

Background

- All Tennesseans are affected by the drug epidemic (directly or indirectly)
 - ❖ Taxpayer funded insurance programs (Medicaid, Medicare, Tricare, etc.), higher insurance premiums, crime related events, HIV/Hepatitis C rates, maternal & infant health, etc.
- Tennessee (TN) has experienced more than its share of adverse effects:
 - ❖ TN has been one of the top 10 states for opioid prescribing
 - ❖ Fatal and nonfatal overdoses continue to rise despite legislative actions
 - ❖ Most overdoses in TN are polydrug related
- Policymakers cannot make sound decisions without accurate, quantifiable information, TDOH-OIA makes that possible

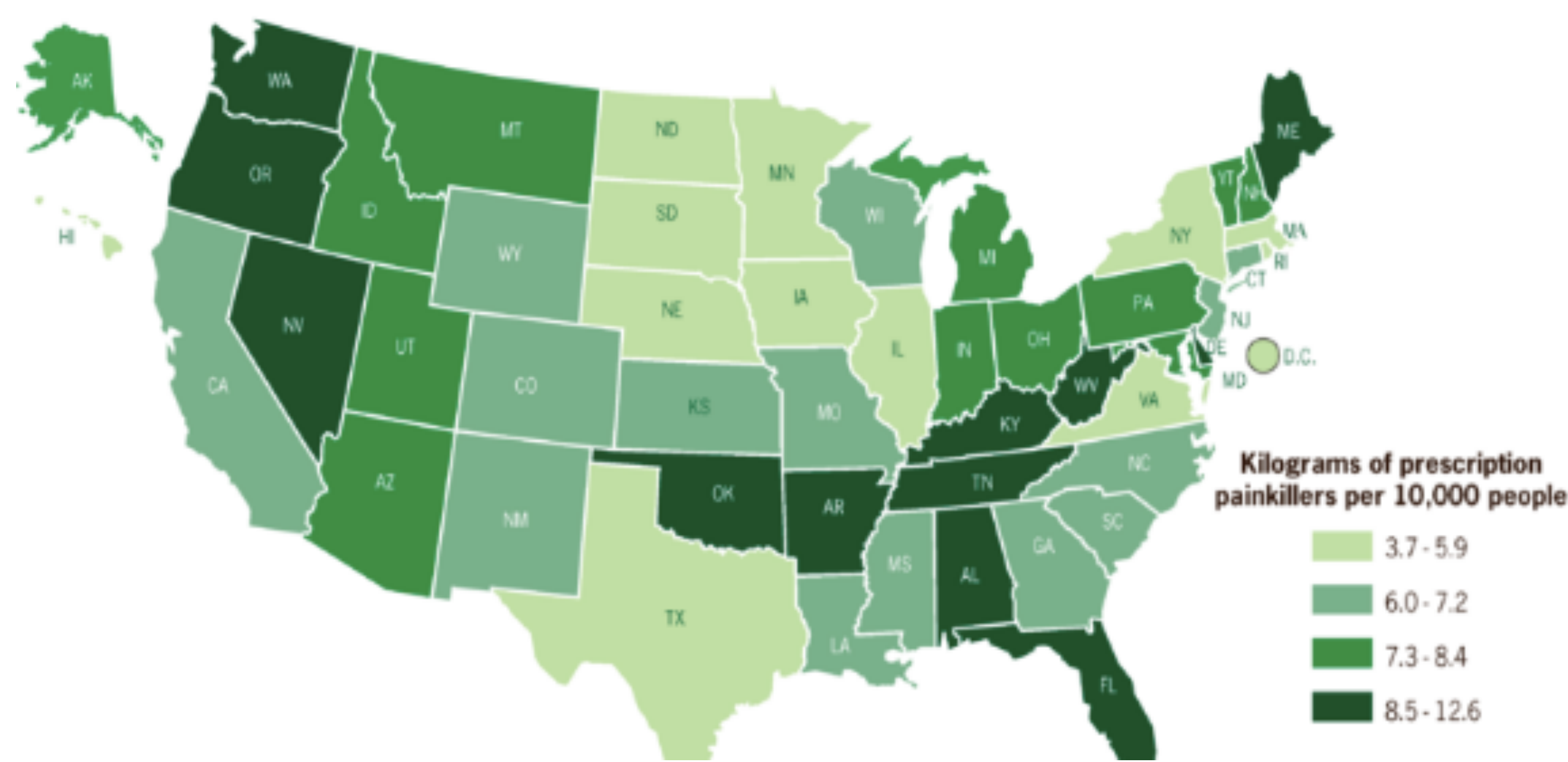


Figure 1. Amount of prescription painkillers sold by state per 10,000 people (2010)

Reference: Automation of Reports and Consolidated Orders System (ARCOS) of the Drug Enforcement Administration (DEA), 2010. Website: <https://www.cdc.gov/vitalsigns/painkilleroverdoses/infographic.html>

Host Organization: TDOH-OIA

- An integral part of TDOH's overall mission, objectives, and goals is to serve all TN residents as healthcare, technology and informatics continues to swiftly advance
- Primarily responsible for the translation and assimilation of data into an interpretable, useable way
- Used by policymakers, lawmakers, & clinicians who rely on updated, accurate, and timely analysis to make crucial decisions.

