ESP CASE DETECTION ALGORITHM

Opioid Prescriptions

**Document Version 1.1**

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**Modification History**

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| **Version** | **Date** | **Modification** | **By** |
| 1.1 | 5/31/2018 | Formatted to new template; deleted Trimtracker reference | DPM |
| 1.0 | 3/15/2015 | Original | CII/DPM |

# Overview

The purpose of this document is to describe the criteria used to identify Opioid Prescriptions in MDPHnet data.

# Definitions

Opioid prescription includes all DEA schedule II-IV opioids excluding Buprenorphine (see Table)

# Surveillance Targets

1. ***Patients receiving any opioids***
   * Identify all individuals given ≥1 prescriptions for opioids within the past year
2. ***Patients receiving high daily dose of opioids*** 
   * Identify all individuals prescribed ≥100 milligrams of morphine equivalents per day for ≥90 days within the past year
   * This will require converting all non-morphine opioid prescriptions into morphine equivalents per day and totaling the number of days in the prescription. Convert the prescribed dose of opioid into morphine equivalents per pill, multiply by the number of pills prescribed, divide by the duration of the prescription in days.
3. ***Patients receiving benzodiazepines***
   * Identify all individuals given ≥1 prescription for a benzodiazepine within the past year
4. ***Patients receiving concurrent opioids and benzodiazepines***
   * Identify all individuals with a prescription for a benzodiazepine within 30 days before or after a prescription for an opioid within the past year

# Integration into ESPnet and MDPHnet surveillance tools

* Add to ESPcondition tables at all sites
* Lincoln Peak to add to MPDHnet list of queriable conditions in user interface
* Add to GenPop and RiskScape reports at all sites

# Generate MDPHnet surveillance reports

* Create SQL for submission to all MPDHnet sites to calculate rates of patients prescribed any opioid, patients prescribed high dose opioids, and patients with concurrent prescriptions for opioids and benzodiazepines
* Generate a table with the following:
  + Number of patients with ≥1 encounters within the past 1 year
  + Number of patients receiving any opioid prescriptions within the past year
  + Average number of opioid prescriptions per patient
  + Average number of morphine equivalents per patient per day
  + Mean / standard deviation for duration of opioid prescription per patient
  + Median / 25th percentile / 75th percentile duration of opioid prescription per patient
  + Number of patients receiving high dose opioids within the past year (as defined above)
  + Number of patients receiving ≥1 benzodiazepine prescriptions within the past year
  + Average number of benzodiazepine prescriptions per patient
  + Average number of lorazepam equivalents per patient per day
  + Mean / standard deviation for duration of benzodiazepine prescriptions per patient
  + Median / 25th percentile / 75th percentile duration of benzodiazepine prescriptions per patient
  + Number of patients receiving concurrent benzodiazepine and opioid prescriptions within the past year (as defined above)
  + Rate of patients with ≥1 opioid prescriptions per 1000 patients
  + Rate of patients with high dose opioid prescriptions per 1000 patients
  + Rate of patients with ≥1 benzodiazepine prescriptions per 1000 patients
  + Rate of patients with concurrent benzodiazepine and opioid prescriptions per 1000 patients

(can potentially add in options to stratify the report by age group, sex , race-ethnicity, PWTF community, concurrent diagnosis code for cancer, etc.)