381	4.4%	0.076	0.004

Table 1f. Cohort of New Initiators of Brand Name Sertraline and Authorized Generic Sertraline in the Sentinel Distributed Database (SDD) from June 30, 2006 to September 30, 2015, Risk Window 15-365 Days, Evaluating Socioeconomic Status (Secondary Outcome: Hospitalized Depression) (Matched, Aggregated), Ratio: 1:many, Caliper: 0.05

	Medical Product				Covariate Balance	
	Brand Name Sertraline		Authorized Generic Sertraline			
	Mean	Standard Deviation	Mean	Standard Deviation		
Health Service Utilization Intensity:						
Mean number of ambulatory encounters	10.4	10.4	10.2	11.5	0.25	0.023
Mean number of inpatient hospital encounters	0.2	0.6	0.2	0.6	-0.012	-0.019
Mean number of filled prescriptions	11.2	12.7	11	12	0.145	0.012
Mean number of generics	5.1	4.6	5.1	4.5	0.075	0.016
Mean number of unique drug classes	4.8	4.1	4.7	4	0.066	0.016
History of use:	Number	Percent	Number	Percent		
Analgesic opiates	2,172	25.0%	2,167	25.0%	0.06	0.001
Antipsychotics	523	6.0%	513	5.9%	0.112	0.005
Anxiolytics/Hypnotics	2,430	28.0%	2,403	27.7%	0.317	0.007
Lithium and other mood stabilizers	851	9.8%	853	9.8%	-0.018	-0.001
Non-sertraline antidepressants	3,177	36.6%	3,169	36.5%	0.09	0.002

Table 2. Effect Estimates for Risk Window 1-14 Days, Evaluating Socioeconomic Status in the Sentinel Distributed Database (SDD) from June 30, 2006 to September 30, 2015 (Secondary Outcome: Hospitalized Depression) by Analysis Type

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence Rate per 1,000 Person Years	Risk per 1,000 New Users	Incidence Rate Difference per 1,000 Person Years	Difference in Risk per 1,000 New Users	Hazard Ratio (95% CI)	Wald P-Value
Unmatched Analysis (Site-adjusted only)											
Brand Name Sertraline	9,997	339.77	12.41	0.03	18	52.98	1.80	-7.96	-0.27	0.62	0.046
Authorized Generic Sertraline	567,284	19,313.76	12.44	0.03	1,177	60.94	2.07			(0.39, 0.99)	
1:many Matched Conditional Predefined Analysis; Caliper= 0.05											
Brand Name Sertraline	9,529	320.02	12.27	0.03	15	46.87	1.57	-20.19	-0.60	0.73	0.272
Authorized Generic Sertraline	53,739	1,744.71	11.86	0.03	117	67.06	2.18			(0.41, 1.28)	

Table 3. Effect Estimates for Risk Window 1-14 Days, Evaluating Socioeconomic Status in the Sentinel Distributed Database (SDD) from June 30, 2006 to September 30, 2015 (Secondary Outcome: Hospitalized Depression) by Analysis Type and Age Group

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence Rate per 1,000 Person Years	Risk per 1,000 New Users	Incidence Rate Difference per 1,000 Person Years	Difference in Risk per 1,000 New Users	Hazard Ratio (95% CI)	Wald P-Value
Age Group: 12-17											
<i>Unmatched Analysis (Site-adjusted only)</i>											
Authorized Generic Sertraline	812	27.62	12.43	0.03	*****	*****	*****	-195.13	-6.76	0.27 (0.07, 1.08)	0.065
Authorized Generic Sertraline	34,280	1,181.12	12.58	0.03	*****	*****	*****				
<i>1:many Matched Conditional Predefined Analysis; Caliper= 0.05</i>											
Authorized Generic Sertraline	748	25.24	12.33	0.03	*****	*****	*****	-108.14	-3.50	0.44 (0.10, 1.93)	0.275
Authorized Generic Sertraline	4,700	154.77	12.03	0.03	*****	*****	*****				
Age Group: 18-24											
<i>Unmatched Analysis (Site-adjusted only)</i>											
Brand Name Sertraline	986	33.25	12.32	0.03	*****	*****	*****	7.72	0.19	0.96 (0.30, 3.04)	0.946
Authorized Generic Sertraline	47,724	1,648.43	12.62	0.03	*****	*****	*****				
<i>1:many Matched Conditional Predefined Analysis; Caliper= 0.05</i>											
Brand Name Sertraline	901	30.33	12.30	0.03	*****	*****	*****	32.78	1.15	1.20 (0.29, 5.07)	0.802
Authorized Generic Sertraline	4,585	151.21	12.05	0.03	*****	*****	*****				
Age Group: 25-54											
<i>Unmatched Analysis (Site-adjusted only)</i>											
Brand Name Sertraline	5,581	189.67	12.41	0.03	*****	*****	*****	-6.78	-0.24	0.80 (0.42, 1.49)	0.476
Authorized Generic Sertraline	254,426	8,671.53	12.45	0.03	*****	*****	*****				
<i>1:many Matched Conditional Predefined Analysis; Caliper= 0.05</i>											
Brand Name Sertraline	5,292	177.50	12.25	0.03	*****	*****	*****	-14.95	-0.43	0.85 (0.38, 1.87)	0.682
Authorized Generic Sertraline	27,839	899.66	11.80	0.03	*****	*****	*****				
Age Group: 55+											
<i>Unmatched Analysis (Site-adjusted only)</i>											
Brand Name Sertraline	2,618	89.22	12.45	0.03	*****	*****	*****	6.87	0.24	0.65 (0.21, 2.06)	0.468
Authorized Generic Sertraline	230,854	7,812.68	12.36	0.03	*****	*****	*****				
<i>1:many Matched Conditional Predefined Analysis; Caliper= 0.05</i>											
Brand Name Sertraline	2,567	86.62	12.33	0.03	*****	*****	*****	-6.52	-0.16	0.66 (0.19, 2.38)	0.531
Authorized Generic Sertraline	16,514	534.59	11.82	0.03	*****	*****	*****				

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

Table 4. Effect Estimates for Risk Window 1-365 Days, Evaluating Socioeconomic Status in the Sentinel Distributed Database (SDD) from June 30, 2006 to September 30, 2015 (Secondary Outcome: Hospitalized Depression) by Analysis Type

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence Rate per 1,000 Person Years	Risk per 1,000 New Users	Incidence Rate Difference per 1,000 Person Years	Difference in Risk per 1,000 New Users	Hazard Ratio (95% CI)	Wald P-Value
Unmatched Analysis (Site-adjusted only)											
Brand Name Sertraline	9,997	1,744.35	63.73	0.17	47	26.94	4.70	3.54	-1.35	0.70 (0.53, 0.94)	0.017
Authorized Generic Sertraline	567,284	146,778.10	94.50	0.26	3,435	23.40	6.06				
1:many Matched Conditional Predefined Analysis; Caliper= 0.05											
Brand Name Sertraline	9,529	1,481.27	56.78	0.16	38	25.65	3.99	-11.29	-0.25	0.84 (0.59, 1.21)	0.351
Authorized Generic Sertraline	53,739	6,171.43	41.95	0.11	228	36.94	4.24				

Table 5. Effect Estimates for Risk Window 1-365 Days, Evaluating Socioeconomic Status in the Sentinel Distributed Database (SDD) from June 30, 2006 to September 30, 2015 (Secondary Outcome: Hospitalized Depression) by Analysis Type and Age Group

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence Rate per 1,000 Person Years	Risk per 1,000 New Users	Incidence Rate Difference per 1,000 Person Years	Difference in Risk per 1,000 New Users	Hazard Ratio (95% CI)	Wald P-Value
Age Group: 12-17											
<i>Unmatched Analysis (Site-adjusted only)</i>											
Authorized Generic Sertraline	812	153.44	69.02	0.19	*****	*****	*****	-73.29	-24.85	0.44 (0.24, 0.82)	0.01
Authorized Generic Sertraline	34,280	9,201.11	98.04	0.27	*****	*****	*****				
<i>1:many Matched Conditional Predefined Analysis; Caliper= 0.05</i>											
Authorized Generic Sertraline	748	125.65	61.36	0.17	*****	*****	*****	-78.68	-6.33	0.47 (0.22, 0.99)	0.048
Authorized Generic Sertraline	4,700	561.98	43.67	0.12	*****	*****	*****				
Age Group: 18-24											
<i>Unmatched Analysis (Site-adjusted only)</i>											
Brand Name Sertraline	986	153.40	56.83	0.16	*****	*****	*****	0.64	-2.84	0.80 (0.36, 1.81)	0.598
Authorized Generic Sertraline	47,724	11,071.33	84.73	0.23	*****	*****	*****				
<i>1:many Matched Conditional Predefined Analysis; Caliper= 0.05</i>											
Brand Name Sertraline	901	127.77	51.80	0.14	*****	*****	*****	4.80	1.86	1.20 (0.45, 3.19)	0.713
Authorized Generic Sertraline	4,585	521.87	41.57	0.11	*****	*****	*****				
Age Group: 25-54											
<i>Unmatched Analysis (Site-adjusted only)</i>											
Brand Name Sertraline	5,581	928.78	60.78	0.17	23	24.76	4.12	5.86	-0.68	0.97 (0.64, 1.46)	0.868
Authorized Generic Sertraline	254,426	64,660.62	92.83	0.25	1,222	18.90	4.80				
<i>1:many Matched Conditional Predefined Analysis; Caliper= 0.05</i>											
Brand Name Sertraline	5,292	780.72	53.88	0.15	17	21.77	3.21	-3.57	0.37	1.07 (0.61, 1.88)	0.821
Authorized Generic Sertraline	27,839	3,116.54	40.89	0.11	79	25.35	2.84				
Age Group: 55+											
<i>Unmatched Analysis (Site-adjusted only)</i>											
Brand Name Sertraline	2,618	508.73	70.98	0.19	*****	*****	*****	7.43	0.83	0.86 (0.43, 1.75)	0.683
Authorized Generic Sertraline	230,854	61,845.04	97.85	0.27	*****	*****	*****				
<i>1:many Matched Conditional Predefined Analysis; Caliper= 0.05</i>											
Brand Name Sertraline	2,567	448.28	63.78	0.17	*****	*****	*****	-5.23	0.39	0.84 (0.38, 1.86)	0.667
Authorized Generic Sertraline	16,514	1,949.99	43.13	0.12	*****	*****	*****				

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

Table 6. Effect Estimates for Risk Window 15-365 Days, Evaluating Socioeconomic Status in the Sentinel Distributed Database (SDD) from June 30, 2006 to September 30, 2015 (Secondary Outcome: Hospitalized Depression) by Analysis Type

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence Rate per 1,000 Person Years	Risk per 1,000 New Users	Incidence Rate Difference per 1,000 Person Years	Difference in Risk per 1,000 New Users	Hazard Ratio (95% CI)	Wald P-Value
Unmatched Analysis (Site-adjusted only)											
Brand Name Sertraline	9,079	1,406.09	56.57	0.15	29	20.62	3.19	2.85	-1.19	0.76 (0.53, 1.10)	0.151
Authorized Generic Sertraline	517,422	127,655.63	90.11	0.25	2,269	17.77	4.39				
1:many Matched Conditional Predefined Analysis; Caliper= 0.05											
Brand Name Sertraline	8,672	1,194.45	50.31	0.14	24	20.09	2.77	-5.74	0.18	0.92 (0.58, 1.47)	0.737
Authorized Generic Sertraline	48,317	4,838.90	36.58	0.10	125	25.83	2.59				

Table 7. Effect Estimates for Risk Window 15-365 Days, Evaluating Socioeconomic Status in the Sentinel Distributed Database (SDD) from June 30, 2006 to September 30, 2015 (Secondary Outcome: Hospitalized Depression) by Analysis Type and Age Group

Medical Product	Number of New Users	Person Years at Risk	Average Person Days at Risk	Average Person Years at Risk	Number of Events	Incidence Rate per 1,000 Person Years	Risk per 1,000 New Users	Incidence Rate Difference per 1,000 Person Years	Difference in Risk per 1,000 New Users	Hazard Ratio (95% CI)	Wald P-Value
Age Group: 12-17											
<i>Unmatched Analysis (Site-adjusted only)</i>											
Authorized Generic Sertraline	738	126.07	62.39	0.17	*****	*****	*****	-56.03	-19.12	0.52 (0.26, 1.05)	0.068
Authorized Generic Sertraline	32,008	8,025.69	91.58	0.25	*****	*****	*****				
<i>1:many Matched Conditional Predefined Analysis; Caliper= 0.05</i>											
Authorized Generic Sertraline	681	106.84	57.30	0.16	*****	*****	*****	-62.62	-3.30	0.62 (0.28, 1.39)	0.248
Authorized Generic Sertraline	4,270	452.63	38.72	0.11	*****	*****	*****				
Age Group: 18-24											
<i>Unmatched Analysis (Site-adjusted only)</i>											
Brand Name Sertraline	882	120.15	49.76	0.14	*****	*****	*****	-5.88	-3.09	0.69 (0.22, 2.17)	0.528
Authorized Generic Sertraline	44,823	9,434.57	76.88	0.21	*****	*****	*****				
<i>1:many Matched Conditional Predefined Analysis; Caliper= 0.05</i>											
Brand Name Sertraline	812	98.74	44.41	0.12	*****	*****	*****	2.88	1.07	1.90 (0.50, 7.24)	0.349
Authorized Generic Sertraline	4,189	399.90	34.87	0.10	*****	*****	*****				
Age Group: 25-54											
<i>Unmatched Analysis (Site-adjusted only)</i>											
Brand Name Sertraline	5,063	739.54	53.35	0.15	13	17.58	2.57	4.86	-0.50	1.15 (0.66, 1.99)	0.631
Authorized Generic Sertraline	232,633	56,069.50	88.03	0.24	713	12.72	3.06				
<i>1:many Matched Conditional Predefined Analysis; Caliper= 0.05</i>											
Brand Name Sertraline	4,812	620.91	47.13	0.13	*****	*****	*****	-2.81	0.23	0.91 (0.43, 1.89)	0.795
Authorized Generic Sertraline	24,831	2,431.61	35.77	0.10	*****	*****	*****				
Age Group: 55+											
<i>Unmatched Analysis (Site-adjusted only)</i>											
Brand Name Sertraline	2,396	420.33	64.08	0.18	*****	*****	*****	6.24	0.62	1.07 (0.44, 2.61)	0.887
Authorized Generic Sertraline	207,958	54,125.87	95.06	0.26	*****	*****	*****				
<i>1:many Matched Conditional Predefined Analysis; Caliper= 0.05</i>											
Brand Name Sertraline	2,345	364.24	56.73	0.16	*****	*****	*****	-6.27	-0.10	0.80 (0.26, 2.44)	0.695
Authorized Generic Sertraline	14,968	1,565.13	38.19	0.10	*****	*****	*****				

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

Figure 1a. Histogram Depicting Propensity Score Distributions Before Matching for Risk Window 1-14 Days, Evaluating Socioeconomic Status (Secondary Outcome: Hospitalized Depression)

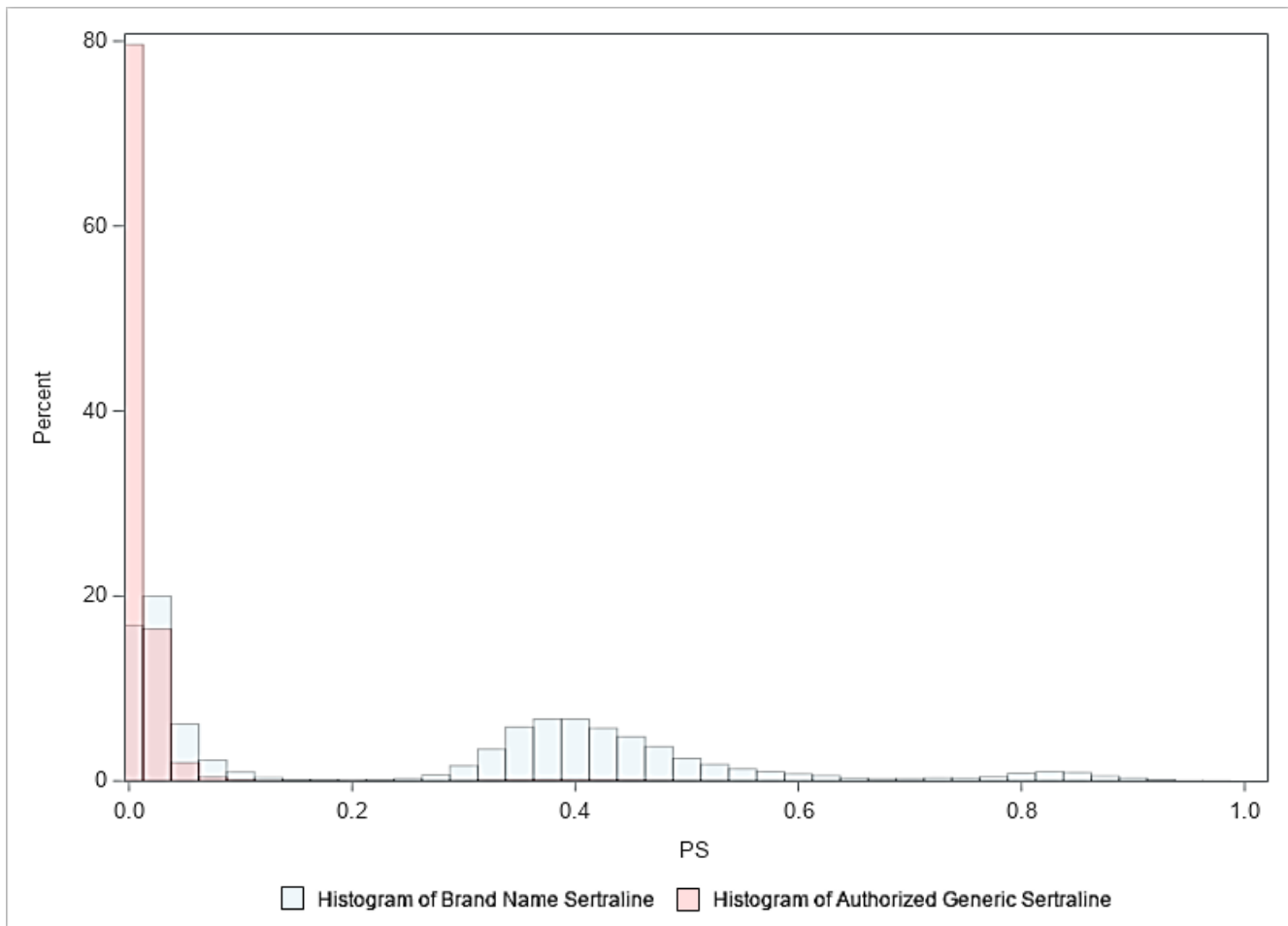


Figure 1b. Histogram Depicting Propensity Score Distributions Before Matching for Risk Window 1-365 Days, Evaluating Socioeconomic Status (Secondary Outcome: Hospitalized Depression)

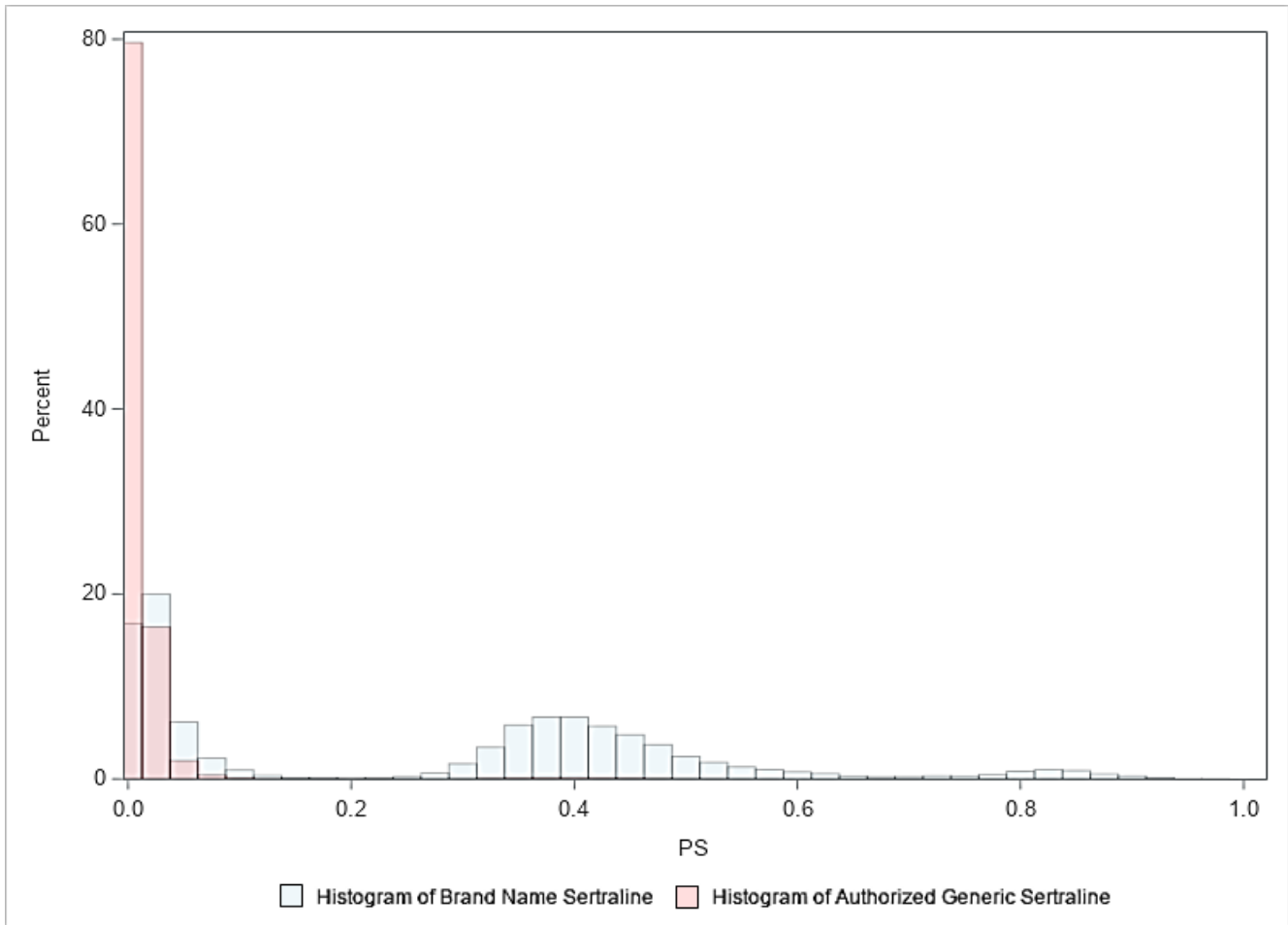


Figure 1c. Histogram Depicting Propensity Score Distributions Before Matching for Risk Window 15-365 Days, Evaluating Socioeconomic Status (Secondary Outcome: Hospitalized Depression)

