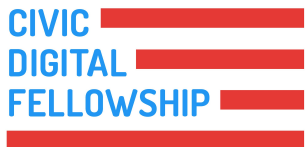


# DASHBOARD AND MAPPING TOOL:

DEMONSTRATING HRSA'S EFFORTS TO COMBAT THE OPIOID EPIDEMIC

HRSA Office of Planning, Analysis, and Evaluation

John Snyder, MD — Chief Medical Officer



RONNIE FECOSO JR.

Virginia Tech

Computational Modeling and Data Analytics

# PROJECT FRAMING AND PURPOSE

- Health Resources and Services Administration (HRSA):
  - Primary federal agency for improving health care and achieving health equity for people who are **geographically isolated and/or economically or medically vulnerable**
- The nation is in the midst of an opioid crisis
  - HRSA population disproportionately affected
- HRSA contributes to the *HHS 5-Point Strategy to Combat the Opioid Crisis*

# QUESTIONS TO ANSWER FOR AN EFFECTIVE PRODUCT

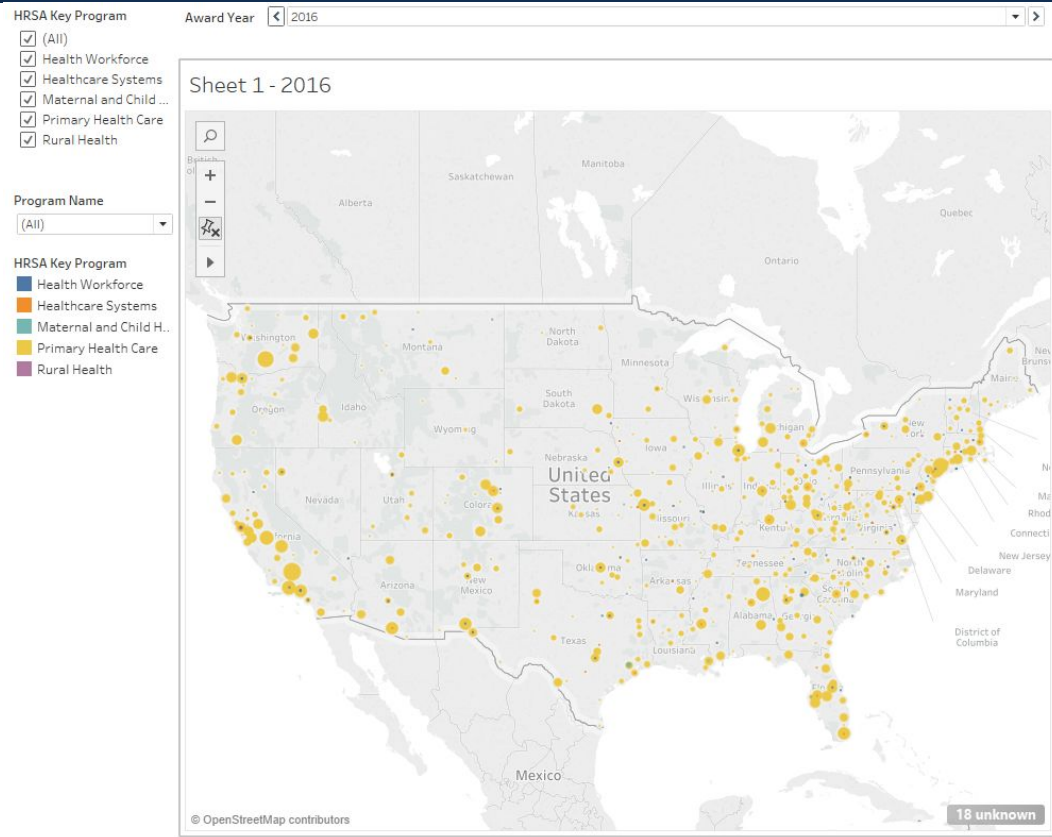
- What is HRSA doing to combat the opioid epidemic?
- Where has HRSA made investments that help address the opioid epidemic?
- How have those investments changed over time? How has the opioid epidemic changed over time?
- How has HRSA reacted/adapted to the changing opioid epidemic (funding streams/strategies?)

