Virginia All-Payer Claims Database (APCD)
Advisory Committee Meeting Minutes
September 4, 2019
(866)-906-0123 #6824846
Richmond, Virginia 23219

Members Participating by Phone: Jonathan (Jon) DeShazo, PhD; Charles (Charlie) Frazier, MD; James (Jim) Harrison, MD, PhD; Parham Jaberi, MD; Marcia Yeskoo

Others Participating by Phone: Jillian Capucao (Virginia Health Information- VHI); Michal Lundberg (VHI); Kyle Russell (VHI); Nicole Sidrak (VHI)

Call to order at 9:34 a.m.

Kyle Russell welcomed the members and guests of the All-Payer Claims Database (APCD) Advisory Committee (hereafter "the Committee").

Kyle asked if any members of the public were attending; There were none.

Committee members received the appended document outlining each request prior to the meeting (See Appendix).

Request 1: (See Appendix, *1. Riverside Health System*) Charlie Frazer formally recused himself prior to the onset of discussion. Kyle then began by summarizing Riverside Health System's request to access the data elements outlined in the appended document, similar to what other health systems have requested in the past. Jon DeShazo asked the Committee members to share whether they felt that the level of detail outlined in the appended document was appropriate. Jim Harrison asked where Riverside Health System is generally located. Kyle answered that Riverside is headquartered in Newport News, Virginia, and is mainly located in the Eastern Virginia region.

Jon asked if the Committee had any additional questions; There were none.

Marcia Yeskoo moved to approve the request. Dr. Harrison seconded, and the motion carried.

Request 2: (See Appendix, *2. Dominion Youth Services*) Following Kyle's summary of the request, Jon pointed out that behavioral health data tends may need to be regulated differently than other kinds of healthcare data; Jon asked whether behavioral health data is always encompassed within other APCD requests or if it is maintained separately. Kyle responded that some data submitters have chosen to remove a subset of their behavioral health claims in order to comply with federal regulation, but for the most part, behavioral health claims are encompassed within other data sets unless otherwise filtered out.

Dr. Frazer moved to approve the request. Dr. Jaberi seconded the motion, and the request was approved.

Request 3: (See Appendix, *3. Valley Health Systems*) Kyle gave a brief overview of the data being requested by Valley Health. The Committee did not ask any clarifying questions.

Marcia moved to approve the request. Dr. Frazer seconded, and the motion carried.

Request 4: (See Appendix, *4. Virginia Tech School of Medicine*) Kyle recapped the request as outlined in the appended document, adding that it has already generated a decent amount of publicity for the APCD. Jon asked whether or not Virginia Tech would need to submit another request for Committee approval should they need more granular data down the line to complete the project. Kyle answered that approval is contingent on the intended use of the data, and the corresponding level of agreement, meaning that since the Committee is approving the use of the data itself, they will not need to re-address the request.

Dr. Frazer moved to approve the request. Dr. Harrison seconded, and the motion carried.

Request 5: (See Appendix, *5. University of California- Los Angeles (UCLA)*)

Kyle provided an overview of the request to the Committee. Dr. Harrison asked if VHI normally supports use of the data outside of the Commonwealth, and if the requesting entity would be charged a fee. Kyle confirmed that VHI does support outside use of the data as long as it is in line with the program's intentions, and that UCLA would be required to pay for the data.

The Committee members raised concerns that due to the specificity of the data set's parameters, the resulting publications could jeopardize the privacy of providers. Kyle confirmed that there are legislative requirements on this issue, which is mentioned in the agreement that UCLA and all other requestors are required to sign. Per the legislation, any practitioner, organizational provider, or plan identified in the data set are all entitled to a 30-day review period prior to the release of any publication. VHI is required to review and approve all public releases of data even if an individual entity is not named. Kyle added that personally identifiable information is anonymized within the data to protect patients.

The Committee conceded that the request falls within the legislative parameters and is in line with the intended use of the APCD, but the potential for a controversy to arise from the data implies a hypothetical associated risk to VHI and the program. Committee members agreed that UCLA may not need to have NPIs or TINs in the data set right away, and that if the need for those fields were to arise later, UCLA could submit justification for Committee review.

Dr. Frazer moved for conditional approval of the request without the inclusion of NPIs or TINs. Marcia seconded the motion, and the request was conditionally approved.

