

Opioid Surveillance Dashboard User Manual

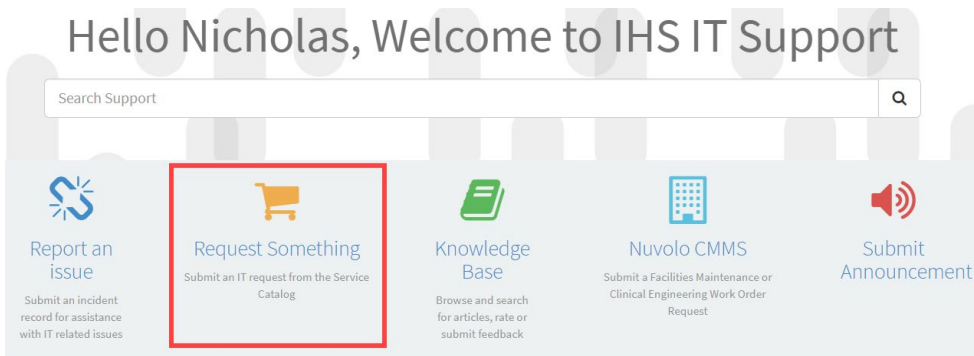
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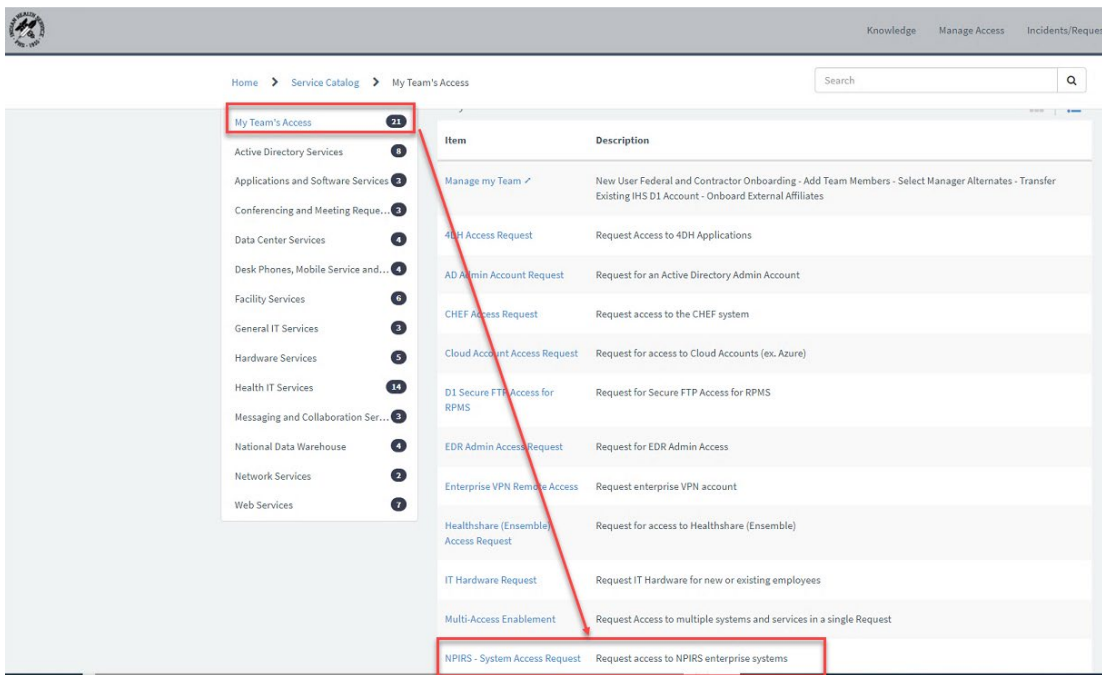
Requesting Access

The IHS SailPoint IAM is used for Team Management. The IHS Service Now system is used for Access Management and will send completed access requests to SailPoint. **Generally, the supervisor of the proposed user should perform these steps.** Please be (make yourself) aware of any guidance from your Area Chief Medical Officer (CMO) before entering your requests. All request are approved by the Area CMO before access is granted.

1. Click the link to begin the request: [IT Support | Indian Health Service \(IHS\)](#);
2. Select **Request Something**;



3. Select **My Team's Access**;
4. Click **NPIRS – Systems Access Request**;



5. Complete the required fields as well as the **Phone Number** and **E-mail Address** fields;
6. Leave the **Service Units** field as "-- None --;"
7. In the **Access Type** field, select "Add;"
8. In the **Employee Role Type** field, select "Other," which will display a new text box to the right called "Other." Please provide the user's role from the approved list of user roles found below. Access can only be granted based on one role. For those fulfilling multiple roles, please choose the most appropriate for the duties they need access for.

User roles available for dashboard access (must be included in the access request);

- Area Director
- Area Chief Medical Officer
- Area Deputy Director
- Area Pharmacy Consultant
- Area Dental Officer
- Area Statistician Officer
- Area Clinical Applications Coordinator
- Area Director of Quality /Quality Manager
- Area Academic Detailer (Opioid Stewardship)
- Area Pain Committee Data Analyst
- Clinical Director
- Deputy Clinical Director
- Chief Pharmacist
- Pharmacy Controlled Substance Officer
- Academic Detailer (Opioid Stewardship)
- Pain Committee Data Analyst
- Chief Dental Officer
- Medical Providers
- Facility Director
- Quality Assurance (QAPI) Manager
- Clinical Applications Coordinator

9. In the **Employee Type Identifier** field, select "Federal" or appropriate designation;
10. In the **Select Enterprise Reporting** field, select "NIPRS [Opioid Surveillance Dashboard];"
11. In the **Options** field choose "None"
12. In the **Justification** field, type the reason for the access request and provide some background of how the user will be using the Opioid Dashboard; and
13. Verify your form with the below example, then click the **Submit** button.

A visual example of steps 5 – 11 listed above can be found on page 4 below.

NPIRS - System Access Request

Request access to NPIRS enterprise systems

*** Requested for**

*** Requested by**

*** Facility**

Phone Number

Current Entitlements

Email Address

Title

Service Units

*** Access Type**

*** Employee Role Type**

- Health Provider
- Office Worker
- Non-IHS
- Other

*** Other**


Employee Type Identifier

*** Select Enterprise Reporting**

*** Options**

*** Justification**

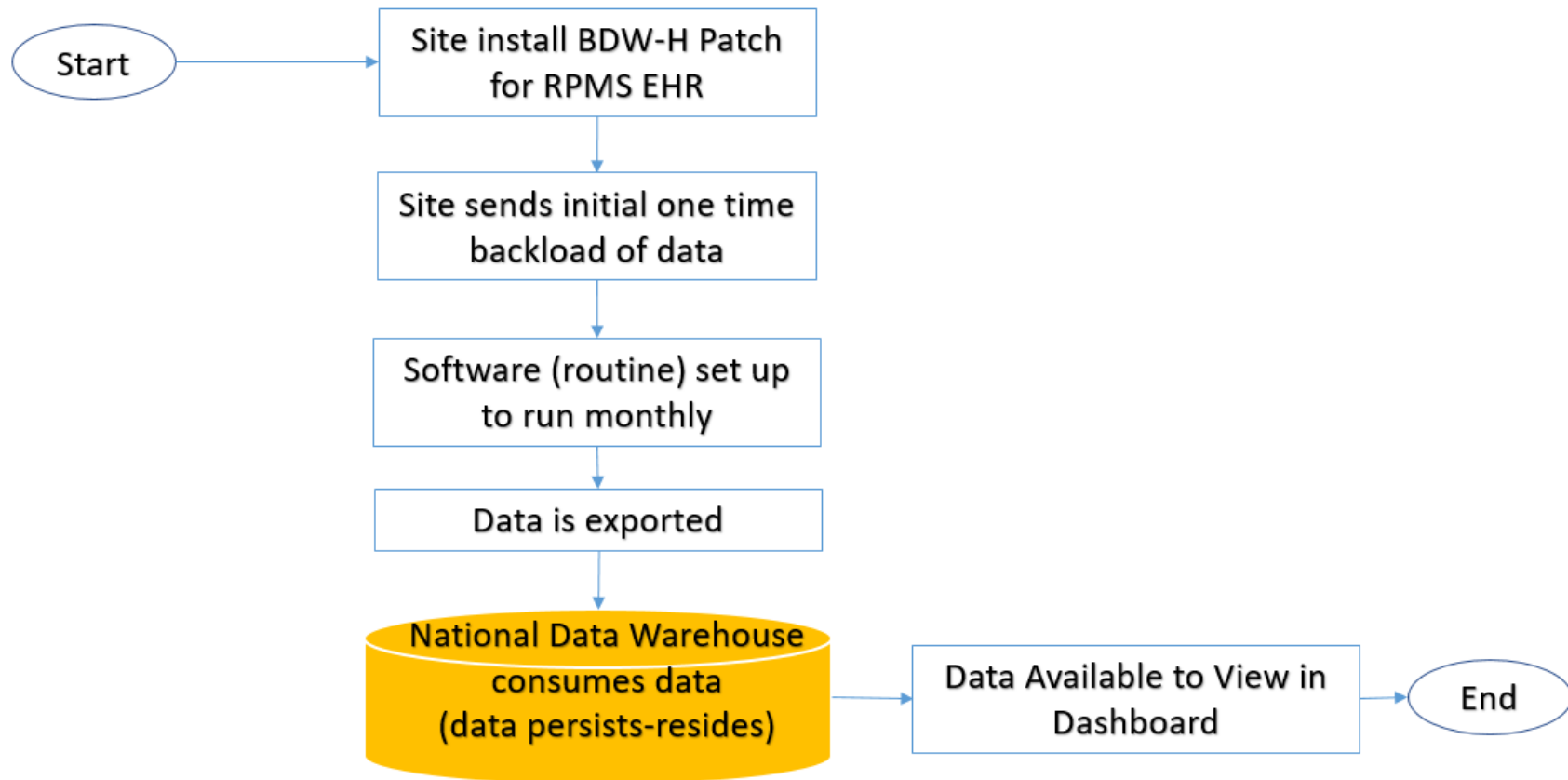
[Submit](#)

 Add attachments

The support request will go to the NPIRS Team to complete. Once completed the “Requested for” user will get an email notification.