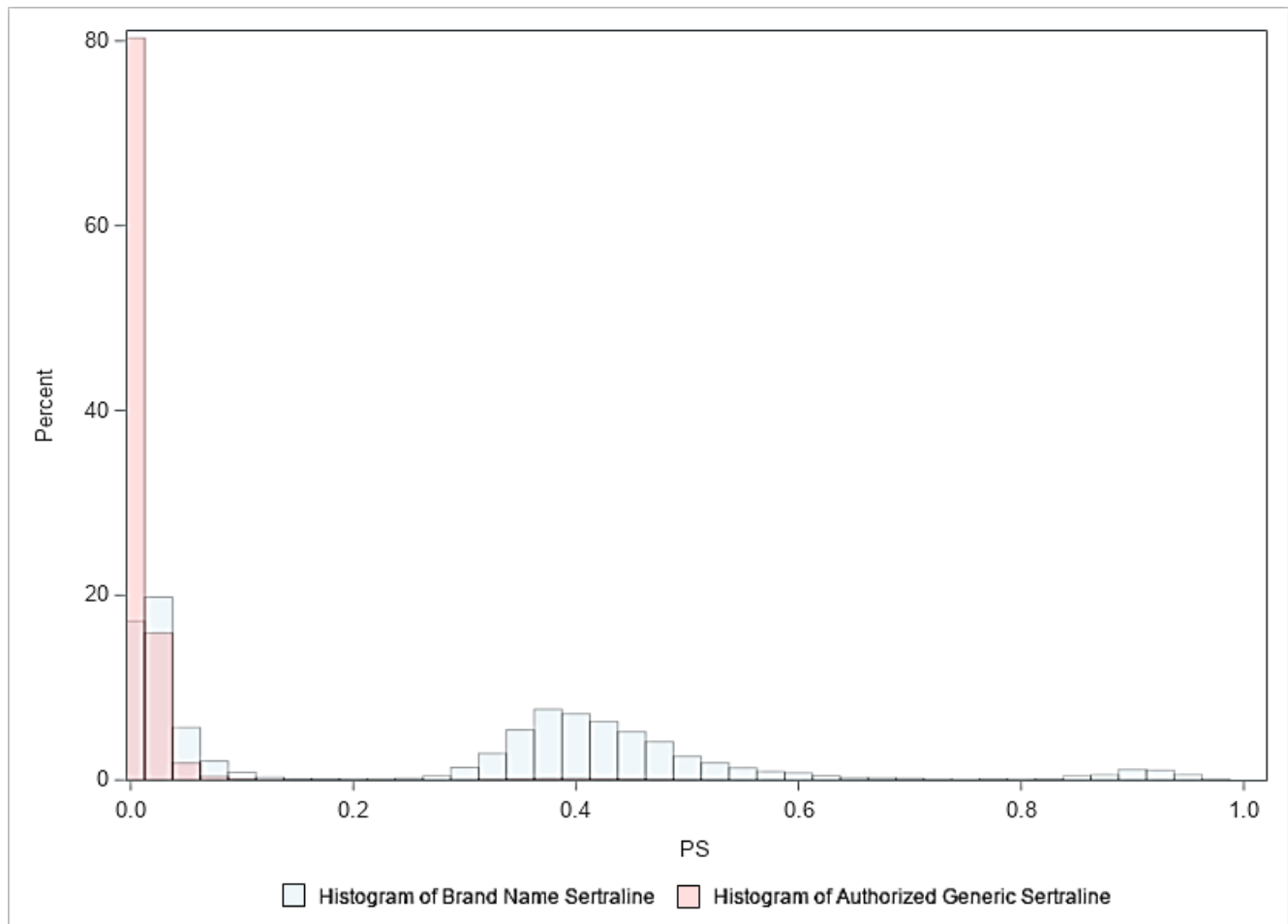


Figure 2a. Kaplan Meier Survival Curves of Weighted Informative Events and Follow-up Time for Risk Window 1-14 Days, Evaluating Socioeconomic Status (Secondary Outcome: Hospitalized Depression), Conditional Matched Cohort

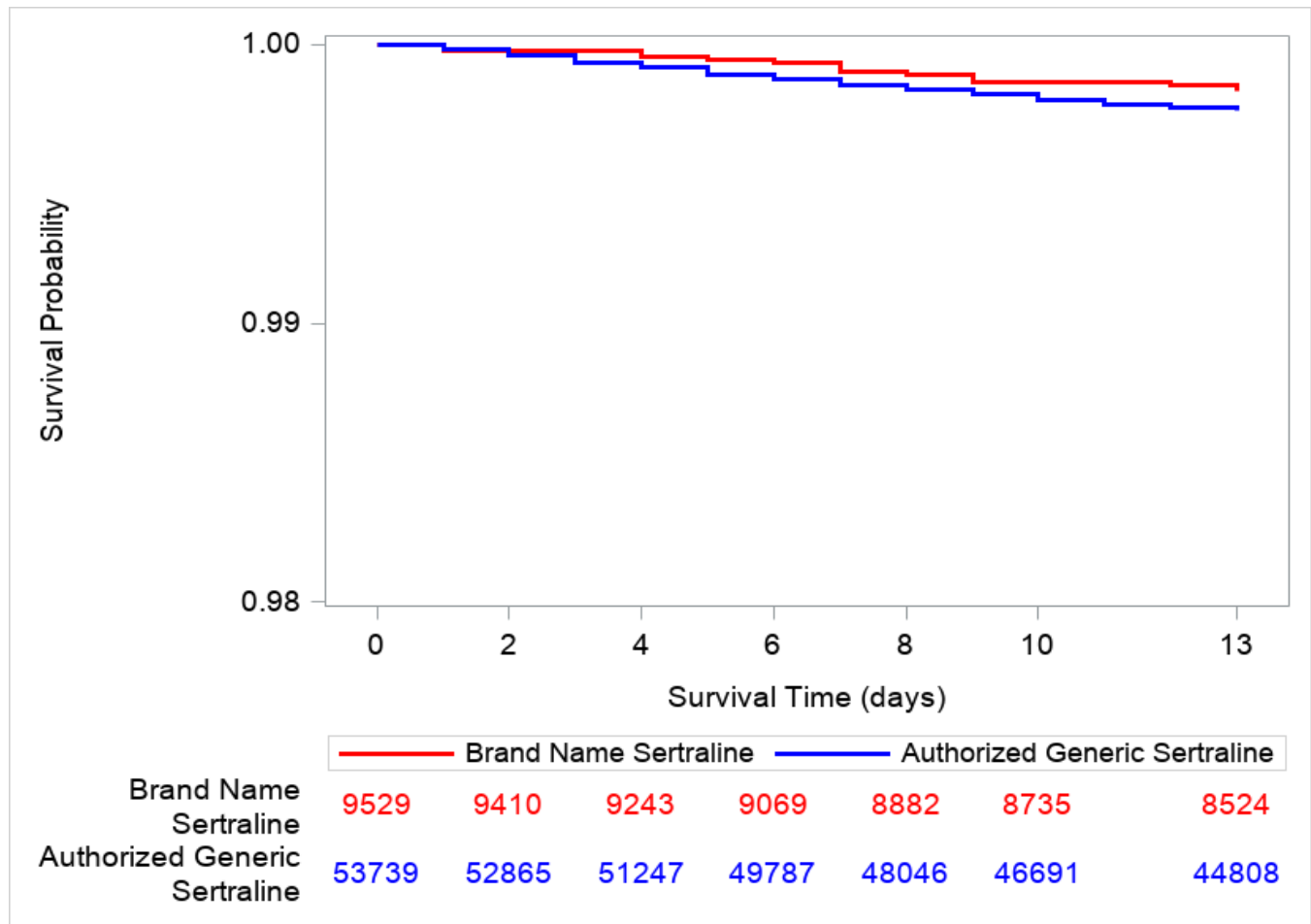


Figure 2b. Kaplan Meier Survival Curves of Weighted Informative Events and Follow-up Time for Risk Window 1-365 Days, Evaluating Socioeconomic Status (Secondary Outcome: Hospitalized Depression), Conditional Matched Cohort

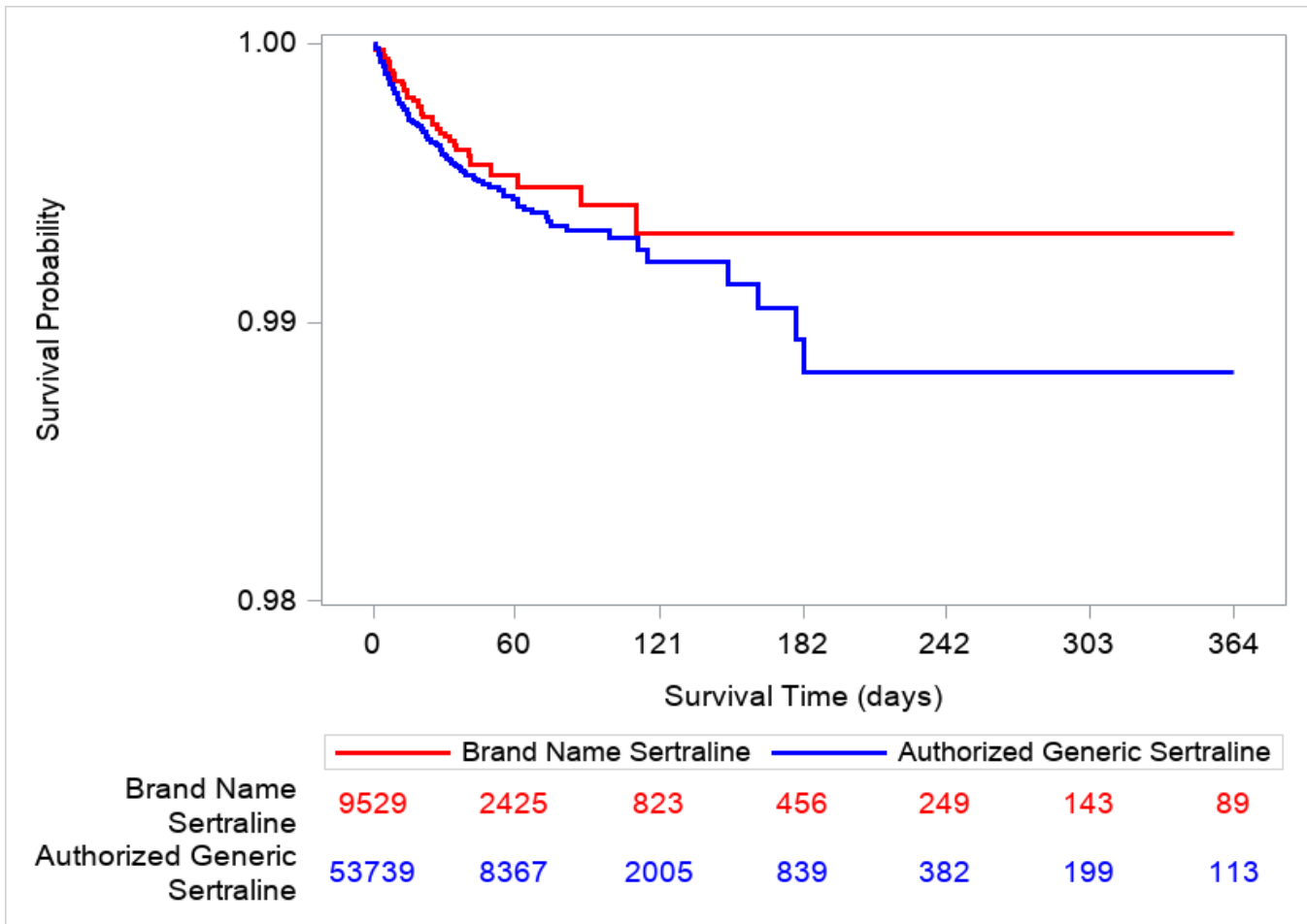
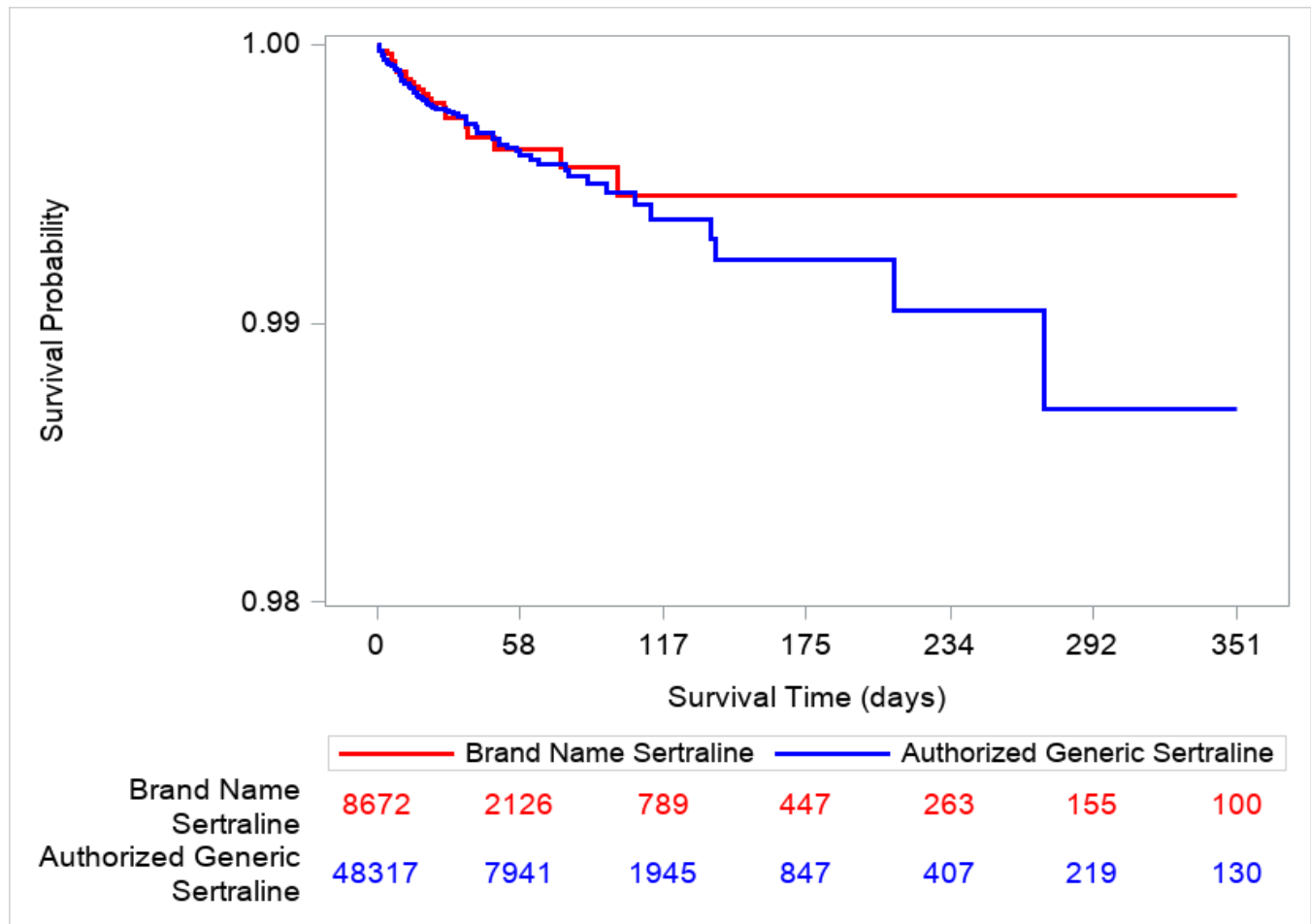


Figure 2c. Kaplan Meier Survival Curves of Weighted Informative Events and Follow-up Time for Risk Window 15-365 Days, Evaluating Socioeconomic Status (Secondary Outcome: Hospitalized Depression), Conditional Matched Cohort



Appendix A. Dates of Available Data for Each Data Partner (DP) as of Request End Date (September 30, 2015)

DP ID	DP Start Date¹	DP End Date¹
DP01	01/01/2000	09/30/2015
DP02	01/01/2008	09/30/2015
DP03	01/01/2000	09/30/2015
DP04	01/01/2006	09/30/2015
DP05	01/01/2008	09/30/2015
DP06	01/01/2000	09/30/2015
DP07	01/01/2000	09/30/2015
DP08	06/01/2007	09/30/2015
DP09	01/01/2010	09/30/2015

¹The start and end dates are based on the minimum and maximum dates within each DP. The month with the maximum date must have at least 80% of the number of records in the previous month.

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

Generic Name	Brand Name
	Sertraline
sertraline HCl	Sertraline
sertraline HCl	Zoloft

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes Used to Define Outcomes in this Request

Code	Description	Code Type	Code Category
Mood or Depressive Disorder			
311	Depressive disorder, not elsewhere classified	Diagnosis	ICD-9-CM
293.83	Mood disorder in conditions classified elsewhere	Diagnosis	ICD-9-CM
296.2	Major depressive disorder, single episode	Diagnosis	ICD-9-CM
296.20	Major depressive disorder, single episode, unspecified	Diagnosis	ICD-9-CM
296.21	Major depressive disorder, single episode, mild	Diagnosis	ICD-9-CM
296.22	Major depressive disorder, single episode, moderate	Diagnosis	ICD-9-CM
296.23	Major depressive disorder, single episode, severe, without mention of psychotic behavior	Diagnosis	ICD-9-CM
296.24	Major depressive disorder, single episode, severe, specified as with psychotic behavior	Diagnosis	ICD-9-CM
296.25	Major depressive disorder, single episode, in partial or unspecified remission	Diagnosis	ICD-9-CM
296.26	Major depressive disorder, single episode in full remission	Diagnosis	ICD-9-CM
296.3	Major depressive disorder, recurrent episode	Diagnosis	ICD-9-CM
296.30	Major depressive disorder, recurrent episode, unspecified	Diagnosis	ICD-9-CM
296.31	Major depressive disorder, recurrent episode, mild	Diagnosis	ICD-9-CM
296.32	Major depressive disorder, recurrent episode, moderate	Diagnosis	ICD-9-CM
296.33	Major depressive disorder, recurrent episode, severe, without mention of psychotic behavior	Diagnosis	ICD-9-CM
296.34	Major depressive disorder, recurrent episode, severe, specified as with psychotic behavior	Diagnosis	ICD-9-CM
296.35	Major depressive disorder, recurrent episode, in partial or unspecified remission	Diagnosis	ICD-9-CM
296.36	Major depressive disorder, recurrent episode, in full remission	Diagnosis	ICD-9-CM
296.5	Bipolar I disorder, most recent episode (or current), depressed	Diagnosis	ICD-9-CM
296.50	Bipolar I disorder, most recent episode (or current) depressed, unspecified	Diagnosis	ICD-9-CM
296.51	Bipolar I disorder, most recent episode (or current) depressed, mild	Diagnosis	ICD-9-CM
296.52	Bipolar I disorder, most recent episode (or current) depressed, moderate	Diagnosis	ICD-9-CM
296.53	Bipolar I disorder, most recent episode (or current) depressed, severe, without mention of psychotic behavior	Diagnosis	ICD-9-CM
296.54	Bipolar I disorder, most recent episode (or current) depressed, severe, specified as with psychotic behavior	Diagnosis	ICD-9-CM
296.55	Bipolar I disorder, most recent episode (or current) depressed, in partial or unspecified remission	Diagnosis	ICD-9-CM
296.56	Bipolar I disorder, most recent episode (or current) depressed, in full remission	Diagnosis	ICD-9-CM
296.90	Unspecified episodic mood disorder	Diagnosis	ICD-9-CM
298.0	Depressive type psychosis	Diagnosis	ICD-9-CM
300.4	Dysthymic disorder	Diagnosis	ICD-9-CM
301.12	Chronic depressive personality disorder	Diagnosis	ICD-9-CM
309.0	Adjustment disorder with depressed mood	Diagnosis	ICD-9-CM
309.1	Prolonged depressive reaction as adjustment reaction	Diagnosis	ICD-9-CM
309.28	Adjustment disorder with mixed anxiety and depressed mood	Diagnosis	ICD-9-CM
Self-Harm Diagnosis			
960	Poisoning by antibiotics	Diagnosis	ICD-9-CM
960.0	Poisoning by penicillins	Diagnosis	ICD-9-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes Used to Define Outcomes in this Request