Request 6: (See Appendix, *6. Joint Commission on Healthcare*) After Kyle provided an abridgment of the request to the Committee, there were no questions or additional discussion.

Dr. Jaberi moved to approve the request. Dr. Frazer seconded the motion, and the request was approved.

Request 7: (See Appendix, *7. Virginia Commonwealth University (VCU)*) Prior to the discussion, Dr. DeShazo and Dr. Frazer both formally recused themselves. After Kyle summarized the request, Dr. Jaberi expressed that he would prefer more specificity regarding the data elements that VCU would have access to as well as more clarity around the actual use of the data. Kyle responded that VCU has already been approved for broad use of the data, which is

why this particular request does not contain as much detail. Kyle also mentioned that each person who has access to the data at VCU is documented. Kyle agreed to send Dr. Jaberi more specific information about how each data set category is defined within the database and the data elements that VCU has access to.

Dr. Harrison moved to approve the request, Marcia seconded, and the motion carried.

Kyle asked if any members of the Committee had additional comments or concerns. There were none. Kyle then asked if there were any public comments, and there were none.

Dr. Jaberi adjourned the meeting at 10:39 a.m.

Appendix

Data Requests submitted for APCD Data Review Committee Consideration

Prepared by VHI for 9/4/19 meeting

1. Riverside Health System

Point of Contact- Leslie Brunick, Business Development System Director, leslie.brunick@rivhs.com

Overview of Request:

Riverside Health System is requesting a data extract from the Virginia APCD for the following intended uses:

- Market share calculations
- Healthcare utilization trends/Patient utilization patterns
- Physician referral patterns/Leakage Analysis

The data extract will be comprised of the following fields:

1. Member Person Key
2. Claim ID
3. Claim Place of Service
4. Admit Date
5. Discharge Date
6. Incurred Date
7. Primary ICD Diagnosis Code,
8. Primary ICD Diagnosis Code Description (Code and Desc)
9. Primary ICD Diagnosis Code Category/Rollup
10. 2nd ICD Diagnosis Code
11. 2nd ICD Diagnosis Code Description
12. 2nd ICD Diagnosis Code Category/Rollup
13. Admit Type
14. Discharge Status
15. DRG Code
16. DRG Code and Description
17. DRG Type
18. MDC Desc
19. MEG Body System
20. MEG Episode Complete
21. MEG Episode Days Duration
22. MEG Episode Number
23. MEG Episode Description

24. MEG Severity
25. MEG Episode End Year and Month
26. HCG Setting
27. HCG Line
28. HCG Detail
29. Payer LOB (Medicaid, Medicare, Commercial)
30. Payor Type
31. CPT Procedure Code
32. CPT Code Desc (Code and Desc)
33. CPT Procedure Family 1
34. CPT Procedure Family 2
35. CPT Procedure Family 3
36. CPT Mod 1 (Code and Desc)
37. Primary ICD Procedure Code
38. Primary ICD Procedure Code Desc (Code and Description
39. Revenue Code
40. UB Bill Type (is this 3-digit code?)
41. VHI Enrollment Dimension – Prim Insurance Indicator
42. Billing Provider ID or NPI (whatever key I need for Fourth Table – Providers)
43. Service Provider ID or NPI
44. Episode Managing Provider ID or NPI
45. Episode Primary Provider ID or NPI
46. PCP Attributed Provider ID or NPI
47. Total Utilization
48. Admits
49. Billed Units
50. Total Proxy Allowed Amount
51. Total Proxy Member Paid
52. Total Proxy Paid Amount
53. Member Age Band
54. Member Gender
55. Member County
56. Member State
57. Member Zip Code
58. Member Relation Detail
59. Member Average Concurrent Risk Score
60. Member Average Prospective Risk Score
61. Member CCHG Grouping

With the following filters/constraints:

- Inpatient facility, outpatient facility, professional claims only
- 2016-2018 and 2019 data updates only
- Member zip codes in exhibit 1

Can shortened DSA be signed? No

Length of Agreement: 1 year

2. Dominion Youth Services

Point of Contact- Ingram Haley, Chief Financial Officer, ingram.haley@dominionyouthservices.com

Overview of Request:

Dominion Youth Services is requesting data for the following intended uses:

"To develop insights and analytics into outputs and outcomes related to our patients and populations we serve; to prepare for the transition to value-based care, which requires population level analytics to establish baselines and measure progress; to better understand downstream impact of our care and identify opportunities for improvement. DYS is a provider of full-spectrum, non-inpatient behavioral health services. Our work touches the lives of our patients and communities though traditional clinical mental health and substance abuse services, community mental health, applied behavioral analysis (autism), Medicaid Waiver, wrap-around supports and alternative education services.