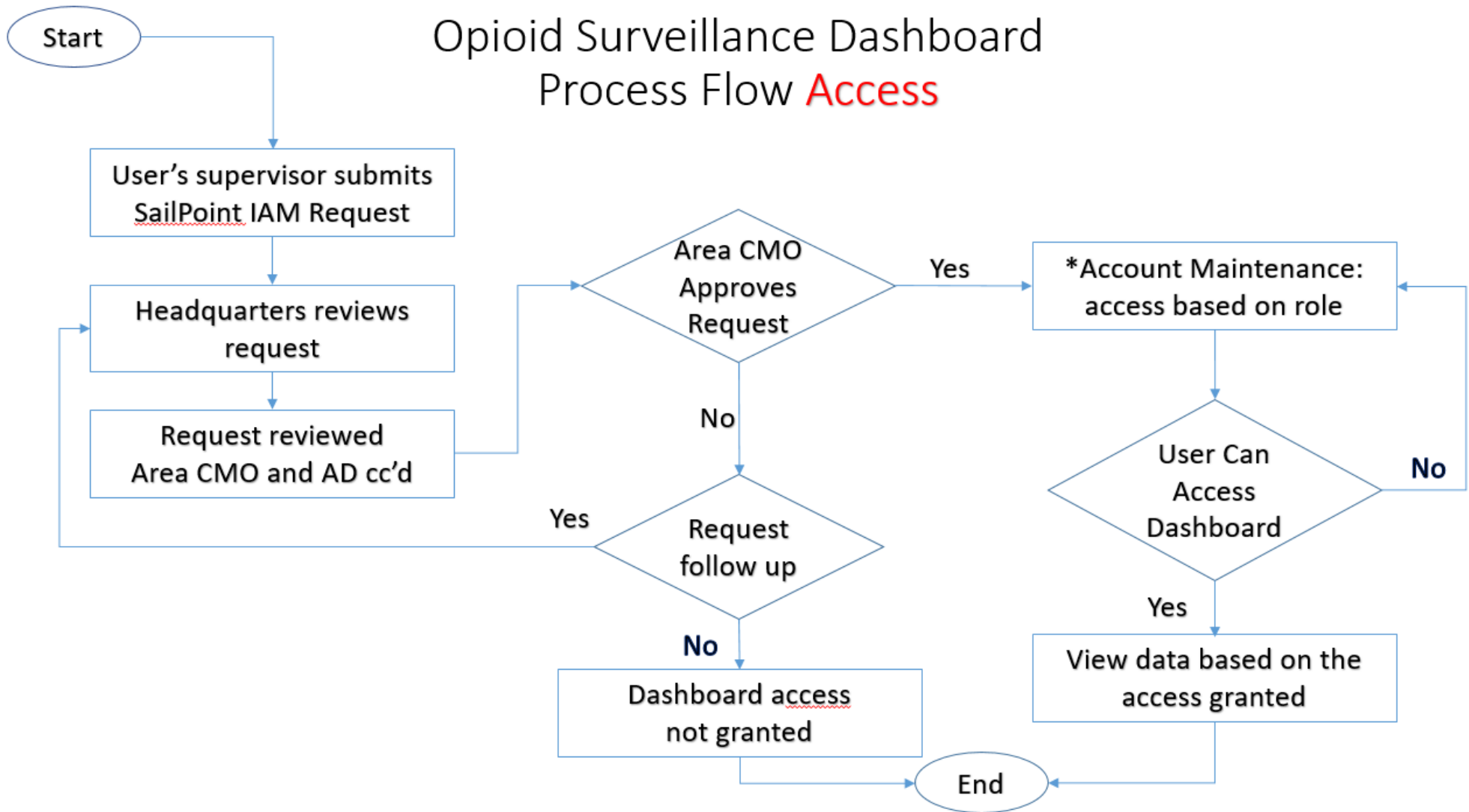
Process Flow

Opioid Surveillance Dashboard Process Flow: Data Availability in Dashboard



Questions or issues -Please contact Dr. Tamara James at Tamara.james@ihs.gov

Opioid Surveillance Dashboard Process Flow **Access**



*Note: security rights will be granted based on predefined user roles (e.g., Clinical Director see site specific facility level data).
Questions or issues -Please contact Dr. Tamara James at Tamara.james@ihs.gov**

General Overview

IHS Opioid Surveillance Dashboard:

The Indian Health Service (IHS) established the Opioid Surveillance Dashboard (also referred to as an electronic dashboard [e-dashboard]) to evaluate opioid interventions and professional practice through enhanced clinical decision support tools. Data will inform system-level quality improvement strategies.

The IHS Opioid Surveillance Dashboard is an Agency wide effort to collect better data to improve outcomes for patients receiving opioid medications within the Indian Health system and to inform population health approaches for communities. These efforts are in support of Health and Human Services priority to reduce and slow the prevalence of opioid addiction and overdose. The Opioid Surveillance Dashboard provides timely, relevant, and meaningful public health data to guide these efforts.

Source:

The data used to create the Opioid Surveillance Dashboard is extracted from prescription drug data housed at the IHS National Data Warehouse (NDW). The NDW receives the information through periodic uploads (at least monthly) from IHS sites to the NDW.

Reported Measures:

This dashboard is an interactive, web-based tool that provides information related to opioid prescribing. This is Phase I of the dashboard and includes the following measures: the number of opioid prescriptions; Morphine Milligram Equivalents (MME) dispensed; the number of patients that received an opioid prescription; and patients receiving chronic opioid therapy (defined as *at least 60-day supply of opioid prescriptions in the last 91 days*). Please note: cancer pain treatment cannot be separated from non-cancer pain treatment because of limitations in the data available in the NDW.

Access:

Access to the Opioid Surveillance Dashboard requires an IAM SailPoint submission by your supervisor, approval through the IHS Area Office and/or IHS Headquarters, and acknowledgement and acceptance for Terms of Use prior to accessing the e-dashboard < <https://home.ihs.gov/hope/>>.

Your view of the dashboard charts and source data has been predefined based on your role in the Indian Health system.

Data Validation / Disclaimer:

In an effort to ensure this dashboard provides timely, relevant and accurate data related to opioid prescribing, the IHS National Committee on Heroin Opioids and Pain Efforts' (HOPE) Metric Workgroup conducted validation steps with the Office of Information Technology, National Patient Information Reporting Systems (NPIRS) for a limited number of facilities. This data validation effort resulted in the discovery of small variances between the data found in the NDW and the individual sites reviewed. The variance was less than 3% at most sites.

Accuracy of Displayed Data:

By default, only sites with complete data (i.e. data for all periods displayed on the charts) will be displayed. This is to ensure chart trends are not skewed by sites with inconsistent or incomplete reporting. It also prevents inaccurate interpretations based on default chart display.

Missing data submissions (especially from larger sites) may produce inaccurate aggregate reporting for the Area and National level views. When previously missing data is submitted, slight changes to aggregate data may occur. When viewing a single site or service unit, if ANY data is missing, the charts will only display a single flat line or no data at all.

Users may manually switch views to show the available data by changing the “Only Show Facilities with Rx Data in Every Month” toggle to “No.”

Lastly, rare coding errors were discovered during the data validation process that cause some opioid prescriptions to appear as if they were dispensed from locations that should not be dispensing opioids. The data from these “phantom” sites will only show when “Only Show Facilities with Rx Data in All Months” is set to “No.”

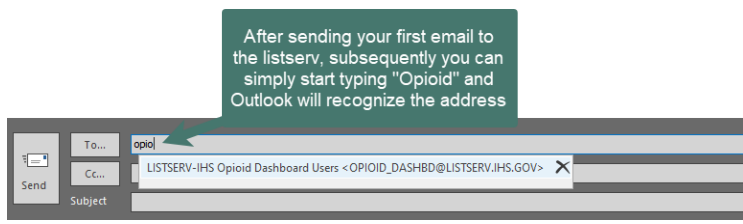
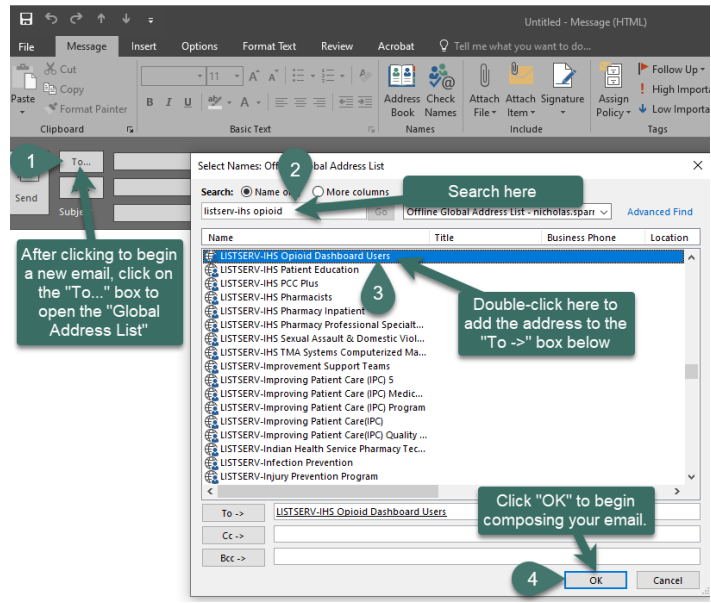
Improving Data Reporting:

As an initial step, each facility is encouraged to review and cross-reference data reported within the Opioid Surveillance Dashboard with Controlled Substance Management Reports (CSM), External Pharmacy Prescriptions Reports (ERxT) and Pharmacy Staff Workload Reports (PWKL). Based on previous data validation efforts, when comparing local reports to the Dashboard, we anticipate a limited number of facilities will experience discrepancies well above the previously described 3%. The dashboard team is actively working to decrease these discrepancies and we highly encourage your site to work directly with the Area Statistics Officer or your local IT to address discrepancies greater than 5%. Additionally, for sites that wish to identify missing data, we suggest changing the “Chart Dimension” to “Month”. Here, users will see any missing months as zeros or blanks.

Inquiries or recommendations regarding function and visualization can be sent using the web form found here: <https://www.ihs.gov/opioids/contactus/>.

Communication:

There is a listserv available where questions can be asked and information shared among Opioid Dashboard users. To sign up, please navigate to https://listserv.ihs.gov/scripts/wa.exe?SUBED1=OPIOID_DASHBD&A=1, fill out the requested information and click “Subscribe”. You will then need to confirm your request via a link that will be sent to your email. Lastly, your request will be confirmed by the listserv moderators. Once you receive the confirmation email saying you have been added to the OPIOID_DASHBD list you can begin using the listserv. The first time you send a message to the listserv, find the listserv by searching the global address book. Subsequently you can simply start typing “Opioid” in the “To...” bar. See below:



Explanation of Measures and Data

Given that each site may be sending data on a slightly different interval, by default all charts will exclude data points that are likely incomplete.

The word “dispensed” is used for all prescription data. However, this includes prescriptions that were e-prescribed to an outside pharmacy where it is unknown whether the prescription was actually dispensed or not. Therefore, in the case of e-prescribed opioids, the data are based on the number prescribed and not necessarily the number dispensed.

All graphs will be display based on the filters selected by the user (e.g., Facility, Fiscal Year vs. Month, etc.).

Available Measures

of Opioid Prescriptions (# Opioid Rx) Dispensed

Explanation: Number of prescriptions for any opioid-containing medication dispensed to the patient, including electronic prescriptions sent without verification that the medications were actually dispensed

Total MME (TMME) Dispensed

Explanation: Sum of all morphine milligram equivalents dispensed

Average Daily MME (ADMME) Dispensed

Numerator: Sum of the Daily MME (DMME) of each prescription

Denominator: Total number of prescriptions

Explanation: The DMME of a prescription is the TMME divided by the days supply of that prescription.

