

MINI-SENTINEL DISTRIBUTED DATABASE

YEAR 3 SUMMARY REPORT

Version 1.1

Prepared by Mini-Sentinel Data Core

August 2014

Mini-Sentinel is a pilot project sponsored by the <u>U.S. Food and Drug Administration (FDA)</u> to inform and facilitate development of a fully operational active surveillance system, the Sentinel System, for monitoring the safety of FDA-regulated medical products. Mini-Sentinel is one piece of the <u>Sentinel</u> <u>Initiative</u>, a multi-faceted effort by the FDA to develop a national electronic system that will complement existing methods of safety surveillance. Mini-Sentinel Collaborators include Data and Academic Partners that provide access to health care data and ongoing scientific, technical, methodological, and organizational expertise. The Mini-Sentinel Coordinating Center is funded by the FDA through the Department of Health and Human Services (HHS) Contract number HHSF223200910006I.



TABLE OF CONTENTS

OVERVIEW	.1
GLOSSARY	.3
MSDD AT A GLANCE	.5
MSDD TABLES AND FIGURES	.6
TABLE 1. SNAPSHOT OF THE MSDD ENROLLMENT TABLE	
FIGURE 1. ANNUAL NUMBER OF ENROLLMENTS, BY ENROLLMENT TYPE	. 8
FIGURE 2. LENGTH OF ENROLLMENT PERIODS	
FIGURE 3. DISTRIBUTION OF ENROLLMENT BY COVERAGE TYPE	-
TABLE 2. SNAPSHOT OF THE MSDD DEMOGRAPHIC TABLE	
FIGURE 4. DEMOGRAPHIC TABLE: DISTRIBUTION BY AGE GROUP	11
FIGURE 5. DEMOGRAPHIC TABLE: DISTRIBUTION BY SEX	
FIGURE 6. DEMOGRAPHIC TABLE: DISTRIBUTION BY RACE	
TABLE 3. SNAPSHOT OF THE MSDD DISPENSING TABLE	13
FIGURE 7. DISPENSINGS PER USER, BY YEAR	
FIGURE 8. DISTRIBUTION OF DISPENSINGS, BY DAYS SUPPLIED	
TABLE 4. SNAPSHOT OF THE MSDD ENCOUNTER TABLE	
FIGURE 9. TOTAL ENCOUNTERS, BY MONTH & ENCOUNTERS PER PATIENT, BY YEAR	16
TABLE 5. SNAPSHOT OF THE MSDD DEATH TABLE	
FIGURE 10. DISTRIBUTION OF DEATH RECORDS, BY SOURCE	
FIGURE 11. DISTRIBUTION OF DEATH RECORDS, BY CONFIDENCE	18
FIGURE 12. NUMBER OF DEATHS FROM JAN-1995 TO OCT-2010	
FIGURE 13. DISTRIBUTION OF CAUSE OF DEATH RECORDS, BY SOURCE	
FIGURE 14. DISTRIBUTION OF CAUSE OF DEATH RECORDS, BY CONFIDENCE	
TABLE 6. SNAPSHOT OF THE MSDD LABORATORY TABLE	
FIGURE 15. NUMBER OF UNIQUE INDIVIDUALS, BY TEST TYPE AND YEAR	
TABLE 7. LABORATORY RESULT TEST UNIT, BY TEST TYPE AND DATA PARTNER	
TABLE 8. SNAPSHOT OF THE MSDD VITAL SIGNS TABLE	23
FIGURE 16. MEAN HEIGHT BY SEX AND AGE GROUP	
FIGURE 17. MEAN WEIGHT BY SEX AND AGE GROUP	
FIGURE 18. MEAN SYSTOLIC BLOOD PRESSURE BY SEX AND AGE GROUP	
FIGURE 19. MEAN DIASTOLIC BLOOD PRESSURE BY SEX AND AGE GROUP	
FIGURE 20. TOBACCO STATUS BY AGE GROUP	26
FIGURE 21. TOBACCO TYPE BY AGE GROUP	26



OVERVIEW

The *Mini-Sentinel Distributed Database Summary Report* presents a high-level summary of the information available in the Mini-Sentinel Distributed Database (MSDD). To generate the information in this report, the Mini-Sentinel Operations Center (MSOC) developed and distributed programs that Data Partners ran on their local implementation of the Mini-Sentinel Common Data Model (MSCDM). Results from the programs were returned to MSOC for review, aggregation and reporting. The *MSDD Summary Report* represents the data found in the MSDD at the time the programs were executed. The report is updated periodically, and is one of many tools used by MSOC, the Data Partners, and FDA to characterize the data available in the MSDD and assess data quality. The purpose of this report is to provide the FDA and Mini-Sentinel communities a summary of descriptive characteristics of the MSDD at a given point in time. Please refer to the Mini-Sentinel Common Data Model specifications for more information (<u>http://mini-sentinel.org/data_activities/distributed_db_and_data/details.aspx?ID=105</u>).

The data presented in this report are current as of July 9, 2012. This report includes data from 18 Mini-Sentinel Data Partners.

The *Mini-Sentinel Distributed Database Summary Report* summarizes each data table in the MSDD. A summary of each table and the data presented follows. Please note that the report reflects the MSDD "as-is" and does not account for different data extract windows across the Data Partners, including different start and end dates, and partial data for 2011 and 2012 for some Data Partners. The number of Data Partners by year is noted in the relevant tables.

The **Enrollment Table** contains records for all individuals who were health plan members during the period included in the data extract, and includes one record for each member enrollment period defined by a unique combination of drug and medical coverage flags. The table is used to identify enrollment periods. As of July 9, 2012, the Enrollment Table includes information from January 2000 through March 2012. These enrollment periods reflect approximately 160 million unique person identifiers and represent more than 4.5 billion person-months with medical and drug coverage (Table 1). Differences in medical and drug coverage counts are a reflection of the inclusion of drug-only and medical-only policies offered by some Data Partners. Over 70 percent of the enrollment periods in the MSDD include both medical and drug coverage (Figure 3). The enrollment table is often used to restrict assessment of exposures and outcomes to periods of enrollment. The drop in enrollment records in 2012 reflects the number of Data Partners contributing data.

The **Demographic Table** includes sex, birth date, race, and ethnicity. The table has one record for every unique person in the MSDD. Some Mini-Sentinel Data Partners provide care to individuals who are not health plan members (e.g., in ambulatory clinics and hospitals), and information for these non-members are included in this table but not in the Enrollment Table. Therefore, everyone in the Enrollment Table should be in the Demographic Table, but not everyone in the Demographic table will be in the Enrollment Table. Only a few Data Partners collect race and ethnicity information. As of July 9, approximately two-thirds of individuals are between the ages of 20 and 64 (Figure 4) and the sex distribution is approximately equal (Figure 5). Race and ethnicity are unknown or frequently missing at most Data Partner sites (Figure 6, Table 2).



The **Dispensing Table** represents outpatient pharmacy dispensings captured by the Data Partners. The table has one record per dispensing. The MSCDM requires that the Data Partners process source data to remove rollback (negative) transactions (e.g., restocking of prescription fills that were not picked up) and other adjustments before populating the table. Infused medications, vaccinations, and injections provided directly by medical providers are captured in the Procedures Table using the appropriate procedure codes. There were about 3.5 billion dispensings and over 85 million unique patients in the dispensing file. Very few dispensings have days supplied outside the expected range (Table 3), and the majority of dispensings are for between 21 and 33 days supplied (Figure 8). The drop in dispensing records in 2011 reflects the number of Data Partners contributing data.

Each record in the **Encounter Table** represents a unique health care visit in the ambulatory or inpatient setting (see "Encounter Type" in Glossary). The Encounter Table includes dates of service, provider identifiers, and the setting in which care was provided. There were approximately 3.8 billion encounters and over 125 million unique persons in the encounter file (Table 4, Figure 9). Diagnoses and procedures recorded during encounters are recorded in separate tables.