Code	Description	Code Type	Code Category
960.1	Poisoning by antifungal antibiotics	Diagnosis	ICD-9-CM
960.2	Poisoning by chloramphenicol group	Diagnosis	ICD-9-CM
960.3	Poisoning by erythromycin and other macrolides	Diagnosis	ICD-9-CM
960.4	Poisoning by tetracycline group	Diagnosis	ICD-9-CM
960.5	Poisoning of cephalosporin group	Diagnosis	ICD-9-CM
960.6	Poisoning of antimycobacterial antibiotics	Diagnosis	ICD-9-CM
960.7	Poisoning by antineoplastic antibiotics	Diagnosis	ICD-9-CM
960.8	Poisoning by other specified antibiotics	Diagnosis	ICD-9-CM
960.9	Poisoning by unspecified antibiotic	Diagnosis	ICD-9-CM
961	Poisoning by other anti-infectives	Diagnosis	ICD-9-CM
961.0	Poisoning by sulfonamides	Diagnosis	ICD-9-CM
961.1	Poisoning by arsenical anti-infectives	Diagnosis	ICD-9-CM
961.2	Poisoning by heavy metal anti-infectives	Diagnosis	ICD-9-CM
961.3	Poisoning by quinoline and hydroxyquinoline derivatives	Diagnosis	ICD-9-CM
961.4	Poisoning by antimalarials and drugs acting on other blood protozoa	Diagnosis	ICD-9-CM
961.5	Poisoning by other antiprotozoal drugs	Diagnosis	ICD-9-CM
961.6	Poisoning by anthelmintics	Diagnosis	ICD-9-CM
961.7	Poisoning by antiviral drugs	Diagnosis	ICD-9-CM
961.8	Poisoning by other antimycobacterial drugs	Diagnosis	ICD-9-CM
961.9	Poisoning by other and unspecified anti-infectives	Diagnosis	ICD-9-CM
962	Poisoning by hormones and synthetic substitutes	Diagnosis	ICD-9-CM
962.0	Poisoning by adrenal cortical steroids	Diagnosis	ICD-9-CM
962.1	Poisoning by androgens and anabolic congeners	Diagnosis	ICD-9-CM
962.2	Poisoning by ovarian hormones and synthetic substitutes	Diagnosis	ICD-9-CM
962.3	Poisoning by insulins and antidiabetic agents	Diagnosis	ICD-9-CM
962.4	Poisoning by anterior pituitary hormones	Diagnosis	ICD-9-CM
962.5	Poisoning by posterior pituitary hormones	Diagnosis	ICD-9-CM
962.6	Poisoning by parathyroid and parathyroid derivatives	Diagnosis	ICD-9-CM
962.7	Poisoning by thyroid and thyroid derivatives	Diagnosis	ICD-9-CM
962.8	Poisoning by antithyroid agents	Diagnosis	ICD-9-CM
962.9	Poisoning by other and unspecified hormones and synthetic substitutes	Diagnosis	ICD-9-CM
963	Poisoning by primarily systemic agents	Diagnosis	ICD-9-CM
963.0	Poisoning by antiallergic and antiemetic drugs	Diagnosis	ICD-9-CM
963.1	Poisoning by antineoplastic and immunosuppressive drugs	Diagnosis	ICD-9-CM
963.2	Poisoning by acidifying agents	Diagnosis	ICD-9-CM
963.3	Poisoning by alkalizing agents	Diagnosis	ICD-9-CM
963.4	Poisoning by enzymes, not elsewhere classified	Diagnosis	ICD-9-CM
963.5	Poisoning by vitamins, not elsewhere classified	Diagnosis	ICD-9-CM
963.8	Poisoning by other specified systemic agents	Diagnosis	ICD-9-CM
963.9	Poisoning by unspecified systemic agent	Diagnosis	ICD-9-CM
964	Poisoning by agents primarily affecting blood constituents	Diagnosis	ICD-9-CM
964.0	Poisoning by iron and its compounds	Diagnosis	ICD-9-CM
964.1	Poisoning by liver preparations and other antianemic agents	Diagnosis	ICD-9-CM
964.2	Poisoning by anticoagulants	Diagnosis	ICD-9-CM
964.3	Poisoning by vitamin K (phytonadione)	Diagnosis	ICD-9-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes Used to Define Outcomes in this Request

Code	Description	Code Type	Code Category
964.4	Poisoning by fibrinolysis-affecting drugs	Diagnosis	ICD-9-CM
964.5	Poisoning by anticoagulant antagonists and other coagulants	Diagnosis	ICD-9-CM
964.6	Poisoning by gamma globulin	Diagnosis	ICD-9-CM
964.7	Poisoning by natural blood and blood products	Diagnosis	ICD-9-CM
964.8	Poisoning by other specified agents affecting blood constituents	Diagnosis	ICD-9-CM
964.9	Poisoning by unspecified agent affecting blood constituents	Diagnosis	ICD-9-CM
965	Poisoning by analgesics, antipyretics, and antirheumatics	Diagnosis	ICD-9-CM
965.0	Poisoning by opiates and related narcotics	Diagnosis	ICD-9-CM
965.00	Poisoning by opium (alkaloids), unspecified	Diagnosis	ICD-9-CM
965.01	Poisoning by heroin	Diagnosis	ICD-9-CM
965.02	Poisoning by methadone	Diagnosis	ICD-9-CM
965.09	Poisoning by opiates and related narcotics, other	Diagnosis	ICD-9-CM
965.1	Poisoning by salicylates	Diagnosis	ICD-9-CM
965.4	Poisoning by aromatic analgesics, not elsewhere classified	Diagnosis	ICD-9-CM
965.5	Poisoning by pyrazole derivatives	Diagnosis	ICD-9-CM
965.6	Poisoning by antirheumatics (antiphlogistics)	Diagnosis	ICD-9-CM
965.61	Poisoning by propionic acid derivatives	Diagnosis	ICD-9-CM
965.69	Poisoning by other antirheumatics	Diagnosis	ICD-9-CM
965.7	Poisoning by other non-narcotic analgesics	Diagnosis	ICD-9-CM
965.8	Poisoning by other specified analgesics and antipyretics	Diagnosis	ICD-9-CM
965.9	Poisoning by unspecified analgesic and antipyretic	Diagnosis	ICD-9-CM
966	Poisoning by anticonvulsants and anti-Parkinsonism drugs	Diagnosis	ICD-9-CM
966.0	Poisoning by oxazolidine derivatives	Diagnosis	ICD-9-CM
966.1	Poisoning by hydantoin derivatives	Diagnosis	ICD-9-CM
966.2	Poisoning by succinimides	Diagnosis	ICD-9-CM
966.3	Poisoning by other and unspecified anticonvulsants	Diagnosis	ICD-9-CM
966.4	Poisoning by anti-Parkinsonism drugs	Diagnosis	ICD-9-CM
967	Poisoning by sedatives and hypnotics	Diagnosis	ICD-9-CM
967.0	Poisoning by barbiturates	Diagnosis	ICD-9-CM
967.1	Poisoning by chloral hydrate group	Diagnosis	ICD-9-CM
967.2	Poisoning by paraldehyde	Diagnosis	ICD-9-CM
967.3	Poisoning by bromine compounds	Diagnosis	ICD-9-CM
967.4	Poisoning by methaqualone compounds	Diagnosis	ICD-9-CM
967.5	Poisoning by glutethimide group	Diagnosis	ICD-9-CM
967.6	Poisoning by mixed sedatives, not elsewhere classified	Diagnosis	ICD-9-CM
967.8	Poisoning by other sedatives and hypnotics	Diagnosis	ICD-9-CM
967.9	Poisoning by unspecified sedative or hypnotic	Diagnosis	ICD-9-CM
968	Poisoning by other central nervous system depressants and anesthetics	Diagnosis	ICD-9-CM
968.0	Poisoning by central nervous system muscle-tone depressants	Diagnosis	ICD-9-CM
968.1	Poisoning by halothane	Diagnosis	ICD-9-CM
968.2	Poisoning by other gaseous anesthetics	Diagnosis	ICD-9-CM
968.3	Poisoning by intravenous anesthetics	Diagnosis	ICD-9-CM
968.4	Poisoning by other and unspecified general anesthetics	Diagnosis	ICD-9-CM
968.5	Poisoning by other central nervous system depressants and anesthetics, Surface	Diagnosis	ICD-9-CM
968.6	Poisoning by peripheral nerve- and plexus-blocking anesthetics	Diagnosis	ICD-9-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes Used to Define Outcomes in this Request

Code	Description	Code Type	Code Category
968.7	Poisoning by spinal anesthetics	Diagnosis	ICD-9-CM
968.9	Poisoning by other and unspecified local anesthetics	Diagnosis	ICD-9-CM
969	Poisoning by psychotropic agents	Diagnosis	ICD-9-CM
969.0	Poisoning by antidepressants	Diagnosis	ICD-9-CM
969.00	Poisoning by antidepressant, unspecified	Diagnosis	ICD-9-CM
969.01	Poisoning by monoamine oxidase inhibitors	Diagnosis	ICD-9-CM
969.02	Poisoning by selective serotonin and norepinephrine reuptake inhibitors	Diagnosis	ICD-9-CM
969.03	Poisoning by selective serotonin reuptake inhibitors	Diagnosis	ICD-9-CM
969.04	Poisoning by tetracyclic antidepressants	Diagnosis	ICD-9-CM
969.05	Poisoning by tricyclic antidepressants	Diagnosis	ICD-9-CM
969.09	Poisoning by other antidepressants	Diagnosis	ICD-9-CM
969.1	Poisoning by phenothiazine-based tranquilizers	Diagnosis	ICD-9-CM
969.2	Poisoning by butyrophenone-based tranquilizers	Diagnosis	ICD-9-CM
969.3	Poisoning by other antipsychotics, neuroleptics, and major tranquilizers	Diagnosis	ICD-9-CM
969.4	Poisoning by benzodiazepine-based tranquilizers	Diagnosis	ICD-9-CM
969.5	Poisoning by other tranquilizers	Diagnosis	ICD-9-CM
969.6	Poisoning by psychodysleptics (hallucinogens)	Diagnosis	ICD-9-CM
969.7	Poisoning by psychostimulants	Diagnosis	ICD-9-CM
969.70	Poisoning by psychostimulant, unspecified	Diagnosis	ICD-9-CM
969.71	Poisoning by caffeine	Diagnosis	ICD-9-CM
969.72	Poisoning by amphetamines	Diagnosis	ICD-9-CM
969.73	Poisoning by methylphenidate	Diagnosis	ICD-9-CM
969.79	Poisoning by other psychostimulants	Diagnosis	ICD-9-CM
969.8	Poisoning by other specified psychotropic agents	Diagnosis	ICD-9-CM
969.9	Poisoning by unspecified psychotropic agent	Diagnosis	ICD-9-CM
970	Poisoning by central nervous system stimulants	Diagnosis	ICD-9-CM
970.0	Poisoning by analeptics	Diagnosis	ICD-9-CM
970.1	Poisoning by opiate antagonists	Diagnosis	ICD-9-CM
970.8	Poisoning by other specified central nervous system stimulants	Diagnosis	ICD-9-CM
970.81	Poisoning by cocaine	Diagnosis	ICD-9-CM
970.89	Poisoning by other central nervous system stimulants	Diagnosis	ICD-9-CM
970.9	Poisoning by unspecified central nervous system stimulant	Diagnosis	ICD-9-CM
971	Poisoning by drugs primarily affecting the autonomic nervous system	Diagnosis	ICD-9-CM
971.0	Poisoning by parasympathomimetics (cholinergics)	Diagnosis	ICD-9-CM
971.1	Poisoning by parasympatholytics (anticholinergics and antimuscarinics) and spa	Diagnosis	ICD-9-CM
971.2	Poisoning by sympathomimetics (adrenergics)	Diagnosis	ICD-9-CM
971.3	Poisoning by sympatholytics (antiadrenergics)	Diagnosis	ICD-9-CM
971.9	Poisoning by unspecified drug primarily affecting autonomic nervous system	Diagnosis	ICD-9-CM
972	Poisoning by agents primarily affecting the cardiovascular system	Diagnosis	ICD-9-CM
972.0	Poisoning by cardiac rhythm regulators	Diagnosis	ICD-9-CM
972.1	Poisoning by cardiotonic glycosides and drugs of similar action	Diagnosis	ICD-9-CM
972.2	Poisoning by antilipemic and antiarteriosclerotic drugs	Diagnosis	ICD-9-CM
972.3	Poisoning by ganglion-blocking agents	Diagnosis	ICD-9-CM
972.4	Poisoning by coronary vasodilators	Diagnosis	ICD-9-CM
972.5	Poisoning by other vasodilators	Diagnosis	ICD-9-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes Used to Define Outcomes in this Request

Code	Description	Code Type	Code Category
972.6	Poisoning by other antihypertensive agents	Diagnosis	ICD-9-CM
972.7	Poisoning by antivaricose drugs, including sclerosing agents	Diagnosis	ICD-9-CM
972.8	Poisoning by capillary-active drugs	Diagnosis	ICD-9-CM
972.9	Poisoning by other and unspecified agents primarily affecting the cardiovascular system	Diagnosis	ICD-9-CM
973	Poisoning by agents primarily affecting the gastrointestinal system	Diagnosis	ICD-9-CM
973.0	Poisoning by antacids and antigastric secretion drugs	Diagnosis	ICD-9-CM
973.1	Poisoning by irritant cathartics	Diagnosis	ICD-9-CM
973.2	Poisoning by emollient cathartics	Diagnosis	ICD-9-CM
973.3	Poisoning by other cathartics, including intestinal atonia drugs	Diagnosis	ICD-9-CM
973.4	Poisoning by digestants	Diagnosis	ICD-9-CM
973.5	Poisoning by antidiarrheal drugs	Diagnosis	ICD-9-CM
973.6	Poisoning by emetics	Diagnosis	ICD-9-CM
973.8	Poisoning by other specified agents primarily affecting the gastrointestinal system	Diagnosis	ICD-9-CM
973.9	Poisoning by unspecified agent primarily affecting the gastrointestinal system	Diagnosis	ICD-9-CM
974	Poisoning by water, mineral, and uric acid metabolism drugs	Diagnosis	ICD-9-CM
974.0	Poisoning by mercurial diuretics	Diagnosis	ICD-9-CM
974.1	Poisoning by purine derivative diuretics	Diagnosis	ICD-9-CM
974.2	Poisoning by carbonic acid anhydrase inhibitors	Diagnosis	ICD-9-CM
974.3	Poisoning by saluretics	Diagnosis	ICD-9-CM
974.4	Poisoning by other diuretics	Diagnosis	ICD-9-CM
974.5	Poisoning by electrolytic, caloric, and water-balance agents	Diagnosis	ICD-9-CM
974.6	Poisoning by other mineral salts, not elsewhere classified	Diagnosis	ICD-9-CM
974.7	Poisoning by uric acid metabolism drugs	Diagnosis	ICD-9-CM
975	Poisoning by agents primarily acting on the smooth and skeletal muscles and respiratory system	Diagnosis	ICD-9-CM
975.0	Poisoning by oxytocic agents	Diagnosis	ICD-9-CM
975.1	Poisoning by smooth muscle relaxants	Diagnosis	ICD-9-CM
975.2	Poisoning by skeletal muscle relaxants	Diagnosis	ICD-9-CM
975.3	Poisoning by other and unspecified drugs acting on muscles	Diagnosis	ICD-9-CM
975.4	Poisoning by antitussives	Diagnosis	ICD-9-CM
975.5	Poisoning by expectorants	Diagnosis	ICD-9-CM
975.6	Poisoning by anti-common cold drugs	Diagnosis	ICD-9-CM
975.7	Poisoning by antiasthmatics	Diagnosis	ICD-9-CM
975.8	Poisoning by other and unspecified respiratory drugs	Diagnosis	ICD-9-CM
976	Poisoning by agents primarily affecting skin and mucous membrane, ophthalmological, otorhinolaryngological, and dental drugs	Diagnosis	ICD-9-CM
976.0	Poisoning by local anti-infectives and anti-inflammatory drugs	Diagnosis	ICD-9-CM
976.1	Poisoning by antipruritics	Diagnosis	ICD-9-CM
976.2	Poisoning by local astringents and local detergents	Diagnosis	ICD-9-CM
976.3	Poisoning by emollients, demulcents, and protectants	Diagnosis	ICD-9-CM
976.4	Poisoning by keratolytics, keratoplastics, other hair treatment drugs and preparations	Diagnosis	ICD-9-CM
976.5	Poisoning by eye anti-infectives and other eye drugs	Diagnosis	ICD-9-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes Used to Define Outcomes in this Request

Code	Description	Code Type	Code Category
976.6	Poisoning by anti-infectives and other drugs and preparations for ear, nose, and throat	Diagnosis	ICD-9-CM
976.7	Poisoning by dental drugs topically applied	Diagnosis	ICD-9-CM
976.8	Poisoning by other agents primarily affecting skin and mucous membrane	Diagnosis	ICD-9-CM
976.9	Poisoning by unspecified agent primarily affecting skin and mucous membrane	Diagnosis	ICD-9-CM
977	Poisoning by other and unspecified drugs and medicinal substances	Diagnosis	ICD-9-CM
977.0	Poisoning by dietetics	Diagnosis	ICD-9-CM
977.1	Poisoning by lipotropic drugs	Diagnosis	ICD-9-CM
977.2	Poisoning by antidotes and chelating agents, not elsewhere classified	Diagnosis	ICD-9-CM
977.3	Poisoning by alcohol deterrents	Diagnosis	ICD-9-CM
977.4	Poisoning by pharmaceutical excipients	Diagnosis	ICD-9-CM
977.8	Poisoning by other specified drugs and medicinal substances	Diagnosis	ICD-9-CM
977.9	Poisoning by unspecified drug or medicinal substance	Diagnosis	ICD-9-CM
978	Poisoning by bacterial vaccines	Diagnosis	ICD-9-CM
978.0	Poisoning by BCG vaccine	Diagnosis	ICD-9-CM
978.1	Poisoning by typhoid and paratyphoid vaccine	Diagnosis	ICD-9-CM
978.2	Poisoning by cholera vaccine	Diagnosis	ICD-9-CM
978.3	Poisoning by plague vaccine	Diagnosis	ICD-9-CM
978.4	Poisoning by tetanus vaccine	Diagnosis	ICD-9-CM
978.5	Poisoning by diphtheria vaccine	Diagnosis	ICD-9-CM
978.6	Poisoning by pertussis vaccine, including combinations with pertussis component	Diagnosis	ICD-9-CM
978.8	Poisoning by other and unspecified bacterial vaccines	Diagnosis	ICD-9-CM
978.9	Poisoning by mixed bacterial vaccines, except combinations with pertussis component	Diagnosis	ICD-9-CM
979	Poisoning by other vaccines and biological substances	Diagnosis	ICD-9-CM
979.0	Poisoning by smallpox vaccine	Diagnosis	ICD-9-CM
979.1	Poisoning by rabies vaccine	Diagnosis	ICD-9-CM
979.2	Poisoning by typhus vaccine	Diagnosis	ICD-9-CM
979.3	Poisoning by yellow fever vaccine	Diagnosis	ICD-9-CM
979.4	Poisoning by measles vaccine	Diagnosis	ICD-9-CM
979.5	Poisoning by poliomyelitis vaccine	Diagnosis	ICD-9-CM
979.6	Poisoning by other and unspecified viral and rickettsial vaccines	Diagnosis	ICD-9-CM
979.7	Poisoning by mixed viral-rickettsial and bacterial vaccines, except combinations with pertussis component	Diagnosis	ICD-9-CM
979.9	Poisoning by other and unspecified vaccines and biological substances	Diagnosis	ICD-9-CM
881	Open wound of elbow, forearm, and wrist	Diagnosis	ICD-9-CM
980	Toxic effect of alcohol	Diagnosis	ICD-9-CM
980.0	Toxic effect of ethyl alcohol	Diagnosis	ICD-9-CM
980.1	Toxic effect of methyl alcohol	Diagnosis	ICD-9-CM
980.2	Toxic effect of isopropyl alcohol	Diagnosis	ICD-9-CM
980.3	Toxic effect of fusel oil	Diagnosis	ICD-9-CM
980.8	Toxic effect of other specified alcohols	Diagnosis	ICD-9-CM
980.9	Toxic effect of unspecified alcohol	Diagnosis	ICD-9-CM
981	Toxic effect of petroleum products	Diagnosis	ICD-9-CM
982	Toxic effect of solvents other than petroleum-based	Diagnosis	ICD-9-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes Used to Define Outcomes in this Request

Code	Description	Code Type	Code Category
982.0	Toxic effect of benzene and homologues	Diagnosis	ICD-9-CM
982.1	Toxic effect of carbon tetrachloride	Diagnosis	ICD-9-CM
982.2	Toxic effect of carbon disulfide	Diagnosis	ICD-9-CM
982.3	Toxic effect of other chlorinated hydrocarbon solvents	Diagnosis	ICD-9-CM
982.4	Toxic effect of nitroglycol	Diagnosis	ICD-9-CM
982.8	Toxic effect of other nonpetroleum-based solvents	Diagnosis	ICD-9-CM
983	Toxic effect of corrosive aromatics, acids, and caustic alkalis	Diagnosis	ICD-9-CM
983.0	Toxic effect of corrosive aromatics	Diagnosis	ICD-9-CM
983.1	Toxic effect of acids	Diagnosis	ICD-9-CM
983.2	Toxic effect of caustic alkalis	Diagnosis	ICD-9-CM
983.9	Toxic effect of caustic, unspecified	Diagnosis	ICD-9-CM
984	Toxic effect of lead and its compounds (including fumes)	Diagnosis	ICD-9-CM
984.0	Toxic effect of inorganic lead compounds	Diagnosis	ICD-9-CM
984.1	Toxic effect of organic lead compounds	Diagnosis	ICD-9-CM
984.8	Toxic effect of other lead compounds	Diagnosis	ICD-9-CM
984.9	Toxic effect of unspecified lead compound	Diagnosis	ICD-9-CM
985	Toxic effect of other metals	Diagnosis	ICD-9-CM
985.0	Toxic effect of mercury and its compounds	Diagnosis	ICD-9-CM
985.1	Toxic effect of arsenic and its compounds	Diagnosis	ICD-9-CM
985.2	Toxic effect of manganese and its compounds	Diagnosis	ICD-9-CM
985.3	Toxic effect of beryllium and its compounds	Diagnosis	ICD-9-CM
985.4	Toxic effect of antimony and its compounds	Diagnosis	ICD-9-CM
985.5	Toxic effect of cadmium and its compounds	Diagnosis	ICD-9-CM
985.6	Toxic effect of chromium	Diagnosis	ICD-9-CM
985.8	Toxic effect of other specified metals	Diagnosis	ICD-9-CM
985.9	Toxic effect of unspecified metal	Diagnosis	ICD-9-CM
986	Toxic effect of carbon monoxide	Diagnosis	ICD-9-CM
987	Toxic effect of other gases, fumes, or vapors	Diagnosis	ICD-9-CM
987.0	Toxic effect of liquefied petroleum gases	Diagnosis	ICD-9-CM
987.1	Toxic effect of other hydrocarbon gas	Diagnosis	ICD-9-CM
987.2	Toxic effect of nitrogen oxides	Diagnosis	ICD-9-CM
987.3	Toxic effect of sulfur dioxide	Diagnosis	ICD-9-CM
987.4	Toxic effect of freon	Diagnosis	ICD-9-CM
987.5	Toxic effect of lacrimogenic gas	Diagnosis	ICD-9-CM
987.6	Toxic effect of chlorine gas	Diagnosis	ICD-9-CM
987.7	Toxic effect of hydrocyanic acid gas	Diagnosis	ICD-9-CM
987.8	Toxic effect of other specified gases, fumes, or vapors	Diagnosis	ICD-9-CM
987.9	Toxic effect of unspecified gas, fume, or vapor	Diagnosis	ICD-9-CM
988	Toxic effect of noxious substances eaten as food	Diagnosis	ICD-9-CM
988.0	Toxic effect of fish and shellfish	Diagnosis	ICD-9-CM
988.1	Toxic effect of mushrooms	Diagnosis	ICD-9-CM
988.2	Toxic effect of berries and other plants	Diagnosis	ICD-9-CM
988.8	Toxic effect of other specified noxious substances	Diagnosis	ICD-9-CM
988.9	Toxic effect of unspecified noxious substance	Diagnosis	ICD-9-CM
989	Toxic effect of other substances, chiefly nonmedicinal as to source	Diagnosis	ICD-9-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes Used to Define Outcomes in this Request