# HRSA'S IMPACT ON OPIOID EPIDEMIC

- **Initial Plan:** Create two interactive, side-by-side maps of the U.S. with variables describing:
  1. Opioid-related HRSA investments
  2. Opioid epidemic itself
- **Geographical and temporal components**
  - Shows where HRSA investments are targeted
  - Allows user to toggle year of data to show time trends
- **Goal**
  - Better understand how HRSA is combating opioid epidemic
  - Reveal correlations between HRSA's ongoing work/investments and opioid epidemic

# GRANTS DASHBOARD

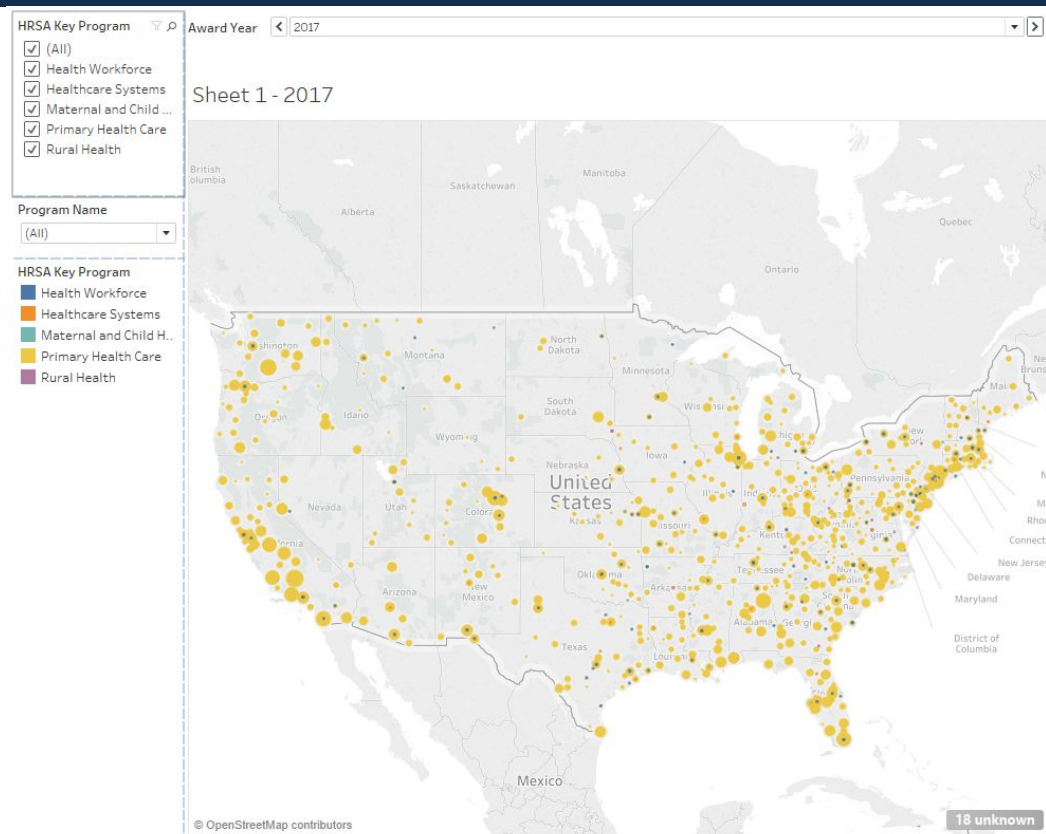
# INITIAL DASHBOARD – GRANTS 2016



## Key:

- Each dot represents a HRSA grant award
- Dot color indicates the grant program
- Dot size indicates the relative funding amount