The **Death Table** records enrollee death dates. Many Data Partners link to state death registries to update the death status of their members, but these updates are performed infrequently; a 2-year lag in death data is not uncommon. As of the July 2012, there were approximately 3.5 million unique patient identifiers included in the Death Table (Table 5). State Death Files were the source of information for about one-fourth of records (Figure 10). The **Cause of Death Table** records diagnosis codes reflecting the underlying condition that contributed to the death. There were 1.6 million unique patient identifiers in the Cause of Death Table after the first extract. State Death Files were the source of the information in nearly 80% of records (Figure 13). The drop in records towards the end of the period reflects the number of Data Partners contributing data and variation in data availability (data lag) across Data Partners. The proportion of deaths captured by the Data Partners is unknown, as is the frequency of imputing the date of death. The death tables have not yet been thoroughly reviewed or tested for use within Mini-Sentinel.

The **Laboratory Table** contains selected outpatient laboratory test results from nine Data Partners. Laboratory test results incorporated to date include: alkaline phosphatase (ALP), alanine aminotransferase (SGPT), total bilirubin, glucose, glycosylated hemoglobin (HbA1c), creatinine, hemoglobin, International Normalized Ratio (INR), fibrin d-dimer, and lipase. Absolute neutrophil count (ANC) was populated by one Data Partner and will be captured by additional partners in subsequent years. There were over 12.6 million members with at least one of the listed laboratory results (Table 6). The number of results each year for each laboratory test is depicted in Figure 15. The drop in 2011 reflects the number of Data Partners contributing data. The laboratory tables are being thoroughly reviewed and tested for use within Mini-Sentinel.

The **Vital Signs Table** contains height, weight, blood pressure, and smoking status data from seven Data Partners. In total, there are over 7 million measurements for height and weight and more than 6.5 million measurements for systolic and diastolic blood pressure (Table 8). Mean height, weight, and blood pressure measurements varied by age and sex (Figures 16-19). The vital signs tables are being thoroughly reviewed and tested for use within Mini-Sentinel.



GLOSSARY

Age - defined as (Refresh Date – Date of Birth)

Amount Dispensed - number of units (e.g., pills, tablets, vials, mL, etc.) dispensed. Net amount per NDC per dispensing.

Confidence - all linkages to external data sources have some level of uncertainty, and many linkage algorithms include an assessment of the confidence of the match. Reported as Excellent, Fair or Poor

- *Death Records* captures the confidence in the certainty that the member drawn from the Source data represents the actual member
- *Cause of Death (COD) Records* confidence in the accuracy of the COD based on source, match, number of reporting sources, discrepancies, etc.

Days Supplied - number of days that the medication supports as reported on the dispensing. Net amount per NDC per dispensing.

Data Partners – refers to Mini-Sentinel collaborating partners who have created the Mini-Sentinel Distributed Database using their administrative, claims, and electronic health record data. Each Data Partner was assigned a random ID which remains consistent throughout this report.

Encounter ID - arbitrary encounter-level identifier. Used to link the Encounter, Diagnosis, and Procedure tables.

Encounter Type

- Inpatient Hospital Stay 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* Includes hospice, skilled nursing facility (SNF), rehab center, nursing home, residential, overnight non-hospital dialysis, and other non-hospital stays.
- *Emergency Department* Includes ED encounters that became inpatient stays (in which case inpatient stay would be a separate encounter). Excludes urgent care visits. ED encounters should be identified before hospital stays to insure that ED with subsequent admission won't be incorporated into the hospital event.
- Ambulatory Visit Includes visits at outpatient clinics, same day surgeries, urgent care visits, and other same-day ambulatory hospital encounters, but excludes emergency department encounters.
- Other Ambulatory Visit 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.

Enrollment Period - defined as Enrollment End Date – Enrollment Start Date. A member may have multiple enrollment periods. Changes in drug or medical coverage status will result in a new enrollment period.

Hispanic - person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin, regardless of race. Use local rules for federal reporting of Hispanic origin when available (defined by Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity from



the Office of Management and Budget (OMB), http://www.whitehouse.gov/omb/fedreg_1997standards)

Patient ID (PatID) - pseudoidentifier that has a crosswalk to the true identifier that is retained by the Data Partner. For analytical data sets requiring patient-level data, only the pseudoidentifier will be used to link across all information belonging to a patient. New enrollment period generates a new record, however the same person should have the same PatID on subsequent enrollment records.

Race - definitions for Race are based on the Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity from the Office of Management and Budget (OMB), http://www.whitehouse.gov/omb/fedreg_1997standards.

- American Indian a person having origins in any of the original peoples of North and South America (including Central America), and who maintains tribal affiliation or community attachment.
- Asian a person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent including, for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand, and Vietnam.
- Black/African American a person having origins in any of the black racial groups of Africa.
- *Native Hawaiian or Other Pacific Islander* a person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands.
- *White* a person having origins in any of the original peoples of Europe, the Middle East, or North Africa

Refresh Date – date data is refreshed, defined by Data Partner

Sex - have values of Male, Female, Ambiguous (transgender/hermaphrodite) or Unknown

Source of Death Records - source of the mortality information, which can come from state or national records, tumor registries or from locally defined sources



MSDD AT A GLANCE

As of July 9, 2012

<u>The Mini-Sentinel Distributed Database was comprised of quality-checked data held by 18 partner</u> <u>organizations.</u>

• 160 million individuals

For members with medical and drug coverage:

- 407 million person-years of observation time from 2000 through 2012
- 52 million individuals currently enrolled, accumulating new data
- ° 34 million individuals have over 3 years of data
- 3.5 billion dispensings
- Accumulating over 45 million dispensings per month
- 3.8 billion unique encounters, including 43 million acute inpatient stays
- Accumulating over 57 million encounters per month