Dominion Youth Services is requesting a data extract from the Virginia APCD for the following intended uses:

The data will be used in a three-fold manner:

1) we will use this data to validate and compare our clinical outcomes against other providers in the state that we serve; we will re-engineer our clinical and administrative operations based on the insights gained.

2) we will use this data to support the industry move towards population health management, the health status of our patients and their communities, determine the opportunities to optimize social determinants of health, and forge new relationships within the industry

3) to support existing partnerships with the provider and payer communities' providers in the establishment and measurement of value-based care

Data will be used by our executive and clinical leadership team to fulfill the reasons and uses stated above."

The data extract will be comprised of the following fields:

1. Service dates- incurred, discharge, paid
2. Diagnosis codes (primary and secondary) with description and rollups
3. Truven MEG fields- episode type, number, severity
4. Payer- LOB, type, code and name

5. Enrollment fields- Medical and RX Eligibility, Prim Insurance Indicator, CCHG grouping, person key, member months
6. Proxy Payment fields- Allowed, paid, member paid
7. Provider (Billing, Service, Attributed PCP, Episode)- NPI and corresponding identifiers
8. MARA scores and subcategories- concurrent and prospective
9. Service/procedure identifiers- ICD, CPT, DRG, HCG
10. Volume metrics- utilization, days supply, RVUs, admits
11. Member demographics- race, zip, county, gender, age band
12. Ancillary claim fields- bill type, claim status, place of service, claim ID
13. Inpatient fields- Admit Source, admit type, e-code, revenue code, discharge status
14. Prescription Drug fields- Brand Status, Dosage Form, Drug Name, NDC, generic info, strength, therapeutic class

With the following filters/constraints:

- 2015-2018 and 2019 data updates only

Can shortened DSA be signed? No

Length of Agreement: 1 year

3. Valley Health Systems

Point of Contact: Jonathan Winter MD, Physician, jwinter@valleyhealthlink.com

Overview of Request:

Valley Health Systems is requesting a report from the Virginia APCD as part of a Virginia Department of Aging funded study on medication use for dementia symptoms in Virginia nursing homes. De-identified data will be used to analyze prescribing for dementia symptoms in Virginia and will be reported to the Virginia Department of Aging. If appropriate, results will also be submitted for publication.

Report Design and Parameters:

See Exhibit 2

Can shortened DSA be signed? Yes

4. Virginia Tech School of Medicine

Point of Contact: Cassandra Mierisch, Physician, saundi.mierisch@gmail.com

Overview of Request:

Per Virginia Tech:

"The aim of this report is to examine the rates of conversion from opiate-naïve patients (defined as no opioid prescriptions over a period of one pre-operative year) into chronic opioid users (defined using established criteria, over a period of one post-operative year plus a 90-day lag period). We hope to examine different variables that affect these rates of conversation (procedure type, size of initial prescription etc.)

The report will be utilized by students and faculty at the Virginia Tech Carilion School of Medicine to draft a report which will be published in an appropriate medical or public health journal. The results should serve to build off of existing research being carried out at the Virginia Tech Carilion School of Medicine, which seeks to influence the prescribing behavior of surgeons and other medical providers, particularly focused on narcotic stewardship around smaller outpatient surgeries"

Note from VHI- This request is an update to a report that was previously approved for release to the Virginia Tech School of Medicine

Report Design and Parameters:

See Exhibit 3

Can shortened DSA be signed? Yes

(Note Virginia Tech may request an update to the report to include cell sizes less than 11 which would require a full length DSA)

5. University of California- Los Angeles (UCLA)

Point of Contact: Lauren Wisk, PhD, Research Faculty- Division of General Internal Medicine & Health Services Research, LWisk@mednet.ucla.edu

Overview of Request:

UCLA is requesting a data set from the Virginia APCD for the following intended uses:

Per UCLA-

"Sexual and reproductive health issues comprise one third of health problems for women under the age of 40. For young women living with Diabetes Mellitus (DM), reproductive care is especially critical as they face elevated risks for acute disease exacerbations and adverse obstetric outcomes.

