



**American Hospital  
Association™**

---

*Advancing Health in America*

# Multi-State Data Collaboration

The power of data collaboration at scale

Gloria Kupferman

Chief Data Strategy Officer

American Hospital Association

# Today's Objectives

- Share findings and lessons learned from the OUD study and raise awareness of the issue from a cost-of-care perspective
- Demonstrate the power of collaboration to support State, Local and National data initiatives
- Discuss and solicit input on next steps

# The AHA Multi-State Data Collaboration (MSDC)

- State data collection and reporting programs are siloed
- MSDC is a true collaboration governed by agreed-upon terms of engagement and guardrails
- Each project has a charter and collaborators can choose to participate on a project-by-project basis
- Projects are identified and chosen by the collaborators
- Distributed computing using co-developed, standard algorithms and code – no sharing of patient-level data
- Each State participant agrees to allow all project participants to use that State's (aggregated) data
- AHA collects the output from each State participant, reviews, checks and compiles the results and creates a data file, Tableau workbook and briefing paper



*Advancing Health in America*

# Opioid Use Disorder (OUD) Project

- The opioid epidemic is in its second decade
- Hospitals and health systems are struggling to train and incentivize prescribers to order non-addictive pain medications
- Between 1999 and 2018, nearly 450,000 people died, with more than 232,000 dying due to an overdose involving prescription opioids.
- A survey conducted by the Addiction Policy Forum found that 1 in 5 Americans reported an increase in their or a family member's substance use since the COVID pandemic began.
- Yet, while there have been some local studies or sample analyses on the prevalence of OUD and its costs to the economy and society, there have been no far-reaching national studies

# MSDC OUD Project – Business Objectives

- The MSDC collaborators chose this project to identify the burden of care for OUD in our hospitals' inpatient and ED settings.
- The analysis would provide a clearer picture of the incidence and trends in substance abuse disorder across the US and enable State associations, policy-makers, hospitals, and health systems to clearly understand and address the health needs of the populations that they serve.
  - Quantify the prevalence and burden of the disease
  - Track disease progression to identify when/where interventions are needed
  - Measure and track outcomes of local interventions
  - Connect favorable trends with successful interventions
  - Set the stage for discussions on how the hospital field can be part of the solution to the problem
  - Raise awareness of the costs to the system for caring for this disease
  - Inform and support follow-up interventions regarding opioid prescribing and the use of alternative pain therapies

# MSDC OUD Project - Parameters

- We used the CMS CCW codes for opioid-related indicators as a starting point for identifying qualifying cases
- We further refined the codes to include only opioid-related cases where the diagnosis was primary or secondary
  - OUD without overdose or complications
  - OUD with overdose
  - OUD with complications (but no overdose)
- We eliminated encounters where the OUD was not present on admission

# Our Issue Brief



## Multi-State Data Collaboration Issue Brief on Opioid Use Disorders

### Key Observations

This brief examines the total inpatient and emergency department (ED) visits related to opioid use disorder (OUD) among adults 18 years or older in the 19 states participating in the Multi-State Data Collaborative on OUDs: Alaska, Colorado, Florida, Iowa, Illinois, Kansas, Michigan, Minnesota, Missouri, Mississippi, Montana, Nevada, Ohio, Oregon, South Dakota, Tennessee, Texas, Wisconsin, and Wyoming. Key observations include:

