

Opioid Prescribing: A quality improvement project of the Larner College of Medicine at the University of Vermont and Maine Health.

Procedure 2: Combine Prescribers PDMP Data and Remove PHI

This procedure is performed by the designated staff person at the practice site. Basic knowledge and experience using Excel software is needed for this procedure.

Purpose: To make a practice-level de-identified roster of opioid prescribing.

The procedure describes how to:

1. Summarize each prescriber's patient list downloaded from the PDMP
2. Combine the prescribers' patient lists into one master spreadsheet for the practice,
3. Create a unique patient ID number
4. De-identify the data by removing all PHI.

A video version of these instructions is available at URL:

https://www.med.uvm.edu/videos/vpms_instructions_2023_practice_de-identification/opc_and_ahec_program/vpms_instructions_2023_practice_de-identification.mp4?sfvrsn=4c06ed41_2

1 Summarize each prescriber's spreadsheet by deleting unnecessary rows. For this step, the spreadsheets can be in one Excel file as worksheets (tabs), or in separate Excel files for this step.

- a. Delete the first two rows of each PDMP spreadsheet. Highlight the first two rows and right click. Select Delete.
Row 1 now has column headers Date, DEA number, Patient name, Year of birth, Drug name, Days' supply, MME per day, and Pharmacy name and address.
- b. Make the columns easier to read. Click the arrow in the upper left corner to select the entire spreadsheet and double-click on any one of the bars separating the columns to make them re-size.

2. Combination of Prescriber worksheets into one Master spreadsheet

- a) Begin this step with the separate spreadsheets created by each prescriber/provider in one Excel workbook with a separate tab for each prescriber. Or, you may start with the separate spreadsheets and copy them into the Master tab.
- b) In the video example, data from the fictitious prescribers, Osler and Smith, are located in a separate tab for each. The tab name is the name of the prescriber.
- c) Create a **new tab** (click on + sign) in the Excel workbook. Name it **Master**. This will contain the combined prescribers' data.
- d) **Select** all data including header row from the first prescriber and **COPY (ctrl c)**. Then **PASTE (ctrl v)** in row 1 column 1 in the new MASTER spreadsheet. This will bring all the 1st prescriber's data into the new Master spreadsheet.

- e) Next **COPY** everything EXCEPT the first header row for the next prescriber and **PASTE** the data at the end of the MASTER data for the first prescriber. The header row should appear only in row 1.
- f) Repeat this step appending data (excluding the header row) for each prescriber to the end of each prescriber's data.

3. Create a unique patient ID number and a static version: These next steps create a unique patient ID number for each patient by means of an IF statement that modifies the ID number for each unique patient by comparing name and birth year. Then we create a static ID that eliminates the formula needed to create the number.

- a) Sort the data by patient name. From the "DATA" menu, click the SORT option. Agree to expand the selection to the whole spreadsheet.
- b) SELECT the "My data has headers" box and SORT by PATIENT and Year of Birth. Click OK.
- c) Insert a new column for the ID number to the left of the patient name by right-clicking and selecting INSERT. (New column C) Label this column ID. Enter a value "1001" as the first patient id number. *The IF statement compares the name and birth year with the row above it, and if they match it keeps the same number, and if it doesn't match it adds a number.*
- d) Select the cell in Column C row three **C3** (the cell below the first PTID number) and type in this statement: **=IF(D3&E3=D2&E2,C2,C2+1)**
- e) At the lower right corner of **C3**, pull down using the right lower corner. You will see that the sequence number changes for patients in the video example. Double click on the right lower corner of the last cell highlighted to fill down across the entire spreadsheet.
 - a. *Excel tip to copy a cell down a column: Click the lower right corner of the first cell and pull down to copy the formula across all rows OR double-click on the lower right of the first cell, and it will fill-down the length of the column.*
- f) Create a static version of the Patient ID number (without the formula)

Note: We need a static version of the patient id number that does not depend on the formula to create it. In Excel, values created by formulas such as the PATID number will continuously update, so when the patient name is deleted during the de-identification process, the formula will break down.

- Insert a new column (D) to the left of Patient name column by selecting the Patient name column and right-clicking . Select Insert a column to the left of Patient name. Name this column PTID.
- Right-click in column C (ID) and Copy the ID values. Then right-click in the new column D and use PASTE Special/ paste - values in Column D. INSTEAD OF DOING A SIMPLE PASTE Choose PASTE-SPECIAL, then choose VALUES. This pastes the ID numbers only, but not the formula.
- Delete the calculated (formula) PATID in column C. Right click on column C and select DELETE. The PATID column is no longer needed.

SAVE THIS COPY WITH PATIENT NAMES in your practice file system, behind your firewall. This will serve as a reference if there are later questions about which patients are included in your roster of patients treated with controlled substances.

For your Chart Reviewers, your list with patient names will be critically important to help them find the right records for the study.

4. Complete the de-identification process

- Delete the patient names in the Master tab by right-clicking in the PATIENT name column (now column D) and selecting Delete.
- Delete the individual prescriber named tabs in the spreadsheet, if present. Keep only the Master tab. Right-click on each individual tab and select DELETE.
- As a last step, delete the pharmacy name and address columns. Delete those by clicking to select them, right click and choose Delete.

After this, you should have only one remaining MASTER tab with no specific identifiers. Save this as the master de-identified roster for your practice with the name “[Practice_name] deidentified for UVM”. You will send this file to UVM for analysis in the Opioid Prescribing Patterns project.

Please notify the Opioid Prescribing Research Team that you have completed a Master Prescribing spreadsheet for your Practice.