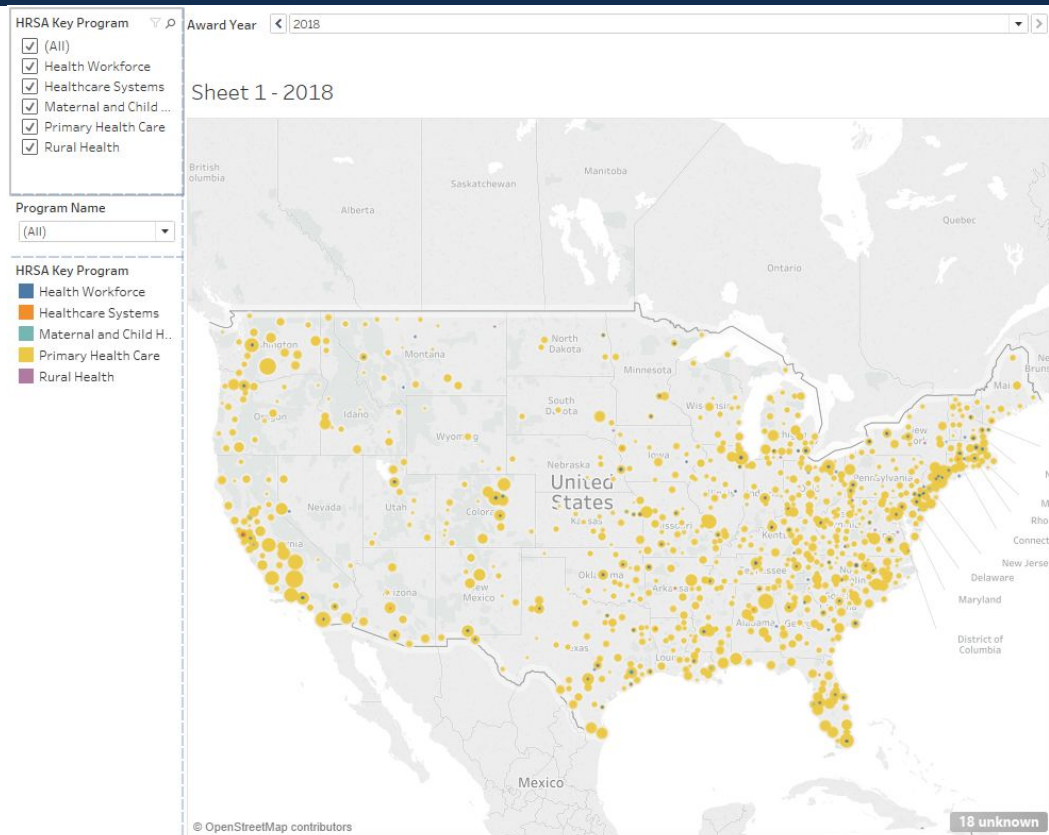
# INITIAL DASHBOARD - GRANTS 2017



## Key:

- Each dot represents a HRSA grant award
- Dot color indicates the grant program
- Dot size indicates the relative funding amount