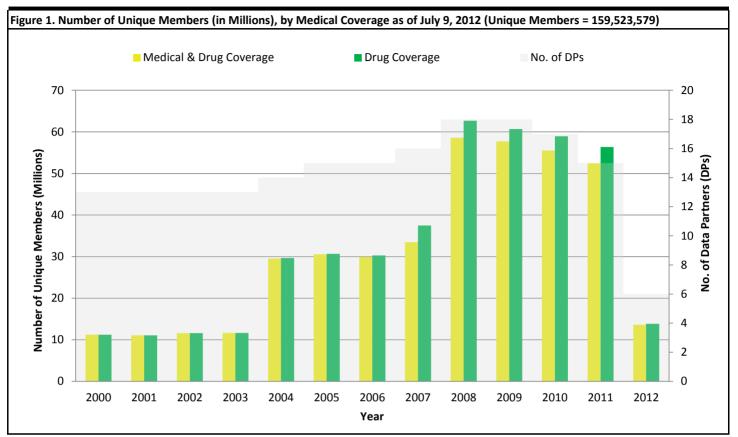


MSDD TABLES AND FIGURES



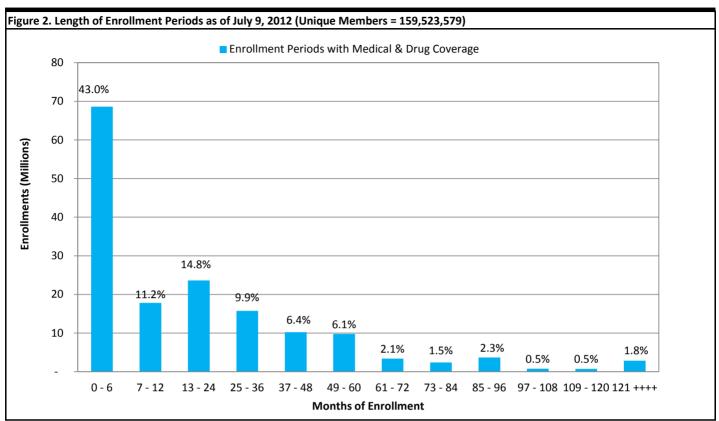
Table 1. Snapshot of the Mini-S	Sentinel D	istributed	Database	Enrollme	nt Table a	s of July 9	, 2012 (Un	ique Merr	bers =159	9,523,579)									
	DP1	DP2	DP3	DP4	DP5	DP6	DP7	DP8	DP9	DP10	DP11	DP12	DP13	DP14	DP15	DP16	DP17	DP18	Total
Number of enrollment periods																			
per person Records with <i>only</i> medical	3.5	4.3	1.8	4.0	1.6	1.1	3.0	1.6	1.1	3.7	3.5	3.4	1.5	6.5	2.6	1.2	1.1	3.4	2
coverage Records with <i>only</i> drug	10.2%	3.1%	4.8%	9.1%	32.0%	0.4%	0.0%	11.7%	38.0%	9.4%	0.2%	50.9%	0.0%	3.3%	1.9%	36.5%	43.1%	7.3%	24.3%
coverage Records with medical +	0.0%	0.0%	0.0%	0.0%	0.0%	48.2%	0.0%	0.0%	1.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.4%	0.0%	0.0%	3.2%
unknown drug coverage Records with <i>both</i> medical	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	35.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.6%	0.0%	0.0%	0.0%	14.9%	1.2%
and drug coverage Length of enrollment:	89.8%	96.9%	95.2%	90.9%	68.0%	51.5%	64.5%	88.3%	60.3%	90.6%	99.8%	49.1%	100.0%	94.1%	98.1%	62.0%	56.9%	77.8%	71.3%
Statistics (months):																			
Min	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
P1	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0
P5	0	3	2	0	0	0	0	2	0	1	2	0	4	3	1	0	0	0	0
P25	9	13	11	10	0	0	3	17	0	11	11	0	12	18	12	0	0	9	0
Median	23	33	27	34	12	2	20	43	8	33	26	23	35	52	36	10	7	25	11
P75	49	76	68	91	49	19	57	76	25	82	62	61	54	111	82	30	24	66	32
P95	117	145	120	149	119	53	73	132	53	145	140	133	123	144	132	83	51	119	85
P99	134	149	121	152	136	53	81	132	53	145	151	142	138	144	133	95	51	144	137
Max	197	262	124	169	202	54	91	135	58	145	223	151	152	144	144	182	51	144	262
Distribution (months):																			
0 - 6	20.8%	12.0%	17.2%	18.4%	42.8%	56.5%	30.9%	10.6%	47.7%	17.6%	16.2%	34.1%	8.4%	11.1%	15.3%	45.3%	48.8%	20.5%	43.0%
7 - 12	15.3%	11.3%	13.5%	10.2%	8.5%	12.5%	10.2%	7.0%	11.2%	10.9%	12.2%	6.7%	18.6%	8.6%	12.4%	10.7%	11.8%	12.3%	11.2%
13 - 24	18.3%	17.6%	17.1%	13.9%	9.5%	12.1%	14.3%	15.2%	15.5%	14.3%	19.4%	10.7%	15.7%	12.0%	14.8%	13.9%	16.7%	16.4%	14.8%
25 - 36	11.5%	12.4%	9.8%	9.6%	8.1%	7.2%	8.9%	12.1%	10.9%	9.9%	11.8%	8.9%	9.2%	9.1%	10.3%	9.7%	9.8%	10.6%	9.9%
37 - 48	8.4%	8.3%	7.7%	7.4%	5.8%	4.8%	6.5%	9.0%	7.0%	7.7%	8.4%	7.6%	8.7%	7.6%	7.5%	6.2%	5.8%	7.1%	6.4%
49 - 60	6.4%	6.3%	6.5%	5.5%	4.8%	7.0%	5.6%	7.7%	7.6%	6.1%	6.1%	6.6%	17.8%	6.4%	6.2%	4.3%	7.1%	6.2%	6.1%
61 - 72	4.4%	5.5%	5.5%	4.5%	4.0%	0.0%	18.2%	12.1%	0.0%	5.1%	4.5%	5.6%	5.2%	5.7%	5.2%	3.1%	0.0%	4.4%	2.1%
73 - 84	3.6%	4.7%	4.6%	3.7%	4.1%	0.0%	5.4%	5.0%	0.0%	4.5%	3.7%	4.3%	5.1%	5.1%	4.9%	2.2%	0.0%	4.0%	1.5%
85 - 96	3.6%	3.8%	4.5%	3.4%	3.1%	0.0%	0.0%	4.0%	0.0%	4.0%	3.2%	4.3%	3.3%	4.4%	4.1%	4.6%	0.0%	7.1%	2.3%
97 - 108	1.9%	3.3%	3.0%	3.1%	2.7%	0.0%	0.0%	3.8%	0.0%	3.3%	2.6%	2.7%	1.6%	4.1%	4.4%	0.0%	0.0%	4.5%	0.5%
109 - 120	1.4%	2.7%	7.0%	2.9%	2.3%	0.0%	0.0%	4.2%	0.0%	3.0%	2.8%	1.7%	1.2%	3.9%	3.9%	0.0%	0.0%	2.3%	0.5%
121 & Up	4.6%	12.1%	3.6%	17.3%	4.5%	0.0%	0.0%	9.5%	0.0%	13.7%	9.1%	6.8%	5.2%	21.9%	10.8%	0.0%	0.0%	4.6%	1.8%



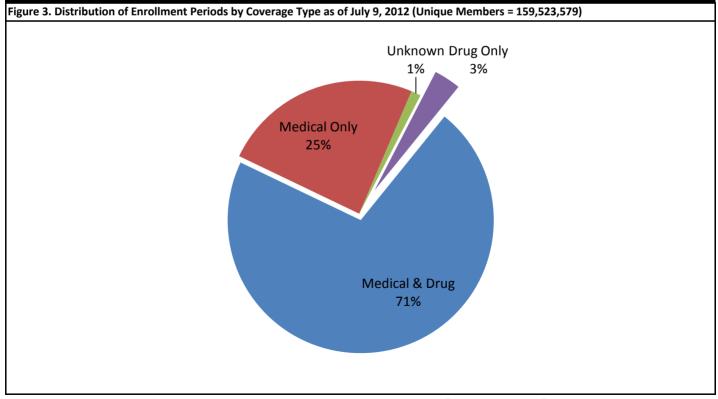


Source: Mini-Sentinel Year Three Data Quality Report; File: Enr_L3_EnrMD_Y





Source: Mini-Sentinel Year Three Data Quality Report; File: Enr_L3_Dist_EnrMD [Data Partners = 18]

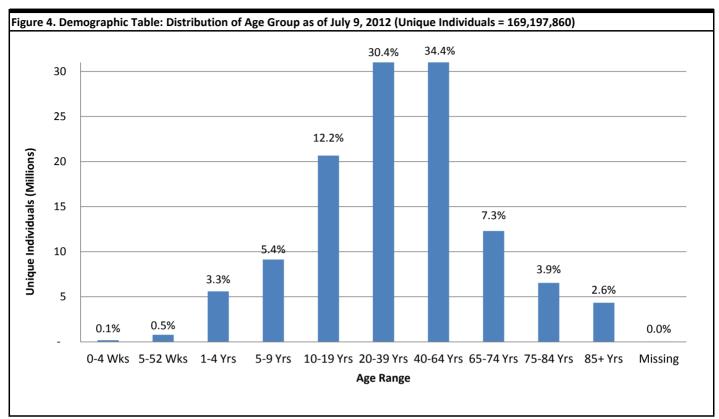


Source: Mini-Sentinel Year Three Data Quality Report; File: Enr_L3_MedDrugCov Table [Data Partners = 18]