Code	Description	Code Type	Code Category
989.0	Toxic effect of hydrocyanic acid and cyanides	Diagnosis	ICD-9-CM
989.1	Toxic effect of strychnine and salts	Diagnosis	ICD-9-CM
989.2	Toxic effect of chlorinated hydrocarbons	Diagnosis	ICD-9-CM
989.3	Toxic effect of organophosphate and carbamate	Diagnosis	ICD-9-CM
989.4	Toxic effect of other pesticides, not elsewhere classified	Diagnosis	ICD-9-CM
989.5	Toxic effect of venom	Diagnosis	ICD-9-CM
989.6	Toxic effect of soaps and detergents	Diagnosis	ICD-9-CM
989.7	Toxic effect of aflatoxin and other mycotoxin (food contaminants)	Diagnosis	ICD-9-CM
989.8	Toxic effect of other substances, chiefly nonmedicinal as to source	Diagnosis	ICD-9-CM
989.81	Toxic effect of asbestos	Diagnosis	ICD-9-CM
989.82	Toxic effect of latex	Diagnosis	ICD-9-CM
989.83	Toxic effect of silicone	Diagnosis	ICD-9-CM
989.84	Toxic effect of tobacco	Diagnosis	ICD-9-CM
989.89	Toxic effect of other substances	Diagnosis	ICD-9-CM
989.9	Toxic effect of unspecified substance, chiefly nonmedicinal as to source	Diagnosis	ICD-9-CM
994.7	Asphyxiation and strangulation	Diagnosis	ICD-9-CM

Appendix D. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes Used to Define Inclusions and Exclusion Criteria in this Request

Code	Description	Code Type	Code Category
Mood or Depressive Disorder (Inclusion)			
311	Depressive disorder, not elsewhere classified	Diagnosis	ICD-9-CM
293.83	Mood disorder in conditions classified elsewhere	Diagnosis	ICD-9-CM
296.2	Major depressive disorder, single episode	Diagnosis	ICD-9-CM
296.20	Major depressive disorder, single episode, unspecified	Diagnosis	ICD-9-CM
296.21	Major depressive disorder, single episode, mild	Diagnosis	ICD-9-CM
296.22	Major depressive disorder, single episode, moderate	Diagnosis	ICD-9-CM
296.23	Major depressive disorder, single episode, severe, without mention of psychotic behavior	Diagnosis	ICD-9-CM
296.24	Major depressive disorder, single episode, severe, specified as with psychotic behavior	Diagnosis	ICD-9-CM
296.25	Major depressive disorder, single episode, in partial or unspecified remission	Diagnosis	ICD-9-CM
296.26	Major depressive disorder, single episode in full remission	Diagnosis	ICD-9-CM
296.3	Major depressive disorder, recurrent episode	Diagnosis	ICD-9-CM
296.30	Major depressive disorder, recurrent episode, unspecified	Diagnosis	ICD-9-CM
296.31	Major depressive disorder, recurrent episode, mild	Diagnosis	ICD-9-CM
296.32	Major depressive disorder, recurrent episode, moderate	Diagnosis	ICD-9-CM
296.33	Major depressive disorder, recurrent episode, severe, without mention of psychotic behavior	Diagnosis	ICD-9-CM
296.34	Major depressive disorder, recurrent episode, severe, specified as with psychotic behavior	Diagnosis	ICD-9-CM
296.35	Major depressive disorder, recurrent episode, in partial or unspecified remission	Diagnosis	ICD-9-CM
296.36	Major depressive disorder, recurrent episode, in full remission	Diagnosis	ICD-9-CM
296.5	Bipolar I disorder, most recent episode (or current), depressed	Diagnosis	ICD-9-CM
296.50	Bipolar I disorder, most recent episode (or current) depressed, unspecified	Diagnosis	ICD-9-CM
296.51	Bipolar I disorder, most recent episode (or current) depressed, mild	Diagnosis	ICD-9-CM
296.52	Bipolar I disorder, most recent episode (or current) depressed, moderate	Diagnosis	ICD-9-CM
296.53	Bipolar I disorder, most recent episode (or current) depressed, severe, without mention of psychotic behavior	Diagnosis	ICD-9-CM
296.54	Bipolar I disorder, most recent episode (or current) depressed, severe, specified as with psychotic behavior	Diagnosis	ICD-9-CM
296.55	Bipolar I disorder, most recent episode (or current) depressed, in partial or unspecified remission	Diagnosis	ICD-9-CM
296.56	Bipolar I disorder, most recent episode (or current) depressed, in full remission	Diagnosis	ICD-9-CM
296.90	Unspecified episodic mood disorder	Diagnosis	ICD-9-CM
298.0	Depressive type psychosis	Diagnosis	ICD-9-CM
300.4	Dysthymic disorder	Diagnosis	ICD-9-CM
301.12	Chronic depressive personality disorder	Diagnosis	ICD-9-CM
309.0	Adjustment disorder with depressed mood	Diagnosis	ICD-9-CM
309.1	Prolonged depressive reaction as adjustment reaction	Diagnosis	ICD-9-CM
309.28	Adjustment disorder with mixed anxiety and depressed mood	Diagnosis	ICD-9-CM
Traumatic Brain Injury (Exclusion)			
851	Cerebral laceration and contusion	Diagnosis	ICD-9-CM
851.0	Cortex (cerebral) contusion without mention of open intracranial wound	Diagnosis	ICD-9-CM

Appendix D. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes Used to Define Inclusions and Exclusion Criteria in this Request

Code	Description	Code Type	Code Category
851.00	Cortex (cerebral) contusion without mention of open intracranial wound, state of consciousness unspecified	Diagnosis	ICD-9-CM
851.01	Cortex (cerebral) contusion without mention of open intracranial wound, no loss of consciousness	Diagnosis	ICD-9-CM
851.02	Cortex (cerebral) contusion without mention of open intracranial wound, brief (less than 1 hour) loss of consciousness	Diagnosis	ICD-9-CM
851.03	Cortex (cerebral) contusion without mention of open intracranial wound, moderate (1-24 hours) loss of consciousness	Diagnosis	ICD-9-CM
851.04	Cortex (cerebral) contusion without mention of open intracranial wound, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level	Diagnosis	ICD-9-CM
851.05	Cortex (cerebral) contusion without mention of open intracranial wound, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level	Diagnosis	ICD-9-CM
851.06	Cortex (cerebral) contusion without mention of open intracranial wound, loss of consciousness of unspecified duration	Diagnosis	ICD-9-CM
851.09	Cortex (cerebral) contusion without mention of open intracranial wound, unspecified concussion	Diagnosis	ICD-9-CM
851.1	Cortex (cerebral) contusion with open intracranial wound	Diagnosis	ICD-9-CM
851.10	Cortex (cerebral) contusion with open intracranial wound, unspecified state of consciousness	Diagnosis	ICD-9-CM
851.11	Cortex (cerebral) contusion with open intracranial wound, no loss of consciousness	Diagnosis	ICD-9-CM
851.12	Cortex (cerebral) contusion with open intracranial wound, brief (less than 1 hour) loss of consciousness	Diagnosis	ICD-9-CM
851.13	Cortex (cerebral) contusion with open intracranial wound, moderate (1-24 hours) loss of consciousness	Diagnosis	ICD-9-CM
851.14	Cortex (cerebral) contusion with open intracranial wound, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level	Diagnosis	ICD-9-CM
851.15	Cortex (cerebral) contusion with open intracranial wound, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level	Diagnosis	ICD-9-CM
851.16	Cortex (cerebral) contusion with open intracranial wound, loss of consciousness of unspecified duration	Diagnosis	ICD-9-CM
851.19	Cortex (cerebral) contusion with open intracranial wound, unspecified concussion	Diagnosis	ICD-9-CM
851.2	Cortex (cerebral) laceration without mention of open intracranial wound	Diagnosis	ICD-9-CM
851.20	Cortex (cerebral) laceration without mention of open intracranial wound, unspecified state of consciousness	Diagnosis	ICD-9-CM
851.21	Cortex (cerebral) laceration without mention of open intracranial wound, no loss of consciousness	Diagnosis	ICD-9-CM
851.22	Cortex (cerebral) laceration without mention of open intracranial wound, brief (less than 1 hour) loss of consciousness	Diagnosis	ICD-9-CM
851.23	Cortex (cerebral) laceration without mention of open intracranial wound, moderate (1-24 hours) loss of consciousness	Diagnosis	ICD-9-CM

Appendix D. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes Used to Define Inclusions and Exclusion Criteria in this Request

Code	Description	Code Type	Code Category
851.24	Cortex (cerebral) laceration without mention of open intracranial wound, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level	Diagnosis	ICD-9-CM
851.25	Cortex (cerebral) laceration without mention of open intracranial wound, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level	Diagnosis	ICD-9-CM
851.26	Cortex (cerebral) laceration without mention of open intracranial wound, loss of consciousness of unspecified duration	Diagnosis	ICD-9-CM
851.29	Cortex (cerebral) laceration without mention of open intracranial wound, unspecified concussion	Diagnosis	ICD-9-CM
851.3	Cortex (cerebral) laceration with open intracranial wound	Diagnosis	ICD-9-CM
851.30	Cortex (cerebral) laceration with open intracranial wound, unspecified state of consciousness	Diagnosis	ICD-9-CM
851.31	Cortex (cerebral) laceration with open intracranial wound, no loss of consciousness	Diagnosis	ICD-9-CM
851.32	Cortex (cerebral) laceration with open intracranial wound, brief (less than 1 hour) loss of consciousness	Diagnosis	ICD-9-CM
851.33	Cortex (cerebral) laceration with open intracranial wound, moderate (1-24 hours) loss of consciousness	Diagnosis	ICD-9-CM
851.34	Cortex (cerebral) laceration with open intracranial wound, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level	Diagnosis	ICD-9-CM
851.35	Cortex (cerebral) laceration with open intracranial wound, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level	Diagnosis	ICD-9-CM
851.36	Cortex (cerebral) laceration with open intracranial wound, loss of consciousness of unspecified duration	Diagnosis	ICD-9-CM
851.39	Cortex (cerebral) laceration with open intracranial wound, unspecified concussion	Diagnosis	ICD-9-CM
851.4	Cerebellar or brain stem contusion without mention of open intracranial wound	Diagnosis	ICD-9-CM
851.40	Cerebellar or brain stem contusion without mention of open intracranial wound, unspecified state of consciousness	Diagnosis	ICD-9-CM
851.41	Cerebellar or brain stem contusion without mention of open intracranial wound, no loss of consciousness	Diagnosis	ICD-9-CM
851.42	Cerebellar or brain stem contusion without mention of open intracranial wound, brief (less than 1 hour) loss of consciousness	Diagnosis	ICD-9-CM
851.43	Cerebellar or brain stem contusion without mention of open intracranial wound, moderate (1-24 hours) loss of consciousness	Diagnosis	ICD-9-CM
851.44	Cerebellar or brain stem contusion without mention of open intracranial wound, prolonged (more than 24 hours) loss consciousness and return to pre-existing conscious level	Diagnosis	ICD-9-CM
851.45	Cerebellar or brain stem contusion without mention of open intracranial wound, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level	Diagnosis	ICD-9-CM

Appendix D. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes Used to Define Inclusions and Exclusion Criteria in this Request

Code	Description	Code Type	Code Category
851.46	Cerebellar or brain stem contusion without mention of open intracranial wound, loss of consciousness of unspecified duration	Diagnosis	ICD-9-CM
851.49	Cerebellar or brain stem contusion without mention of open intracranial wound, unspecified concussion	Diagnosis	ICD-9-CM
851.5	Cerebellar or brain stem contusion with open intracranial wound	Diagnosis	ICD-9-CM
851.50	Cerebellar or brain stem contusion with open intracranial wound, unspecified state of consciousness	Diagnosis	ICD-9-CM
851.51	Cerebellar or brain stem contusion with open intracranial wound, no loss of consciousness	Diagnosis	ICD-9-CM
851.52	Cerebellar or brain stem contusion with open intracranial wound, brief (less than 1 hour) loss of consciousness	Diagnosis	ICD-9-CM
851.53	Cerebellar or brain stem contusion with open intracranial wound, moderate (1-24 hours) loss of consciousness	Diagnosis	ICD-9-CM
851.54	Cerebellar or brain stem contusion with open intracranial wound, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level	Diagnosis	ICD-9-CM
851.55	Cerebellar or brain stem contusion with open intracranial wound, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level	Diagnosis	ICD-9-CM
851.56	Cerebellar or brain stem contusion with open intracranial wound, loss of consciousness of unspecified duration	Diagnosis	ICD-9-CM
851.59	Cerebellar or brain stem contusion with open intracranial wound, unspecified concussion	Diagnosis	ICD-9-CM
851.6	Cerebellar or brain stem laceration without mention of open intracranial wound	Diagnosis	ICD-9-CM
851.60	Cerebellar or brain stem laceration without mention of open intracranial wound, unspecified state of consciousness	Diagnosis	ICD-9-CM
851.61	Cerebellar or brain stem laceration without mention of open intracranial wound, no loss of consciousness	Diagnosis	ICD-9-CM
851.62	Cerebellar or brain stem laceration without mention of open intracranial wound, brief (less than 1 hour) loss of consciousness	Diagnosis	ICD-9-CM
851.63	Cerebellar or brain stem laceration without mention of open intracranial wound, moderate (1-24 hours) loss of consciousness	Diagnosis	ICD-9-CM
851.64	Cerebellar or brain stem laceration without mention of open intracranial wound, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level	Diagnosis	ICD-9-CM
851.65	Cerebellar or brain stem laceration without mention of open intracranial wound, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level	Diagnosis	ICD-9-CM
851.66	Cerebellar or brain stem laceration without mention of open intracranial wound, loss of consciousness of unspecified duration	Diagnosis	ICD-9-CM
851.69	Cerebellar or brain stem laceration without mention of open intracranial wound, unspecified concussion	Diagnosis	ICD-9-CM
851.7	Cerebellar or brain stem laceration with open intracranial wound	Diagnosis	ICD-9-CM

Appendix D. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes Used to Define Inclusions and Exclusion Criteria in this Request

Code	Description	Code Type	Code Category
851.70	Cerebellar or brain stem laceration with open intracranial wound, state of consciousness unspecified	Diagnosis	ICD-9-CM
851.71	Cerebellar or brain stem laceration with open intracranial wound, no loss of consciousness	Diagnosis	ICD-9-CM
851.72	Cerebellar or brain stem laceration with open intracranial wound, brief (less than one hour) loss of consciousness	Diagnosis	ICD-9-CM
851.73	Cerebellar or brain stem laceration with open intracranial wound, moderate (1-24 hours) loss of consciousness	Diagnosis	ICD-9-CM
851.74	Cerebellar or brain stem laceration with open intracranial wound, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level	Diagnosis	ICD-9-CM
851.75	Cerebellar or brain stem laceration with open intracranial wound, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level	Diagnosis	ICD-9-CM
851.76	Cerebellar or brain stem laceration with open intracranial wound, loss of consciousness of unspecified duration	Diagnosis	ICD-9-CM
851.79	Cerebellar or brain stem laceration with open intracranial wound, unspecified concussion	Diagnosis	ICD-9-CM
851.8	Other and unspecified cerebral laceration and contusion, without mention of open intracranial wound	Diagnosis	ICD-9-CM
851.80	Other and unspecified cerebral laceration and contusion, without mention of open intracranial wound, unspecified state of consciousness	Diagnosis	ICD-9-CM
851.81	Other and unspecified cerebral laceration and contusion, without mention of open intracranial wound, no loss of consciousness	Diagnosis	ICD-9-CM
851.82	Other and unspecified cerebral laceration and contusion, without mention of open intracranial wound, brief (less than 1 hour) loss of consciousness	Diagnosis	ICD-9-CM
851.83	Other and unspecified cerebral laceration and contusion, without mention of open intracranial wound, moderate (1-24 hours) loss of consciousness	Diagnosis	ICD-9-CM
851.84	Other and unspecified cerebral laceration and contusion, without mention of open intracranial wound, prolonged (more than 24 hours) loss of consciousness and return to preexisting conscious level	Diagnosis	ICD-9-CM
851.85	Other and unspecified cerebral laceration and contusion, without mention of open intracranial wound, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level	Diagnosis	ICD-9-CM
851.86	Other and unspecified cerebral laceration and contusion, without mention of open intracranial wound, loss of consciousness of unspecified duration	Diagnosis	ICD-9-CM
851.89	Other and unspecified cerebral laceration and contusion, without mention of open intracranial wound, unspecified concussion	Diagnosis	ICD-9-CM
851.9	Other and unspecified cerebral laceration and contusion, with open intracranial wound	Diagnosis	ICD-9-CM
851.90	Other and unspecified cerebral laceration and contusion, with open intracranial wound, unspecified state of consciousness	Diagnosis	ICD-9-CM
851.91	Other and unspecified cerebral laceration and contusion, with open intracranial wound, no loss of consciousness	Diagnosis	ICD-9-CM

Appendix D. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes Used to Define Inclusions and Exclusion Criteria in this Request

Code	Description	Code Type	Code Category
851.92	Other and unspecified cerebral laceration and contusion, with open intracranial wound, brief (less than 1 hour) loss of consciousness	Diagnosis	ICD-9-CM
851.93	Other and unspecified cerebral laceration and contusion, with open intracranial wound, moderate (1-24 hours) loss of consciousness	Diagnosis	ICD-9-CM
851.94	Other and unspecified cerebral laceration and contusion, with open intracranial wound, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level	Diagnosis	ICD-9-CM
851.95	Other and unspecified cerebral laceration and contusion, with open intracranial wound, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level	Diagnosis	ICD-9-CM
851.96	Other and unspecified cerebral laceration and contusion, with open intracranial wound, loss of consciousness of unspecified duration	Diagnosis	ICD-9-CM
851.99	Other and unspecified cerebral laceration and contusion, with open intracranial wound, unspecified concussion	Diagnosis	ICD-9-CM
852	Subarachnoid, subdural, and extradural hemorrhage, following injury	Diagnosis	ICD-9-CM
852.0	Subarachnoid hemorrhage following injury without mention of open intracranial wound	Diagnosis	ICD-9-CM
852.00	Subarachnoid hemorrhage following injury, without mention of open intracranial wound, unspecified state of consciousness	Diagnosis	ICD-9-CM
852.01	Subarachnoid hemorrhage following injury, without mention of open intracranial wound, no loss of consciousness	Diagnosis	ICD-9-CM
852.02	Subarachnoid hemorrhage following injury, without mention of open intracranial wound, brief (less than 1 hour) loss of consciousness	Diagnosis	ICD-9-CM
852.03	Subarachnoid hemorrhage following injury, without mention of open intracranial wound, moderate (1-24 hours) loss of consciousness	Diagnosis	ICD-9-CM
852.04	Subarachnoid hemorrhage following injury, without mention of open intracranial wound, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level	Diagnosis	ICD-9-CM
852.05	Subarachnoid hemorrhage following injury, without mention of open intracranial wound, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level	Diagnosis	ICD-9-CM
852.06	Subarachnoid hemorrhage following injury, without mention of open intracranial wound, loss of consciousness of unspecified duration	Diagnosis	ICD-9-CM
852.09	Subarachnoid hemorrhage following injury, without mention of open intracranial wound, unspecified concussion	Diagnosis	ICD-9-CM
852.1	Subarachnoid hemorrhage following injury, with open intracranial wound	Diagnosis	ICD-9-CM
852.10	Subarachnoid hemorrhage following injury, with open intracranial wound, unspecified state of consciousness	Diagnosis	ICD-9-CM
852.11	Subarachnoid hemorrhage following injury, with open intracranial wound, no loss of consciousness	Diagnosis	ICD-9-CM
852.12	Subarachnoid hemorrhage following injury, with open intracranial wound, brief (less than 1 hour) loss of consciousness	Diagnosis	ICD-9-CM
852.13	Subarachnoid hemorrhage following injury, with open intracranial wound, moderate (1-24 hours) loss of consciousness	Diagnosis	ICD-9-CM

Appendix D. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes Used to Define Inclusions and Exclusion Criteria in this Request