# INITIAL DASHBOARD - GRANTS 2018



## Key:

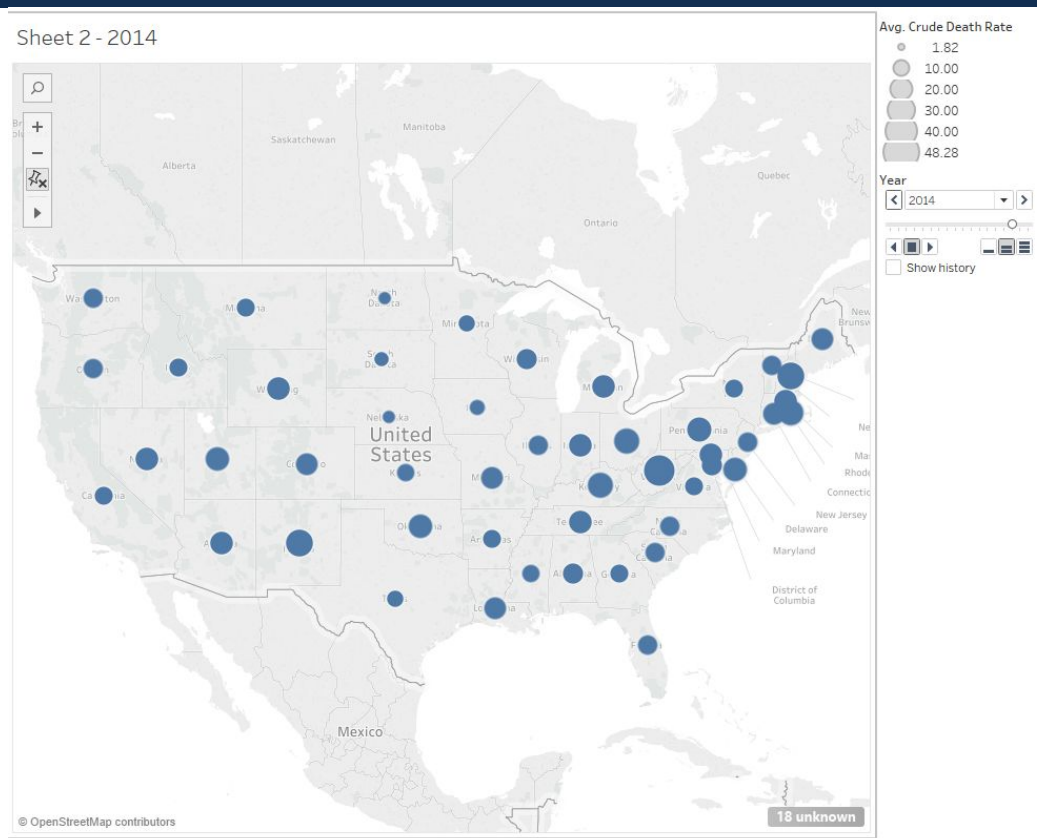
- Each dot represents a HRSA grant award
- Dot color indicates the grant program
- Dot size indicates the relative funding amount





# OPIOID DEATHS DASHBOARD

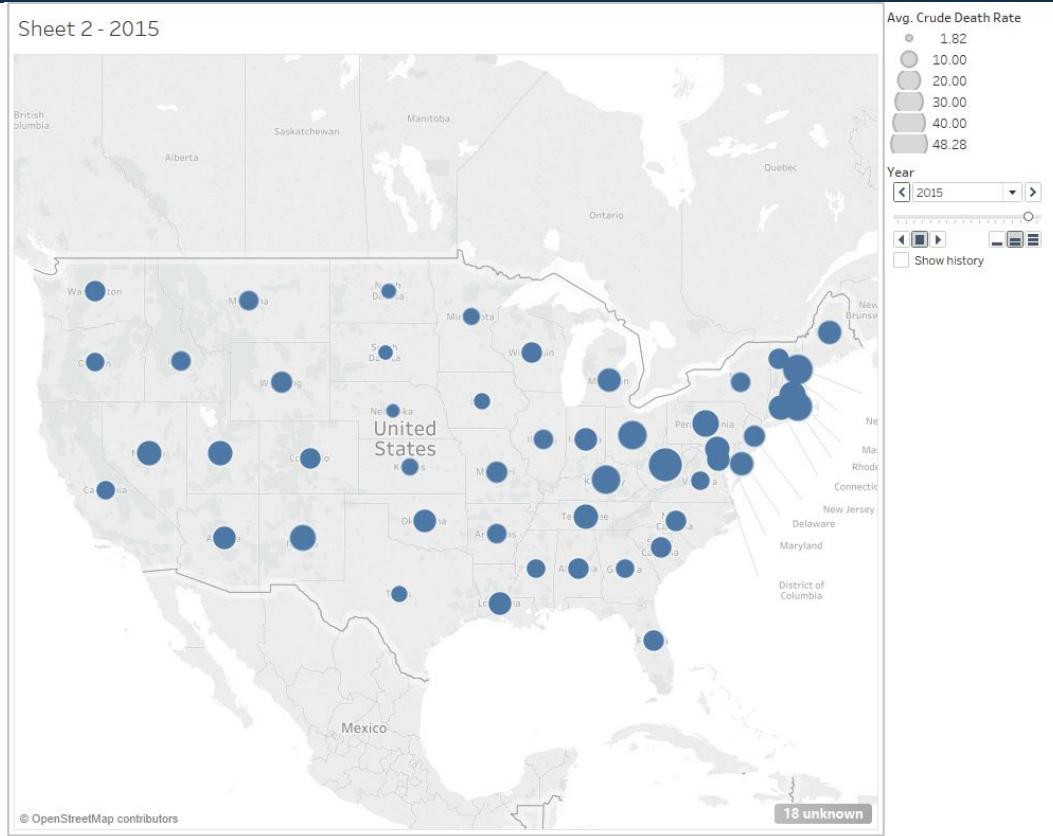
# INITIAL DASHBOARD – OPIOID DEATHS 2014