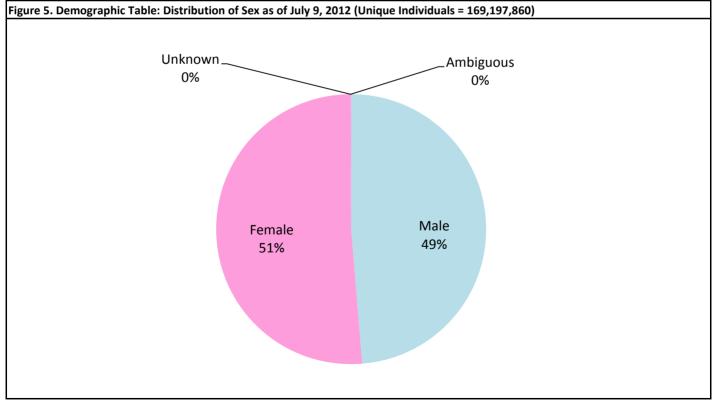


	DP1	DP2	DP3	DP4	DP5	DP6	DP7	DP8	DP9	DP10	DP11	DP12	DP13	DP14	DP15	DP16	DP17	DP18	Tota
Race																			
Unknown American Indian /	90.4%	67.6%	91.8%	55.8%	32.7%	45.1%	89.6%	7.8%	42.1%	57.9%	79.8%	100.0%	100.0%	38.7%	84.7%	100.0%	75.3%	81.2%	73.1
Alaska Native	0.0%	0.4%	0.0%	0.8%	0.3%	0.3%	0.1%	0.2%	0.2%	0.4%	0.1%	0.0%	0.0%	0.4%	0.1%	0.0%	0.2%	0.4%	0.1
Asian	0.5%	1.3%	0.0%	15.2%	4.1%	0.9%	0.9%	1.3%	2.7%	2.1%	1.3%	0.0%	0.0%	9.5%	0.9%	0.0%	1.6%	1.6%	1.6
African American Native Hawaiian / Other	0.8%	2.1%	0.0%	0.8%	26.0%	5.9%	4.9%	25.6%	5.7%	1.6%	9.8%	0.0%	0.0%	5.8%	1.8%	0.0%	2.5%	1.0%	3.2
Pacific Islander	0.0%	0.1%	0.0%	12.9%	0.0%	1.3%	0.2%	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	0.1%	0.2%	0.2
White	8.3%	28.4%	8.1%	14.5%	36.9%	46.5%	4.4%	65.0%	49.2%	37.7%	9.0%	0.0%	0.0%	45.2%	12.6%	0.0%	20.3%	15.6%	21.
Sex																			
Male	48.3%	48.6%	49.3%	50.7%	46.1%	44.5%	47.9%	43.2%	49.4%	48.9%	48.0%	48.1%	46.6%	50.2%	48.9%	49.4%	48.7%	47.4%	48.
Female	51.7%	51.4%	50.7%	49.3%	53.9%	55.5%	52.1%	56.8%	50.6%	51.0%	52.0%	51.9%	53.4%	49.8%	50.9%	50.4%	51.3%	52.5%	51.
Ambiguous	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0
Unknown	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.2%	0.0%	0.1%	0.
Hispanic																			
Yes	0.4%	5.6%	0.0%	3.3%	1.3%	1.4%	1.3%	4.9%	6.9%	2.8%	1.3%	1.0%	41.4%	12.7%	0.5%	0.0%	2.9%	0.8%	3.
No	9.6%	18.7%	0.0%	17.8%	0.0%	54.9%	8.6%	92.2%	57.9%	17.4%	0.0%	55.8%	49.9%	0.0%	0.0%	0.0%	0.5%	19.0%	18
Unknown	89.9%	75.7%	100.0%	79.0%	98.7%	43.7%	90.1%	2.8%	35.2%	79.8%	98.7%	43.1%	8.7%	87.3%	99.5%	100.0%	96.6%	80.1%	78
Age																			
Statistics																			
Mean	38.2	37.8	41.5	41.8	41.6	59.9	36.3	32.6	35.9	37.8	37.2	48.4	36.4	40.6	40.2	38.2	36.1	44.3	
STD	171.9	129.3	79.7	97.1	137.5	401.0	109.4	219.5	592.3	130.4	102.8	86.1	103.7	315.7	240.7	814.0	584.4	199.5	-
Min	-1	-2	0	0	-2	0	-2	0	0	-2	0	-1	0	-1	-7889	-1	-1	-1	-
Max	130	121	124	125	118	111	110	196	210	125	113	205	119	126	169	111	117	211	
Distribution																			
0 - 4 wks	0.2%	0.7%	0.0%	0.0%	0.6%	0.0%	0.7%	0.1%	0.0%	0.8%	0.0%	0.2%	0.0%	0.2%	0.1%	0.1%	0.1%	0.2%	0.
5 - 52 wks	0.4%	0.5%	0.1%	0.3%	0.6%	0.1%	0.6%	1.4%	0.7%	0.5%	0.6%	0.5%	0.5%	0.5%	0.4%	0.3%	0.6%	0.3%	0.
1 - 4 yrs	2.5%	3.2%	1.8%	2.2%	3.2%	1.1%	3.7%	7.6%	4.7%	3.1%	2.5%	3.0%	3.9%	2.9%	2.9%	2.7%	4.1%	1.6%	3.
5 - 9 yrs	4.9%	5.5%	4.6%	3.9%	3.8%	2.0%	5.5%	10.0%	6.4%	5.3%	4.9%	4.5%	6.4%	4.8%	4.6%	5.5%	5.9%	2.6%	5.
10 - 19 yrs	13.2%	12.6%	12.2%	9.6%	11.5%	4.3%	12.5%	18.9%	13.4%	13.0%	13.4%	11.1%	17.1%	11.6%	11.4%	12.7%	13.0%	9.4%	12
20 - 39 yrs	30.7%	32.0%	29.0%	32.8%	28.1%	12.9%	33.6%	28.4%	31.0%	32.9%	33.0%	23.3%	30.1%	30.9%	30.4%	32.2%	33.4%	29.0%	30
40 - 64 yrs	38.7%	34.4%	37.3%	35.6%	35.0%	23.7%	34.9%	20.0%	36.2%	32.8%	37.3%	27.6%	29.7%	33.5%	37.8%	35.7%	34.3%	40.3%	34
65 - 74 yrs	6.0%	5.9%	6.4%	8.0%	7.5%	27.3%	5.5%	5.5%	4.3%	6.2%	5.1%	8.0%	6.2%	7.0%	5.7%	6.3%	5.0%	7.9%	7.
75 - 84 yrs	2.3%	3.3%	4.7%	4.3%	5.8%	18.3%	2.3%	3.8%	2.2%	3.0%	2.2%	7.3%	3.4%	4.4%	2.9%	2.7%	2.4%	3.9%	3.
85 + yrs	1.2%	2.0%	3.9%	3.4%	3.9%	10.4%	0.9%	4.2%	1.2%	2.4%	1.0%	14.3%	2.6%	4.2%	3.8%	1.9%	1.3%	4.9%	2.



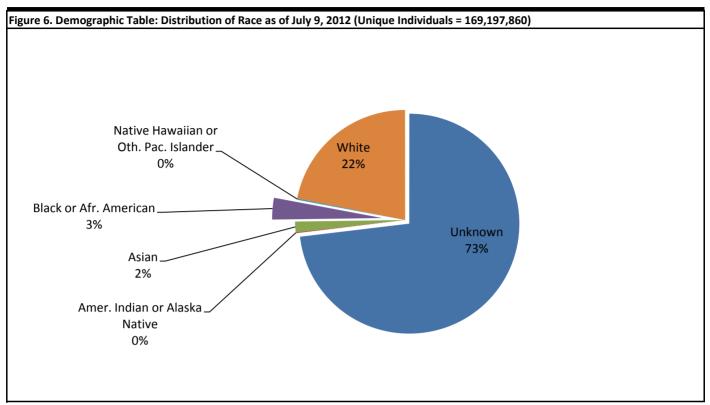


Source: Mini-Sentinel Year Three Data Quality Report; File:Dem_L3_AgeYrsDist2 [Data Partners = 18]



Source: Mini-Sentinel Year Three Data Quality Report; File: Dem_L3_SexDist [Data Partners = 18]



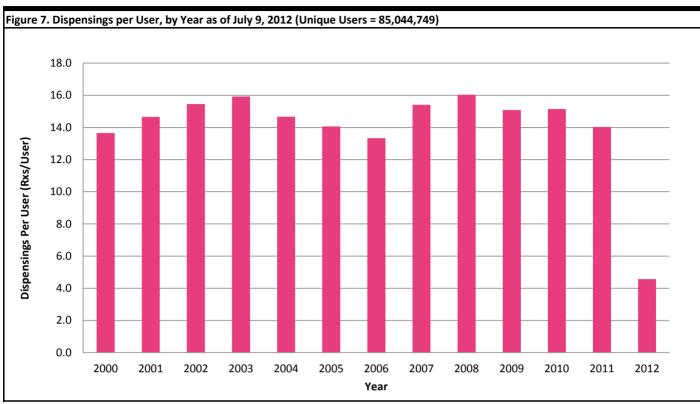


Source: Mini-Sentinel Year Three Data Quality Report; File:Dem_L3_RaceDist [Data Partners = 18]