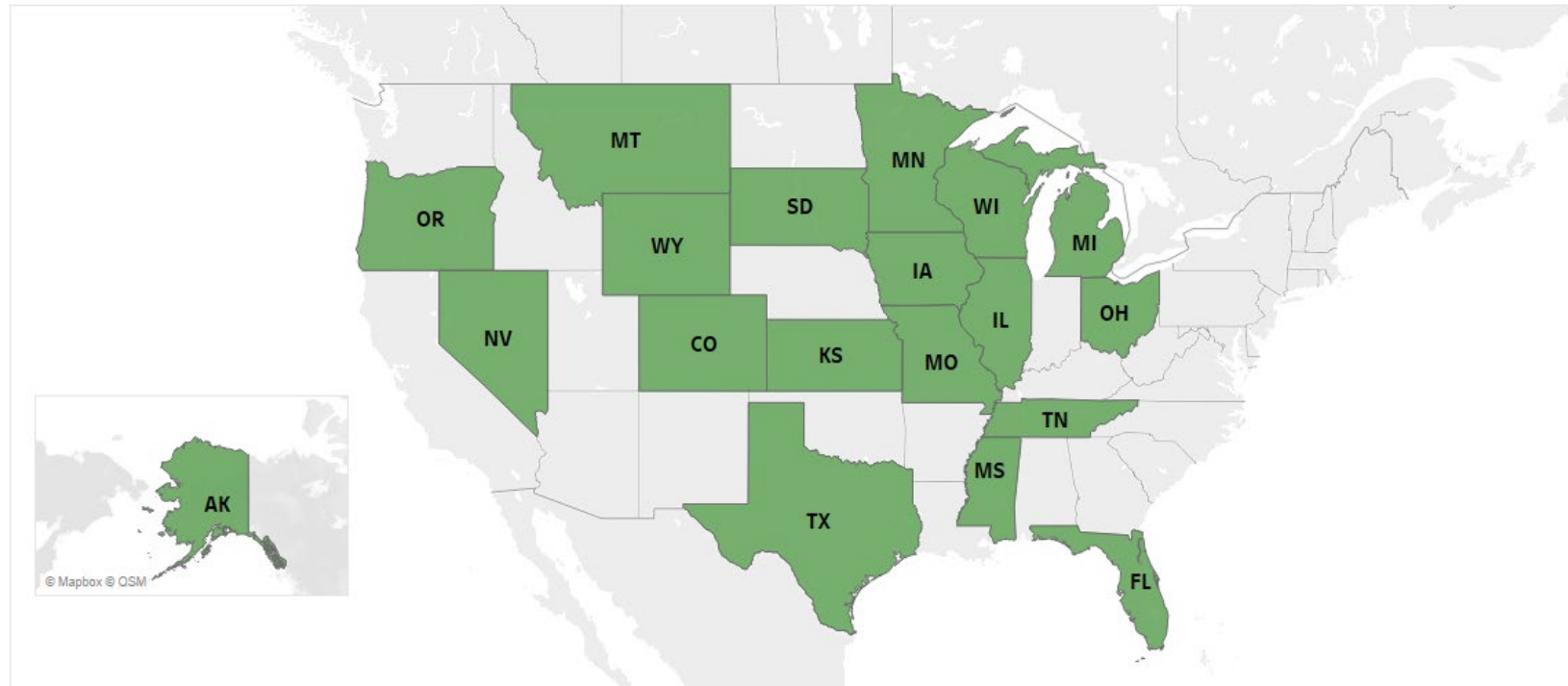
- Among the 19 participating states, total OUD inpatient and ED visits per 100,000 visits generally decreased across the three study years, 2017 to 2019, with a few exceptions.
- Mississippi and Oregon consistently posted the highest OUD hospital utilization rates, while Michigan and Wyoming reported the lowest hospitalization rates.
- The median hospital encounter rates for states that have adopted the Medicaid expansion program (AK, CO, IL, IA, MI, MN, MT, NV, OH, OR) are higher than the medians for non-expansion states (FL, KS, MO\*, MS, SD, TN, TX, WI, WY), although there is a larger degree of variation between states that have expanded Medicaid.
- There is a moderate positive association (correlation coefficient  $r$  ranges between .21 and .26) between states' OUD hospital encounter rates and percent of the population in poverty.
- Across the 19 states, there appears to be a moderate negative association (correlation coefficient  $r$  ranges between -.38 and -.49) between the percentage of white residents and the OUD hospital encounter rate.
- There appears to be no association ( $r$  between -.13 and .07) between OUD hospital encounter rates and the state percentage of rural population.

\*Missouri expanded its Medicaid program in 2020.