% of All Prescriptions Dispensed That Were Opioid Prescriptions (% Opioid Rx)

Numerator: Number of opioid prescriptions dispensed

Denominator: Total number of prescriptions dispensed

Total MME/100 Rx (TMME/100 Rx) Dispensed

Numerator: Sum of all morphine milligram equivalents dispensed

Denominator: Total number of prescriptions dispensed divided by 100

Explanation: The addition of a denominator creates a ratio and normalizes the data making the data more useful when comparing one site or area to another. The denominator is divided by 100 simply to prevent the ratios from being incredibly small at some sites.

of Opioid Patients (# Opioid Patients)

Explanation: Total number of patients who received any opioid during the timeframe

of Patients Receiving Chronic Opioid Therapy (# COT Patients)

Explanation: Total number of patients who received 60 days of opioids in the previous 91 days (The CDC defines COT as 60 days of therapy in the last quarter (i.e. 91 days)). The left-most point of this chart may not match up with the left-most points on other charts (more than 60 days of data are required before the first point can be generated).

Parameter Logic:

“Only Show Complete Time Periods in Charts?”

Default is “Yes”. When set to “Yes” the charts will not show data for month of the current refresh data, nor the previous two months of data. For example, if data was refreshed on November 10th, you would not see the data from September, October or November. Only data prior to September would be available in the charts.

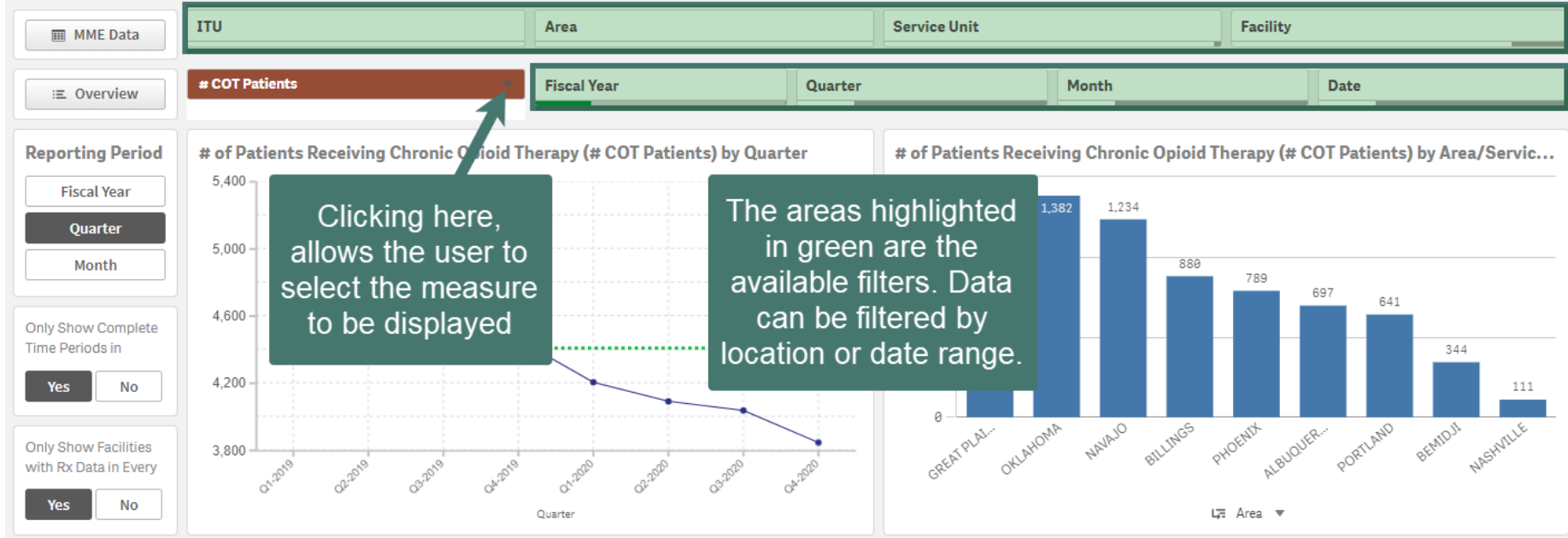
“Only Show Facilities with Rx Data in Every Month?”

Default is “Yes”. When set to “Yes” the charts will not include any data from sites that are missing any month from January 2013 until two months before the most recent data refresh, not including the current month (see above for example).

Navigation/Orientation

Please Note: When viewing this section from within the Opioid Dashboard these graphics are designed to be viewed at a resolution of 1920 x 1080. Otherwise, some of the graphics may be truncated on the right side of the graphic. If your monitor does not support this resolution, you can still view the full images, however, image quality will be degraded. You can adjust the image sizes by holding down the ctrl key on your keyboard and scrolling your mouse wheel to zoom out until you can see the full images. Additionally, please view the dashboard on any browser besides Internet Explorer.

The image shows a vertical navigation menu for the Opioid Dashboard. At the top, there are two logos and the text "OPIOID SU". Below this are several menu items: "MME Data" with a grid icon, "Overview" with a list icon, "Reporting Period" with three sub-options: "Fiscal Year", "Quarter" (highlighted), and "Month", "Only Show Complete Time Periods in Charts?" with "Yes" and "No" buttons, and "Only Show Facilities with Rx Data in Every Month?" with "Yes" and "No" buttons. Five callout boxes with arrows point to specific elements: 1. "Toggles between graphical and tabular views" points to the "MME Data" button. 2. "Displays Overview Page" points to the "Overview" button. 3. "Changes how much time each data point represents." points to the "Reporting Period" section. 4. "When set to 'Yes' this option excludes facilities who have not provided data for every month in the displayed date range to prevent inaccurate trends." points to the "Yes" button for "Only Show Facilities with Rx Data in Every Month?". 5. "When set to 'Yes' this option prevents incomplete data from being displayed. When 'No' is selected, incomplete data will display - usually visible on the right-most data points of the chart." points to the "Yes" button for "Only Show Complete Time Periods in Charts?".



Clicking here, allows the user to select the measure to be displayed

The areas highlighted in green are the available filters. Data can be filtered by location or date range.

Within each filter, the green bar gives a visual representation of how data is selected of the available data.

Clicking the ellipsis allows the user to Select All, Select Possible, Select Alternative or Select Excluded

Clicking here will clear any current selections

Fiscal Year

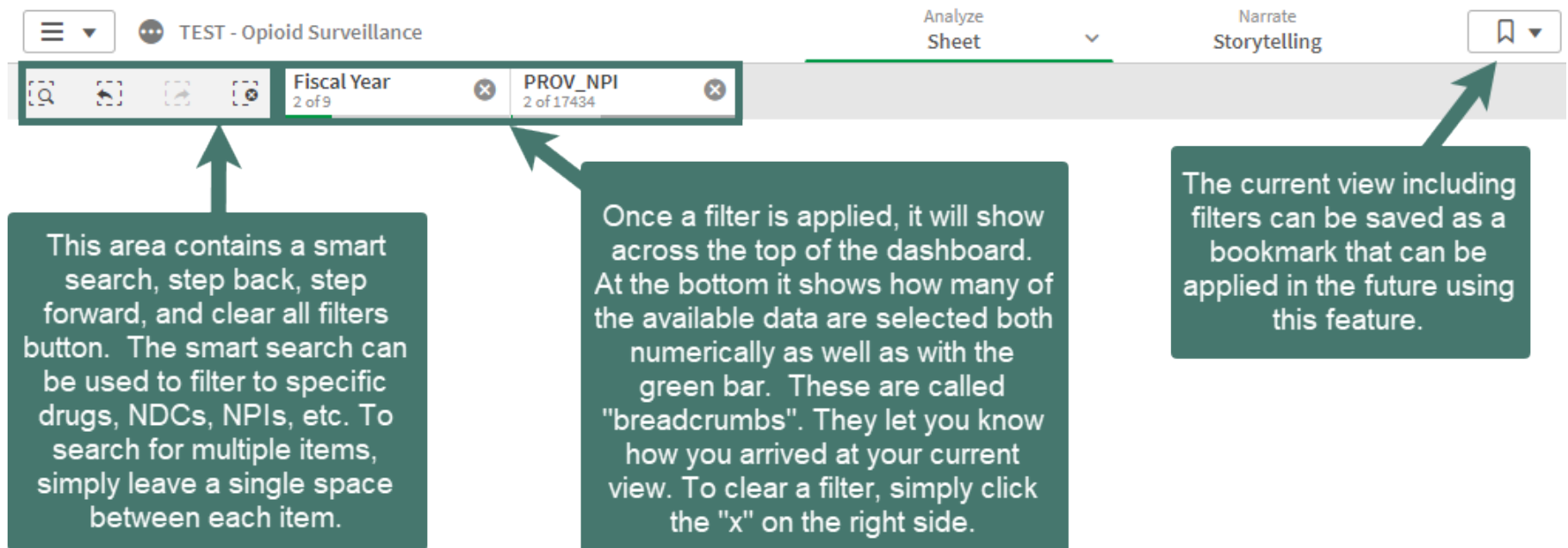
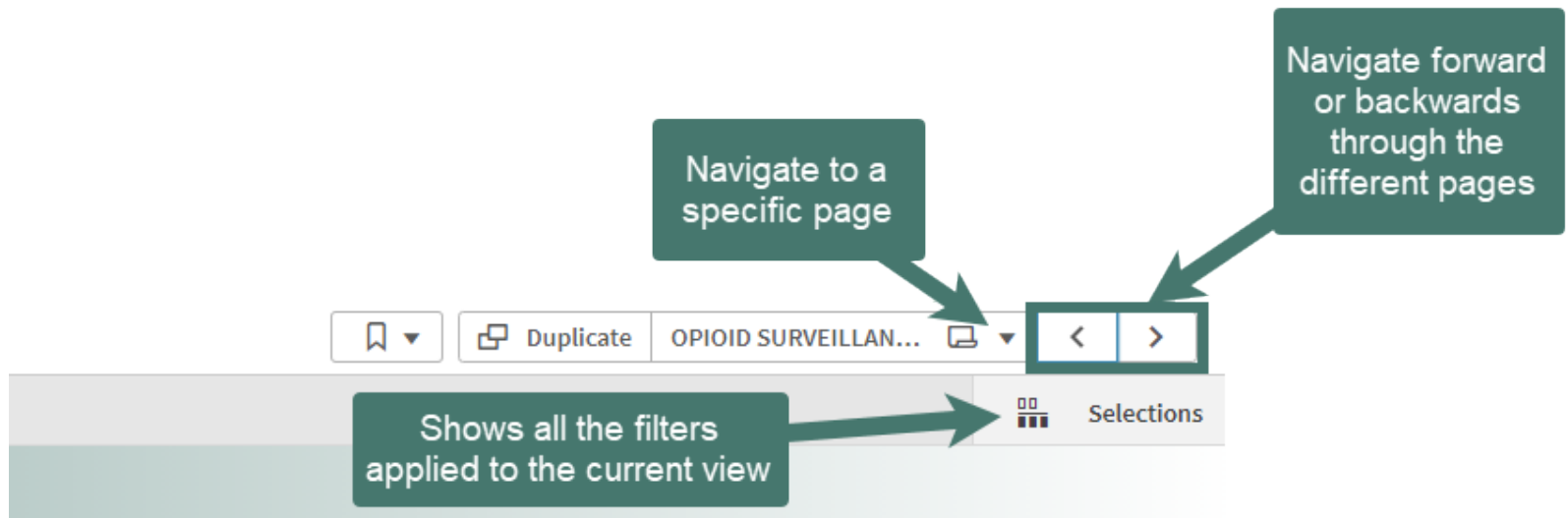
... [Ellipsis]