Code	Description	Code Type	Code Category
852.14	Subarachnoid hemorrhage following injury, with open intracranial wound, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level	Diagnosis	ICD-9-CM
852.15	Subarachnoid hemorrhage following injury, with open intracranial wound, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level	Diagnosis	ICD-9-CM
852.16	Subarachnoid hemorrhage following injury, with open intracranial wound, loss of consciousness of unspecified duration	Diagnosis	ICD-9-CM
852.19	Subarachnoid hemorrhage following injury, with open intracranial wound, unspecified concussion	Diagnosis	ICD-9-CM
852.2	Subdural hemorrhage following injury without mention of open intracranial wound	Diagnosis	ICD-9-CM
852.20	Subdural hemorrhage following injury, without mention of open intracranial wound, unspecified state of consciousness	Diagnosis	ICD-9-CM
852.21	Subdural hemorrhage following injury, without mention of open intracranial wound, no loss of consciousness	Diagnosis	ICD-9-CM
852.22	Subdural hemorrhage following injury, without mention of open intracranial wound, brief (less than one hour) loss of consciousness	Diagnosis	ICD-9-CM
852.23	Subdural hemorrhage following injury, without mention of open intracranial wound, moderate (1-24 hours) loss of consciousness	Diagnosis	ICD-9-CM
852.24	Subdural hemorrhage following injury, without mention of open intracranial wound, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level	Diagnosis	ICD-9-CM
852.25	Subdural hemorrhage following injury, without mention of open intracranial wound, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level	Diagnosis	ICD-9-CM
852.26	Subdural hemorrhage following injury, without mention of open intracranial wound, loss of consciousness of unspecified duration	Diagnosis	ICD-9-CM
852.29	Subdural hemorrhage following injury, without mention of open intracranial wound, unspecified concussion	Diagnosis	ICD-9-CM
852.3	Subdural hemorrhage following injury, with open intracranial wound	Diagnosis	ICD-9-CM
852.30	Subdural hemorrhage following injury, with open intracranial wound, state of consciousness unspecified	Diagnosis	ICD-9-CM
852.31	Subdural hemorrhage following injury, with open intracranial wound, no loss of consciousness	Diagnosis	ICD-9-CM
852.32	Subdural hemorrhage following injury, with open intracranial wound, brief (less than 1 hour) loss of consciousness	Diagnosis	ICD-9-CM
852.33	Subdural hemorrhage following injury, with open intracranial wound, moderate (1-24 hours) loss of consciousness	Diagnosis	ICD-9-CM
852.34	Subdural hemorrhage following injury, with open intracranial wound, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level	Diagnosis	ICD-9-CM
852.35	Subdural hemorrhage following injury, with open intracranial wound, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level	Diagnosis	ICD-9-CM

Appendix D. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes Used to Define Inclusions and Exclusion Criteria in this Request

Code	Description	Code Type	Code Category
852.36	Subdural hemorrhage following injury, with open intracranial wound, loss of consciousness of unspecified duration	Diagnosis	ICD-9-CM
852.39	Subdural hemorrhage following injury, with open intracranial wound, unspecified concussion	Diagnosis	ICD-9-CM
852.4	Extradural hemorrhage following injury without mention of open intracranial wound	Diagnosis	ICD-9-CM
852.40	Extradural hemorrhage following injury, without mention of open intracranial wound, unspecified state of consciousness	Diagnosis	ICD-9-CM
852.41	Extradural hemorrhage following injury, without mention of open intracranial wound, no loss of consciousness	Diagnosis	ICD-9-CM
852.42	Extradural hemorrhage following injury, without mention of open intracranial wound, brief (less than 1 hour) loss of consciousness	Diagnosis	ICD-9-CM
852.43	Extradural hemorrhage following injury, without mention of open intracranial wound, moderate (1-24 hours) loss of consciousness	Diagnosis	ICD-9-CM
852.44	Extradural hemorrhage following injury, without mention of open intracranial wound, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level	Diagnosis	ICD-9-CM
852.45	Extradural hemorrhage following injury, without mention of open intracranial wound, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level	Diagnosis	ICD-9-CM
852.46	Extradural hemorrhage following injury, without mention of open intracranial wound, loss of consciousness of unspecified duration	Diagnosis	ICD-9-CM
852.49	Extradural hemorrhage following injury, without mention of open intracranial wound, unspecified concussion	Diagnosis	ICD-9-CM
852.5	Extradural hemorrhage following injury with open intracranial wound	Diagnosis	ICD-9-CM
852.50	Extradural hemorrhage following injury, with open intracranial wound, state of consciousness unspecified	Diagnosis	ICD-9-CM
852.51	Extradural hemorrhage following injury, with open intracranial wound, no loss of consciousness	Diagnosis	ICD-9-CM
852.52	Extradural hemorrhage following injury, with open intracranial wound, brief (less than 1 hour) loss of consciousness	Diagnosis	ICD-9-CM
852.53	Extradural hemorrhage following injury, with open intracranial wound, moderate (1-24 hours) loss of consciousness	Diagnosis	ICD-9-CM
852.54	Extradural hemorrhage following injury, with open intracranial wound, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level	Diagnosis	ICD-9-CM
852.55	Extradural hemorrhage following injury, with open intracranial wound, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level	Diagnosis	ICD-9-CM
852.56	Extradural hemorrhage following injury, with open intracranial wound, loss of consciousness of unspecified duration	Diagnosis	ICD-9-CM
852.59	Extradural hemorrhage following injury, with open intracranial wound, unspecified concussion	Diagnosis	ICD-9-CM
853	Other and unspecified intracranial hemorrhage following injury	Diagnosis	ICD-9-CM

Appendix D. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes Used to Define Inclusions and Exclusion Criteria in this Request

Code	Description	Code Type	Code Category
853.0	Other and unspecified intracranial hemorrhage following injury, without mention of open intracranial wound	Diagnosis	ICD-9-CM
853.00	Other and unspecified intracranial hemorrhage following injury, without mention of open intracranial wound, unspecified state of consciousness	Diagnosis	ICD-9-CM
853.01	Other and unspecified intracranial hemorrhage following injury, without mention of open intracranial wound, no loss of consciousness	Diagnosis	ICD-9-CM
853.02	Other and unspecified intracranial hemorrhage following injury, without mention of open intracranial wound, brief (less than 1 hour) loss of consciousness	Diagnosis	ICD-9-CM
853.03	Other and unspecified intracranial hemorrhage following injury, without mention of open intracranial wound, moderate (1-24 hours) loss of consciousness	Diagnosis	ICD-9-CM
853.04	Other and unspecified intracranial hemorrhage following injury, without mention of open intracranial wound, prolonged (more than 24 hours) loss of consciousness and return to preexisting conscious level	Diagnosis	ICD-9-CM
853.05	Other and unspecified intracranial hemorrhage following injury. Without mention of open intracranial wound, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level	Diagnosis	ICD-9-CM
853.06	Other and unspecified intracranial hemorrhage following injury, without mention of open intracranial wound, loss of consciousness of unspecified duration	Diagnosis	ICD-9-CM
853.09	Other and unspecified intracranial hemorrhage following injury, without mention of open intracranial wound, unspecified concussion	Diagnosis	ICD-9-CM
853.1	Other and unspecified intracranial hemorrhage following injury with open intracranial wound	Diagnosis	ICD-9-CM
853.10	Other and unspecified intracranial hemorrhage following injury, with open intracranial wound, unspecified state of consciousness	Diagnosis	ICD-9-CM
853.11	Other and unspecified intracranial hemorrhage following injury, with open intracranial wound, no loss of consciousness	Diagnosis	ICD-9-CM
853.12	Other and unspecified intracranial hemorrhage following injury, with open intracranial wound, brief (less than 1 hour) loss of consciousness	Diagnosis	ICD-9-CM
853.13	Other and unspecified intracranial hemorrhage following injury, with open intracranial wound, moderate (1-24 hours) loss of consciousness	Diagnosis	ICD-9-CM
853.14	Other and unspecified intracranial hemorrhage following injury, with open intracranial wound, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level	Diagnosis	ICD-9-CM
853.15	Other and unspecified intracranial hemorrhage following injury, with open intracranial wound, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level	Diagnosis	ICD-9-CM
853.16	Other and unspecified intracranial hemorrhage following injury, with open intracranial wound, loss of consciousness of unspecified duration	Diagnosis	ICD-9-CM
853.19	Other and unspecified intracranial hemorrhage following injury, with open intracranial wound, unspecified concussion	Diagnosis	ICD-9-CM
854	Intracranial injury of other and unspecified nature	Diagnosis	ICD-9-CM

Appendix D. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis Codes Used to Define Inclusions and Exclusion Criteria in this Request

Code	Description	Code Type	Code Category
854.0	Intracranial injury of other and unspecified nature without mention of open intracranial wound	Diagnosis	ICD-9-CM
854.00	Intracranial injury of other and unspecified nature, without mention of open intracranial wound, unspecified state of consciousness	Diagnosis	ICD-9-CM
854.01	Intracranial injury of other and unspecified nature, without mention of open intracranial wound, no loss of consciousness	Diagnosis	ICD-9-CM
854.02	Intracranial injury of other and unspecified nature, without mention of open intracranial wound, brief (less than 1 hour) loss of consciousness	Diagnosis	ICD-9-CM
854.03	Intracranial injury of other and unspecified nature, without mention of open intracranial wound, moderate (1-24 hours) loss of consciousness	Diagnosis	ICD-9-CM
854.04	Intracranial injury of other and unspecified nature, without mention of open intracranial wound, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level	Diagnosis	ICD-9-CM
854.05	Intracranial injury of other and unspecified nature, without mention of open intracranial wound, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level	Diagnosis	ICD-9-CM
854.06	Intracranial injury of other and unspecified nature, without mention of open intracranial wound, loss of consciousness of unspecified duration	Diagnosis	ICD-9-CM
854.09	Intracranial injury of other and unspecified nature, without mention of open intracranial wound, unspecified concussion	Diagnosis	ICD-9-CM
854.1	Intracranial injury of other and unspecified nature with open intracranial wound	Diagnosis	ICD-9-CM
854.10	Intracranial injury of other and unspecified nature, with open intracranial wound, unspecified state of consciousness	Diagnosis	ICD-9-CM
854.11	Intracranial injury of other and unspecified nature, with open intracranial wound, no loss of consciousness	Diagnosis	ICD-9-CM
854.12	Intracranial injury of other and unspecified nature, with open intracranial wound, brief (less than 1 hour) loss of consciousness	Diagnosis	ICD-9-CM
854.13	Intracranial injury of other and unspecified nature, with open intracranial wound, moderate (1-24 hours) loss of consciousness	Diagnosis	ICD-9-CM
854.14	Intracranial injury of other and unspecified nature, with open intracranial wound, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level	Diagnosis	ICD-9-CM
854.15	Intracranial injury of other and unspecified nature, with open intracranial wound, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level	Diagnosis	ICD-9-CM
854.16	Intracranial injury of other and unspecified nature, with open intracranial wound, loss of consciousness of unspecified duration	Diagnosis	ICD-9-CM
854.19	Intracranial injury of other and unspecified nature, with open intracranial wound, with unspecified concussion	Diagnosis	ICD-9-CM
959.01	Head injury, unspecified		

Appendix E. List of Generic and Brand Medical Product Names Used to Define Incidence in this Request

Generic Name	Brand Name
Other Generic Sertraline	
sertraline HCl	Sertraline
Non-Sertraline Antidepressants	
amitriptyline HCl	Amitriptyline
amitriptyline HCl	Vanatrip
amitriptyline HCl/chlordiazepoxide	Limbitrol
amitriptyline HCl/chlordiazepoxide	Limbitrol DS
amitriptyline HCl/chlordiazepoxide	Amitriptyline-Chlordiazepoxide
amoxapine	Amoxapine
bupropion HBr	Aplenzin
bupropion HCl	Bupropion HCl
bupropion HCl	Budeprion XL
bupropion HCl	Budeprion SR
bupropion HCl	Wellbutrin SR
bupropion HCl	Wellbutrin
bupropion HCl	Wellbutrin XL
bupropion HCl	Forfivo XL
bupropion HCl/dietary supplement combination no.15	Appbutamone-D
bupropion HCl/dietary supplement combination no.16	Appbutamone
citalopram hydrobromide	Citalopram
citalopram hydrobromide	Celexa
clomipramine HCl	Clomipramine
clomipramine HCl	Anafranil
desipramine HCl	Norpramin
desipramine HCl	Desipramine
desvenlafaxine	Desvenlafaxine
desvenlafaxine	Khedezla
desvenlafaxine fumarate	Desvenlafaxine Fumarate
desvenlafaxine succinate	Pristiq
desvenlafaxine succinate	Desvenlafaxine Succinate
doxepin HCl	Sinequan
doxepin HCl	Doxepin
doxepin HCl	Silenor
duloxetine HCl	Cymbalta
duloxetine HCl	Duloxetine
duloxetine HCl	Irenka
escitalopram oxalate	Escitalopram Oxalate
escitalopram oxalate	Lexapro
fluoxetine HCl	Prozac Weekly
fluoxetine HCl	Fluoxetine
fluoxetine HCl	Selfemra
fluoxetine HCl	Prozac
fluoxetine HCl	Sarafem
fluoxetine HCl	Rapiflux
fluoxetine HCl/dietary supplement no.17	Gaboxetine
fluoxetine HCl/dietary supplement no.8	Sentroxatine

Appendix E. List of Generic and Brand Medical Product Names Used to Define Incidence in this Request

Generic Name	Brand Name
fluvoxamine maleate	Fluvoxamine
fluvoxamine maleate	Luvox CR
imipramine HCl	Tofranil
imipramine HCl	Imipramine HCl
imipramine pamoate	Imipramine Pamoate
imipramine pamoate	Tofranil-PM
isocarboxazid	Marplan
levomilnacipran HCl	Fetzima
maprotiline HCl	Maprotiline
mirtazapine	Remeron
mirtazapine	Remeron SolTab
mirtazapine	Mirtazapine
nefazodone HCl	Nefazodone
nefazodone HCl	Serzone
nortriptyline HCl	Pamelor
nortriptyline HCl	Nortriptyline
olanzapine/fluoxetine HCl	Symbyax
olanzapine/fluoxetine HCl	Olanzapine-Fluoxetine
paroxetine HCl	Paxil CR
paroxetine HCl	Paxil
paroxetine HCl	Paroxetine HCl
paroxetine mesylate	Paroxetine Mesylate (menop.sym)
paroxetine mesylate	Pexeva
paroxetine mesylate	Brisdelle
perphenazine/amitriptyline HCl	Perphenazine-Amitriptyline
perphenazine/amitriptyline HCl	Duo-Vil 2-10
perphenazine/amitriptyline HCl	Duo-Vil 2-25
phenelzine sulfate	Nardil
phenelzine sulfate	Phenelzine
protriptyline HCl	Protriptyline
protriptyline HCl	Vivactil
selegiline	Emsam
tranylcypromine sulfate	Parnate
tranylcypromine sulfate	Tranylcypromine
trazodone HCl	Desyrel
trazodone HCl	Trazodone
trazodone HCl	Oleptro ER
trazodone HCl/dietary supplement no.8	Trazamine
trimipramine maleate	Trimipramine
trimipramine maleate	Surmontil
venlafaxine HCl	Effexor
venlafaxine HCl	Effexor XR
venlafaxine HCl	Venlafaxine
vortioxetine hydrobromide	Brintellix
vortioxetine hydrobromide	Trintellix

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

Code	Description	Code Type	Code Category
Anxiety			
300.02	Generalized anxiety disorder	Diagnosis	ICD-9-CM
300.0	Anxiety states	Diagnosis	ICD-9-CM
300.00	Anxiety state, unspecified	Diagnosis	ICD-9-CM
300.09	Other anxiety states	Diagnosis	ICD-9-CM
300.2	Phobic disorders	Diagnosis	ICD-9-CM
300.20	Phobia, unspecified	Diagnosis	ICD-9-CM
300.22	Agoraphobia without mention of panic attacks	Diagnosis	ICD-9-CM
300.29	Other isolated or specific phobias	Diagnosis	ICD-9-CM
300.01	Panic disorder without agoraphobia	Diagnosis	ICD-9-CM
300.21	Agoraphobia with panic disorder	Diagnosis	ICD-9-CM
300.23	Social phobia	Diagnosis	ICD-9-CM
Behavioral Disorders			
314	Hyperkinetic syndrome of childhood	Diagnosis	ICD-9-CM
314.0	Attention deficit disorder of childhood	Diagnosis	ICD-9-CM
314.00	Attention deficit disorder without mention of hyperactivity	Diagnosis	ICD-9-CM
314.01	Attention deficit disorder with hyperactivity	Diagnosis	ICD-9-CM
314.1	Hyperkinesis with developmental delay	Diagnosis	ICD-9-CM
314.2	Hyperkinetic conduct disorder	Diagnosis	ICD-9-CM
314.8	Other specified manifestations of hyperkinetic syndrome	Diagnosis	ICD-9-CM
314.9	Unspecified hyperkinetic syndrome	Diagnosis	ICD-9-CM
312	Disturbance of conduct not elsewhere classified	Diagnosis	ICD-9-CM
312.0	Undersocialized conduct disorder aggressive type	Diagnosis	ICD-9-CM
312.00	Undersocialized conduct disorder aggressive type, unspecified	Diagnosis	ICD-9-CM
312.01	Undersocialized conduct disorder aggressive type, mild	Diagnosis	ICD-9-CM
312.02	Undersocialized conduct disorder aggressive type, moderate	Diagnosis	ICD-9-CM
312.03	Undersocialized conduct disorder aggressive, severe	Diagnosis	ICD-9-CM
312.1	Undersocialized conduct disorder unaggressive type	Diagnosis	ICD-9-CM
312.10	Undersocialized conduct disorder unaggressive type, unspecified	Diagnosis	ICD-9-CM
312.11	Undersocialized conduct disorder unaggressive type, mild	Diagnosis	ICD-9-CM
312.12	Undersocialized conduct disorder unaggressive type, moderate	Diagnosis	ICD-9-CM
312.13	Undersocialized conduct disorder unaggressive, severe	Diagnosis	ICD-9-CM
312.2	Socialized conduct disorder	Diagnosis	ICD-9-CM
312.20	Socialized conduct disorder, unspecified	Diagnosis	ICD-9-CM
312.21	Socialized conduct disorder, mild	Diagnosis	ICD-9-CM
312.22	Socialized conduct disorder, moderate	Diagnosis	ICD-9-CM
312.23	Socialized conduct disorder, severe	Diagnosis	ICD-9-CM
312.3	Disorders of impulse control not elsewhere classified	Diagnosis	ICD-9-CM
312.30	Impulse control disorder, unspecified	Diagnosis	ICD-9-CM
312.31	Pathological gambling	Diagnosis	ICD-9-CM
312.32	Kleptomania	Diagnosis	ICD-9-CM
312.33	Pyromania	Diagnosis	ICD-9-CM
312.34	Intermittent explosive disorder	Diagnosis	ICD-9-CM
312.35	Isolated explosive disorder	Diagnosis	ICD-9-CM

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

Code	Description	Code Type	Code Category
312.39	Other disorders of impulse control	Diagnosis	ICD-9-CM
312.4	Mixed disturbance of conduct and emotions	Diagnosis	ICD-9-CM
312.8	Other specified disturbances of conduct not elsewhere classified	Diagnosis	ICD-9-CM
312.81	Conduct disorder, childhood onset type	Diagnosis	ICD-9-CM
312.82	Conduct disorder, adolescent onset type	Diagnosis	ICD-9-CM
312.89	Other conduct disorder	Diagnosis	ICD-9-CM
312.9	Unspecified disturbance of conduct	Diagnosis	ICD-9-CM
Other Psychological Disorders			
294	Persistent mental disorders due to conditions classified elsewhere	Diagnosis	ICD-9-CM
294.0	Amnestic disorder in conditions classified elsewhere	Diagnosis	ICD-9-CM
294.1	Dementia in conditions classified elsewhere	Diagnosis	ICD-9-CM
294.10	Dementia in conditions classified elsewhere without behavioral disturbance	Diagnosis	ICD-9-CM
294.11	Dementia in conditions classified elsewhere with behavioral disturbance	Diagnosis	ICD-9-CM
294.2	Dementia, unspecified	Diagnosis	ICD-9-CM
294.20	Dementia, unspecified, without behavioral disturbance	Diagnosis	ICD-9-CM
294.21	Dementia, unspecified, with behavioral disturbance	Diagnosis	ICD-9-CM
294.8	Other persistent mental disorders due to conditions classified elsewhere	Diagnosis	ICD-9-CM
294.9	Unspecified persistent mental disorders due to conditions classified elsewhere	Diagnosis	ICD-9-CM
296.0	Bipolar I disorder, single manic episode	Diagnosis	ICD-9-CM
296.00	Bipolar I disorder, single manic episode, unspecified	Diagnosis	ICD-9-CM
296.01	Bipolar I disorder, single manic episode, mild	Diagnosis	ICD-9-CM
296.02	Bipolar I disorder, single manic episode, moderate	Diagnosis	ICD-9-CM
296.03	Bipolar I disorder, single manic episode, severe, without mention of psychotic behavior	Diagnosis	ICD-9-CM
296.04	Bipolar I disorder, single manic episode, severe, specified as with psychotic behavior	Diagnosis	ICD-9-CM
296.05	Bipolar I disorder, single manic episode, in partial or unspecified remission	Diagnosis	ICD-9-CM
296.06	Bipolar I disorder, single manic episode, in full remission	Diagnosis	ICD-9-CM
296.1	Manic disorder, recurrent episode	Diagnosis	ICD-9-CM
296.10	Manic disorder, recurrent episode, unspecified	Diagnosis	ICD-9-CM
296.11	Manic disorder, recurrent episode, mild	Diagnosis	ICD-9-CM
296.12	Manic disorder, recurrent episode, moderate	Diagnosis	ICD-9-CM
296.13	Manic disorder, recurrent episode, severe, without mention of psychotic behavior	Diagnosis	ICD-9-CM
296.14	Manic disorder, recurrent episode, severe, specified as with psychotic behavior	Diagnosis	ICD-9-CM
296.15	Manic disorder, recurrent episode, in partial or unspecified remission	Diagnosis	ICD-9-CM
296.16	Manic disorder, recurrent episode, in full remission	Diagnosis	ICD-9-CM
296.4	Bipolar I disorder, most recent episode (or current) manic	Diagnosis	ICD-9-CM
296.40	Bipolar I disorder, most recent episode (or current) manic, unspecified	Diagnosis	ICD-9-CM
296.41	Bipolar I disorder, most recent episode (or current) manic, mild	Diagnosis	ICD-9-CM
296.42	Bipolar I disorder, most recent episode (or current) manic, moderate	Diagnosis	ICD-9-CM
296.43	Bipolar I disorder, most recent episode (or current) manic, severe, without mention of psychotic behavior	Diagnosis	ICD-9-CM

