<https://core.ac.uk/download/pdf/210610174.pdf>

* On 22 July 2016, the Comprehensive Addiction and Recovery Act 12 was enacted to address the opioid crisis by authoring the U.S. department of 9 Justice to award grants to state, local and tribal governments to provide opioid abuse services, directs the Department of Veteran Affairs to expand its opioid safety initiative and help communities to develop and treat the overdoes problem
* August 2017, Jeff Sessions ordered the launch of an Opioid Fraud and Abuse Detection Unit13 within the Department of Justice. The unit’s mission is to arrest individuals who commit opioid-related fraud
* The first step in data cleaning is to read the files in suitable format. The MEPS data files are by default in the. spss format, which is the SAS transport format, to convert them to .csv which is suitable format for data analysis using python, I wrote a script to convert the files to readable .csv format. Fig 5: Exporting SAS transport format data into csv

ICD-10

* Natural & semi-synthetic opioids, incl. methadone (T40.2, T40.3)
* Opioids (T40.0-T40.4,T40.6)
* Cocaine (T40.5)
* Natural & semi-synthetic opioids (T40.2)
* Heroin (T40.1)
* Synthetic opioids, excl. methadone (T40.4)
* Methadone (T40.3)

<https://cdn.ymaws.com/www.cste.org/resource/resmgr/Injury/Analysis_of_data_on_drug_poi.pdf>

<https://www.cdc.gov/drugoverdose/pdf/pdo_guide_to_icd-9-cm_and_icd-10_codes-a.pdf>

Websites

* <https://www.cdc.gov/vitalsigns/opioids/infographic.html>
* <https://www.fiercehealthcare.com/practices/ama-report-finds-nearly-40-decline-opioid-prescriptions-but-overdose-deaths-continue-to>

Laws

* SUPPORT
  + 2018 Substance Use-Disorder Prevention that Promotes Opioid Recovery and Treatment
    - CE
    - PDMP interop
    - New tx funding
    - Drug disposal
  + <https://www.ada.org/en/publications/ada-news/2018-archive/october/congress-passes-bipartisan-opioid-legislation>
  + <https://www.chcf.org/blog/the-660-page-opioids-bill-is-now-the-law-heres-whats-in-it/>
* <https://www.pharmacytimes.com/view/opioid-prescribing-limits-across-the-states>
* <https://www.dovepress.com/an-examination-of-state-and-federal-opioid-analgesic-and-continuing-ed-peer-reviewed-fulltext-article-JPR>
* DATA 2000
  + Expanded providers and settings where OUD patients can find tx
* CARA
  + 2016 – Comprehensive Addiction and Recovery Act
  + Improved access to buprenorphine tx
    - Providers can expand up to 275 patients
    - Extended prescribing privileges to PA and NP through 10/2021
      * Rigorous training required

Articles on laws

* <https://www.pharmacytimes.com/view/opioid-prescribing-limits-across-the-states>
  + Fifteen states have passed laws limiting opioid prescribing for acute pain in an opioid naive patient to a 7-day supply. These states include Alaska, Hawaii, Colorado, Utah, Oklahoma, Louisiana, Missouri, Indiana, West Virginia, South Carolina, Pennsylvania, New York, Maine, Connecticut, Massachusetts. In addition, Arizona, North Carolina, and New Jersey limit initial prescribing to 5 days.2
* <https://www.cdc.gov/drugoverdose/policy/successes.html>
* States are funded by federal govt
  + <https://www.cdc.gov/drugoverdose/states/state_prevention.html>
  + Awards granted through 2019
* PMP
  + <https://nabp.pharmacy/members/pmp-interconnect/>
  + http://pdaps.org/datasets/pdmp-implementation-dates

Data to cite

* <http://pdaps.org/datasets/pdmp-implementation-dates> for pdmp info
* Wonder.cdc.gov
* <https://www.cdc.gov/drugoverdose/prescribing/guideline.html>

Capstone proposal

**Executive Summary**

*Opioid use and abuse is a subject that is often in the news.  As a pharmacist in Tennessee, I have seen a dramatic decrease in the number of prescriptions and the amount being dispensed but does the data show this? Is there a decline in abuse with the new laws that have been put in place in some states? There are published datasets that present the medications prescribed across years where I will need to pull out the specific opioid medications.*

**Motivation**

*Opioids is a topic that has caused me distress over my years in healthcare. I have seen how patients start on a simple pain treatment for an acute surgery only to progress into chronic use or even move to heroin. As a pharmacist, I have to be vigilant about timing of refills so that I would not contribute to their addiction and potential overdose. Many patients that use opioids chronically call in repeatedly to ask when they can have their next fill, even though they know the answer.  I have had patients admit that they will take heroin if they cannot get their opioids filled early and had patients overdose on street drugs while trying to overcome their addiction. I honestly hope that the data shows that the US is coming out of the opioid crisis.*

[*https://www.drugabuse.gov/drug-topics/opioids/opioid-overdose-crisis#:~:text=In%202019%2C%20nearly%2050%2C000%20people,died%20from%20opioid%2Dinvolved%20overdoses.&text=The%20misuse%20of%20and%20addiction,as%20social%20and%20economic%20welfare*](https://www.drugabuse.gov/drug-topics/opioids/opioid-overdose-crisis#:~:text=In%202019%2C%20nearly%2050%2C000%20people,died%20from%20opioid%2Dinvolved%20overdoses.&text=The%20misuse%20of%20and%20addiction,as%20social%20and%20economic%20welfare)*.*

**Data Question**

*What is the state of opioid use and abuse in the United States? Has use and abuse declined? Are deaths from overdoses declining? Are there more clinics to help those addicted?*