

April, 2022

SOR Analysis

- Logan Cameron, Lead Analyst
- Joan Kwamboka, MS, Research Analyst | Coordinator
- Anita Murcko, MD, Clinical Associate Professor
- George Runger, PhD, Professor



EPI Analyses

Sections

- SOR AHCCCS Stimulant & Opioid Analysis-updated
- Balance of state non-fatal overdose-status
- Balance of state mortality analysis-status
- Pathways to Addiction Model-updated, analysis useful for epi also

SOR AHCCCS Stimulant and Opioid analysis

- **Overview:** EPI workgroup requested analysis into stimulant and opioid overdose. Period 9/2021 - 1/2022
- **Data:** Policy Map census to normalise the data; CHiR AHCCCS claims, period Jan 2017 - Dec 2020, ICD 10 code F10 - F19 and T43.6.
- **Completed**
 - ✓ Data set curation- selecting and transforming to tall data set structure
 - ✓ Analysis of the original questions.
 - ✓ An interactive dashboard was developed to answer these questions in general about the population or about specific localities. 01/13/2022
 - ✓ Signature required for viewer login captured

Next

- Pending dashboard access
- Awaiting signed user agreement protocol from the Office of Research & Integrity at ASU, we are following up regularly.

SOR AHCCCS Stimulant and Opioid analysis

- Time trends 2016-2020 in aggregate and drill
- by county (or 3-digit zip code)
- by age <18, 18-14, 25-34, 45-54, 65+
- by gender, race/ethnicity

- Primary diagnosis and all diagnoses (or top 3 or 5)
- For SUD codes and overdose codes
- Compute number of cases and unique individuals
- For cases and unique individuals:
- % different conditions/events of all SUD

SOR AHCCCS Overdoses

- In progress deaths with SUD comorbidities.

Completed

- ✓ Charlson Comorbidity Index (CCI)
- ✓ SUD with CCI relationships

Next

- Breakdown into age, race/ethnicity, gender, geography in progress

Balance of the State- Nonfatal overdoses

- **Overview:** Assess drug use patterns among those in Medicaid and not in Medicaid.
- **Data:** AZ Hospital Discharge data
- **Significance:** Determine community level response to fatal and non-fatal overdoses.
- **Completed**
 - ✓ IRB is approved by ASU
 - ✓ AZ Hospital Discharge data request submitted to ADHS
- **Next**
 - Awaiting approval from ADHS
 - Breakdown into age, race/ethnicity, gender, geography, SMI, etc.
 - AHCCCS vs balance of state

Balance of the state: Mortality

- **Overview:** The opioid epidemic in Arizona is a state-wide problem and expanding the current population/scope to include the whole Arizonan population will uncover trends and suggest data-informed intervention strategies.
- **Data:** Policy Map census to normalise the data; ADHS death data, CHiR AHCCCS Claims
- **Significance:** Compare AHCCCS members to the balance of the state. The results will inform the Pathway to Addiction model and be shared with policy makers.
- **Completed**
 - ✓ IRB and HSRB is approved for AHCCCS members only.
- **Next**
 - ASU IRB only needs support statement from ADHS
 - Awaiting approval from ADHS

Adherence to Treatment

- **Overview:** What factors are predictive of continued treatment
- **Data:** AHCCCS claims data, literature review
- **Significance:** Identify individuals for proactive intervention to maintain treatment
- **Completed**
 - ✓ IRB and HSRB is approved for AHCCCS members.
 - ✓ Data pre-processed
- **Next**
 - ☐ Analytical, machine learning models for summaries, and predictions

Pathways to Addiction: Treatment Patterns

- **Title:** Medication Adherence for Opioid Use Disorder in the Arizona Medicaid Population
- **Data:** AHCCCS claims data from 2017 - 2020.
- **Significance:** Maintaining medication assisted treatment is beneficial for individuals who suffer from OUD. However, there is limited research on MOUD adherence.
- **Completed**
 - ✓ Month by month transitions between remission, MAT, OUD, etc.
 - ✓ Forecasts versus actual
 - ✓ Breakdown by geography, demographics,
 - ✓ Linked to policy map, geographic SDOH
 - ✓ Preliminary analysis and report. 4/7/2022 by Nicole Young
- **Next**
 - Update visualizations and animations to visualize treatment transitions
 - Inform the Pathway to Addiction model

Thank you!

Contact info

Joan Kwamboka

Research Analyst | Project Manager

Arizona State University

Health Futures Center | 6161 E Mayo Blvd | 3rd Floor

Ph: 469-704-9081 | jkwambok@asu.edu | chs.asu.edu