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

Code	Description	Code Type	Code Category
296.44	Bipolar I disorder, most recent episode (or current) manic, severe, specified as with psychotic behavior	Diagnosis	ICD-9-CM
296.45	Bipolar I disorder, most recent episode (or current) manic, in partial or unspecified remission	Diagnosis	ICD-9-CM
296.46	Bipolar I disorder, most recent episode (or current) manic, in full remission	Diagnosis	ICD-9-CM
296.5	Bipolar I disorder, most recent episode (or current), depressed	Diagnosis	ICD-9-CM
296.50	Bipolar I disorder, most recent episode (or current) depressed, unspecified	Diagnosis	ICD-9-CM
296.51	Bipolar I disorder, most recent episode (or current) depressed, mild	Diagnosis	ICD-9-CM
296.52	Bipolar I disorder, most recent episode (or current) depressed, moderate	Diagnosis	ICD-9-CM
296.53	Bipolar I disorder, most recent episode (or current) depressed, severe, without mention of psychotic behavior	Diagnosis	ICD-9-CM
296.54	Bipolar I disorder, most recent episode (or current) depressed, severe, specified as with psychotic behavior	Diagnosis	ICD-9-CM
296.55	Bipolar I disorder, most recent episode (or current) depressed, in partial or unspecified remission	Diagnosis	ICD-9-CM
296.56	Bipolar I disorder, most recent episode (or current) depressed, in full remission	Diagnosis	ICD-9-CM
296.6	Bipolar I disorder, most recent episode (or current), mixed	Diagnosis	ICD-9-CM
296.60	Bipolar I disorder, most recent episode (or current) mixed, unspecified	Diagnosis	ICD-9-CM
296.61	Bipolar I disorder, most recent episode (or current) mixed, mild	Diagnosis	ICD-9-CM
296.62	Bipolar I disorder, most recent episode (or current) mixed, moderate	Diagnosis	ICD-9-CM
296.63	Bipolar I disorder, most recent episode (or current) mixed, severe, without mention of psychotic behavior	Diagnosis	ICD-9-CM
296.64	Bipolar I disorder, most recent episode (or current) mixed, severe, specified as with psychotic behavior	Diagnosis	ICD-9-CM
296.65	Bipolar I disorder, most recent episode (or current) mixed, in partial or unspecified remission	Diagnosis	ICD-9-CM
296.66	Bipolar I disorder, most recent episode (or current) mixed, in full remission	Diagnosis	ICD-9-CM
296.7	Bipolar I disorder, most recent episode (or current) unspecified	Diagnosis	ICD-9-CM
296.8	Other and unspecified bipolar disorders	Diagnosis	ICD-9-CM
296.80	Bipolar disorder, unspecified	Diagnosis	ICD-9-CM
296.81	Atypical manic disorder	Diagnosis	ICD-9-CM
296.82	Atypical depressive disorder	Diagnosis	ICD-9-CM
296.89	Other and unspecified bipolar disorders	Diagnosis	ICD-9-CM
296.99	Other specified episodic mood disorder	Diagnosis	ICD-9-CM
300.3	Obsessive-compulsive disorders	Diagnosis	ICD-9-CM
300.1	Dissociative, conversion and factitious disorders	Diagnosis	ICD-9-CM
300.10	Hysteria unspecified	Diagnosis	ICD-9-CM
300.11	conversion disorder	Diagnosis	ICD-9-CM
300.12	Dissociative amnesia	Diagnosis	ICD-9-CM
300.13	Dissociative fugue	Diagnosis	ICD-9-CM
300.14	Dissociative identity disorder	Diagnosis	ICD-9-CM
300.15	Dissociative disorder or reaction, unspecified	Diagnosis	ICD-9-CM
300.16	Factitious disorder with predominantly psychological signs and symptoms	Diagnosis	ICD-9-CM
300.19	Other and unspecified factitious illness	Diagnosis	ICD-9-CM

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

Code	Description	Code Type	Code Category
300.5	Neurasthenia	Diagnosis	ICD-9-CM
300.6	Depersonalization disorder	Diagnosis	ICD-9-CM
300.7	Hypochondriasis	Diagnosis	ICD-9-CM
300.8	Somatoform disorders	Diagnosis	ICD-9-CM
300.81	Somatization disorder	Diagnosis	ICD-9-CM
300.82	Undifferentiated somatoform disorder	Diagnosis	ICD-9-CM
300.89	Other somatoform disorders	Diagnosis	ICD-9-CM
300.9	Unspecified nonpsychotic mental disorder	Diagnosis	ICD-9-CM
302	Sexual and gender identity disorders	Diagnosis	ICD-9-CM
302.0	Ego-dystonic sexual orientation	Diagnosis	ICD-9-CM
302.1	Zoophilia	Diagnosis	ICD-9-CM
302.2	Pedophilia	Diagnosis	ICD-9-CM
302.3	Transvestic fetishism	Diagnosis	ICD-9-CM
302.4	Exhibitionism	Diagnosis	ICD-9-CM
302.5	Trans-sexualism	Diagnosis	ICD-9-CM
302.50	Trans-sexualism with unspecified sexual history	Diagnosis	ICD-9-CM
302.51	Trans-sexualism with asexual history	Diagnosis	ICD-9-CM
302.52	Trans-sexualism with homosexual history	Diagnosis	ICD-9-CM
302.53	Trans-sexualism with heterosexual history	Diagnosis	ICD-9-CM
302.6	Gender identity disorder in children	Diagnosis	ICD-9-CM
302.7	Psychosexual dysfunction	Diagnosis	ICD-9-CM
302.70	Psychosexual dysfunction, unspecified	Diagnosis	ICD-9-CM
302.71	Hypoactive sexual desire disorder	Diagnosis	ICD-9-CM
302.72	Psychosexual dysfunction with inhibited sexual excitement	Diagnosis	ICD-9-CM
302.73	Female orgasmic disorder	Diagnosis	ICD-9-CM
302.74	Male orgasmic disorder	Diagnosis	ICD-9-CM
302.75	Premature ejaculation	Diagnosis	ICD-9-CM
302.76	Dyspareunia, psychogenic	Diagnosis	ICD-9-CM
302.79	Psychosexual dysfunction with other specified psychosexual dysfunctions	Diagnosis	ICD-9-CM
302.8	Other specified psychosexual disorders	Diagnosis	ICD-9-CM
302.81	Fetishism	Diagnosis	ICD-9-CM
302.82	Voyeurism	Diagnosis	ICD-9-CM
302.83	Sexual masochism	Diagnosis	ICD-9-CM
302.84	Sexual sadism	Diagnosis	ICD-9-CM
302.85	Gender identity disorder in adolescents or adults	Diagnosis	ICD-9-CM
302.89	Other specified psychosexual disorders	Diagnosis	ICD-9-CM
302.9	Unspecified psychosexual disorders	Diagnosis	ICD-9-CM
306	Physiological malfunction arising from mental factors	Diagnosis	ICD-9-CM
306.0	Musculoskeletal malfunction arising from mental factors	Diagnosis	ICD-9-CM
306.1	Respiratory malfunction arising from mental factors	Diagnosis	ICD-9-CM
306.2	Cardiovascular malfunction arising from mental factors	Diagnosis	ICD-9-CM
306.3	Skin disorder arising from mental factors	Diagnosis	ICD-9-CM
306.4	Gastrointestinal malfunction arising from mental factors	Diagnosis	ICD-9-CM
306.5	Genitourinary malfunction arising from mental factors	Diagnosis	ICD-9-CM

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

Code	Description	Code Type	Code Category
306.50	Psychogenic genitourinary malfunction, unspecified	Diagnosis	ICD-9-CM
306.51	psychogenic vaginismus	Diagnosis	ICD-9-CM
306.52	psychogenic dysmenorrhea	Diagnosis	ICD-9-CM
306.53	psychogenic dysuria	Diagnosis	ICD-9-CM
306.59	Other genitourinary malfunction arising from mental factors	Diagnosis	ICD-9-CM
306.6	Endocrine disorder arising from mental factors	Diagnosis	ICD-9-CM
306.7	Disorder of organs of special sense arising from mental factors	Diagnosis	ICD-9-CM
306.8	Other specified psychophysiological malfunction	Diagnosis	ICD-9-CM
306.9	Unspecified psychophysiological malfunction	Diagnosis	ICD-9-CM
307	Special symptoms or syndromes not elsewhere classified	Diagnosis	ICD-9-CM
307.0	Adult onset fluency disorder	Diagnosis	ICD-9-CM
307.1	Anorexia nervosa	Diagnosis	ICD-9-CM
307.2	Tics	Diagnosis	ICD-9-CM
307.20	Tic disorder, unspecified	Diagnosis	ICD-9-CM
307.21	Transient tic disorder	Diagnosis	ICD-9-CM
307.22	Chronic motor or vocal tic disorder	Diagnosis	ICD-9-CM
307.23	Tourette's disorder	Diagnosis	ICD-9-CM
307.3	Stereotypic movement disorder	Diagnosis	ICD-9-CM
307.5	Other unspecified disorder of eating	Diagnosis	ICD-9-CM
307.50	Eating disorder, unspecified	Diagnosis	ICD-9-CM
307.51	Bulimia nervosa	Diagnosis	ICD-9-CM
307.52	Pica	Diagnosis	ICD-9-CM
307.53	Rumination disorder	Diagnosis	ICD-9-CM
307.54	Psychogenic vomiting	Diagnosis	ICD-9-CM
307.59	Other disorders of eating	Diagnosis	ICD-9-CM
307.6	Enuresis	Diagnosis	ICD-9-CM
307.7	Encopresis	Diagnosis	ICD-9-CM
307.8	pain disorder related to psychological factors	Diagnosis	ICD-9-CM
307.80	psychogenic pain, site unspecified	Diagnosis	ICD-9-CM
307.81	Tension headache	Diagnosis	ICD-9-CM
307.89	Other pain disorders related to psychological factors	Diagnosis	ICD-9-CM
307.9	Other and unspecified special symptoms or syndromes, not elsewhere classified	Diagnosis	ICD-9-CM
308	Acute reaction to stress	Diagnosis	ICD-9-CM
308.0	Predominant disturbance of emotions	Diagnosis	ICD-9-CM
308.1	Predominant disturbance of consciousness	Diagnosis	ICD-9-CM
308.2	Predominant psychomotor disturbance	Diagnosis	ICD-9-CM
308.3	Other acute reactions to stress	Diagnosis	ICD-9-CM
308.4	Mixed disorders as reaction to stress	Diagnosis	ICD-9-CM
308.9	Unspecified acute reaction to stress	Diagnosis	ICD-9-CM
309.2	Adjustment reaction with predominant disturbance of other emotions	Diagnosis	ICD-9-CM
309.21	Separation anxiety disorder	Diagnosis	ICD-9-CM
309.22	Emancipation disorder of adolescence and early adult life	Diagnosis	ICD-9-CM
309.23	Specific academic or work inhibition	Diagnosis	ICD-9-CM

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

Code	Description	Code Type	Code Category
309.24	Adjustment disorder with anxiety	Diagnosis	ICD-9-CM
309.28	Adjustment disorder with mixed anxiety and depressed mo	Diagnosis	ICD-9-CM
309.29	Other adjustment reactions with predominant disturbance of other emotions	Diagnosis	ICD-9-CM
309.3	Adjustment disorder with disturbance of conduct	Diagnosis	ICD-9-CM
309.4	Adjustment disorder with mixed disturbance of emotions and conduct	Diagnosis	ICD-9-CM
309.8	Other specified adjustment reactions	Diagnosis	ICD-9-CM
309.81	Posttraumatic stress disorder	Diagnosis	ICD-9-CM
309.82	Adjustment reaction with physical symptoms	Diagnosis	ICD-9-CM
309.83	Adjustment reaction with withdrawal	Diagnosis	ICD-9-CM
309.89	Other specified adjustment reactions	Diagnosis	ICD-9-CM
309.9	Unspecified adjustment reaction	Diagnosis	ICD-9-CM
310	Specific nonpsychotic mental disorders due to brain damage	Diagnosis	ICD-9-CM
310.0	Frontal lobe syndrome	Diagnosis	ICD-9-CM
310.1	Personality change due to conditions classified elsewhere	Diagnosis	ICD-9-CM
310.2	Postconcussion syndrome	Diagnosis	ICD-9-CM
310.8	Other specified nonpsychotic mental disorders following organic brain damage	Diagnosis	ICD-9-CM
310.81	Pseudobulbar affect	Diagnosis	ICD-9-CM
310.89	Other specified nonpsychotic mental disorders following organic brain damage	Diagnosis	ICD-9-CM
310.9	Unspecified nonpsychotic mental disorder following organic brain damage	Diagnosis	ICD-9-CM
313	Disturbance of emotions specific to childhood and adolescence	Diagnosis	ICD-9-CM
313.0	Overanxious disorder specific to childhood and adolescence	Diagnosis	ICD-9-CM
313.1	Misery and unhappiness disorder specific to childhood and adolescence	Diagnosis	ICD-9-CM
313.2	Sensitivity shyness and social withdrawal disorder specific to childhood and adolescence	Diagnosis	ICD-9-CM
313.21	Shyness disorder of childhood	Diagnosis	ICD-9-CM
313.22	Introverted disorder of childhood	Diagnosis	ICD-9-CM
313.23	Slective mutism	Diagnosis	ICD-9-CM
313.3	Relationship problems specific to childhood and adolescence	Diagnosis	ICD-9-CM
313.8	Other or mixed emotional disturbances of childhood or adolescence	Diagnosis	ICD-9-CM
313.81	Oppositional defiant disorder	Diagnosis	ICD-9-CM
313.82	Identity disorder of childhood or adolescence	Diagnosis	ICD-9-CM
313.83	Academic underachievement disorder of childhood or adolescence	Diagnosis	ICD-9-CM
313.89	Other emotional disturbances of childhood or adolescence	Diagnosis	ICD-9-CM
313.9	Unspecified emotional disturbance of childhood or adolescence	Diagnosis	ICD-9-CM
315	Specific delays in development	Diagnosis	ICD-9-CM
315.0	Developmental reading disorder	Diagnosis	ICD-9-CM
315.00	Developmental reading disorder, unspecified	Diagnosis	ICD-9-CM
315.01	Alexia	Diagnosis	ICD-9-CM
315.02	Developmental dyslexia	Diagnosis	ICD-9-CM
315.09	Other specific developmental reading disorder	Diagnosis	ICD-9-CM
315.1	Mathematics disorder	Diagnosis	ICD-9-CM
315.2	Other specific developmental learning difficulties	Diagnosis	ICD-9-CM
315.3	Developmental speech or language disorder	Diagnosis	ICD-9-CM
315.31	Expressive language disorder	Diagnosis	ICD-9-CM

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

Code	Description	Code Type	Code Category
315.32	Mixed receptive-expressive language disorder	Diagnosis	ICD-9-CM
315.34	Speech and language developmental delay due to hearing loss	Diagnosis	ICD-9-CM
315.35	Childhood onset fluency disorder	Diagnosis	ICD-9-CM
315.39	Other developmental speech or language disorder	Diagnosis	ICD-9-CM
315.4	Developmental coordination disorder	Diagnosis	ICD-9-CM
315.5	Mixed development disorder	Diagnosis	ICD-9-CM
315.8	Other specified delays in development	Diagnosis	ICD-9-CM
315.9	Unspecified delay in development	Diagnosis	ICD-9-CM
316	Psychic factors associated with diseases classified elsewhere	Diagnosis	ICD-9-CM
301	Personality disorders	Diagnosis	ICD-9-CM
301.0	Paranoid personality disorder	Diagnosis	ICD-9-CM
301.1	Affective personality disorder	Diagnosis	ICD-9-CM
301.10	Affective personality disorder, unspecified	Diagnosis	ICD-9-CM
301.11	Chronic hypomanic personality disorder	Diagnosis	ICD-9-CM
301.12	Chronic depressive personality disorder	Diagnosis	ICD-9-CM
301.13	Cyclothymic disorder	Diagnosis	ICD-9-CM
301.2	Schizoid personality disorder	Diagnosis	ICD-9-CM
301.20	Schizoid personality disorder, unspecified	Diagnosis	ICD-9-CM
301.21	Introverted personality	Diagnosis	ICD-9-CM
301.22	Schizotypal personality disorder	Diagnosis	ICD-9-CM
301.3	Explosive personality disorder	Diagnosis	ICD-9-CM
301.4	Obsessive-compulsive personality disorder	Diagnosis	ICD-9-CM
301.5	Histrionic personality disorder	Diagnosis	ICD-9-CM
301.50	Histrionic personality disorder, unspecified	Diagnosis	ICD-9-CM
301.51	Chronic factitious illness with physical symptoms	Diagnosis	ICD-9-CM
301.59	Other histrionic personality disorder	Diagnosis	ICD-9-CM
301.6	Dependent personality disorder	Diagnosis	ICD-9-CM
301.7	Antisocial personality disorder	Diagnosis	ICD-9-CM
301.8	Other personality disorders	Diagnosis	ICD-9-CM
301.81	Narcissistic personality disorder	Diagnosis	ICD-9-CM
301.82	Avoidant personality disorder	Diagnosis	ICD-9-CM
301.83	Borderline personality disorder	Diagnosis	ICD-9-CM
301.84	Passive-aggressive personality	Diagnosis	ICD-9-CM
301.89	Other personality disorders	Diagnosis	ICD-9-CM
301.9	Unspecified personality disorder	Diagnosis	ICD-9-CM
299	Pervasive developmental disorders	Diagnosis	ICD-9-CM
299.0	Autistic disorder	Diagnosis	ICD-9-CM
299.00	Autistic disorder, current or active state	Diagnosis	ICD-9-CM
299.01	Autistic disorder, residual state	Diagnosis	ICD-9-CM
299.1	Childhood disintegrative disorder	Diagnosis	ICD-9-CM
299.10	Childhood disintegrative disorder, current or active state	Diagnosis	ICD-9-CM
299.11	Childhood disintegrative disorder, residual state	Diagnosis	ICD-9-CM
299.8	Other specified pervasive developmental disorders	Diagnosis	ICD-9-CM
299.80	Other specified pervasive developmental disorders, current or active state	Diagnosis	ICD-9-CM

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

Code	Description	Code Type	Code Category
299.81	Other specified pervasive developmental disorders, residual state	Diagnosis	ICD-9-CM
299.9	Unspecified pervasive developmental disorder	Diagnosis	ICD-9-CM
299.90	Unspecified pervasive developmental disorder, current or active state	Diagnosis	ICD-9-CM
299.91	Unspecified pervasive developmental disorder, residual state	Diagnosis	ICD-9-CM
309.81	Posttraumatic stress disorder	Diagnosis	ICD-9-CM
625.4	Premenstrual tension syndromes	Diagnosis	ICD-9-CM
290.8	Other specified senile psychotic conditions	Diagnosis	ICD-9-CM
290.9	Unspecified senile psychotic condition	Diagnosis	ICD-9-CM
297	Delusional disorders	Diagnosis	ICD-9-CM
297.0	Paranoid state, simple	Diagnosis	ICD-9-CM
297.1	Delusional disorders	Diagnosis	ICD-9-CM
297.2	Paraphrenia	Diagnosis	ICD-9-CM
297.3	Shared psychotic disorder	Diagnosis	ICD-9-CM
297.8	Other specified paranoid states	Diagnosis	ICD-9-CM
297.9	unspecified paranoid state	Diagnosis	ICD-9-CM
298	Other nonorganic psychosis	Diagnosis	ICD-9-CM
298.0	Depressive type psychosis	Diagnosis	ICD-9-CM
298.1	Excitatory type psychosis	Diagnosis	ICD-9-CM
298.2	Reactive confusion	Diagnosis	ICD-9-CM
298.3	Acute paranoid reaction	Diagnosis	ICD-9-CM
298.4	Psychogenic paranoid psychosis	Diagnosis	ICD-9-CM
298.8	Other and unspecified reactive psychosis	Diagnosis	ICD-9-CM
298.9	Unspecified psychosis	Diagnosis	ICD-9-CM
295	Schizophrenic disorders	Diagnosis	ICD-9-CM
295.0	Simple type schizophrenia	Diagnosis	ICD-9-CM
295.00	Simple schizophrenia, unspecified condition	Diagnosis	ICD-9-CM
295.01	Simple schizophrenia, subchronic condition	Diagnosis	ICD-9-CM
295.02	Simple schizophrenia, chronic condition	Diagnosis	ICD-9-CM
295.03	Simple schizophrenia, subchronic condition with acute exacerbation	Diagnosis	ICD-9-CM
295.04	Simple schizophrenia, chronic condition with acute exacerbation	Diagnosis	ICD-9-CM
295.05	Simple schizophrenia, in remission	Diagnosis	ICD-9-CM
295.1	Disorganized type schizophrenia	Diagnosis	ICD-9-CM
295.10	Disorganized schizophrenia, unspecified condition	Diagnosis	ICD-9-CM
295.11	Disorganized schizophrenia, subchronic condition	Diagnosis	ICD-9-CM
295.12	Disorganized schizophrenia, chronic condition	Diagnosis	ICD-9-CM
295.13	Disorganized schizophrenia, subchronic condition with acute exacerbation	Diagnosis	ICD-9-CM
295.14	Disorganized schizophrenia, chronic condition with acute exacerbation	Diagnosis	ICD-9-CM
295.15	Disorganized schizophrenia, in remission	Diagnosis	ICD-9-CM
295.2	Catatonic type schizophrenia	Diagnosis	ICD-9-CM
295.20	Catatonic schizophrenia, unspecified condition	Diagnosis	ICD-9-CM
295.21	Catatonic schizophrenia, subchronic condition	Diagnosis	ICD-9-CM
295.22	Catatonic schizophrenia, chronic condition	Diagnosis	ICD-9-CM
295.23	Catatonic schizophrenia, subchronic condition with acute exacerbation	Diagnosis	ICD-9-CM
295.24	Catatonic schizophrenia, chronic condition with acute exacerbation	Diagnosis	ICD-9-CM