Search in listbox

- 2021
- 2020 ✓
- 2019 ✓
- 2018
- 2017
- 2016
- 2015
- 2014

[X] [✓]

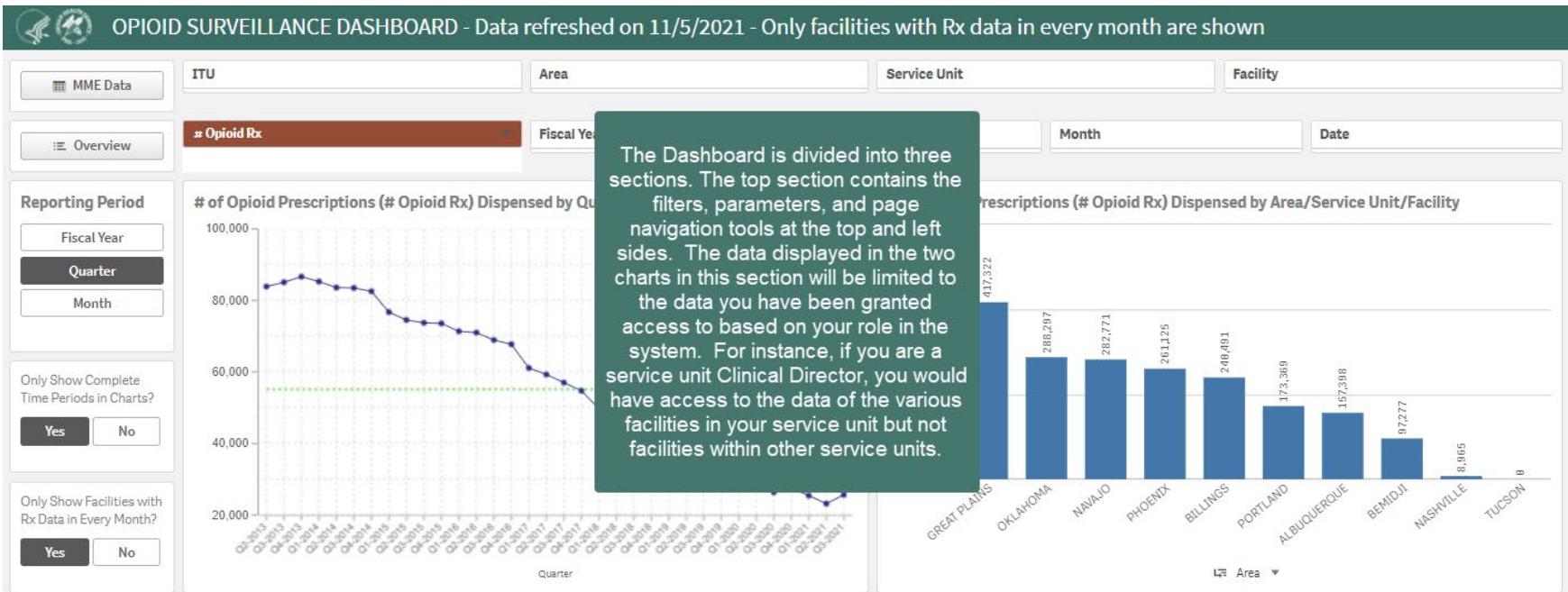
Clicking an item to filter (e.g., Fiscal Year) will display the options within that filter. Filters can be selected by either searching then clicking them or by simply clicking them if they are already viewable. Clicking filters highlights them in green. The charts will update as filters are selected. To accept the selection, click on the green check mark at the upper right. To cancel click on the red "X".



DASHBOARD - Opioid Rx, TMME, ADMME, TMME/100 (data refreshed on 9/21/2021) - Only facilities with Rx data in all 102 months are shown

The green status bar across the top displays the last time the data was refreshed as well as whether or not only sites with a complete data set are being displayed or not

DASHBOARD - Opioid Rx, TMME, ADMME, TMME/100 (data refreshed on 9/21/2021) - Charts now reflect incomplete data

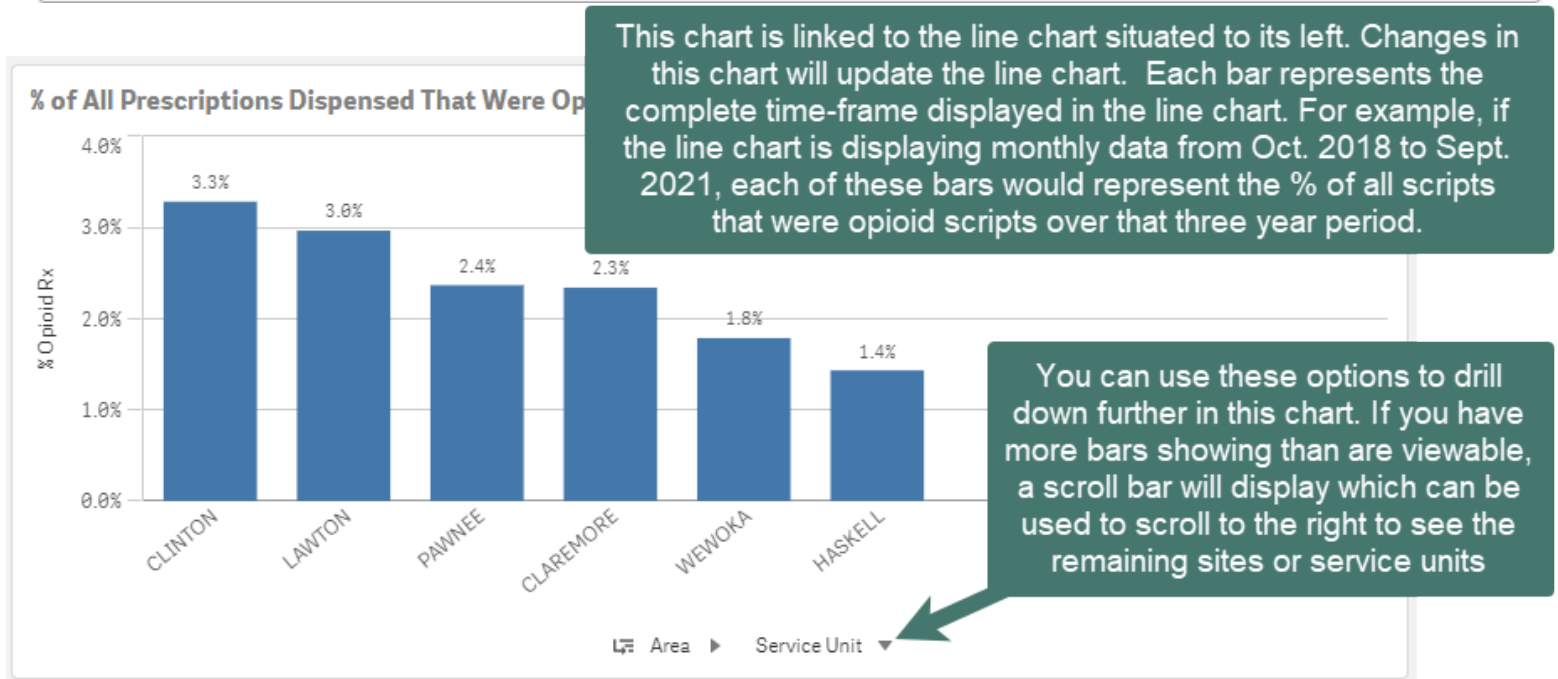
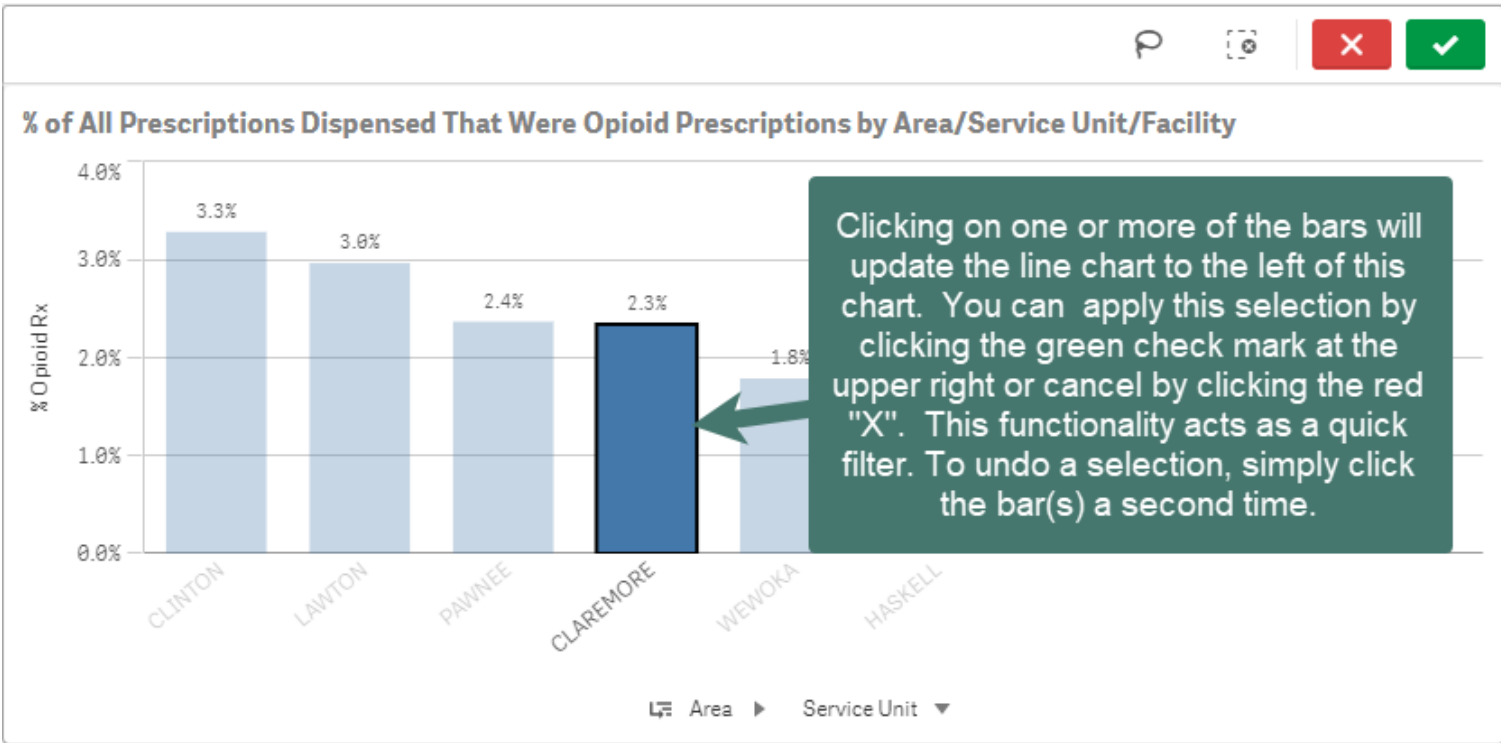


As you scroll across the left chart in the top section, the value of each data point is displayed. In this example there were 53,233 opioid prescriptions dispensed in Q2 of 2017, The total number of facilities displayed is 59, and the average (green dotted line) of all the points displayed in the graph is 51,009 prescriptions per quarter.