## Key:

- Each dot represents the opioid-related crude death rate for a state
- Data is from the CDC
- Could also plot opioid overdoses and hospitalizations

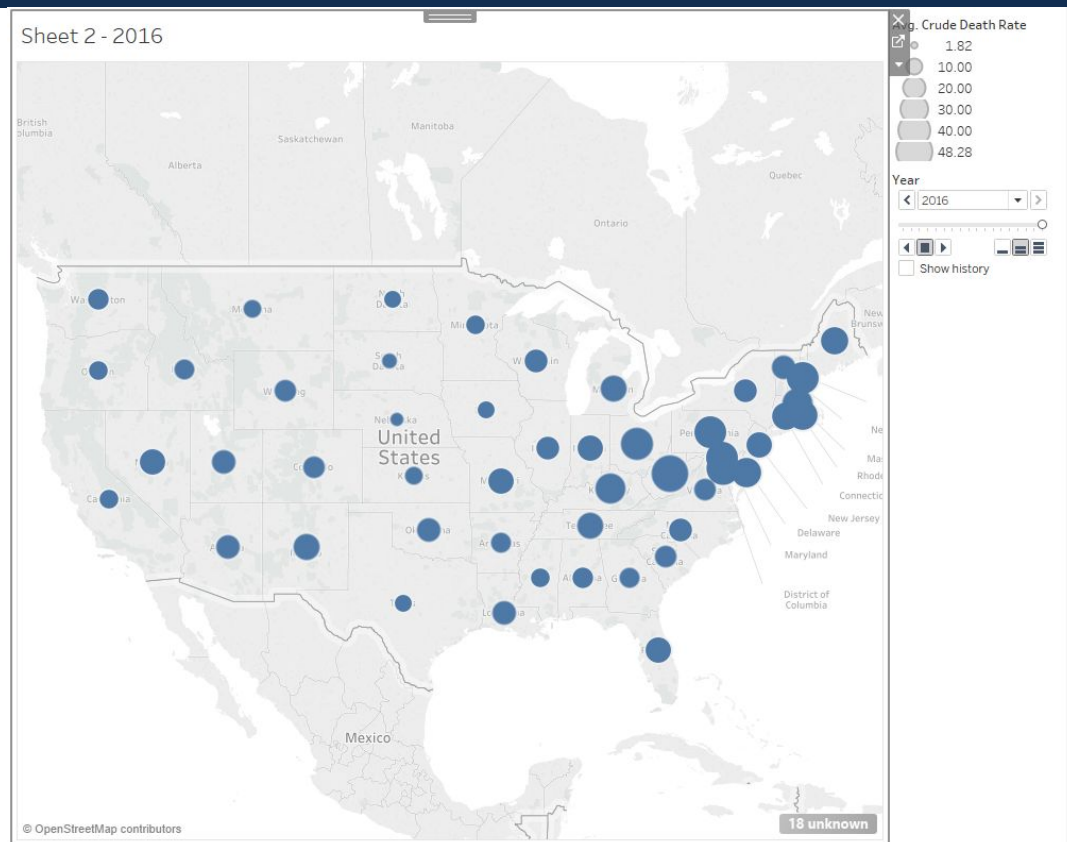
# INITIAL DASHBOARD - OPIOID DEATHS 2015



## Key:

- Each dot represents the opioid-related crude death rate for a state
- Data is from the CDC
- Could also plot opioid overdoses and hospitalizations