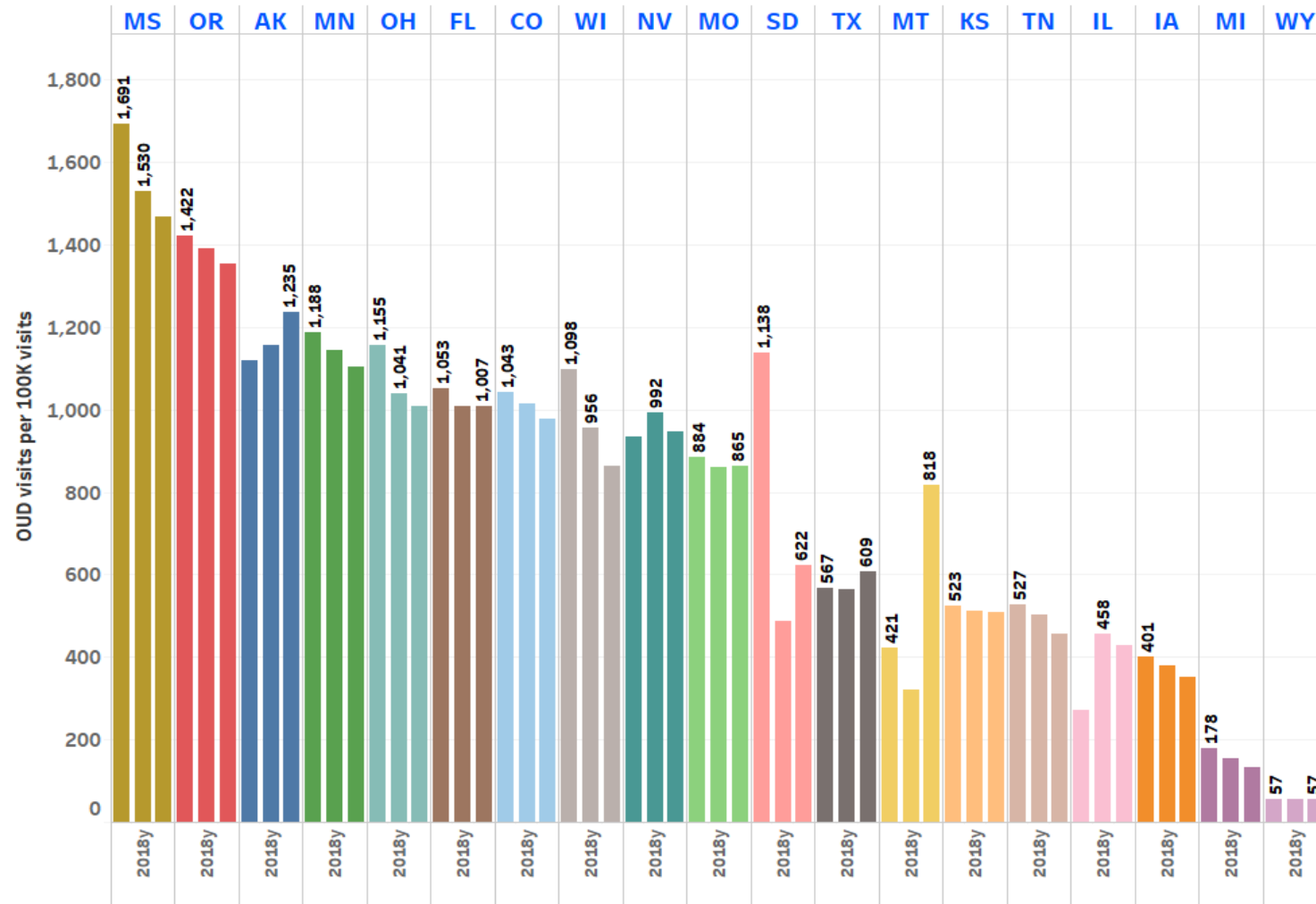
Advancing Health in America

# Nineteen Participating States