Click here to get a full screen view of the chart. Once in full screen mode, clicking on it again will return you to the standard view

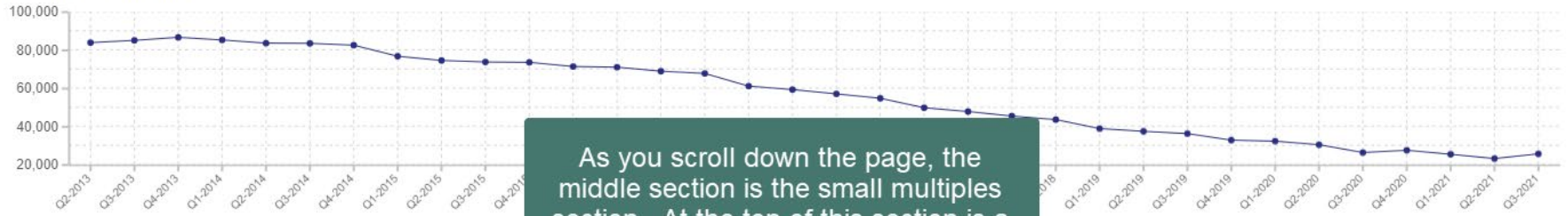
Clicking the ellipsis will give you options to go to / return from full screen, share the chart, take a screenshot of the chart, or download an image of the chart, a .pdf of the chart, or the data from the chart





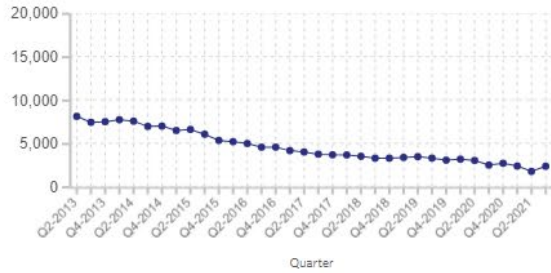
Area and National Small Multiples - # of Opioid Prescriptions (# Opioid Rx) Dispensed by Quarter

NATIONAL AGGREGATE

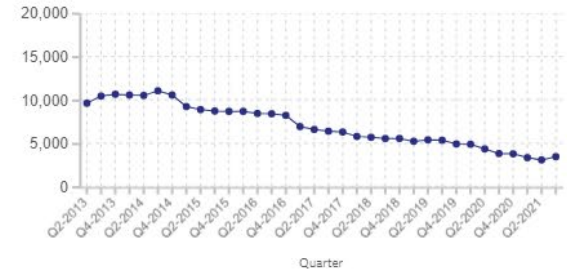


As you scroll down the page, the middle section is the small multiples section. At the top of this section is a National Aggregate chart and below it small multiples of each of the IHS Areas' chart of the selected measure on a harmonized x- and y-axis to make comparison easier. These small multiples will be affected by all parameters and filters *except* location filters. No matter what facilities are displayed in the two charts in the top section, the small multiple charts will display the aggregate data for each of the Areas.

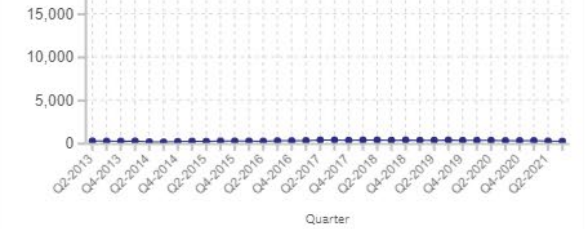
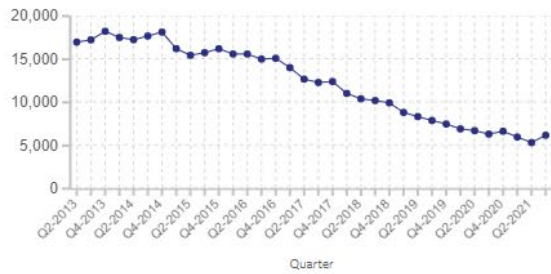
ALBUQUERQUE



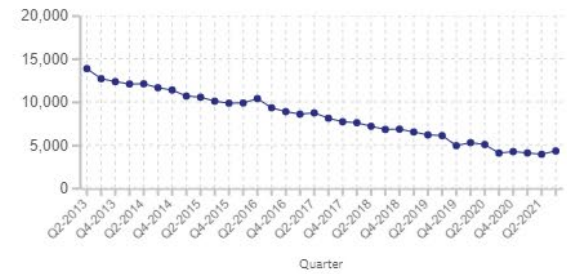
BILLINGS



GREAT PLAINS

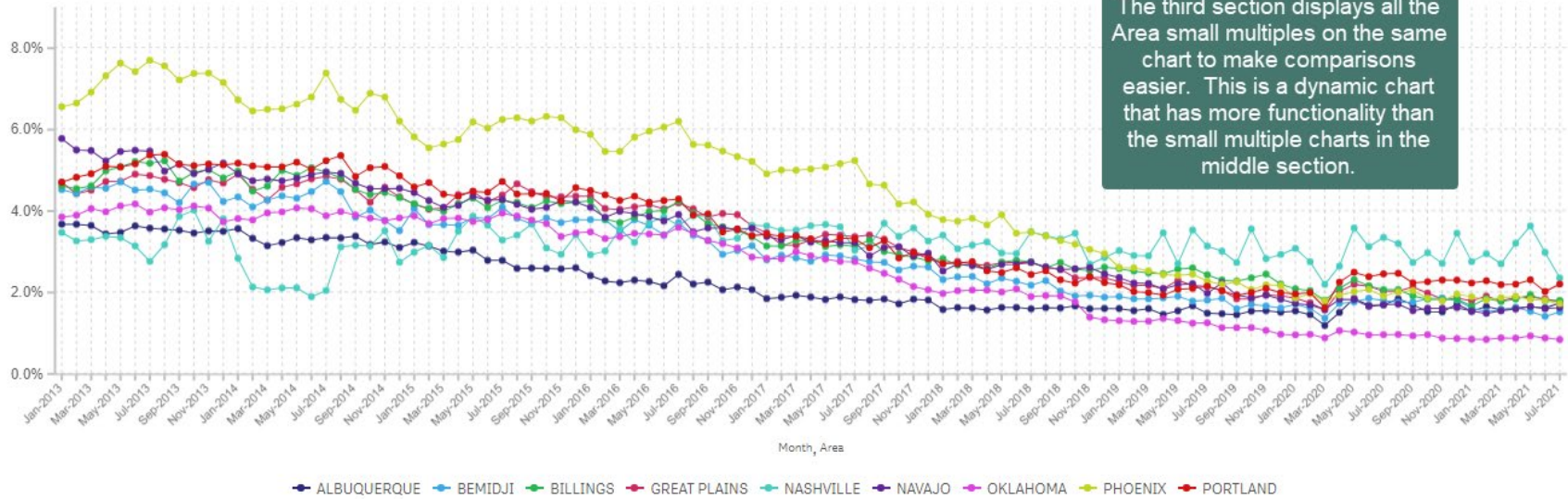


NAVAJO



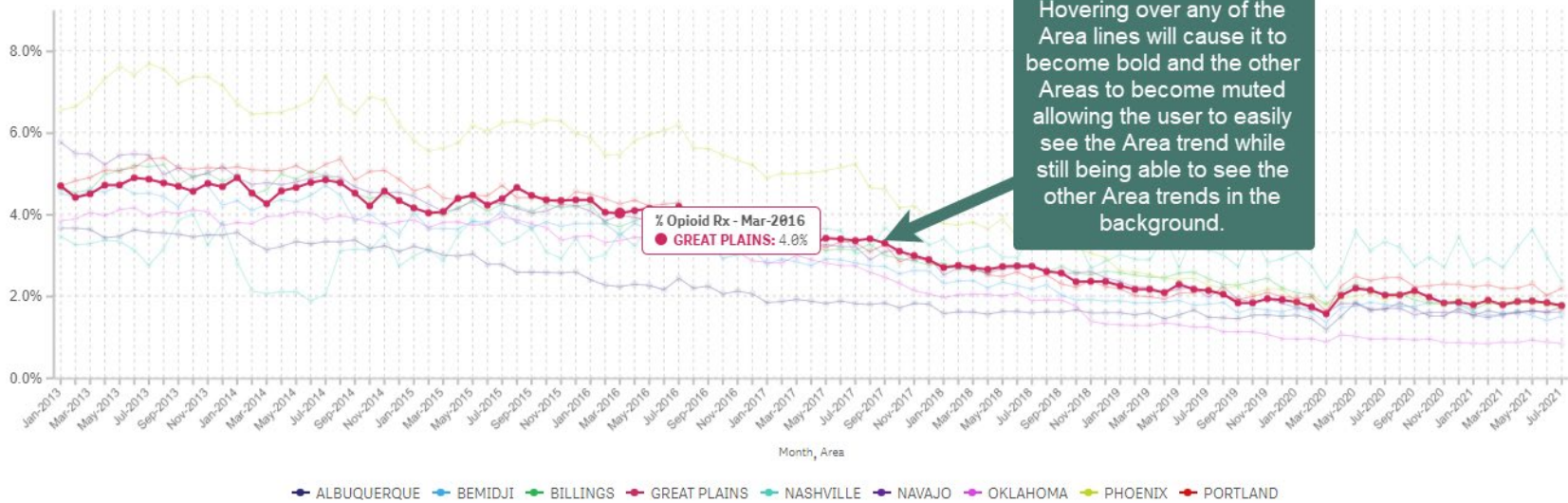
Area Comparison

Area Comparison - % of All Prescriptions Dispensed That Were Opioid Prescriptions (% Opioid Rx) by Area, Month



Area Comparison

Area Comparison - % of All Prescriptions Dispensed That Were Opioid Prescriptions (% Opioid Rx) by Area, Month