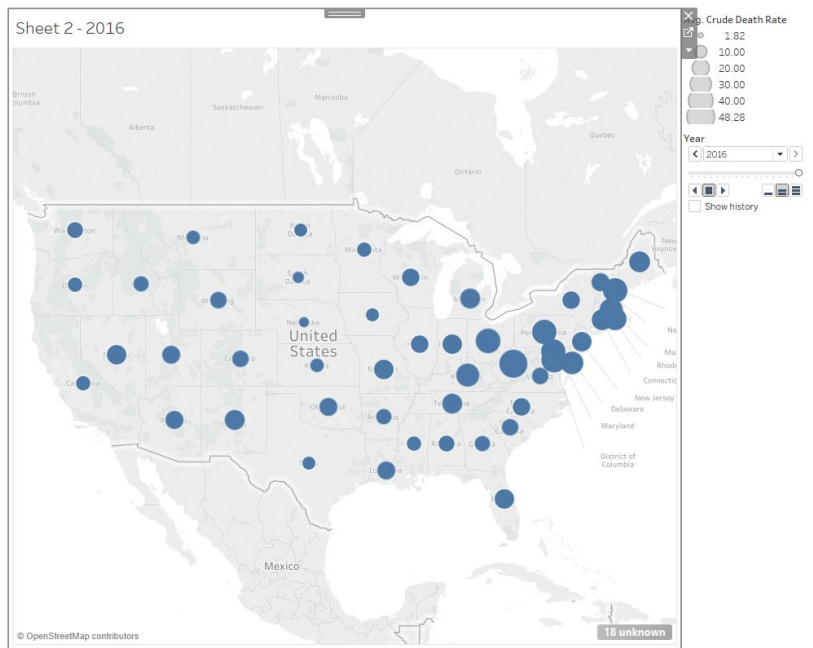
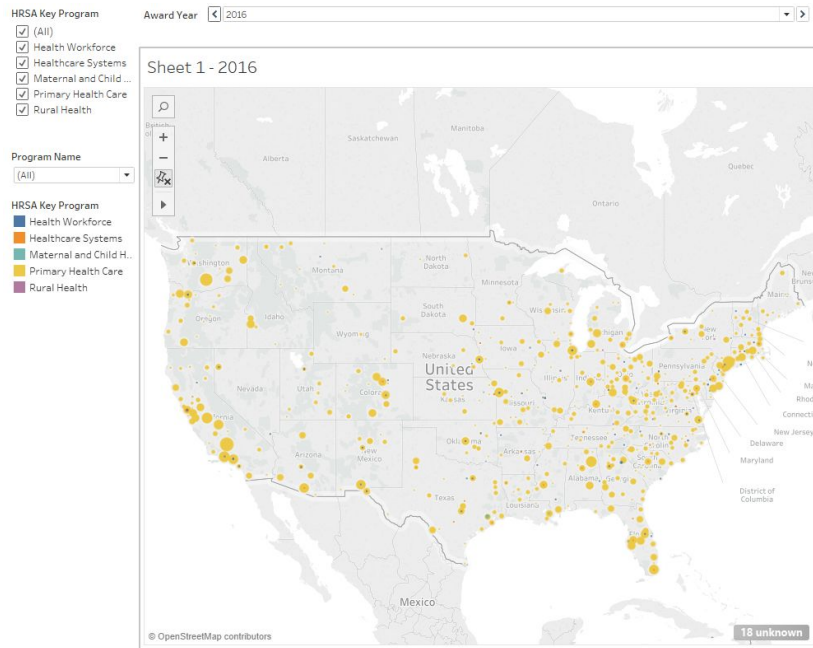
# INITIAL DASHBOARD - OPIOID DEATHS 2016



## Key:

- Each dot represents the opioid-related crude death rate for a state
- Data is from the CDC
- Could also plot opioid overdoses and hospitalizations

# SCREENSHOTS OF INITIAL DASHBOARD - 2016



# NEXT STEPS

- **Further refine data**
  - Add other opioid epidemic variables (overdoses, hospitalizations, etc.)
  - Plot opioid data at the county level for better comparison to HRSA investments
- **Publish dashboard/maps** as a beta site to HRSA's intranet
- Could be used on public-facing HRSA website for messaging about agency efforts

# THANK YOU!

Special thanks to:

- John Snyder
- Carolyn Robbins
- Seth Marcus
- Jason Lin