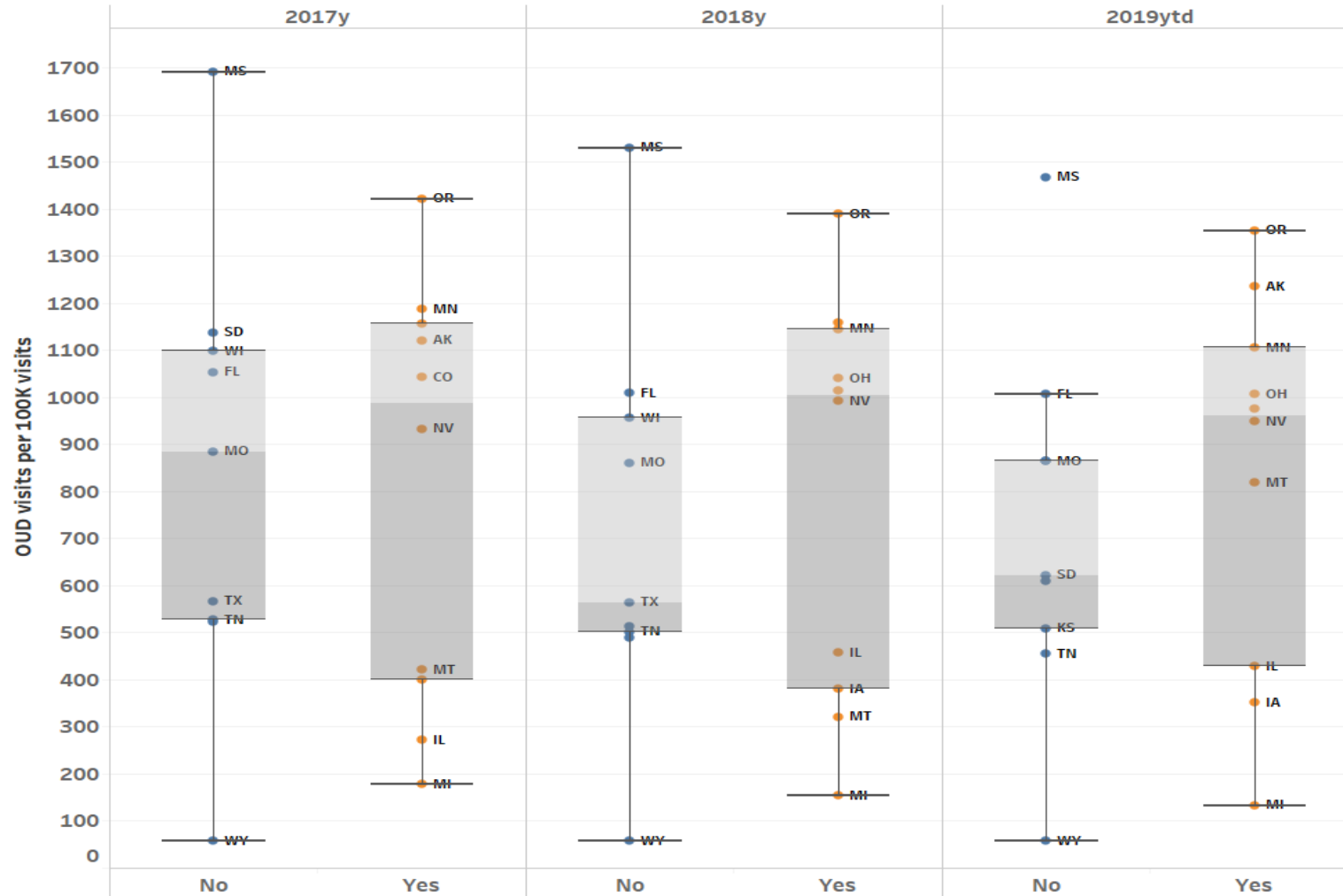




# OUD Rates per 100K Encounters by State and Year