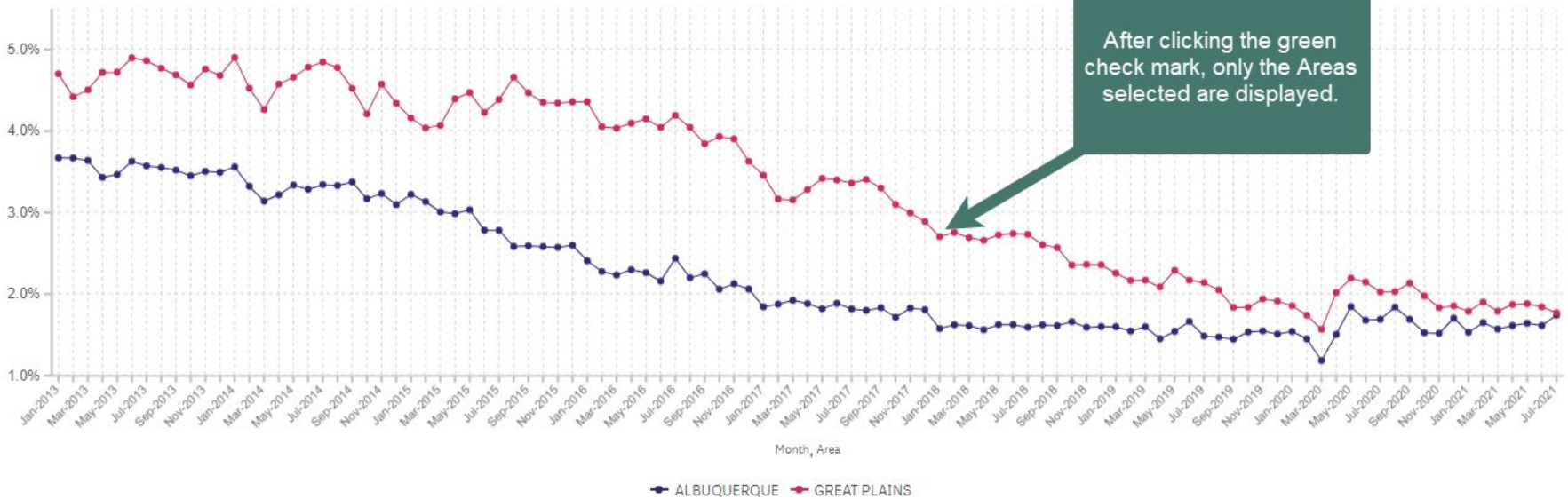


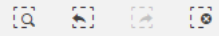
Area Comparison - % of All Prescriptions Dispensed That Were Opioid Prescriptions (% Opioid Rx) by Area, Month



Area Comparison

Area Comparison - % of All Prescriptions Dispensed That Were Opioid Prescriptions (% Opioid Rx) by Area, Month





PC Area
2 of 11



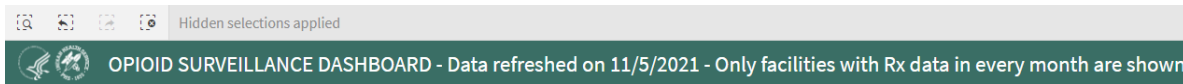
Click the "x" next to the PC Area filter at the top of the screen to revert back to the original chart or to start the Area selection again.

Troubleshooting Missing Data

Verifying whether data is missing:

From within the Opioid Dashboard

1. Ensure that all filters are cleared by clicking on the “x” next to any filters that may be active so the top of the Opioid Dashboard looks like this:



2. Verify that the “Only Show Facilities with Rx Data in Every Month” parameter at the left is set to “Yes”.
3. Select “# Opioid Rx” as the measure to display.
4. Choose the “Facility” filter on the upper right bar chart by clicking on the bottom middle of the chart and choosing “Facility”. This will show you all of the facilities you have access to. Access is dependent on your role.
5. Write down the facilities that display a zero above them as they are missing data.
6. Some “facilities” listed may seem erroneous like “Home” or “Diabetes Center”. These occur because of coding errors and represent only a handful of prescriptions at most.
7. Change the “Only Show Facilities with Rx Data in Every Month” parameter at the left to “No”
8. Above each of the names of your facilities will be a number. This is the number of opioid scripts that have been sent to the National Data Warehouse (NDW). For those erroneous “facilities” mentioned in #6 you should see tiny number (<5). If you see large numbers you may need to have a discussion with the Health Information Management (HIM) department at that facility to determine what is causing the coding errors.
9. Change the “Reporting Period” at the left to “Month”
10. Using the list you created in step #5, click on one of the name of one of the facilities that had a zero when “Only Show Facilities with Rx Data in Every Month” was set to “Yes”. The line graph to the left will update (if you have access to more than one facility) to show what data is available for the site you selected (clicked on).
11. Determine what data is missing and write each month that is missing next to that facility name. You should have data up and until two months ago not including the current month of the most recent data refresh. For instance, if data was refreshed on November 10th, there should be data showing through August.
 - a. If it looks like the data is complete from January 2013 forward, it is likely that a single month is missing. You may have to hover over each point and follow the data through to determine which point is missing.
 - b. Write down the “data refreshed on” date listed on the Opioid Dashboard banner (see page 11 above) and provide this to those who will fix the data problems.
12. After you have gone through each of your facilities and written down what data is missing, please provide this data to your Area RPMS support and/or Clinical Informaticist(s) or depending on the circumstances the local Site Manager and/or Clinical Informaticist(s).

Fixing missing data:

It is recommended that the below actions be performed by Area RPMS support or the Site Manager and/or Clinical Informaticist of the Area/Facility/Service Unit which is missing data. If your site is missing data in one or more months, follow all the steps below – not proceeding from one step to the next until the previous step has been completed. There may be multiple issues going on in your system as has been that case at other sites, so completing all the steps will prevent delays in getting your site’s data to the NDW.

There are multiple steps that must take place after you send your data to the NDW before the data will be made available to the Opioid Dashboard. This process can take as long as one (1) month, but may take as little as two (2) weeks. Therefore, when you check the dashboard to verify your data is now flowing to the dashboard, make sure that the “data refreshed on” date obtained in the “Verifying whether data is missing:” step #11-b is at least two (2) weeks after the fix below was performed.

Steps to follow to ensure all data is available to the Opioid Dashboard:

Before you begin, please download the BDWH User Manual found by clicking the following link and looking under the subheading “Opioid Surveillance Dashboard Guidance Documents”: <https://www.ihs.gov/opioids/opioidresponse/techassistance/>. This manual has some highlighting relative to the BDWH (prescription drug export) patch as well as some comments to help guide you, however, it is recommended that the full User Manual be reviewed and not just the highlighted sections as it has information relative to both the BDW (visit data export) and BDWH patches, which are both necessary to be able to populate the Opioid Surveillance Dashboard.

For most multi-divisional sites, only the parent site will export data, however this is not always the case. It is assumed that the person working these instructions will be able to determine if their multi-divisional site has a single export or multiple. Once again, most have a single export. Please keep this in mind as you go through these instructions as they are written as if there is only a single export.

1. Correct any single months missing data on the Opioid Dashboard:

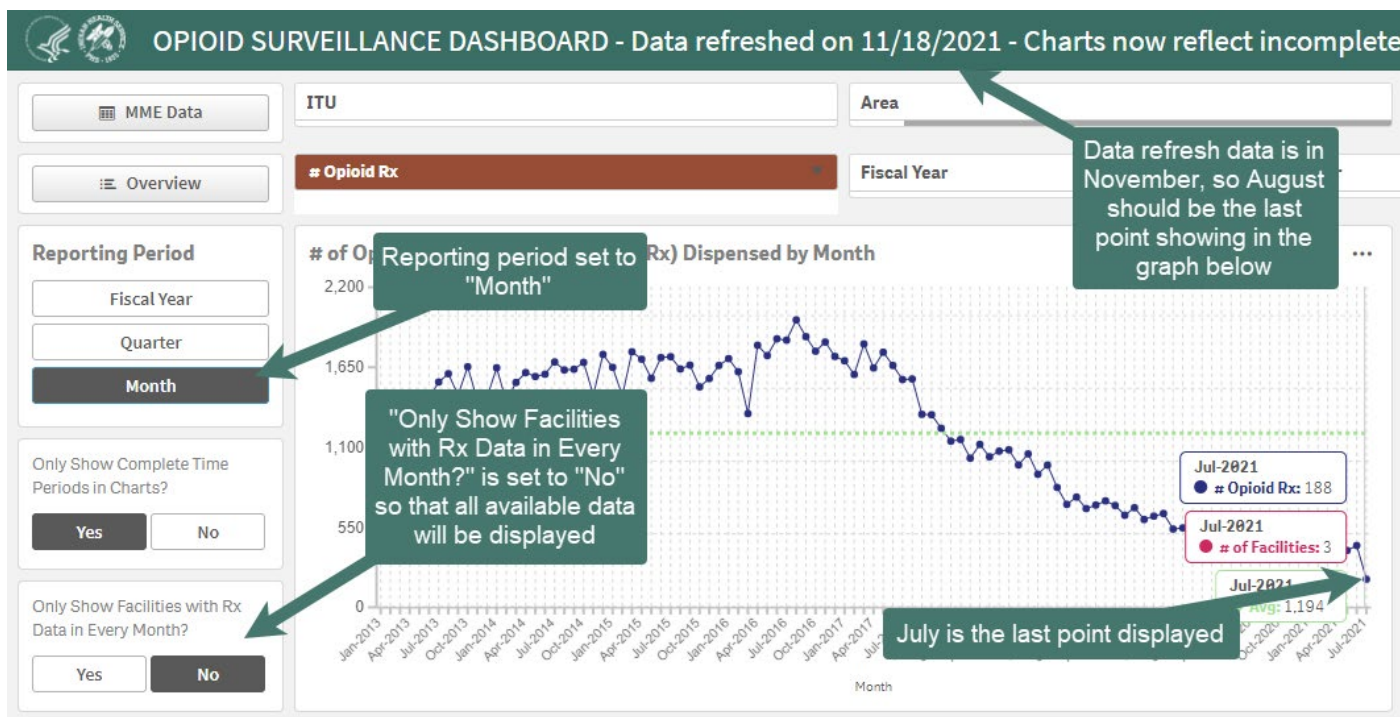
- a. If the data missing on the dashboard has data on both sides of it, this means something happened during that period, but that things are working as they should now.
- b. If the missing data does not have good data on both sides of it in the Opioid Dashboard, proceed to step 2.
- c. To re-export a specific month or months of data, perform the following:
 - i. From the “Data Warehouse Export Menu ...” select “PREX Prescription Drug Data Warehouse Export Menu ...” and then “PRRX Re-Run Previously Run Prescription Export.”
 - ii. At the “Select BDW PRESCRIPTION EXPORT LOG ORIGINAL RUN DATE:” prompt type “??” and hit enter.
 - iii. Find the specific date export you need to re-run remembering that the date of the run will be for the previous month (so long as that is what you have your export frequency set to). So if your exports run on the 1st of the month and the month missing is August, you would re-export the September 1st export for the year in question. If for some reason there is not a file that corresponds to the dates that you are missing, you may need to create a new export for a specific date range – if so, follow the directions below, otherwise continue with step iv.
 1. Determine the specific date range you need to export. We are not certain of this, but we believe it best to overlap slightly with dates that are in the dashboard, both before and after the missing timeframe.
 2. Submit a ticket to the IT Helpdesk with a subject something like, “Please assign to NPIRS. We are missing data in the Opioid Surveillance Dashboard and it appears we will need to use the PRDR option in RPMs to generate a specific data range of data for upload to the NDW. We would like to request authorization to do so. Thank you.”
 - iv. At the “Do you want to regenerate the HL7 messages for this run?” prompt answer “Y” for yes.
 - v. At the “Do you want to QUEUE this to run at a later time?” prompt answer “Y” for yes and type in the date and time you want to run the report (e.g., T@2100 or 11-15-21@0200). Make sure you choose a non-peak time for your facility.
 - vi. Check the PUB after your queued re-report to make sure the file was created. For instructions on how to determine where your PUB is, please see #7 items a to e.
 - vii. After you have verified the file was created and showed up in your PUB, you can verify that your files made it to the NDW by accessing this link: <http://export.d1.na.ihs.gov/>. (note: it takes 20 seconds or more to load)
 1. Choose your Area using the “Choose Area:” dropdown and click the “go” button
 2. Choose your site using the “Site:” dropdown and click the “go” button
 3. Look for your file (by filename) in the list.
 4. If it has only been a few hours since you ran the BDWH export, you may need to give it one more day to show up in the NDW, but if it has been more than 2 business days and it still isn’t there, it probably isn’t going to make it there.