Current Challenges



Figure 2. TDOH-OIA current challenges in technology and informatics

Project Objectives

- Learn about the major challenges and logistical concerns in keeping databases current along with creating new databases
- Gain an understanding on how TDOH-OIA operates
- Understand the continually changing patterns related to prescribing, dispensing and abuse of controlled substances from a public health perspective
- Practicum Project was part of a grant funded by the Center for Disease Control & Prevention (CDC): National Center for Injury Prevention and Control: Opioid Overdose Prevention and Surveillance: 6NU17CE002731-04-01: \$8.3 million grant

Project Outcome

Based on:

- Currently the most prescribed, dispensed and abused legal drugs in TN population based on previous years models and the most current published and un-released surveillance information
- CDC 2018-2019 updated information released yearly in September
- Controlled substances that had not risen to levels of concern but were updated to provide epidemiologists and data analysts advanced insights into controlled substance activity patterns
- Two extensive documents were created including: brand name, National Drug Code [NDC] numbers, dosage, dosage forms, dosage strength, units of measurement, compounded vs. manufactured and expired when applicable; these documents were constructed as initial stages of the updated database

Significance and Next Steps

- My project will aid in better surveillance and reporting on gabapentin prescribing in TN
 - ❖ CDC does not include gabapentin because it is not a nationally scheduled substance
 - ❖ Gabapentin was made reportable July 2018 in TN, but needed better data to track prescriptions
- Updated controlled substance list to include controlled substances previously not included on the "watch list" but is of interest/concern
- Helped address one of the major challenges of the OIA: slow adoption of updated information based on federal and state standards

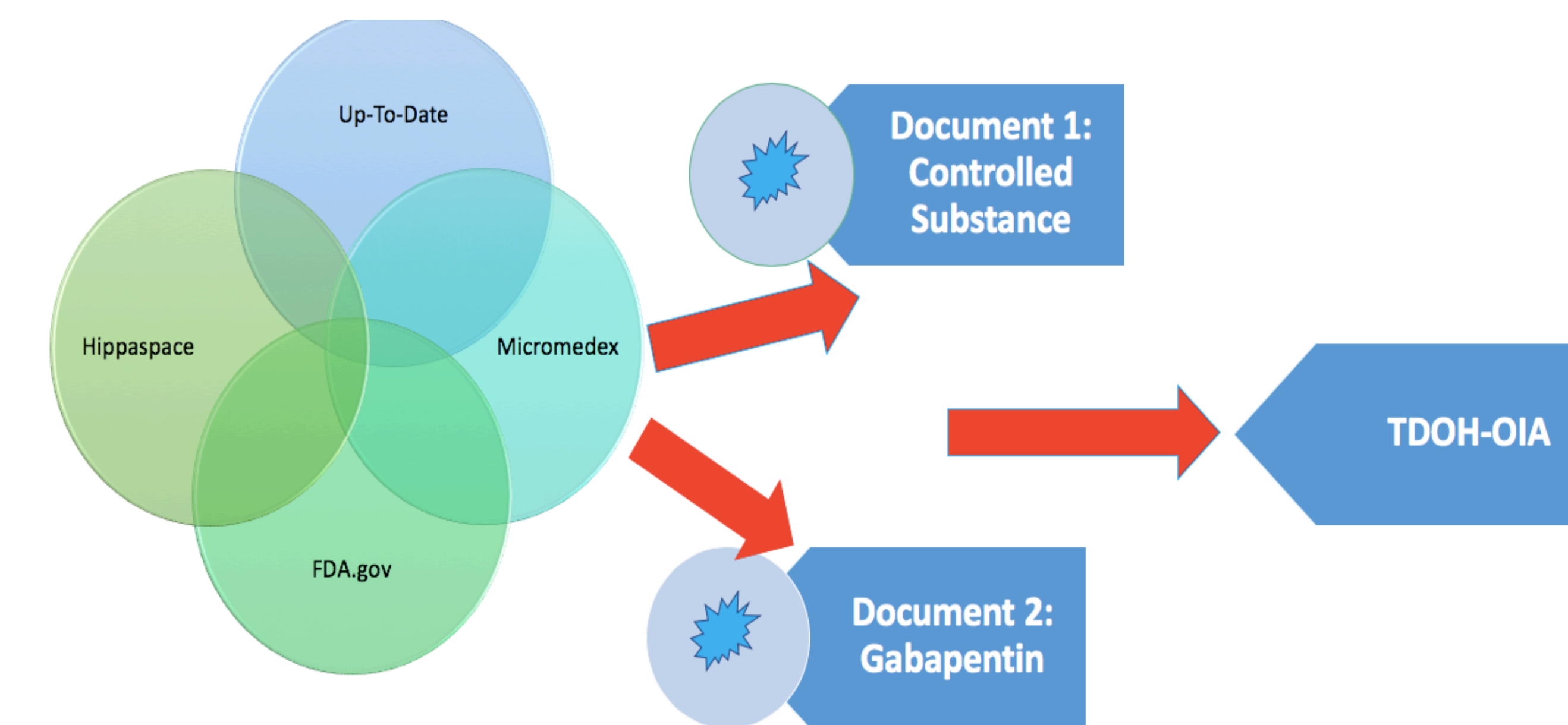


Figure 3. Project workflow in developing surveillance documentation.

Conclusions

- Overall, this was a great experience to learn how the state of TN provides key-stakeholders with valuable information of prescription trends
- With more thorough and updated information, OIA will be able to better inform stakeholders who have an interest in prescription drug trends in TN (i.e. TDOH overdose response, overprescribing investigators, mental health, and possibly TN Medicaid)
- More accurately monitor other controlled substances previous surveillance, and better able to forecast issues with controlled substances