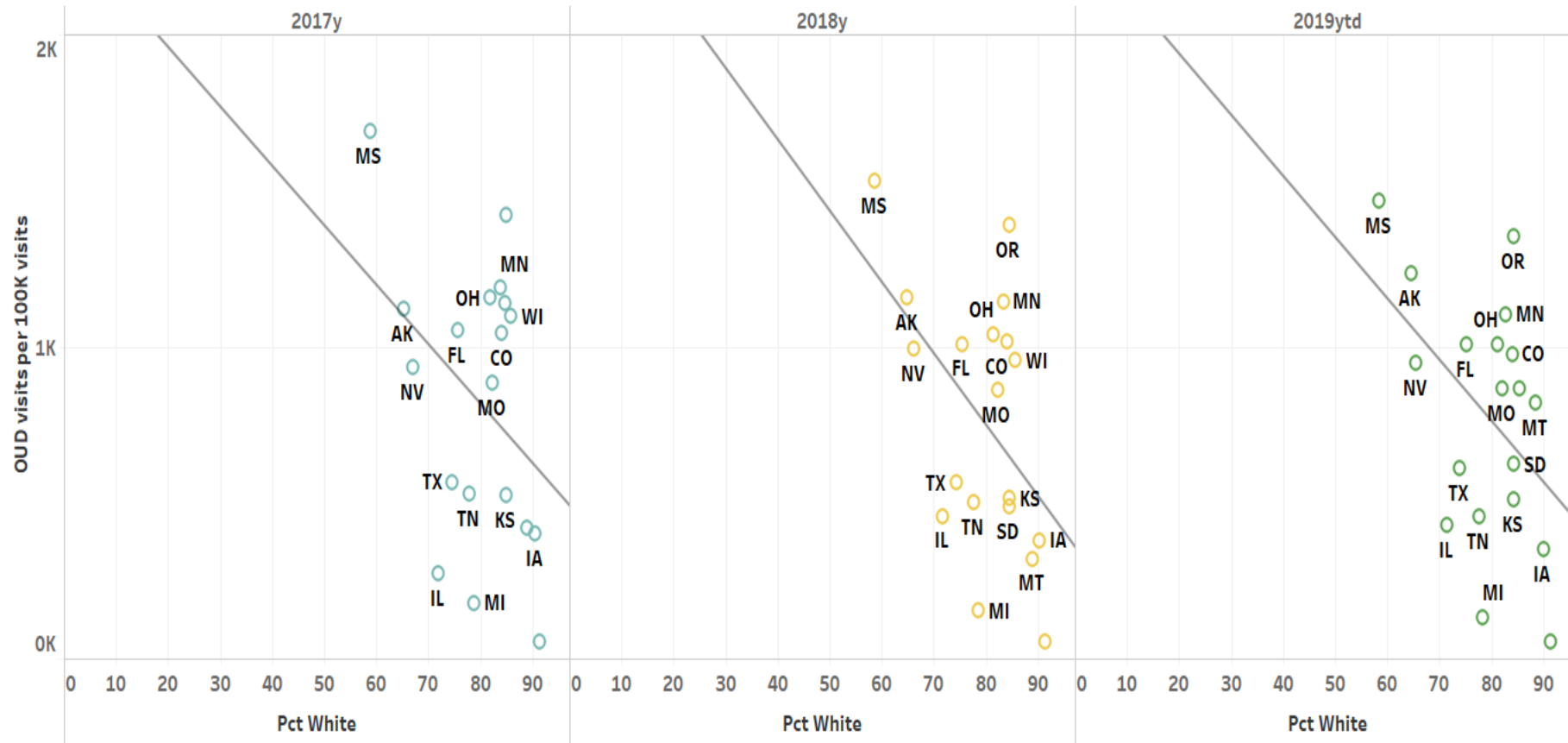
# OUD Rates per 100K Encounters by Medicaid Expansion Status and Year