5. If you file is in the PUB but isn't making it to the NDW, you may need to skip to #9 to resolve this issue.

viii. Check the Dashboard 2 weeks to 1 month later to see if the data is now included.

2. **Correct data missing in the most recent month(s) that should be populated:**

- a. If the missing data on the dashboard is ONLY in the most recent month or months but all other data – back to 2013 – is populated, follow the steps below before proceeding to step #3 – otherwise, skip to step #3 now (i.e., you are missing more data than just the most recent data). For an explanation of what “most recent” data means, see items “b” and “c” below.
- b. To determine what the most recent month should be in the dashboard, the “Data refreshed on . . .” date from the dashboard should have been provided to you. If not, it is found on the banner at the top of the dashboard.
- c. The Opioid Dashboard excludes the month of the most recent refresh plus the previous two months of data. In the example below, 11/18/2021 is the refresh date, so the last datapoint in the Opioid Dashboard should be for August 2021 (September, October, and November will not show on the Opioid Dashboard). However, the data ends in July, and therefore is incomplete (and why nothing shows when the “Only Show Facilities with Rx Data in Every Month?” is set to “Yes”, however, you can see that data goes all the way back to January 2013 (this is what we should see), so everything is complete except for August 2021 (and maybe part of July 2021 based on the steep drop of the July data point). Once the “Data refreshed on” date is a date in December, then September’s data would show up on the Opioid Dashboard, etc.



- d. When processing prescriptions for export, the BDWH system creates a temporary file that then has to be cleared before the next export. From time to time this temporary file will not be cleared automatically and has to be cleared manually.
- e. Check whether the ^BDWHTMP global is hung up:
 - i. From the “Data Warehouse Export Menu ...” select “PREX Prescription Drug Data Warehouse Export Menu ...” and then “PRGT Generate Prescription Export Transactions.” Note: you will need the BDWHZMENU key to access these menu options.
 - ii. If there was a problem, you will not get the “Do you want to continue?” prompt and it will not tell you when the last run was and what was exported. Instead you will get something like:

“This option will generate Pharmacy Prescription Data Warehouse HL7 messages for prescriptions filled between a specified range of dates.

You may "^" out at any prompt and will be ask to confirm your entries prior to generating the HL7 messages.

previous PRESCRIPTION export not written to host file

Contact your site manager. **^BDWHTMP still exists."**

- iii. If you don't see this, skip to letter "f" below.
 - iv. If you see this, you will need to open a ServiceNow ticket. Please put in the ticket something to the affect, "BDWH export to the NDW is stuck because the the ^BDWHTMP global still exists and needs to be cleared."
 - v. After you receive confirmation that the ^BDWHTMP global has been deleted, got back to the PRGT option. It should now tell you when the last successful run of data was. You should now get the "Do you want to continue?"
 1. Answer "Yes" to the "Do you want to continue?" prompt.
 2. Answer "Yes" to the "Do you want to QUEUE this to run at a later time?" prompt and then put in a non-peak time for it to run – ideally late today (e.g., T@2000).
 - vi. The next morning, run the PRDL option and get your fileman:
 1. At the "Select BDW PRESCRIPTION EXPORT LOG ORIGINAL RUN DATE:" prompt type "??" and hit enter.
 2. Select the number for the date when you ran the export (probably yesterday's date)
 3. Use the down arrow to scroll down to where you can see the "Filename Created:" field and copy the name to Notepad to reference later.
 - vii. Check the PUB to make sure the file was created (this will likely be the following day). For instructions on how to determine where your PUB is, please see #7 items a to e.
 - viii. Verify your file(s) made it to the NDW by following the steps in 1.c.vii above.
 - ix. Check the Dashboard 2 weeks to 1 month later to see if the data is now included.
 - x. If after a month your data is still not in the dashboard, proceed to step #3.
- f. Check whether the file generation got hung up:
- i. If the ^BDWHTMP doesn't appear to be the problem, another problem that may arise is that the file didn't get created, because there was some interruption in the system during the creation of the file. You will also see this when running the PRGT option. It will look something like this:

"This option will generate Pharmacy Prescription Data Warehouse HL7 messages for prescriptions filled between a specified range of dates.
You may "^" out at any prompt and will be ask to confirm your entries prior to generating the HL7 messages.

Last run was for Prescription Fill dates JUL 07, 2020 through JUL 31, 2020.

Data Warehouse Prescription Transmission is currently running!!"

- ii. If you don't see this, proceed to step #3.
- iii. First you will need to figure out what happened to cause the task to fail in the middle of running. Was there a server error? Was the disk too full, etc.? If there is no explanation, it is still ok to proceed, just know that it may fail again if the problem hasn't resolved or been fixed.
- iv. Next, look at the PRDL to see if you see the log entry for the date range mentioned in litter "f" when you ran the PRGT option. The log file will the the file created the day after the end date listed. So in the example in "f" the log file in question would be the one for Aug 1, 2020.
- v. Look into the log and make sure it shows that a file wasn't created (i.e., the "Number of Prescription Fills Processed:" and "Total Number of Fills Exported:" should be blank as well as the "Filename Created:" field).
- vi. Once you have determined which log file is stuck, run the "PRRL Reset Prescription Export Log" option and choose to reset the log file you found in letter "i" above. It will give you a bunch of nasty warnings, but so long as you are sure which file is the stuck one, go ahead.

- vii. Once the log has been reset for the file, you should be able to go into the PRGT option and queue the new export.
 - 1. Answer “Yes” to the “Do you want to continue?” prompt
 - 2. Answer “Yes” to the “Do you want to QUEUE this to run at a later time?” prompt and then choose a non-peak time later today (e.g., T@2100).
- viii. The next morning, run the PRDL option and get your fileman:
 - 1. At the “Select BDW PRESCRIPTION EXPORT LOG ORIGINAL RUN DATE:” prompt type “??” and hit enter.
 - 2. Select the number for the date when you ran the export (probably yesterday’s date)
 - 3. Use the down arrow to scroll down to where you can see the “Filename Created:” field and copy the name to Notepad to reference later.
- ix. Verify the file made it to your PUB. The files should generate at that time and show up the next morning in your PUB. For instructions on how to determine where your PUB is, please see #7 items a to e.
 - 1. If no file name is listed or the file doesn’t show up in the PUB it may be that there is a larger server error causing the problem.
 - 2. You may need to repeat #2 after determining what is causing the files to fail to generate.
 - 3. If you can’t figure out what is causing the files to fail to generate, please submit a ServiceNow ticket and put something in the ticket to the effect, “BDWH files are failing to generate and are hanging up in RPMS.”
- x. Verify your file(s) made it to the NDW by following the steps in 1.c.vii above.
- xi. Check the Dashboard 2 weeks to 1 month later to see if the data is now included.
- xii. If after a month your data is still not in the dashboard, proceed to step #3.

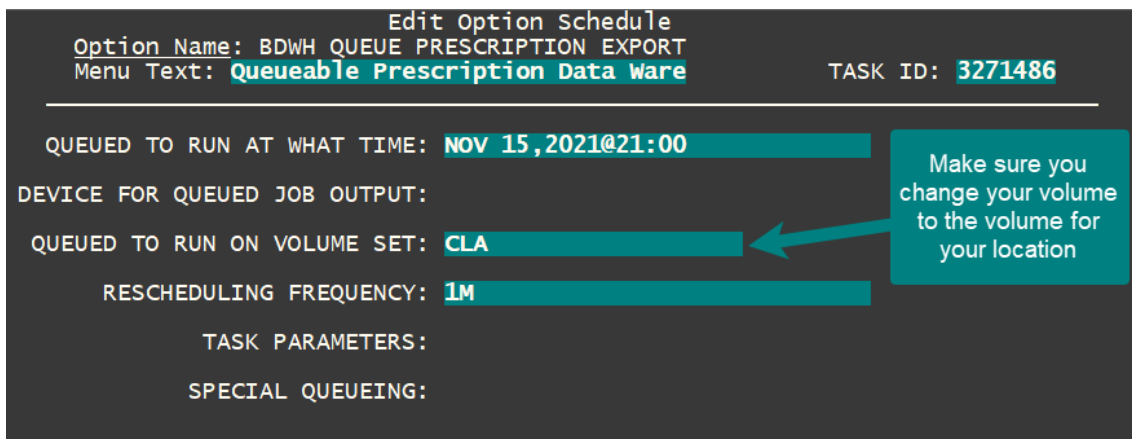
3. Ensure that all BDW patches are installed:

- a. From the “Kernel Installation & Distribution System ...” menu select the “Utilities ...” menu then the “Display Patches for a Package” option.
- b. At the “Select PACKAGE NAME:” prompt type “BDW” and hit enter 4 times.
- c. The patches installed on the system will be listed. You should have at least patch 1 through 6 installed, and there is a patch 7 as well that is recommended to be installed. Patch #6 was the BDWH patch which contained the logic for exporting opioid data to the NDW. **However, the other BDW patches and exports are necessary because the NDW uses both the BDW and BDWH data to get the complete data set necessary to populate the dashboard.**
- d. If patches 1 through 7 are already installed, skip to step 4.
- e. If patches are missing, please follow the installation and user manual instructions carefully to ensure your data is populated correctly.
- f. Before queuing or scheduling any exports (as per the installation/user manual instructions), make sure that steps 4 and 5 below have been completed.
- g. Specifically, for the BDWH patch, the user manual for the patch (BDW Version 1.0, Patch 6, June 2019) must be followed very carefully all the way through including the BDW parts (as these make sure you have the BDW portion installed and working). With regards to the BDWH patch, make sure you send both the Backload AND set up the BDWH QUEUE PRESCRIPTION EXPORT in Taskman to export monthly.

4. Verify that your system is generating BDW and BDWH files (if you set up your system for the first time in step 1, you will not see any files here yet until your start generating them via the tasks you queue and the tasks you set up in Taskman):

- a. The BDW menu is locked with the BDWZMENU key and the BDWH menu is locked with the BDWHZMENU key
- b. Check if your **BDW** exports are being generated:
 - i. From the “Data Warehouse Export Menu ...” select the “Display Log Entry” option.
 - ii. At the “Select BDW DATA WAREHOUSE EXPORT LOG BEGINNING DATE:” prompt type “??” and hit enter.
 - iii. If you have been exporting to the BDW regularly, you should see at least monthly entries going back as far as when you installed the BDW patch.
 - iv. Enter down to the bottom of the list.