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

Code	Description	Code Type	Code Category
295.25	Catatonic schizophrenia, in remission	Diagnosis	ICD-9-CM
295.3	Paranoid type schizophrenia	Diagnosis	ICD-9-CM
295.30	Paranoid schizophrenia, unspecified condition	Diagnosis	ICD-9-CM
295.31	Paranoid schizophrenia, subchronic condition	Diagnosis	ICD-9-CM
295.32	Paranoid schizophrenia, chronic condition	Diagnosis	ICD-9-CM
295.33	Paranoid schizophrenia, subchronic condition with acute exacerbation	Diagnosis	ICD-9-CM
295.34	Paranoid schizophrenia, chronic condition with acute exacerbation	Diagnosis	ICD-9-CM
295.35	Paranoid schizophrenia, in remission	Diagnosis	ICD-9-CM
295.4	Schizophreniform disorder	Diagnosis	ICD-9-CM
295.40	Schizophreniform disorder, unspecified	Diagnosis	ICD-9-CM
295.41	Schizophreniform disorder, subchronic	Diagnosis	ICD-9-CM
295.42	Schizophreniform disorder, chronic	Diagnosis	ICD-9-CM
295.43	Schizophreniform disorder, subchronic with acute exacerbation	Diagnosis	ICD-9-CM
295.44	Schizophreniform disorder, chronic with acute exacerbation	Diagnosis	ICD-9-CM
295.45	Schizophreniform disorder, in remission	Diagnosis	ICD-9-CM
295.5	Latent schizophrenia	Diagnosis	ICD-9-CM
295.50	Latent schizophrenia, unspecified condition	Diagnosis	ICD-9-CM
295.51	Latent schizophrenia, subchronic condition	Diagnosis	ICD-9-CM
295.52	Latent schizophrenia, chronic condition	Diagnosis	ICD-9-CM
295.53	Latent schizophrenia, subchronic condition with acute exacerbation	Diagnosis	ICD-9-CM
295.54	Latent schizophrenia, chronic condition with acute exacerbation	Diagnosis	ICD-9-CM
295.55	Latent schizophrenia, in remission	Diagnosis	ICD-9-CM
295.6	Schizophrenic disorders, residual type	Diagnosis	ICD-9-CM
295.60	Schizophrenic disorders, residual type, unspecified	Diagnosis	ICD-9-CM
295.61	Schizophrenic disorders, residual type, subchronic	Diagnosis	ICD-9-CM
295.62	Schizophrenic disorders, residual type, chronic	Diagnosis	ICD-9-CM
295.63	Schizophrenic disorders, residual type, subchronic with acute exacerbation	Diagnosis	ICD-9-CM
295.64	Schizophrenic disorders, residual type, chronic with acute exacerbation	Diagnosis	ICD-9-CM
295.65	Schizophrenic disorders, residual type, in remission	Diagnosis	ICD-9-CM
295.7	Schizoaffective disorder	Diagnosis	ICD-9-CM
295.70	Schizoaffective disorder, unspecified	Diagnosis	ICD-9-CM
295.71	Schizoaffective disorder, subchronic	Diagnosis	ICD-9-CM
295.72	Schizoaffective disorder, chronic	Diagnosis	ICD-9-CM
295.73	Schizoaffective disorder, subchronic with acute exacerbation	Diagnosis	ICD-9-CM
295.74	Schizoaffective disorder, chronic with acute exacerbation	Diagnosis	ICD-9-CM
295.75	Schizoaffective disorder, in remission	Diagnosis	ICD-9-CM
295.8	Other specified types of schizophrenia	Diagnosis	ICD-9-CM
295.80	Other specified types of schizophrenia, unspecified condition	Diagnosis	ICD-9-CM
295.81	Other specified types of schizophrenia, subchronic condition	Diagnosis	ICD-9-CM
295.82	Other specified types of schizophrenia, chronic condition	Diagnosis	ICD-9-CM
295.83	Other specified types of schizophrenia, subchronic condition with acute exacerbation	Diagnosis	ICD-9-CM
295.84	Other specified types of schizophrenia, chronic condition with acute exacerbation	Diagnosis	ICD-9-CM

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

Code	Description	Code Type	Code Category
295.85	Other specified types of schizophrenia, in remission	Diagnosis	ICD-9-CM
295.9	Unspecified schizophrenia	Diagnosis	ICD-9-CM
295.90	Unspecified schizophrenia, unspecified condition	Diagnosis	ICD-9-CM
295.91	Unspecified schizophrenia, subchronic condition	Diagnosis	ICD-9-CM
295.92	Unspecified schizophrenia, chronic condition	Diagnosis	ICD-9-CM
295.93	Unspecified schizophrenia, subchronic condition with acute exacerbation	Diagnosis	ICD-9-CM
295.94	Unspecified schizophrenia, chronic condition with acute exacerbation	Diagnosis	ICD-9-CM
295.95	Unspecified schizophrenia, in remission	Diagnosis	ICD-9-CM
Sleep Disorder			
307.4	Specific disorders of sleep of nonorganic origin	Diagnosis	ICD-9-CM
307.40	Nonorganic sleep disorder, unspecified	Diagnosis	ICD-9-CM
307.41	Transient disorder of initiating or maintaining sleep	Diagnosis	ICD-9-CM
307.42	Persistent disorder of initiating or maintaining sleep	Diagnosis	ICD-9-CM
307.43	Transient disorder of initiating or maintaining wakefulness	Diagnosis	ICD-9-CM
307.44	Persistent disorder of initiating or maintaining wakefulness	Diagnosis	ICD-9-CM
307.45	Circadian rhythm sleep disorder of nonorganic origin	Diagnosis	ICD-9-CM
307.46	Sleep arousal disorder	Diagnosis	ICD-9-CM
307.47	Other dysfunctions of sleep stages or arousal from sleep	Diagnosis	ICD-9-CM
307.48	Repetitive intrusions of sleep	Diagnosis	ICD-9-CM
307.49	Other specific disorders of sleep of nonorganic origin	Diagnosis	ICD-9-CM
347	Cataplexy and narcolepsy	Diagnosis	ICD-9-CM
347.0	Narcolepsy	Diagnosis	ICD-9-CM
347.00	Narcolepsy, without cataplexy	Diagnosis	ICD-9-CM
347.01	Narcolepsy, with cataplexy	Diagnosis	ICD-9-CM
347.1	Narcolepsy in conditions classified elsewhere	Diagnosis	ICD-9-CM
347.10	Narcolepsy in conditions classified elsewhere, without cataplexy	Diagnosis	ICD-9-CM
347.11	Narcolepsy in conditions classified elsewhere, with cataplexy	Diagnosis	ICD-9-CM
780.5	Sleep disturbances	Diagnosis	ICD-9-CM
780.50	Sleep disturbances, unspecified	Diagnosis	ICD-9-CM
780.51	Insomnia with sleep apnea, unspecified	Diagnosis	ICD-9-CM
780.52	Insomnia, unspecified	Diagnosis	ICD-9-CM
780.53	Hypersomnia, with sleep apnea, unspecified	Diagnosis	ICD-9-CM
780.54	Hypersomnia, unspecified	Diagnosis	ICD-9-CM
780.55	Disruption of 24 hour sleep wake cycle, unspecified	Diagnosis	ICD-9-CM
780.56	Dysfunctions associated with sleep stages or arousal from sleep	Diagnosis	ICD-9-CM
780.57	Unspecified sleep apnea	Diagnosis	ICD-9-CM
780.58	Sleep related movement disorder, unspecified	Diagnosis	ICD-9-CM
780.59	Other sleep disturbances	Diagnosis	ICD-9-CM
Substance Abuse Disorders			
291.0	Alcohol withdrawal delirium	Diagnosis	ICD-9-CM
291.1	Alcohol-induced persisting amnesic disorder	Diagnosis	ICD-9-CM
291.2	Alcohol-induced persisting dementia	Diagnosis	ICD-9-CM
291.3	Alcohol-induced psychotic disorder with hallucinations	Diagnosis	ICD-9-CM
291.4	Idiosyncratic alcohol intoxication	Diagnosis	ICD-9-CM

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

Code	Description	Code Type	Code Category
291.5	Alcohol-induced psychotic disorder with delusions	Diagnosis	ICD-9-CM
291.8	Other specified alcohol-induced mental disorders	Diagnosis	ICD-9-CM
291.81	Alcohol withdrawal	Diagnosis	ICD-9-CM
291.82	Alcohol induced sleep disorders	Diagnosis	ICD-9-CM
291.89	Other specified alcohol-induced mental disorders	Diagnosis	ICD-9-CM
291.9	Unspecified alcohol-induced mental disorders	Diagnosis	ICD-9-CM
292.0	Drug withdrawal	Diagnosis	ICD-9-CM
292.1	Drug-induced psychotic disorder	Diagnosis	ICD-9-CM
292.11	Drug-induced psychotic disorder with delusions	Diagnosis	ICD-9-CM
292.12	Drug-induced psychotic disorder with hallucinations	Diagnosis	ICD-9-CM
292.2	Pathological drug intoxication	Diagnosis	ICD-9-CM
292.8	Other specified drug-induced mental disorders	Diagnosis	ICD-9-CM
292.89	Other specified drug-induced mental disorder	Diagnosis	ICD-9-CM
292.9	Unspecified drug-induced mental disorder	Diagnosis	ICD-9-CM
303.0	Acute alcoholic intoxication	Diagnosis	ICD-9-CM
303.00	Acute alcoholic intoxication, unspecified	Diagnosis	ICD-9-CM
303.01	Acute alcoholic intoxication, continuous	Diagnosis	ICD-9-CM
303.02	Acute alcoholic intoxication, episodic	Diagnosis	ICD-9-CM
303.03	Acute alcoholic intoxication, in remission	Diagnosis	ICD-9-CM
303.9	Other and unspecified alcohol dependence	Diagnosis	ICD-9-CM
303.90	Other and unspecified alcohol dependence, unspecified	Diagnosis	ICD-9-CM
303.91	Other and unspecified alcohol dependence, continuous	Diagnosis	ICD-9-CM
303.92	Other and unspecified alcohol dependence, episodic	Diagnosis	ICD-9-CM
303.93	Other and unspecified alcohol dependence, in remission	Diagnosis	ICD-9-CM
304.0	Opioid type dependence	Diagnosis	ICD-9-CM
304.00	Opioid type dependence, unspecified	Diagnosis	ICD-9-CM
304.01	Opioid type dependence, continuous	Diagnosis	ICD-9-CM
304.02	Opioid type dependence, episodic	Diagnosis	ICD-9-CM
304.03	Opioid type dependence, in remission	Diagnosis	ICD-9-CM
304.1	Sedative, hypnotic or anxiolytic dependence	Diagnosis	ICD-9-CM
304.10	Sedative, hypnotic or anxiolytic dependence, unspecified	Diagnosis	ICD-9-CM
304.11	Sedative, hypnotic or anxiolytic dependence, continuous	Diagnosis	ICD-9-CM
304.12	Sedative, hypnotic or anxiolytic dependence, episodic	Diagnosis	ICD-9-CM
304.13	Sedative, hypnotic or anxiolytic dependence, in remission	Diagnosis	ICD-9-CM
304.2	Cocaine dependence	Diagnosis	ICD-9-CM
304.20	Cocaine dependence, unspecified	Diagnosis	ICD-9-CM
304.21	Cocaine dependence, continuous	Diagnosis	ICD-9-CM
304.22	Cocaine dependence, episodic	Diagnosis	ICD-9-CM
304.23	Cocaine dependence, in remission	Diagnosis	ICD-9-CM
304.3	Cannabis dependence	Diagnosis	ICD-9-CM
304.30	Cannabis dependence, unspecified	Diagnosis	ICD-9-CM
304.31	Cannabis dependence, continuous	Diagnosis	ICD-9-CM
304.32	Cannabis dependence, episodic	Diagnosis	ICD-9-CM
304.33	Cannabis dependence, in remission	Diagnosis	ICD-9-CM

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

Code	Description	Code Type	Code Category
304.4	Amphetamine and other psychostimulant dependence	Diagnosis	ICD-9-CM
304.40	Amphetamine and other psychostimulant dependence, unspecified	Diagnosis	ICD-9-CM
304.41	Amphetamine and other psychostimulant dependence, continuous	Diagnosis	ICD-9-CM
304.42	Amphetamine and other psychostimulant dependence, episodic	Diagnosis	ICD-9-CM
304.43	Amphetamine and other psychostimulant dependence, in remission	Diagnosis	ICD-9-CM
304.5	Hallucinogen dependence	Diagnosis	ICD-9-CM
304.50	Hallucinogen dependence, unspecified	Diagnosis	ICD-9-CM
304.51	Hallucinogen dependence, continuous	Diagnosis	ICD-9-CM
304.52	Hallucinogen dependence, episodic	Diagnosis	ICD-9-CM
304.53	Hallucinogen dependence, in remission	Diagnosis	ICD-9-CM
304.6	Other specified drug dependence	Diagnosis	ICD-9-CM
304.60	Other specified drug dependence, unspecified	Diagnosis	ICD-9-CM
304.61	Other specified drug dependence, continuous	Diagnosis	ICD-9-CM
304.62	Other specified drug dependence, episodic	Diagnosis	ICD-9-CM
304.63	Other specified drug dependence, in remission	Diagnosis	ICD-9-CM
304.7	Combinations of opioid type drug with any other drug dependence	Diagnosis	ICD-9-CM
304.70	Combinations of opioid type drug with any other drug dependence, unspecified	Diagnosis	ICD-9-CM
304.71	Combinations of opioid type drug with any other drug dependence, continuous	Diagnosis	ICD-9-CM
304.72	Combinations of opioid type drug with any other drug dependence, episodic	Diagnosis	ICD-9-CM
304.73	Combinations of opioid type drug with any other drug dependence, in remission	Diagnosis	ICD-9-CM
304.8	Combinations of drug dependence excluding opioid type drug	Diagnosis	ICD-9-CM
304.80	Combinations of drug dependence excluding opioid type drug, unspecified	Diagnosis	ICD-9-CM
304.81	Combinations of drug dependence excluding opioid type drug, continuous	Diagnosis	ICD-9-CM
304.82	Combinations of drug dependence excluding opioid type drug, episodic	Diagnosis	ICD-9-CM
304.83	Combinations of drug dependence excluding opioid type drug, in remission	Diagnosis	ICD-9-CM
304.9	Unspecified drug dependence	Diagnosis	ICD-9-CM
304.90	Unspecified drug dependence, unspecified	Diagnosis	ICD-9-CM
304.91	Unspecified drug dependence, continuous	Diagnosis	ICD-9-CM
304.92	Unspecified drug dependence, episodic	Diagnosis	ICD-9-CM
304.93	Unspecified drug dependence, in remission	Diagnosis	ICD-9-CM
305.0	Nondependent alcohol abuse	Diagnosis	ICD-9-CM
305.00	Nondependent alcohol abuse, unspecified	Diagnosis	ICD-9-CM
305.01	Nondependent alcohol abuse, continuous	Diagnosis	ICD-9-CM
305.02	Nondependent alcohol abuse, episodic	Diagnosis	ICD-9-CM
305.03	Nondependent alcohol abuse, in remission	Diagnosis	ICD-9-CM
305.2	Nondependent cannabis abuse	Diagnosis	ICD-9-CM
305.20	Nondependent cannabis abuse, unspecified	Diagnosis	ICD-9-CM
305.21	Nondependent cannabis abuse, continuous	Diagnosis	ICD-9-CM
305.22	Nondependent cannabis abuse, episodic	Diagnosis	ICD-9-CM
305.23	Nondependent cannabis abuse, in remission	Diagnosis	ICD-9-CM
305.3	Nondependent hallucinogen abuse	Diagnosis	ICD-9-CM

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

Code	Description	Code Type	Code Category
305.30	Nondependent hallucinogen abuse, unspecified	Diagnosis	ICD-9-CM
305.31	Nondependent hallucinogen abuse, continuous	Diagnosis	ICD-9-CM
305.32	Nondependent hallucinogen abuse, episodic	Diagnosis	ICD-9-CM
305.33	Nondependent hallucinogen abuse, in remission	Diagnosis	ICD-9-CM
305.4	Nondependent sedative, hypnotic or anxiolytic abuse	Diagnosis	ICD-9-CM
305.40	Nondependent sedative, hypnotic or anxiolytic abuse, unspecified	Diagnosis	ICD-9-CM
305.41	Nondependent sedative hypnotic or anxiolytic abuse, continuous	Diagnosis	ICD-9-CM
305.42	Nondependent sedative, hypnotic or anxiolytic abuse, episodic	Diagnosis	ICD-9-CM
305.43	Nondependent sedative, hypnotic or anxiolytic abuse, in remission	Diagnosis	ICD-9-CM
305.5	Nondependent opioid abuse	Diagnosis	ICD-9-CM
305.50	Nondependent opioid abuse, unspecified	Diagnosis	ICD-9-CM
305.51	Nondependent opioid abuse, continuous	Diagnosis	ICD-9-CM
305.52	Nondependent opioid abuse, episodic	Diagnosis	ICD-9-CM
305.53	Nondependent opioid abuse, in remission	Diagnosis	ICD-9-CM
305.6	Nondependent cocaine abuse	Diagnosis	ICD-9-CM
305.60	Nondependent cocaine abuse, unspecified	Diagnosis	ICD-9-CM
305.61	Nondependent cocaine abuse, continuous	Diagnosis	ICD-9-CM
305.62	Nondependent cocaine abuse, episodic	Diagnosis	ICD-9-CM
305.63	Nondependent cocaine abuse, in remission	Diagnosis	ICD-9-CM
305.7	Nondependent amphetamine or related acting sympathomimetic abuse	Diagnosis	ICD-9-CM
305.70	Nondependent amphetamine or related acting sympathomimetic abuse, unspecified	Diagnosis	ICD-9-CM
305.71	Nondependent amphetamine or related acting sympathomimetic abuse, continuous	Diagnosis	ICD-9-CM
305.72	Nondependent amphetamine or related acting sympathomimetic abuse, episodic	Diagnosis	ICD-9-CM
305.73	Nondependent amphetamine or related acting sympathomimetic abuse, in remission	Diagnosis	ICD-9-CM
305.8	Nondependent antidepressant type abuse	Diagnosis	ICD-9-CM
305.80	Nondependent antidepressant type abuse, unspecified	Diagnosis	ICD-9-CM
305.81	Nondependent antidepressant type abuse, continuous	Diagnosis	ICD-9-CM
305.82	Nondependent antidepressant type abuse, episodic	Diagnosis	ICD-9-CM
305.83	Nondependent antidepressant type abuse, in remission	Diagnosis	ICD-9-CM
305.9	Other, mixed, or unspecified nondependent drug abuse	Diagnosis	ICD-9-CM
305.90	Other, mixed, or unspecified nondependent drug abuse, unspecified	Diagnosis	ICD-9-CM
305.91	Other, mixed, or unspecified nondependent drug abuse, continuous	Diagnosis	ICD-9-CM
305.92	Other, mixed, or unspecified nondependent drug abuse, episodic	Diagnosis	ICD-9-CM
305.93	Other, mixed, or unspecified nondependent drug abuse, in remission	Diagnosis	ICD-9-CM

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

Generic Name	Brand Name
Analgesic Opiates	
acetaminophen with codeine phosphate	Acetaminophen-Codeine
acetaminophen with codeine phosphate	Capital with Codeine
acetaminophen with codeine phosphate	Cocet
acetaminophen with codeine phosphate	Cocet Plus
acetaminophen with codeine phosphate	Tylenol-Codeine #3
acetaminophen with codeine phosphate	Tylenol-Codeine #4
acetaminophen with codeine phosphate	Vopac
aspirin/codeine phosphate	Aspirin-Codeine
aspirin/codeine phosphate	Aspirin-Codeine #3
aspirin/codeine phosphate	Aspirin-Codeine #4
buprenorphine	Buprenorphine
buprenorphine	Butrans
buprenorphine HCl	Belbuca
buprenorphine HCl/naloxone HCl	Bunavail
butalbital/acetaminophen/caffeine/codeine phosphate	Butalbital-Acetaminop-Caf-Cod
butalbital/acetaminophen/caffeine/codeine phosphate	Fioricet with Codeine
butalbital/acetaminophen/caffeine/codeine phosphate	Phrenilin w/Caffeine-Codeine
carisoprodol/aspirin/codeine phosphate	Carisoprodol Compound-Codeine
carisoprodol/aspirin/codeine phosphate	Carisoprodol-ASA-Codeine
carisoprodol/aspirin/codeine phosphate	Soma Compound with Codeine
codeine phosphate	Codeine Phosphate
codeine phosphate	Codeine Phosphate Soluble
codeine phosphate/butalbital/aspirin/caffeine	Ascomp with Codeine
codeine phosphate/butalbital/aspirin/caffeine	Butalbital Compound W/Codeine
codeine phosphate/butalbital/aspirin/caffeine	Butalbital Compound-Codeine
codeine phosphate/butalbital/aspirin/caffeine	Codeine-Butalbital-ASA-Caff
codeine phosphate/butalbital/aspirin/caffeine	Fiorinal-Codeine #3
codeine sulfate	Codeine Sulfate
fentanyl citrate	Abstral
fentanyl citrate	Actiq
fentanyl citrate	Fentanyl Citrate
fentanyl citrate	Fentora
fentanyl citrate	Lazanda
fentanyl citrate	Onsolis
fentanyl citrate in 0.9 % sodium chloride/PF	Fentanyl Citrate (PF)-0.9%NaCl
fentanyl citrate in dextrose 5% in water/PF	Fentanyl Citrate in D5W (PF)
fentanyl citrate/bupivacaine HCl in 0.9 % sodium chloride/PF	Fentanyl (PF)-Bupivacaine-NaCl
fentanyl citrate/droperidol	fentanyl-Droperidol
fentanyl citrate/PF	Fentanyl Citrate (PF)
fentanyl citrate/PF	Sublimaze (PF)
fentanyl citrate/ropivacaine HCl/sodium chloride 0.9%/PF	Fentanyl-Ropivacaine-NaCl (PF)
hydrocodone bitartrate	Hysingla ER
hydrocodone bitartrate	Zohydro ER
hydrocodone bitartrate/acetaminophen	Anexsia
hydrocodone bitartrate/acetaminophen	Co-Gesic