We aim to determine (1) socioeconomic predictors (e.g., race/ethnicity), (2) systems correlates (e.g., primary provider type) and (3) geographic clusters of realized access to guideline-recommended reproductive health services (e.g., receipt of STI screening, preconception counseling) for young women with diabetes compared to peers without diabetes.

We will perform a retrospective secondary data analysis using Virginia All-Payer Claims Data (APCD) on young women (ages 13-39 years), both with and without diabetes. We are requesting demographic, enrollment, medical, and pharmacy claims in order to construct a cohort that includes our population of interest. We will apply validated claims-based algorithms for identifying diabetes through the use of International Classification of Diseases [ICD]-9 codes of 250.xx and ICD-10 codes of E10 and E11. We will include all women (between the ages of 13-39 during their ≥1-year inclusion in the data) with ≥2 claims including these relevant diagnosis codes and ≥1 pharmacy claim for insulin or oral diabetes medications within their enrollment span. To establish a comparison group of women without diabetes, we will apply the same age and enrollment criteria as those used for women with diabetes but include only those with no claims using the aforementioned ICD codes."

"Reproductive care outcomes will be operationalized in these administrative data through the use of validated claims-based algorithms to determine health services use, such as receipt of recommended reproductive care (e.g., chlamydia and cervical cancer screening as per USPSTF), receipt of prescription medications (e.g., ceasing contraindicated medications during pregnancy), and selected obstetric outcomes related to the mother (e.g., preterm labor/delivery, pre-eclampsia). If possible, linking birth outcomes from children delivered to women included in our cohort would be ideal. Finally, costs (charges and/or expenditures) associated with health service use are requested."

Specifics on Data Requested:

With the following parameters:

Per UCLA- "We are requesting demographic data, including age, race/ethnicity information, residential zip code, year, payer type (e.g., private insurance), and other available sociodemographics. We would also like to request information on health plan features (if available), such as whether or not the plan is a Health Maintenance Organization (HMO), and enrollment information (e.g., woman is the subscriber on a family plan). We are requesting individuals' 5-digit zip code to link to US census data to merge in established proxies for socioeconomic status (e.g., median neighborhood income, % of non-white households) and geographic information (e.g., urbanicity); provider/facility zip code is also requested (if available).

We would also like to request available information about servicing providers (e.g., provider specialty) and facilities (e.g., whether a federally-qualified health center or not) and/or provider identifiers (e.g., National Provider Identifier [NPI], Tax Identification Numbers [TIN]) in order to merge additional information about systems of care. "

Can shortened DSA be signed? No

6. Joint Commission on Healthcare

Point of Contact- Paula Margolis, Senior Health Policy Analyst, pmargolis@jchc.virginia.gov

Overview of Request:

The JCHC is requesting APCD data to be used to "demonstrate the volume of ER visits (or some portion of total visits) that could potentially be avoided if the flu test were added to statewide standing orders allowing tests to be performed in community pharmacies, and if appropriate dispense Tamiflu without a prescription when tests are positive and the pharmacists assess the consumer and determines that referral to a physician is not needed. The flu test is a CLIA-Waived test, meaning that it can be performed safely without a MD order and has a high degree of reliability. Pharmacists are trained in assessment and referral. This could result in lower health care costs, reduced spread of the flu and other positive benefits.

The data will be presented to members of the Virginia Joint Commission on Health Care in the October 4, 2019 when the issue of Collaborative Pharmacy Practice Agreements will be discussed."

Data considerations for request:

- Emergency department (ED) visits were specified using the Milliman Health Cost Guidelines (HCG) Grouper Line= "O11 - Emergency Room". Costs related to these visits were specified using the Milliman HCG Lines "O11 - Emergency Room" and "P51 - ER Visits and Observation Care".

- The following ICD-10 codes were used to identify the ED visit included in the numerator: J00 - J209; N3000; N3001; N390; N3901; N3090; N3081; N3080

    - Time period: 2016-2017
    - Fields included:
        - Incurred Year
        - Health Planning Region
        - Primary ICD Diagnosis Code
        - Primary ICD Diagnosis Code Description
        - Primary ICD CCS Level 3
        - Total Number of ED Visits
        - Total Proxy Allowed

Can shortened DSA be signed? Yes

7. Virginia Commonwealth University (VCU)

Point of Contact: Alex Krist, MD, MPH, Professor and Family Physician, alexander.krist@vcuhealth.org

Overview of Request:

VCU is requesting approval to add the following uses to their data subscriber agreement:

Assess patterns of overuse (unnecessary laboratory tests, radiology and medications). We will collaborate with the Virginia Center for Health Innovation to determine the burden of overuse, which types of overuse are most common, the costs associated with overuse and how overuse affects various populations within the Commonwealth of Virginia.