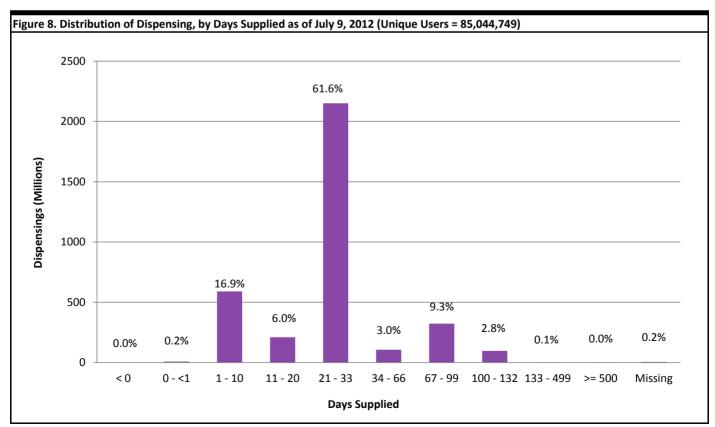


Table 3. Snapshot o	of the M	ini-Senti	inel Disti	ributed [Database	e Dispen	sing Tab	le as of J	luly 9, 20	012 (Uni	que Indi [,]	viduals =	85,044,	749)					
	DP1	DP2	DP3	DP4	DP5	DP6	DP7	DP8	DP9	DP10	DP11	DP12	DP13	DP14	DP15	DP16	DP17	DP18	Total
Distribution of:																			
Days Supplied																			
MISSING	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	17.6%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%
< 0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
0	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.1%	2.3%	0.0%	0.5%	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	0.0%	0.0%	0.2%
> 0 - 33	91.8%	48.7%	88.9%	71.5%	72.5%	86.8%	48.4%	97.3%	90.4%	69.3%	83.1%	81.1%	92.0%	51.4%	81.5%	89.5%	88.1%	72.6%	84.5%
34 - 66	1.0%	39.8%	3.0%	4.9%	11.8%	1.7%	15.6%	0.1%	0.8%	4.1%	4.3%	4.6%	1.6%	11.2%	3.6%	1.7%	0.8%	4.8%	3.0%
67 - 99	7.2%	10.7%	7.5%	23.1%	9.7%	11.5%	18.1%	0.1%	8.6%	24.5%	12.3%	12.7%	6.3%	6.0%	14.5%	8.5%	11.0%	21.6%	9.3%
100 - 499	0.0%	0.8%	0.6%	0.6%	5.8%	0.0%	0.2%	0.0%	0.1%	1.7%	0.3%	1.7%	0.0%	31.4%	0.3%	0.2%	0.1%	1.0%	2.9%
>= 500	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%





Source: Mini-Sentinel Year Three Data Quality Report; File: Dis_L3_RxPtYr [Data Partners = 18]

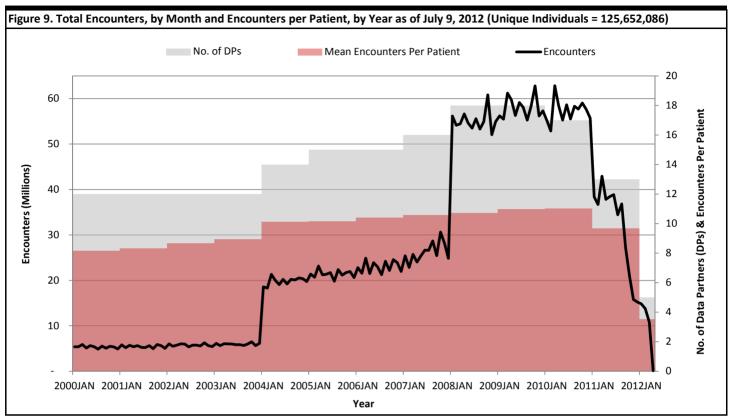


Source:Mini-Sentinel Year Three Data Quality Report; File: Dis_L3_RxSup [Data Partners = 18]



Table 4. Snapshot of the Mini-Sent	inel Distr	ibuted D	atabase	Encoun	ter Table	e as of Ju	ily 9, 201	L2 (Uniqu	ue Indivi	duals = 1	125,652,	086)							
	DP1	DP2	DP3	DP4	DP5	DP6	DP7	DP8	DP9	DP10	DP11	DP12	DP13	DP14	DP15	DP16	DP17	DP18	Total
Mean Number of Encounters per																			
Patient (All Years)	36.2	35.3	47.6	44.0	26.3	36.2	28.5	53.3	21.3	63.8	24.2	101.2	30.3	45.7	36.1	32.5	23.5	49.0	30.4
2000	5.11	4.39	8.33	7.91	6.66			5.52		5.84	3.32	5.98	4.45	4.39	7.63				5.21
2001	5.38	4.13	7.95	7.94	6.82			5.54		6.04	3.30	6.11	4.58	4.43	7.83				5.28
2002	5.56	4.13	8.96	8.11	6.85			5.78		6.48	3.22	6.23	5.23	4.50	8.03				5.45
2003	5.59	4.07	8.51	7.99	6.89			6.08		6.60	3.29	6.44	5.49	4.58	8.28				5.55
2004	5.69	4.07	6.48	7.27	6.88			6.43		6.67	3.17	6.59	5.18	4.59	8.55	6.46		6.23	6.17
2005	5.78	4.42	7.78	8.90	6.77		5.13	5.25		6.64	4.28	6.72	5.13	4.64	8.82	6.42		6.61	6.11
2006	5.97	4.47	9.60	6.45	6.93		5.12	5.85		6.58	4.25	7.64	5.03	4.86	9.04	6.49		6.80	6.23
2007	5.80	4.77	10.47	4.67	6.98	5.26	4.91	5.95		6.98	4.40	8.21	5.24	5.04	9.27	6.62		7.02	6.26
2008	5.94	5.00	11.36	4.81	7.03	7.41	4.92	6.14	6.35	7.41	4.44	8.51	5.34	4.99	9.41	6.66	7.26	7.10	6.60
2009	6.11	5.26	7.72	4.95	6.95	8.01	5.24	7.26	6.51	7.76	4.67	8.16	5.56	4.89	9.77	6.83	7.22	7.53	6.78
2010	6.13	5.45		4.98	6.97	8.35	6.64	6.89	6.48	7.64	5.65	8.37	5.30	4.79	8.97	6.91	7.21	7.45	6.80
Encounter Type																			
Inpatient Hospital Stay	0.8%	1.0%	2.4%	0.8%	1.3%	1.1%	1.0%	3.8%	0.8%	0.6%	1.1%	2.1%	1.5%	1.1%	0.7%	1.2%	0.8%	0.6%	1.1%
Non-Acute Institutional Stay	0.2%	0.2%	0.7%	0.1%	0.0%	1.4%	0.1%	6.5%	0.1%	0.1%	0.1%	0.0%	0.6%	0.1%	0.1%	0.8%	0.1%	0.9%	0.7%
Emergency Department	2.6%	2.3%	2.7%	2.0%	10.8%	1.6%	1.7%	11.5%	2.3%	1.6%	2.3%	3.2%	3.6%	3.1%	0.0%	3.6%	2.7%	1.7%	3.3%
Ambulatory Visit	78.4%	57.6%	87.1%	74.5%	87.7%	74.9%	73.3%	78.2%	84.0%	44.3%	74.5%	73.0%	76.4%	65.5%	98.9%	80.0%	91.6%	55.0%	79.8%
Other Ambulatory Visit	18.0%	38.8%	7.1%	22.5%	0.2%	21.1%	24.0%	0.0%	12.9%	53.4%	22.0%	21.7%	17.8%	30.3%	0.3%	14.4%	4.8%	41.7%	15.1%



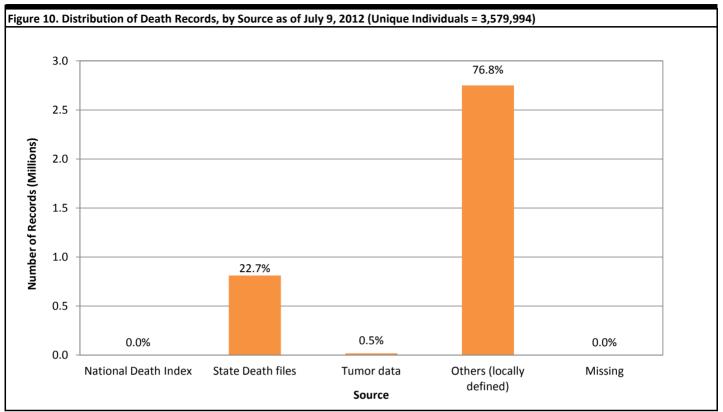


Source: Mini-Sentinel Year Three Data Quality Report; File: Enc_L3_Stats_Y, Enc_L3_EncDate_YM NOTE: Mean Encounters is among patients with at least one encounter of any type.

