**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?*

**Minimum Viable Product (MVP)**

*The final product will be charts and graphs presented in a dashboard. The audience will be health care workers, counselors or possibly lawmakers.*

**Schedule (through <date of demo day>)**

1. Get the Data May 8,2021
2. Clean & Explore the Data May 22,2021
3. Create Presentation of your Analysis June 24,2021

* Should be a presentation, but could include a Jupyter Notebook or dashboard in Excel, Tableau, or PowerBI

1. Internal demos June 26,2021
2. Demo Day!! June 29,2021

**Data Sources**

* Opioid Prescriptions Dispensed, data.world <https://data.world/jessicayung/opioid-prescriptions-dispensed>
* Opioid prescription amounts, data.world <https://data.world/associatedpress/opioid-prescriptions-2010-2015/workspace/file?filename=Opioid_prescription_amounts.csv>
* Opioid overdose deaths, data.world <https://data.world/health/opioid-overdose-deaths>
* Prescribed medicines file, AHRQ <https://www.meps.ahrq.gov/mepsweb/data_stats/download_data_files_detail.jsp?cboPufNumber=HC-206A>
* CDC <https://wonder.cdc.gov/controller/datarequest/D76;jsessionid=1623E18BB40C185C405CECA786D5>
* CDC <https://www.cdc.gov/drugoverdose/data/statedeaths/drug-overdose-death-2019.html>

**Known Issues and Challenges**

*Explain any anticipated challenges with your project, and your plan for managing them. Be sure to include:*

* *So far, I only found data on prescribed opioids. I will try to find data on illicit drugs such as heroin, cocaine, or street fentanyl to present a more complete picture.*
* *The totals in the datasets may be different, some seem to be based on actual numbers, others are in millions. May have to convert to make all the same.*
* *Some databases may not have all of the opioid drugs in their lists, will have to evaluate and list as an assumption.*
* *Some databases list opioid use by county, others do not break it down as granular. Will have to merge all counties into states.*
* *Data is old so may not show a decrease. Many laws changed in last 2 years.*