Measure receipt of services of infants affected by in utero opioid exposure. We will record follow-up visits with primary care and specialist providers as well as receipt of therapies.

Research tool to measure impact of research and community engagement on community wellbeing. As part of the Wright Center's mission to foster community engaged research, we will use data from the APCD to understand the reach of research throughout the Commonwealth, impact of research on community wellbeing, alignment of research with community needs, and representativeness of research being conducted.

Educational planning and support. The VCU medical school and several departments plan to use APCD data to assess the impact of educational policies and initiatives on graduates' scope of practice and quality of care. Furthermore, the APCD can serve as a data source for learners in undergraduate, medical school, and graduate programs to explore and answer research questions in the above use domains for capstone and PhD projects.

Compare associations between health, healthcare delivery, social risks, and environmental exposures. Data from multiple sources will be used to compare relative associations between known factors to influence health.

The following additional claim types are needed to fulfill these additional research objectives (all types correspond to Milliman HCG Categories)-

- Lab
- Radiology
- Hearing and Speech Exams
- Physical Therapy (physical / occupational / speech)
- Outpatient Psychiatric
- Outpatient Alcohol & Drug Abuse
- PT/OT/ST when billed with facility specialty code
- Psych provided in hospital outpt dept or freestanding facility
- Alcohol Drug Abuse provided in hosp outpt dept or freestanding facility
- Immunizations
- Preventive Care- Mammography, colonoscopy, lipid panel

Can shortened DSA be signed? No, VCU already has signed a full DSA

Length of Agreement: VCU's current agreement runs through March of 2020

Exhibit 1- Riverside Health System Zip Codes

22432, 22435, 22436, 22437, 22438, 22442, 22454, 22456, 22460, 22469, 22472, 22473, 22476, 22480, 22482, 22488, 22503, 22504, 22507, 22509, 22511, 22513, 22517, 22520, 22523, 22524, 22528, 22530, 22539, 22548, 22558, 22560, 22570, 22572, 22576, 22578, 22579, 23001, 23003, 23009, 23011, 23017, 23018, 23021, 23023, 23025, 23030, 23031, 23032, 23035, 23043, 23045, 23050, 23056, 23061, 23062, 23064, 23066, 23068, 23070, 23071, 23072, 23076, 23079, 23081, 23085, 23086, 23089, 23090, 23091, 23092, 23106, 23107, 23108, 23109, 23110, 23115, 23119, 23124, 23125, 23126, 23127, 23128, 23130, 23131, 23138, 23140, 23147, 23148, 23149, 23154, 23155, 23156, 23161, 23163, 23169, 23175, 23176, 23177, 23178, 23180, 23181, 23183, 23184, 23185, 23186, 23187, 23188, 23190, 23191, 23301, 23302, 23303, 23304, 23306, 23307, 23308, 23310, 23313, 23314, 23316, 23336, 23337, 23341, 23345, 23347, 23350, 23354, 23356, 23357, 23358, 23359, 23389, 23395, 23396, 23398, 23399, 23401, 23404, 23405, 23407, 23408, 23409, 23410, 23412, 23413, 23414, 23415, 23416, 23417, 23418, 23419, 23420, 23421, 23422, 23423, 23424, 23426, 23427, 23429, 23430, 23431, 23440, 23441, 23442, 23443, 23480, 23482, 23483, 23486, 23488, 23601, 23602, 23603, 23604, 23605, 23606, 23607, 23608, 23609, 23612, 23630, 23631, 23651, 23653, 23661, 23662, 23663, 23664, 23665, 23666, 23667, 23668, 23669, 23670, 23681, 23690, 23691, 23692, 23693, 23694, 23696, 23839, 23846, 23883, 23168

Exhibit 2- Valley Health Systems Report Parameters

Nursing homes were defined using two different criteria-

1. A place of service of nursing facility
2. CPT procedure code of 99301, 99302, 99303, 99304, 99305, 99306, 99307, 99308, 99309, 99310, 99312, 99313, 99315, 99316, 99318, 99379, or 99380 and place of service was not a skilled nursing facility, assisted living facility, or an adult living care facility

Individuals were only classified as nursing home patients with a specified health condition if they had at least 1 claim containing a relevant nursing home CPT and at least 1 claim containing a relevant diagnosis code at any time within a given quarter, even if the codes did not appear together on the same claim.