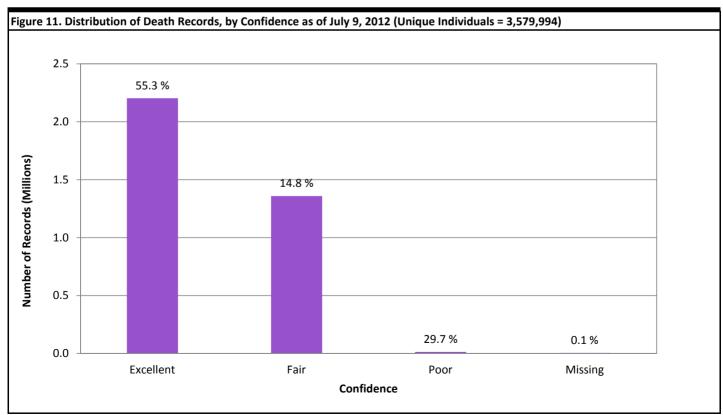


Table 5. Snapshot of the Mi	ni-Sentin	el Distrib	outed Dat	abase De	ath Tab	le as of Ju	ıly 9, 201	2 (Uniqu	e Individu	uals = 3,5	79,994)								
	DP1	DP2	DP3	DP4	DP5	DP6	DP7	DP8	DP9	DP10	DP11	DP12	DP13	DP14	DP15	DP16	DP17	DP18	Total
Source																			
State Death Files	91.8%	26.6%	0.0%	0.0%		0.0%	0.0%	100.0%	0.0%	78.3%	54.4%	43.5%		50.1%	87.2%	0.0%		89.9%	22.7%
National Death Index	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%		0.0%	0.0%
Tumor data	0.5%	24.9%	0.0%	0.0%		0.0%	0.0%	0.0%	0.0%	9.6%	0.0%	0.0%		0.0%	0.0%	0.0%		3.6%	0.5%
Other, locally defined	7.7%	48.5%	100.0%	100.0%		100.0%	100.0%	0.0%	100.0%	12.1%	45.6%	56.5%		49.9%	12.8%	100.0%		6.5%	76.8%
Missing	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%		0.0%	0.0%
Invalid Code	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%		0.0%	0.0%
Confidence																			
Excellent	86.4%	48.9%	0.0%	100.0%		100.0%	78.2%	100.0%	100.0%	100.0%	47.0%	100.0%		96.0%	87.2%	5.0%		67.7%	61.5%
Fair	13.6%	50.5%	0.0%	0.0%		0.0%	0.2%	0.0%	0.0%	0.0%	47.1%	0.0%		4.0%	12.8%	95.0%		21.0%	37.9%
Poor	0.0%	0.6%	0.0%	0.0%		0.0%	21.6%	0.0%	0.0%	0.0%	5.9%	0.0%		0.0%	0.0%	0.0%		11.0%	0.4%
Missing	0.0%	0.0%	100.0%	0.0%		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%		0.0%	0.1%
Invalid Code	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%		0.3%	0.0%



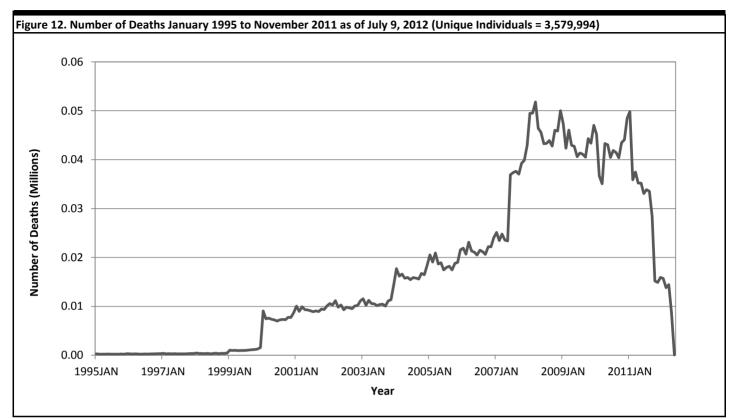


Source: Mini-Sentinel Year Three Data Quality Report; File: Dth_L3_Source [Data Partners = 14]

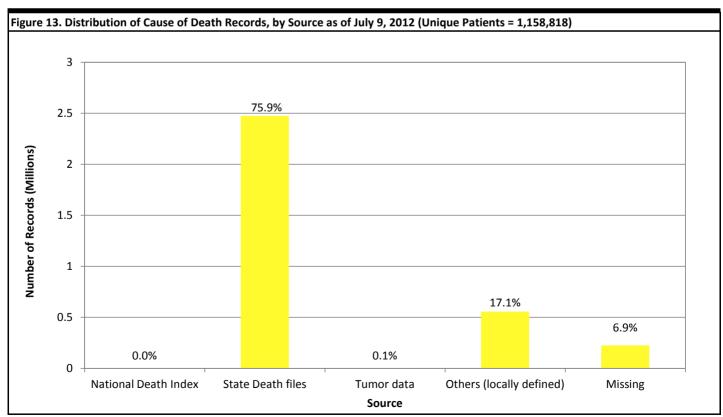


Source: Mini-Sentinel Year Three Data Quality Report; File: Dth_L3_Confidence [Data Partners = 14]



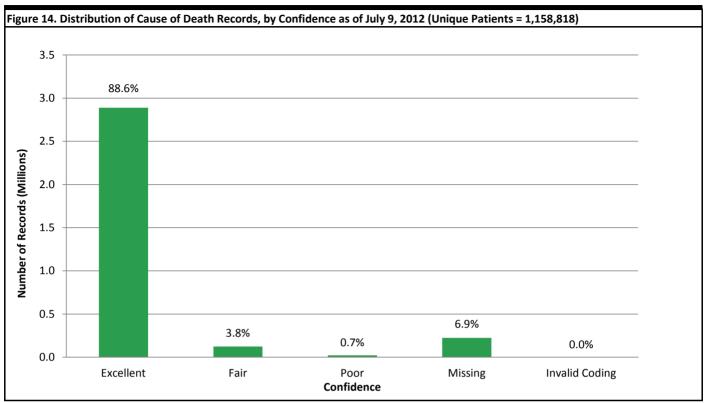


Source: Mini-Sentinel Year Three Data Quality Report; File: Dth_L3_DthDt_YM [Data Partners = 14]



Source: Mini-Sentinel Year Three Data Quality Report; File: COD_L3_Source [Data Partners = 14]





Source: Mini-Sentinel Year Three Data Quality Report; File: COD_L3_Confidence [Data Partners = 14]



Table 6. Snapshot of the Mini-Sentinel Distributed Database Laboratory Table as of July 9, 2012

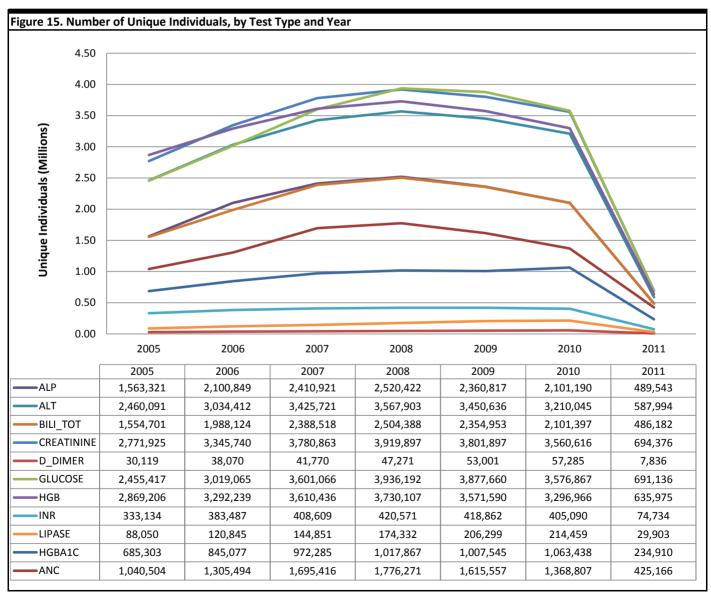
	Value
Number of Unique Individuals:	
with any Labs ¹	13,579,634
with any Labs with Eligibility ²	13,353,505
with any Labs within the Enrollment Period ³	12,617,657