- v. Verify that your last entry is one (1) month or less ago. If not, you will need to modify the BDW QUEUE GDW task in Taskman to export at least monthly (i.e., 1M). You may also consider twice a month on specific days if you are a larger site; for instance 1m(1,15) will export monthly on the 1st and 15th of the month. You may need to work with your RPMS support to get this setup.
 - c. Check if your **BDWH** exports are being generated:
 - i. From the “Data Warehouse Export Menu ...” select “PREX Prescription Drug Data Warehouse Export Menu ...” and then “PRDL Display Prescription Export Log Entry.”
 - ii. At the “Select BDW PRESCRIPTION EXPORT LOG ORIGINAL RUN DATE:” prompt type “??” and hit enter.
 - iii. If you have been exporting to the BDWH regularly, you should see at least monthly entries going back as far as when you installed the BDWH patch. If you are exporting more often than monthly, it is recommended you change your export to only export monthly.
 - iv. Enter down to the bottom of the list.
 - v. Verify that your last entry is one (1) month or less ago. If not, you will need to modify the BDWH QUEUE PRESCRIPTION EXPORT task in Taskman to export monthly (i.e., 1M). You may need to work with your RPMS support to get this setup.
5. **Verify that you have generated the backload file for BDWH:**
- a. From the list of files you found in 2.c.ii above, select the first file generated.
 - b. In the details that are displayed, you should see a “Backload Begin Date:” that is JAN 01, 2013 and a “Backload End Date:” that is DEC 31 of the year prior to your generating the backload. If this is not the case, please refer to the BDWH user manual’s instructions on sending the backload found in sections 5.1 and 5.1.1 of the BDWH User Manual.
6. **Verify that you have scheduled BDW and BDWH tasks in Taskman** (you may have already looked at both of these in step 3, if so, proceed to step 5):
- a. In RPMS navigate to “Taskman Management ...” then select “Schedule/Unschedule Options.”
 - b. Type BDWH QUEUE PRESCRIPTION EXPORT at the “Select OPTION to schedule or reschedule:” prompt.
 - c. Verify that it is set up correctly (i.e., a future date and time in the QUEUED TO RUN AT WHAT TIME: field, your volume set entered in the QUEUED TO RUN ON VOLUME SET: field, and “1M” (please keep this one at 1M and no more frequent) in the RESCHEDULING FREQUENCY: field. The rest of the fields can remain blank. An example is below. The actual date and time in the “QUEUED TO RUN AT WHAT TIME:” field may be different in your system and that is fine. The BDW QUEUE BDW will look very similar but should have a different time so they aren’t trying to run at the same time.



- d. Hit the F1 key and then the Q key to quit without saving or if you made changes that need to be saved hit F1 and then E to exit and save changes.
- e. Type BDW QUEUE GDW at the “Select OPTION to schedule or reschedule:” prompt.
- f. Verify that it is set up correctly (i.e., a future date and time in the QUEUED TO RUN AT WHAT TIME: field, your volume set entered in the QUEUED TO RUN ON VOLUME SET: field, and “1M” in the RESCHEDULING FREQUENCY: field. The rest of the fields can remain blank.
- g. Hit the F1 key and then the Q key to quit without saving or if you made changes that need to be saved, hit F1 and then E to exit and save changes.

7. Verify that files are being dropped in the PUB:

- a. **For sites running RPMS on a Windows-based server:** navigate to the PUB file location of your RPMS server. The easiest way to verify where this is to run any report in RPMS and when you get to the DEVICE: prompt, type “HFS” and hit enter. It will say something like: HOST FILE NAME: G:\PUB\YOURFILE.TXT//. You can use “^” to exit, but note that in this example G:\PUB\ is the pub location on the RPMS system. Yours may be slightly different, but the drive letter and the directory/directories that is/are listed before “YOURFILE.TXT” is where you need to access for this step.
- b. To access this location you need to know your RPMS server IP address and then in Windows File Explorer type [\\161.223.234.34\PUB\](#) in the address bar at the top replacing the IP address with your IP address and PUB with whatever you found in step 5.a.
- c. **For sites running RPMS on a server not running Windows:** Use whatever system you use to access your server files and you PUB folder (e.g. SecureFx).
- d. Now in the search box at the upper right type “*.BDW”. This will pull up all the BDW related files your system has created. Note: if you do not see any .BDWH or .BDWC files, you may need to search for “*.BDW*” instead.
- e. If you do not see any files, it may be that they are being saved in a different folder on the RPMS server. You will need to locate the .BDW and .BDWH files before continuing.
- f. Verify that you have both .BDW and .BDWH files listed. You will likely have a lot of .BDWC files from the COVID exports so you will have to do some scrolling to find some .BDW and .BDWH files. Pay attention to the dates of these files because you won’t see .BDWH files after the date when you first started making those exports.
- g. The actual files you saw listed in step 2 should be found here. You will notice that the .BDW files are much larger than the .BDWH files. This is because the .BDW files contain all visits and all BDW data from those visits. The .BDWH files only contain prescription data.
- h. After you find your .BDW and .BDWH files, open one of each using Notepad.
- i. These files are HL7 files and each line starts with a segment name/delimiter.
- j. About 3 lines down in both files you should see an MSH segment. The MSH segments should start with “MSH|^~\&|”. Verify that these segment start this way as well as the next 2 instances start this way as well (just find the next two times there is an MSH segment). The “^~\&” is the encoding characters that will be described in future steps.
- k. Additionally, verify that you see a lot of “|” characters separating the data – these are the field separator that will be described in future steps.
- l. If your MSH segments are incorrect at all or you are missing field separators, please refer to the step talking about the SCRIPT GENERATOR MESSAGE.
- m. Just a matter of note, once these files hit the PUB they are then ftp’d to the NDW. There can be problems with the ftp setup which will be addressed in the step talking about ZISH.

8. Verify encoding characters and field separators in the SCRIPT GENERATOR MESSAGE file:

- a. Go to Fileman.
- b. Choose the “Inquire to File Entries” option.
- c. At the “OUTPUT FROM WHAT FILE:” prompt, type “SCRIPT GENERATOR MESSAGE” and hit enter.
- d. At the “Select SCRIPT GENERATOR MESSAGE NAME:” prompt type “HL IHS DW1HOPE HEADER” and hit enter.
- e. At the “ANOTHER ONE:” prompt select HL IHS DW1HOPE 013.
- f. At the “ANOTHER ONE:” prompt select HL IHS DW1HOPE TRAILER.
- g. At the “ANOTHER ONE:” prompt just hit enter three (3) times.
- h. You will be presented with the output from these three scripts in the order you entered them. Verify that each one’s “ENCODING CHARACTERS:” say “^~\&” and “FIELD SEPARATOR:” say “|” (without the quotation marks).
- i. If the field separator is blank, you can use Fileman’s Enter/Edit option (if you have access) and know what you are doing otherwise, you will need to submit a Service Now ticket that says something like: “The FIELD SEPARATOR: field for the HL IHS DW1HOPE HEADER, HL IHS DW1HOPE 013, and HL IHS DW1HOPE TRAILER has incorrect or missing character. The FIELD SEPARATOR: must be “|” but currently is not.” You can also leave out any of the HL IHS DW1HOPE items that don’t have problems to focus on the ones that do.

- j. If your encoding characters are bad or missing, you will need to put in a ticket as Enter/Edit will not allow you to put an “^” at the first of the four (4) characters to fix it yourself. The “^~\&” has to be added from the programmer prompt. To resolve this, please submit a Service Now ticket that says something to the effect: “The ENCODING CHARACTERS: field for the HL IHS DW1HOPE HEADER, HL IHS DW1HOPE 013, and HL IHS DW1HOPE TRAILER has incorrect or missing characters that can only be updated in programmer mode. The ENCODING CHARACTERS: must be “^~\&” but currently are not.” You can also leave out any of the HL IHS DW1HOPE items that don’t have problems to focus on the ones that do.
9. **Verify that the ZISH settings are correct:**
- If steps 1 - 6 have all checked out, but you still are missing data on the Opioid Dashboard, it is likely that the ZISH settings are not correct. These will affect both BDW and BDWH files.
 - When files are generated by the BDW and BDWH tasks and are dropped into the PUB on the RPMS server, they are then picked up in the background and sent to the NDW via ftp. The ZISH parameters are the first part of this and the ftp setup is the second part.
 - The ftp sending of the file will use one of two types: sendto or powershell. Sendto is outdated and powershell is newer. You can look at the BZLSEND routine in HealthShare (Studio) and read the comments at the top of that routine for a little more information.
 - To check out the ZISH SEND PARAMETERS:
 - Go to Fileman.
 - Choose the “Inquire to File Entries” option.
 - At the “OUTPUT FROM WHAT FILE:” prompt, type “ZISH SEND PARAMETERS” and hit enter.
 - At the “Select ZISH SEND PARAMETERS:” prompt type “DATA WAREHOUSE SEND” and hit enter 4 times.
 - If the “SEND COMMAND:” field says “sendto” skip to step ix.
 - If the “SEND COMMAND:” field says “powershell” then verify that “USERNAME:” is dwxfer, the “PASSWORD:” is regpcc, the “ARGUMENTS:” do not start with a “-”, and the “FOREGROUND/BACKGROUND” is “BACKGROUND”. The “ARGUMENTS:” can be anything so long as they don’t start with “-“. Ours are “ascii” but if yours is something different and it doesn’t start with a dash, then you are probably fine.
 - The “TARGET SYSTEM ID:” is something that should have been set up when the ZISH for the export was set up.
 - If any of the items in step vi were wrong, these can be changed using Fileman Enter/Edit if you feel comfortable doing so, otherwise reach out to tier 3 for help as described in step ix.
 - Your “SEND COMMAND:” says “sendto” or if it says “powershell” but you don’t see any clear issues as described in step vi, then you will need to submit a ServiceNow ticket that says something like: “The ZISH SEND PARAMETERS and/or the sendto or powershell ftp scripts/settings for sending data from RPMS to the NDW do not appear to be working at our site. BDW files are being generated by RPMS, but they are not getting sent to the NDW.” This should get you ticket sent to the right place so you can get the help you need.
10. **Verify file creation, upload to the NDW, and population of the Opioid Dashboard:**
- After you have performed the steps above and your queued tasks have run for the backload and/or your scheduled task(s) in Taskman, perform the following:
 - Check the PUB to make sure the file(s) was created.
 - Verify your file(s) made it to the NDW by following the steps in 1.c.vii above.
 - Check the Dashboard 2 weeks to 1 month later to see if the data is now included.
 - If after a month the files are still not available, double-check the steps above to make sure nothing was missed. If everything checks out, proceed to step 11.
11. If after performing the above and waiting at least one (1) month since you believe your data was submitted, if your data is still not showing in the dashboard, please reach out to nicholas.sparrow@ihs.gov or the IHS Opioid Dashboard Users LISTSERV Opioid_Dashbd@listserv.ihs.gov. (Note: you must sign up for the LISTSERV using the instructions at the end of the General Overview section before you will be able to send a message to the LISTSERV).