A list of diagnosis codes and drug names were provided by Valley Health.

Individuals were defined as having a health condition if they had a listed diagnosis code as a primary, secondary, third, fourth, fifth, sixth, seventh, eighth, ninth, tenth, eleventh, or twelfth diagnosis.

The list of drugs names within the 5 drug categories are as follows-

1. Tegretol and Derivatives: Carbamazepine (Tegretol), Oxcarbazepine (Trileptal), and Eslicarbazepine (Aptiom)
2. Mood Stabilizers: Carbamazepine (Tegretol), Oxcarbazepine (Trileptal), and Eslicarbazepine (Aptiom), Valproate (Depakote), and Lamotrigine (Lamictal)

3. Mood Affecters: Gabapentin (Neurontin), Pregabalin (Lyrica), and Topiramate (Topamax)
4. New AEDs: Levetiracetam (Keppra), Lacosamide (Vimpat), Tiagabine (Gabitril), Vigabatrin (Sabril), and Zonisamide (Zonegran)
5. Old AEDs: Phenobarbital (Luminal) and Phenytoin/Fosphenytoin (Dilantin/Cerebyx)

Exhibit 3- Specifics for Virginia Tech Report

Methods

This report examines the rate of opiate naïve surgical patients who chronically used opiates the year after their surgical procedure. Opiate-naïve individuals were determined as having no opiate prescription the year prior to a surgical procedure (excluding the 14 days leading up the procedure). Chronic-opiate users were defined as having at least 10 opiate prescriptions or 120 days of opiates in the year following a surgical procedure excluding the first 90 days.

Steps Taken for Ratio Calculations

The following steps were taken to determine the denominator (opiate naive surgeries) calculation:

1. Identified all professional surgery claims in relevant year
2. Excluded individuals with secondary coverage only and medical coverage only
3. Excluded procedures for individuals who had 1 or more opiate prescriptions between day 369 and day 15 prior to surgery (result is "denominator population")
4. Calculated the total number of each type of procedure performed within this population (results are "denominator by procedure type")

The following steps were taken to determine the numerator (chronic opiate usage) calculation:

1. Identified all individuals who had at least 10 opiate prescriptions or 120 days supply of opiates in 2014, 2015 and Q1 2016 for the 2014 report and 2013, 2014 and Q1 2015 for the 2013 report
2. Excluded individuals with secondary coverage only and pharmacy coverage only
3. Excluded all individuals who were not included in the denominator population
4. Extracted all 2014 professional surgery claims plus all opiate prescriptions over the next 455 days for this population
5. Calculated the number of days supply/number of prescriptions between days 90-455 per person for each individual surgery
6. Identified procedures for individuals with at least 120 days supply or 10 prescriptions for days 90-455

7. Identified the number of individuals with only 1 surgery day with any one procedure over $125, with at least 120 days supply or 10 prescriptions for each surgery for days 90-455
8. Identified the number of individuals with only 1 procedure over $125, with at least 120 days supply or 10 prescriptions for each surgery for days 90-455

Ratio Calculation:

1. Divide the number of individuals identified in Numerator step 6 by Denominator step 4
2. Divide the number of individuals identified in Numerator step 7 by Denominator step 4 after applying additional numerator filter criteria to denominator
3. Divide the number of individuals identified in Numerator step 8 by Denominator step 4 after applying additional numerator filter criteria to denominator

The following steps were taken to determine initial prescription size:

1. Pull all opiate prescription data within 14 days of all surgery in a given year (2013 or 2014)

2. Lookup each individual from the opiate naive denominator within this data set

3. If an individual is not within the data set created in step 1, they were not prescribed an opiate within 14 days, if they are found within the data set then explore further

4. Apply a sequence number to each record within the data set created in step 1 (so an individual's first opiate would generate "1", 2nd "2" and so on)

5. For individuals who were prescribed an opiate within 14 days within the Denominator, use their identification number + sequence number to generate the dates and days supply of each opiate prescription (so person 123 + sequence #1 would pull their first opiate, 123 + #2 would pull their second)

6. Identify the days supply for the minimum opiate prescription date that is on the same day or later than the surgery date