Source: Mini-Sentinel LAB QA Report; File: 1_TABLE1, 2_TABLE5, 3_TABLE6 [Data Partners = 9]

1 Includes number of people who received the following lab tests regardless of enrollment status: alkaline phosphatase (ALP), alanine aminotransferase (ALT), total bilirubin, glucose (fasting and randomized), glycosylated hemoglobin (HbA1c), creatinine, hemoglobin, international normalized ratio (INR), fibrin d-dimer, absolute neutrophil count (ANC), lipase

2 Includes number of people with a lab test with at least one enrollment period

3 Includes number of people with a lab test during enrollment period



Source: Mini-Sentinel LAB QA Report; File: _TABLE4 [Data Partners = 9]



Table 7. Laboratory Test Result U										
	DP2	DP3	DP4	DP9	DP10	DP11	DP13	DP15	DP17	TOTAL
Alkaline Phosphatase (ALP)										
U/L	0.0%	100.0%	99.9%	100.0%	0.2%	98.5%	100.0%	100.0%	100.0%	95.4%
IU/L	100.0%	0.0%	0.1%	0.0%	99.8%	1.5%	0.0%	0.0%	0.0%	4.6%
IU/ML	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
_OTHER	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
BLANK/MISSING	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Alanine Aminotransferase (ALT)										
IU/ML	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	55.3%
U/L	0.0%	100.0%	100.0%	100.0%	0.0%	98.7%	100.0%	0.0%	100.0%	38.5%
IU/L	100.0%	0.0%	0.0%	0.0%	99.9%	1.3%	0.0%	0.0%	0.0%	6.2%
_OTHER	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
– BLANK/MISSING	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Bilirubin										
MG/DL	100.0%	100.0%	100.0%	100.0%	99.9%	100.0%	100.0%	100.0%	100.0%	100.0%
ML/DL	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
_OTHER	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
BLANK/MISSING	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%
Creatinine										
MG/DL	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
_OTHER	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
BLANK/MISSING	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Fibrin D-Dimer	0.070	0.070	0.070	0.070	0.070	0.070	0.070	0.070	0.070	0.070
NG/ML FEU	5.7%	-	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	89.4%	22.9%
UG/ML(DDU)	0.0%	-	0.0%	0.0%	0.0%	85.9%	0.0%	0.0%	0.0%	9.5%
MG/L	0.0%	-	0.0%	0.0%	93.0%	1.7%	0.0%	100.0%	0.2%	7.1%
UG/ML(FEU)	0.0%	-	0.0%	0.0%	0.0%	4.5%	0.0%	0.0%	0.2%	0.5%
NG/ML(FEU)	0.0%	-	0.0%	0.0%	0.0%	4.5% 1.4%	0.0%	0.0%	0.0%	0.2%
MCG/ML	0.0%	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.8%	0.2%
FEU	0.0%	-	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	0.1%
MG/ML	0.0%	-	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%
_OTHER	94.3%	-	100.0%	0.0%	0.0%	6.1%	100.0%	0.0%	0.0% 9.6%	59.6%
_OTHER BLANK/MISSING	94.5% 0.1%	-	0.0%			0.1%	0.0%		9.0% 0.0%	0.1%
	0.1%	-	0.0%	0.0%	7.0%	0.0%	0.0%	0.0%	0.0%	0.1%
Glucose, Fasting	100.00/	100.00/	100.00/	100.00/	00.00/	100.00/	100.00/	100.00/	100.00/	100.00/
MG/DL	100.0%	100.0%	100.0%	100.0%	99.9%	100.0%	100.0%	100.0%	100.0%	100.0%
U/L	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
BLANK/MISSING	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%
Glucose, Random		00 00 /			00 40 /	100.00/				00 =0(
MG/DL	100.0%	99.3%	100.0%	100.0%	83.1%	100.0%	100.0%	100.0%	100.0%	99.5%
_OTHER	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
BLANK/MISSING	0.0%	0.7%	0.0%	0.0%	16.9%	0.0%	0.0%	0.0%	0.0%	0.5%
Hemoglobin										
G/DL	88.4%	100.0%	0.7%	100.0%	100.0%	100.0%	100.0%	100.0%	0.1%	93.6%
GM/DL	11.6%	0.0%	99.3%	0.0%	0.0%	0.0%	0.0%	0.0%	99.9%	6.4%
MG/DL	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
_OTHER	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
BLANK/MISSING	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Source: Mini-Sentinel LAB QA Report; File: _3a_result_unit [Data Partners = 9]



Table 7. Laboratory Test Result	Units, by Tes	t Type and	Data Parti	ner (contin	ued)					
	DP2	DP3	DP4	DP9	DP10	DP11	DP13	DP15	DP17	TOTAL
Glycosylated Hemoglobin (HbA:	1c)									
%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	0.0%	100.0%	53.4%
PERCENT	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	46.6%
BLANK/MISSING	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
International Normalized Ratio	(INR)									
RATIO	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	41.7%
THERAPEUTIC	7.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.5%
BLANK/MISSING	92.4%	100.0%	100.0%	100.0%	100.0%	100.0%	0.0%	100.0%	100.0%	57.7%
Lipase										
U/L	100.0%	100.0%	100.0%	100.0%	98.6%	93.4%	97.0%	100.0%	100.0%	98.1%
IU/L	0.0%	0.0%	0.0%	0.0%	0.0%	6.6%	3.0%	0.0%	0.0%	1.9%
%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
MG/DL	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
OTHER	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
BLANK/MISSING	0.0%	0.0%	0.0%	0.0%	1.4%	0.0%	0.0%	0.0%	0.0%	0.0%

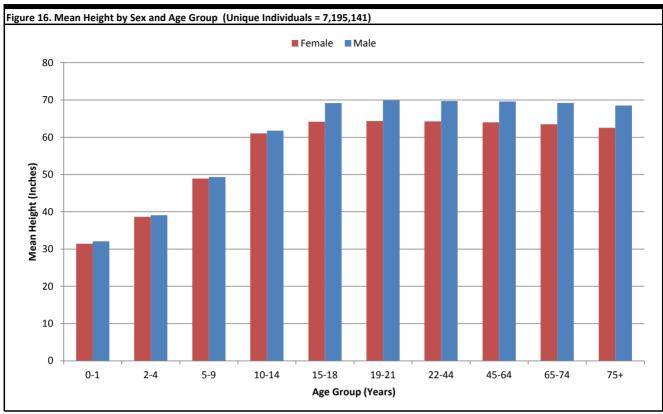
Source: Mini-Sentinel LAB QA Report; File: _3a_result_unit [Data Partners = 9]