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

Generic Name	Brand Name
hydrocodone bitartrate/acetaminophen	Dolacet
hydrocodone bitartrate/acetaminophen	Dolorex Forte
hydrocodone bitartrate/acetaminophen	Hycet
hydrocodone bitartrate/acetaminophen	Hydrocet
hydrocodone bitartrate/acetaminophen	Hydrocodone-Acetaminophen
hydrocodone bitartrate/acetaminophen	Hydrogesic
hydrocodone bitartrate/acetaminophen	Liquicet
hydrocodone bitartrate/acetaminophen	Lorcet (hydrocodone)
hydrocodone bitartrate/acetaminophen	Lorcet 10/650
hydrocodone bitartrate/acetaminophen	Lorcet HD
hydrocodone bitartrate/acetaminophen	Lorcet Plus
hydrocodone bitartrate/acetaminophen	Lortab
hydrocodone bitartrate/acetaminophen	Lortab 10-325
hydrocodone bitartrate/acetaminophen	Lortab 5-325
hydrocodone bitartrate/acetaminophen	Lortab 7.5-325
hydrocodone bitartrate/acetaminophen	Lortab Elixir
hydrocodone bitartrate/acetaminophen	Margesic-H
hydrocodone bitartrate/acetaminophen	Maxidone
hydrocodone bitartrate/acetaminophen	Norco
hydrocodone bitartrate/acetaminophen	Polygesic
hydrocodone bitartrate/acetaminophen	Stagesic
hydrocodone bitartrate/acetaminophen	Vanacet
hydrocodone bitartrate/acetaminophen	Verdrocet
hydrocodone bitartrate/acetaminophen	Vicodin
hydrocodone bitartrate/acetaminophen	Vicodin ES
hydrocodone bitartrate/acetaminophen	Vicodin HP
hydrocodone bitartrate/acetaminophen	Xodol 10/300
hydrocodone bitartrate/acetaminophen	Xodol 5/300
hydrocodone bitartrate/acetaminophen	Xodol 7.5/300
hydrocodone bitartrate/acetaminophen	Zamicet
hydrocodone bitartrate/acetaminophen	Zolvit
hydrocodone bitartrate/acetaminophen	Zydone
hydrocodone bitartrate/acetaminophen/dietary supplement †	Theracodophen-325
hydrocodone bitartrate/acetaminophen/dietary supplement †	Theracodophen-650
hydrocodone bitartrate/acetaminophen/dietary supplement †	Theracodophen-Low-90
hydromorphone HCl	Dilaudid
hydromorphone HCl	Dilaudid-5
hydromorphone HCl	Exalgo ER
hydromorphone HCl	Hydromorphone
hydromorphone HCl in 0.9 % sodium chloride	Hydromorphone in 0.9 % NaCl
hydromorphone HCl in 0.9 % sodium chloride/PF	Hydromorphone (PF)-0.9 % NaCl
hydromorphone HCl in dextrose 5 %-water/PF	Hydromorphone in D5W (PF)
hydromorphone HCl in sterile water/PF	Hydromorphone (PF) in Water
hydromorphone HCl/bupivacaine HCl in 0.9% sodium chloride	Hydromorphone-bupiv (PF)-NaCl
hydromorphone HCl/PF	Dilaudid (PF)
hydromorphone HCl/PF	Dilaudid-HP (PF)

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

Generic Name	Brand Name
hydromorphone HCl/PF	Hydromorphone (PF)
hydromorphone HCl/ropivacaine in 0.9 % sodium chloride/PF	Hydromorph(PF)-ropiv-0.9% NaCl
ibuprofen/oxycodone HCl	Combunox
ibuprofen/oxycodone HCl	Ibuprofen-Oxycodone
meperidine HCl	Demerol
meperidine HCl	Meperidine
meperidine HCl	Meperitab
meperidine HCl in 0.9 % sodium chloride	Meperidine in 0.9 % NaCl
meperidine HCl in 0.9 % sodium chloride/PF	Meperidine (PF) in 0.9 % NaCl
meperidine HCl/PF	Demerol (PF)
meperidine HCl/PF	Meperidine (PF)
meperidine HCl/promethazine HCl	Meperidine-Promethazine
meperidine HCl/promethazine HCl	Meprozone
Antipsychotics	
aripiprazole	Abilify
aripiprazole	Abilify Discmelt
aripiprazole	Abilify Maintena
aripiprazole	Aripiprazole
aripiprazole lauroxil	Aristada
aripiprazole lauroxil, submicronized	Aristada Initio
asenapine maleate	Saphris
asenapine maleate	Saphris (black cherry)
brexpiprazole	Rexulti
cariprazine HCl	Vraylar
chlorpromazine HCl	Chlorpromazine
clozapine	Clozapine
clozapine	Clozaril
clozapine	FazaClo
clozapine	Versacloz
fluphenazine decanoate	Fluphenazine Decanoate
fluphenazine HCl	Fluphenazine HCl
haloperidol	Haloperidol
haloperidol decanoate	Haldol Decanoate
haloperidol decanoate	Haloperidol Decanoate
haloperidol lactate	Haldol
haloperidol lactate	Haloperidol Lactate
iloperidone	Fanapt
loxapine	Adasuve
loxapine succinate	Loxapine Succinate
loxapine succinate	Loxitane
lurasidone HCl	Latuda
molindone HCl	Moban
molindone HCl	Molindone
olanzapine	Olanzapine
olanzapine	Zyprexa
olanzapine	Zyprexa Zydis

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

Generic Name	Brand Name
olanzapine pamoate	Zyprexa Relprevv
olanzapine/fluoxetine HCl	Olanzapine-Fluoxetine
olanzapine/fluoxetine HCl	Symbyax
paliperidone	Invega
paliperidone	Paliperidone
paliperidone palmitate	Invega Sustenna
paliperidone palmitate	Invega Trinza
perphenazine	Perphenazine
perphenazine/amitriptyline HCl	Duo-Vil 2-10
perphenazine/amitriptyline HCl	Duo-Vil 2-25
perphenazine/amitriptyline HCl	Perphenazine-Amitriptyline
pimavanserin tartrate	Nuplazid
pimozide	Orap
pimozide	Pimozide
quetiapine fumarate	Quetiapine
quetiapine fumarate	Seroquel
quetiapine fumarate	Seroquel XR
risperidone	Perseris
risperidone	Risperdal
risperidone	Risperdal M-TAB
risperidone	Risperidone
risperidone microspheres	Risperdal Consta
thioridazine HCl	Thioridazine
thiothixene	Navane
thiothixene	Thiothixene
trifluoperazine HCl	Trifluoperazine
ziprasidone HCl	Geodon
ziprasidone HCl	Ziprasidone HCl
ziprasidone mesylate	Geodon
Anxiolytic and Hypnotic Medication	
alprazolam	Alprazolam
alprazolam	Alprazolam Intensol
alprazolam	Niravam
alprazolam	Xanax
alprazolam	Xanax XR
alprazolam/dietary supplement,misc combo no.17	Gabazolamine
amitriptyline HCl/chlordiazepoxide	Amitriptyline-Chlordiazepoxide
amitriptyline HCl/chlordiazepoxide	Limbitrol
amitriptyline HCl/chlordiazepoxide	Limbitrol DS
bupirone HCl	BuSpar
bupirone HCl	Bupirone
bupirone HCl	Vanspar
chlordiazepoxide HCl	Chlordiazepoxide HCl
chlordiazepoxide HCl	Librium
clorazepate dipotassium	Clorazepate Dipotassium
clorazepate dipotassium	Tranxene T-Tab

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

Generic Name	Brand Name
clorazepate dipotassium	Tranxene-SD
diazepam	Diazepam
diazepam	Diazepam Intensol
diazepam	Valium
lorazepam	Ativan
lorazepam	Lorazepam
lorazepam	Lorazepam Intensol
meprobamate	Meprobamate
oxazepam	Oxazepam
butabarbital sodium	Butisol
chloral hydrate	Chloral Hydrate
chloral hydrate	Somnote
doxepin HCl	Doxepin
doxepin HCl	Prudoxin
doxepin HCl	Silenor
doxepin HCl	Sinequan
doxepin HCl	Zonalon
estazolam	Estazolam
estazolam	Prosom
eszopiclone	Eszopiclone
eszopiclone	Lunesta
flurazepam HCl	Dalmane
flurazepam HCl	Flurazepam
mephobarbital	Mebaral
mephobarbital	Mephobarbital
midazolam HCl	Midazolam
midazolam HCl in 0.9 % sodium chloride	Midazolam in 0.9 % Sod Chlorid
midazolam HCl in 0.9 % sodium chloride/PF	Midazolam (PF) in 0.9 % NaCl
midazolam HCl in 5 % dextrose and water/PF	Midazolam in Dextrose 5 % (PF)
midazolam HCl in dextrose 5% in water	Midazolam in Dextrose 5 %
midazolam HCl/PF	Midazolam (PF)
pentobarbital sodium	Nembutal Sodium
pentobarbital sodium	Pentobarbital Sodium
quazepam	Doral
quazepam	Quazepam
ramelteon	Rozerem
secobarbital sodium	Seconal
secobarbital sodium	Seconal Sodium
suvorexant	Belsomra
tasimelteon	Hetlioz
temazepam	Restoril
temazepam	Temazepam
temazepam/dietary supplement no.8	Strazepam
triazolam	Halcion
triazolam	Triazolam
zaleplon	Sonata

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

Generic Name	Brand Name
zaleplon	Zaleplon
zolpidem tartrate	Ambien
zolpidem tartrate	Ambien CR
zolpidem tartrate	AMBIEN PAK
zolpidem tartrate	Edluar
zolpidem tartrate	Intermezzo
zolpidem tartrate	Zolpidem
zolpidem tartrate	Zolpimist
Lithium and Other Mood Stabilizers	
carbamazepine	Carbamazepine
carbamazepine	Carbatrol
carbamazepine	Epitol
carbamazepine	Equetro
carbamazepine	Tegretol
carbamazepine	Tegretol XR
clonazepam	Clonazepam
clonazepam	Klonopin
divalproex sodium	Depakote
divalproex sodium	Depakote ER
divalproex sodium	Depakote Sprinkles
divalproex sodium	Divalproex
lamotrigine	Lamictal
lamotrigine	Lamictal ODT
lamotrigine	Lamictal ODT Starter (Blue)
lamotrigine	Lamictal ODT Starter (Green)
lamotrigine	Lamictal ODT Starter (Orange)
lamotrigine	Lamictal Starter (Blue) Kit
lamotrigine	Lamictal Starter (Green) Kit
lamotrigine	Lamictal Starter (Orange) Kit
lamotrigine	Lamictal XR
lamotrigine	Lamictal XR Starter (Blue)
lamotrigine	Lamictal XR Starter (Green)
lamotrigine	Lamictal XR Starter (Orange)
lamotrigine	Lamotrigine
lamotrigine	Subvenite
lamotrigine	Subvenite Starter (Blue) Kit
lamotrigine	Subvenite Starter (Green) Kit
lamotrigine	Subvenite Starter (Orange) Kit
lithium carbonate	Lithium Carbonate
lithium carbonate	Lithobid
lithium citrate	Lithium Citrate
oxcarbazepine	Oxcarbazepine
oxcarbazepine	Oxtellar XR
oxcarbazepine	Trileptal
valproic acid	Depakene
valproic acid	Stavzor

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

Generic Name	Brand Name
valproic acid	Valproic Acid
valproic acid (as sodium salt) (valproate sodium)	Depacon
valproic acid (as sodium salt) (valproate sodium)	Depakene
valproic acid (as sodium salt) (valproate sodium)	Valproate Sodium
valproic acid (as sodium salt) (valproate sodium)	Valproic Acid (as sodium salt)
Non-Sertraline Antidepressants	
amitriptyline HCl	Amitriptyline
amitriptyline HCl	Vanatrip
amitriptyline HCl/chlordiazepoxide	Amitriptyline-Chlordiazepoxide
amitriptyline HCl/chlordiazepoxide	Limbitrol
amitriptyline HCl/chlordiazepoxide	Limbitrol DS
amoxapine	Amoxapine
bupropion HBr	Aplenzin
bupropion HCl	Budeprion SR
bupropion HCl	Budeprion XL
bupropion HCl	Bupropion HCl
bupropion HCl	Forfivo XL
bupropion HCl	Wellbutrin
bupropion HCl	Wellbutrin SR
bupropion HCl	Wellbutrin XL
bupropion HCl/dietary supplement combination no.15	Appbutamone-D
bupropion HCl/dietary supplement combination no.16	Appbutamone
citalopram hydrobromide	Celexa
citalopram hydrobromide	Citalopram
clomipramine HCl	Anafranil
clomipramine HCl	Clomipramine
desipramine HCl	Desipramine
desipramine HCl	Norpramin
desvenlafaxine	Desvenlafaxine
desvenlafaxine	Khedezla
desvenlafaxine fumarate	Desvenlafaxine Fumarate
desvenlafaxine succinate	Desvenlafaxine Succinate
desvenlafaxine succinate	Pristiq
doxepin HCl	Doxepin
doxepin HCl	Silenor
doxepin HCl	Sinequan
duloxetine HCl	Cymbalta
duloxetine HCl	Duloxetine
duloxetine HCl	Irenka
escitalopram oxalate	Escitalopram Oxalate
escitalopram oxalate	Lexapro
fluoxetine HCl	Fluoxetine
fluoxetine HCl	Prozac
fluoxetine HCl	Prozac Weekly
fluoxetine HCl	Rapiflux
fluoxetine HCl	Sarafem

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Generic Name	Brand Name
fluoxetine HCl	Selfemra
fluoxetine HCl/dietary supplement no.17	Gaboxetine
fluoxetine HCl/dietary supplement no.8	Sentroxatine
fluvoxamine maleate	Fluvoxamine
fluvoxamine maleate	Luvox CR
imipramine HCl	Imipramine HCl
imipramine HCl	Tofranil
imipramine pamoate	Imipramine Pamoate
imipramine pamoate	Tofranil-PM
isocarboxazid	Marplan
levomilnacipran HCl	Fetzima
maprotiline HCl	Maprotiline
mirtazapine	Mirtazapine
mirtazapine	Remeron
mirtazapine	Remeron SolTab
nefazodone HCl	Nefazodone
nefazodone HCl	Serzone
nortriptyline HCl	Nortriptyline
nortriptyline HCl	Pamelor
olanzapine/fluoxetine HCl	Olanzapine-Fluoxetine
olanzapine/fluoxetine HCl	Symbyax
paroxetine HCl	Paroxetine HCl
paroxetine HCl	Paxil
paroxetine HCl	Paxil CR
paroxetine mesylate	Brisdelle
paroxetine mesylate	Paroxetine Mesylate (menop.sym)
paroxetine mesylate	Pexeva
perphenazine/amitriptyline HCl	Duo-Vil 2-10
perphenazine/amitriptyline HCl	Duo-Vil 2-25
perphenazine/amitriptyline HCl	Perphenazine-Amitriptyline
phenelzine sulfate	Nardil
phenelzine sulfate	Phenelzine
protriptyline HCl	Protriptyline
protriptyline HCl	Vivactil
selegiline	Emsam
tranylcypromine sulfate	Parnate
tranylcypromine sulfate	Tranylcypromine
trazodone HCl	Desyrel
trazodone HCl	Oleptro ER
trazodone HCl	Trazodone
trazodone HCl/dietary supplement no.8	Trazamine
trimipramine maleate	Surmontil
trimipramine maleate	Trimipramine
venlafaxine HCl	Effexor
venlafaxine HCl	Effexor XR
venlafaxine HCl	Venlafaxine

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

Generic Name	Brand Name
vortioxetine hydrobromide	Brintellix
vortioxetine hydrobromide	Trintellix

Appendix H. Specifications for Parameters Used to Define this Request

This request executed the Cohort Identification and Descriptive Analysis (CIDA) and Propensity Score Analysis (PSA) modules, Version 7.3.3, with additional programming to assess the risk of hospitalized depression comparing brand name sertraline to its authorized generic in the Sentinel Distributed Database (SDD).						
<p>Query Period: June 30, 2006 - September 30, 2015</p> <p>Coverage Requirement: Medical and Drug Coverage</p> <p>Enrollment Gap: 0 Days</p> <p>Enrollment Requirement: 180 days</p> <p>Age Groups: 12-17, 18-24, 25-54, 55+ years</p>						
	Risk Window: 1-14 days With socioeconomic status covariate		Risk Window: 1-365 days With socioeconomic status covariate		Risk Window: 15-365 days With socioeconomic status covariate	
	Comparison 1		Comparison 2		Comparison 3	
Drug/Exposure	Authorized generic sertraline	Brand name sertraline	Authorized generic sertraline	Brand name sertraline	Authorized generic sertraline	Brand name sertraline
Incident Exposure/Comparator						
Incident with Respect to:	Any sertraline (including those not in exposure definitions)	Any sertraline (including those not in exposure definitions)	Any sertraline (including those not in exposure definitions)	Any sertraline (including those not in exposure definitions)	Any sertraline (including those not in exposure definitions)	Any sertraline (including those not in exposure definitions)
Incidence Assessment	Lookback period should search for evidence of days supply	Lookback period should search for evidence of days supply	Lookback period should search for evidence of days supply	Lookback period should search for evidence of days supply	Lookback period should search for evidence of days supply	Lookback period should search for evidence of days supply
Washout Period	180 days	180 days	180 days	180 days	180 days	180 days
Cohort Definition	Cohort includes only the first valid incident treatment episode during the query period	Cohort includes only the first valid incident treatment episode during the query period	Cohort includes only the first valid incident treatment episode during the query period	Cohort includes only the first valid incident treatment episode during the query period	Cohort includes only the first valid incident treatment episode during the query period	Cohort includes only the first valid incident treatment episode during the query period
Episode Gap	15	15	15	15	15	15
Episode Extension Period	15	15	15	15	15	15
Minimum Episode Duration	1	1	1	1	1	1

Appendix H. Specifications for Parameters Used to Define this Request

	Risk Window: 1-14 days With socioeconomic status covariate		Risk Window: 1-365 days With socioeconomic status covariate		Risk Window: 15-365 days With socioeconomic status covariate	
	Comparison 1		Comparison 2		Comparison 3	
	Maximum Episode Duration Minimum Days Supplied Censor Criteria	14 1 Death, query end date, disenrollment, event, switch to brand name sertraline, dispensing for another antidepressant	14 1 Death, query end date, disenrollment, event, switch to generic name sertraline, dispensing for another antidepressant	365 1 Death, query end date, disenrollment, event, switch to brand name sertraline, dispensing for another antidepressant	365 1 Death, query end date, disenrollment, event, switch to generic name sertraline, dispensing for another antidepressant	365 1 Death, query end date, disenrollment, event, switch to brand name sertraline, dispensing for another antidepressant
Inclusion/Exclusion Pre-Existing Condition Include/Exclude Lookback Period Pre-Existing Condition Include/Exclude Lookback Period	Mood/depressive disorder Inclusion (-90, 0) Traumatic brain injury Exclusion (-180, 0)	Mood/depressive disorder Inclusion (-90, 0) Traumatic brain injury Exclusion (-180, 0)	Mood/depressive disorder Inclusion (-90, 0) Traumatic brain injury Exclusion (-180, 0)	Mood/depressive disorder Inclusion (-90, 0) Traumatic brain injury Exclusion (-180, 0)	Mood/depressive disorder Inclusion (-90, 0) Traumatic brain injury Exclusion (-180, 0)	Mood/depressive disorder Inclusion (-90, 0) Traumatic brain injury Exclusion (-180, 0)
Event/Outcome Event/Outcome Event Definition	Hospitalized depression Primary diagnosis of mood or depressive disorder in inpatient care setting and No diagnosis of poisoning, toxicity of a substance chiefly non-medical in nature, asphyxiation, or open wound to the elbow, wrist, or forearm in inpatient care setting or emergency department on the same day		Hospitalized depression Primary diagnosis of mood or depressive disorder in inpatient care setting and No diagnosis of poisoning, toxicity of a substance chiefly non-medical in nature, asphyxiation, or open wound to the elbow, wrist, or forearm in inpatient care setting or emergency department on the same day		Hospitalized depression Primary diagnosis of mood or depressive disorder in inpatient care setting and No diagnosis of poisoning, toxicity of a substance chiefly non-medical in nature, asphyxiation, or open wound to the elbow, wrist, or forearm in inpatient care setting or emergency department on the same day	

Appendix H. Specifications for Parameters Used to Define this Request

	Risk Window: 1-14 days With socioeconomic status covariate	Risk Window: 1-365 days With socioeconomic status covariate	Risk Window: 15-365 days With socioeconomic status covariate
	Comparison 1	Comparison 2	Comparison 3
Washout Period	0 days	0 days	0 days
Blackout Period	1	1	14
Propensity Score Matching			
Covariates	See Appendices F-G	See Appendices F-G	See Appendices F-G
Covariate Evaluation Window	(-180, -1)	(-180, -1)	(-180, -1)
Matching Ratio	1:n	1:n	1:n
Matching Caliper Settings	0.05	0.05	0.05
Analysis Type	Conditional	Conditional	Conditional
Variable in Cox model	None	None	None
Subgroup Analysis			
Stratifying variable	Age group	Age group	Age group
Re-matching	Whole Population	Whole Population	Whole Population
Additional Output	Kaplan Meier curves	Kaplan Meier curves	Kaplan Meier curves

International Classification of Disease, Ninth Edition, Clinical Modification (ICD-9-CM), International Classification of Disease, Tenth Edition, Clinical Modification (ICD-10-CM), Healthcare Common Procedure Coding System (HCPCS), Current Procedural Terminology, Third Edition (CPT-3), and Current Procedural Terminology, Fourth Edition (CPT-4) codes are provided by Optum360. National Drug Codes (NDC) are checked against First Data Bank's "National Drug Data File (NDDF®) Plus."