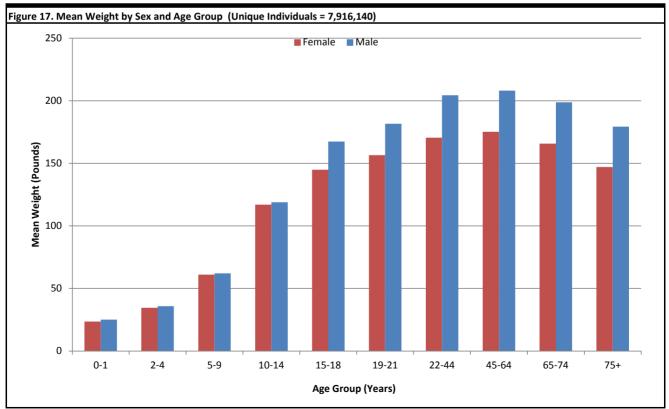
					Number (%)	of Member	s with Measure	ments for:				
mber of										_		_
asurements	Height - A	All	Height - Ped	iatrics*	Weight -	All	Weight - Peo	diatrics	Systolic Blood	Pressure	Diastolic Blood	Pressure
1	1,410,902	(19.6%)	451,907	(24.2%)	1,062,909	(13.4%)	302,452	(14.2%)	963,570	(12.6%)	963,546	(12.6%)
2	1,019,326	(14.2%)	319,161	(17.1%)	854,045	(10.8%)	243,174	(11.4%)	913,374	(11.9%)	913,380	(11.9%)
3	769,430	(10.7%)	235,405	(12.6%)	647,423	(8.2%)	187,378	(8.8%)	576,709	(7.5%)	576,695	(7.5%)
4	617,617	(8.6%)	175,976	(9.4%)	554,970	(7.0%)	158,956	(7.5%)	553,581	(7.2%)	553,589	(7.2%)
5	504,589	(7.0%)	136,640	(7.3%)	472,860	(6.0%)	135,191	(6.3%)	383,035	(5.0%)	383,034	(5.0%)
6	423,123	(5.9%)	111,467	(6.0%)	416,259	(5.3%)	118,854	(5.6%)	389,282	(5.1%)	389,282	(5.1%)
7	355,691	(4.9%)	92,224	(4.9%)	362,777	(4.6%)	103,893	(4.9%)	278,176	(3.6%)	278,182	(3.6%)
8	304,270	(4.2%)	79,136	(4.2%)	321,299	(4.1%)	92 <i>,</i> 086	(4.3%)	291,122	(3.8%)	291,115	(3.8%)
9	257,762	(3.6%)	64,482	(3.5%)	286,640	(3.6%)	82,216	(3.9%)	211,267	(2.8%)	211,256	(2.8%)
10	217,013	(3.0%)	51,317	(2.7%)	256,889	(3.2%)	73,759	(3.5%)	227,516	(3.0%)	227,527	(3.0%)
11	181,275	(2.5%)	38,536	(2.1%)	232,638	(2.9%)	66,867	(3.1%)	166,615	(2.2%)	166,614	(2.2%)
12	151,068	(2.1%)	27,781	(1.5%)	209,933	(2.7%)	60,327	(2.8%)	184,041	(2.4%)	184,039	(2.4%)
13	125,631	(1.7%)	19,758		189,568	(2.4%)	54,029	(2.5%)	135,480	(1.8%)	135,474	(1.8%)
14	106,125	(1.5%)	14,424	(0.8%)	171,808	(2.2%)	48,657	(2.3%)	150,387	(2.0%)	150,380	(2.0%)
15	90,627	(1.3%)	10,562		156,490	(2.0%)	43,519	(2.0%)	111,399	(1.5%)	111,403	(1.5%)
16	77,348	(1.1%)	7,918	(0.4%)	143,089	(1.8%)	39,486	(1.9%)	125,723	(1.6%)	125,726	(1.6%)
17	67,436	(0.9%)		(0.3%)	129,985	(1.6%)	34,893	(1.6%)	93,162	(1.2%)	93,156	(1.2%)
18	57,832	(0.8%)	4,451	(0.2%)	117,412	(1.5%)	30,917	(1.5%)	106,817	(1.4%)	106,818	(1.4%)
19	50,011	(0.7%)	3,493	(0.2%)	106,805	(1.3%)	27,710	(1.3%)	78,904	(1.0%)	78,902	(1.0%)
20	44,093	(0.6%)		(0.2%)	97,453	. ,	24,761	. ,	91,387	. ,	91,391	(1.2%)
21	38,425	. ,	2,179	(0.1%)	•	(1.1%)	21,803		67,584	. ,		(0.9%)
22	33,618	(0.5%)	1,718	(0.1%)	80,604	(1.0%)	19,288		79,080	(1.0%)	79,079	(1.0%)
23	29,487	. ,		(0.1%)	73,493	(0.9%)	17,370	. ,	57,939	. ,	57,951	. ,
24	26,126	. ,		(0.1%)	67,121	. ,	15,188	. ,	68,244	. ,	68,247	. ,
25	23,497	. ,	,	(0.0%)	61,201	. ,	13,495		50,676	. ,	50,664	. ,
26-50	188,740	. ,		(0.3%)		(7.8%)	103,288	. ,	751,717	. ,	751,706	. ,
51+	24,079	. ,	513	(0.0%)	135,016	. ,	11,027	. ,	538,895		538,885	. ,
TOTAL	7,195,141	(100.0%)	1,866,145	(100.0%)	7,916,140	(100.0%)	2,130,584	(100.0%)	7,645,682	(100.0%)	7,645,616	(100.0%)

*The pediatric population is a subset persons aged <16 years of age



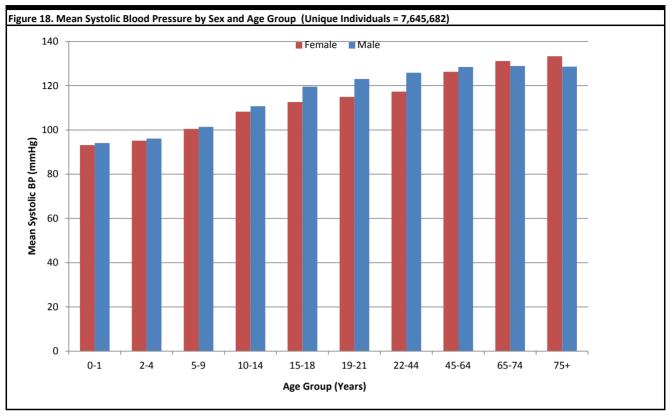




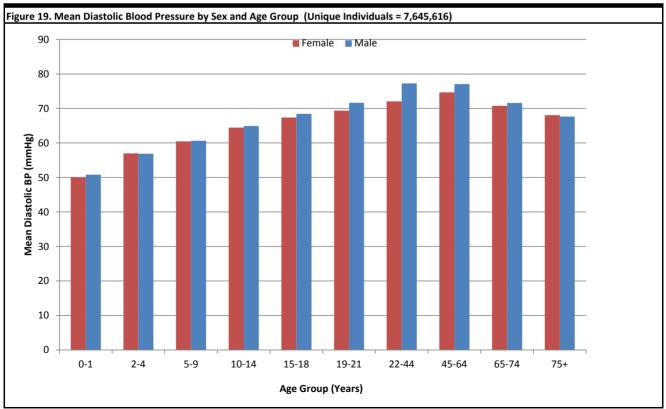


Source: Mini-Sentinel LAB QA Report; File: vitalsQA_means [Data Partners = 7]



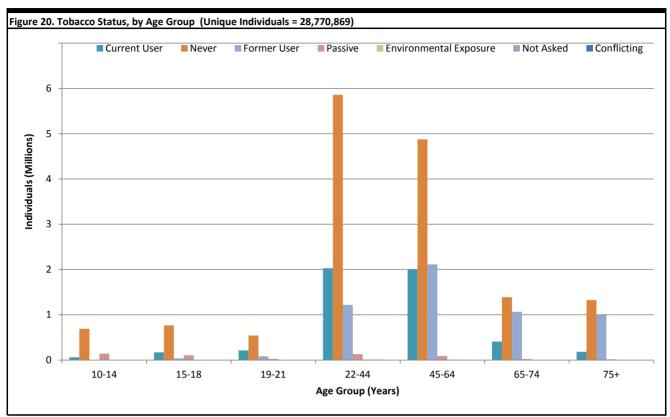


Source: Mini-Sentinel LAB QA Report; File: vitalsQA_means [Data Partners = 7]

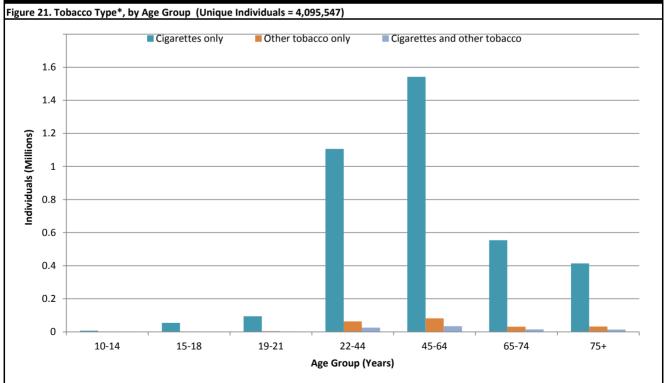


Source: Mini-Sentinel LAB QA Report; File: vitalsQA_means [Data Partners = 7]





Source: Mini-Sentinel LAB QA Report; File: VitalsQA_tobacco [Data Partners = 7]



*Only selected tobacco types shown. Tobacco types listed as 'Unknown' or 'None' are not shown.

Source: Mini-Sentinel LAB QA Report; File: VitalsQA_tobacco_Type [Data Partners = 7]