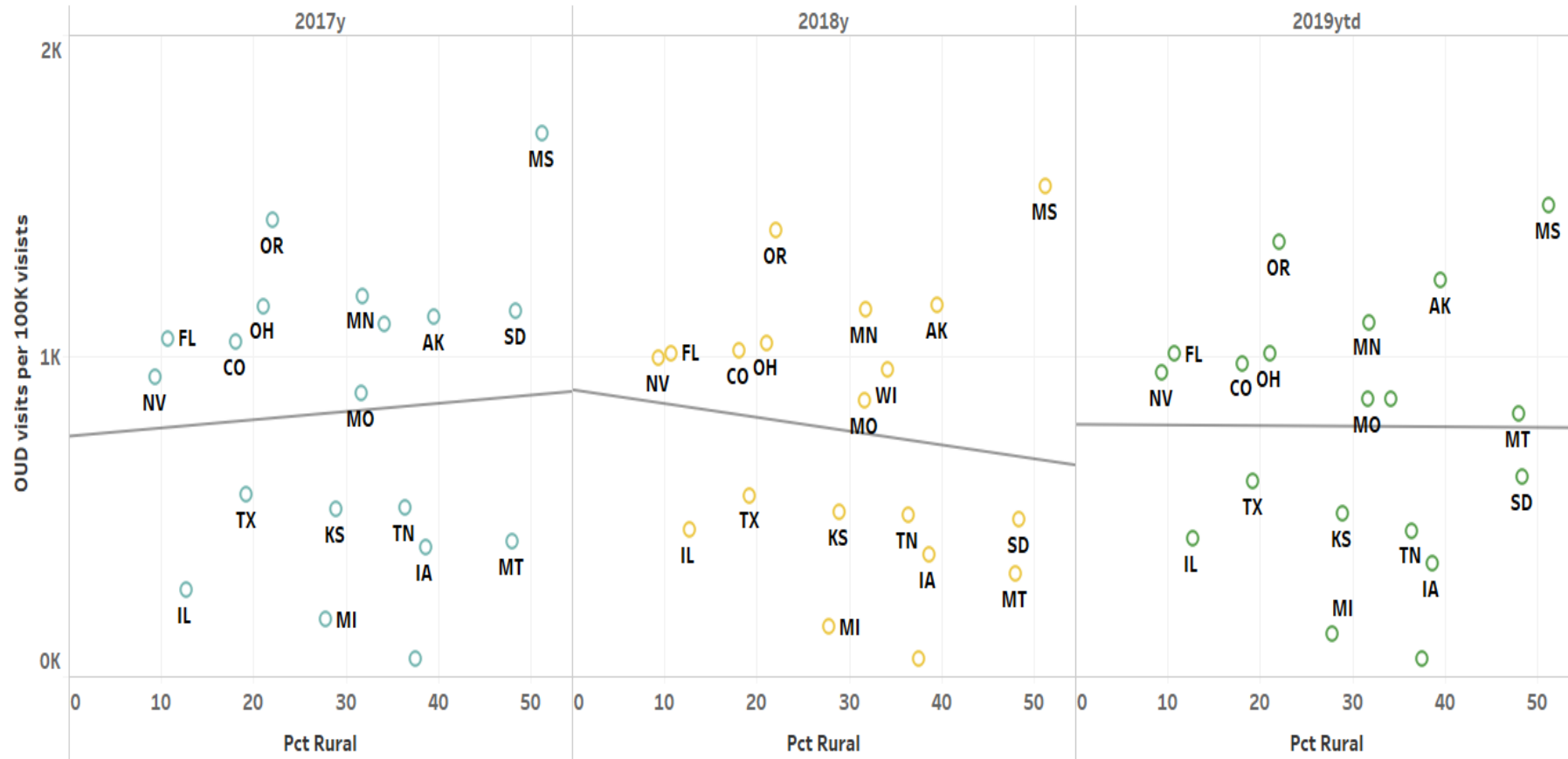
# OUD Rates per 100K Encounters and Poverty Percentage by Year



# OUD Rates per 100K Encounters and Percent White Population by Year



# OUD Rates per 100K Encounters and Percent Rural Population by Year



# Lessons Learned

- Collaboration requires trust
- Collaboration brings multiple perspectives to the table and can create a much richer understanding of the analysis
- Collaboration takes longer than expected
- You need to find the common data elements in order to derive comparable results
- There needs to be a business reason for all participants
- All participants should have equal standing

# Next Steps

- Update with 2020 and 2021 data to see whether COVID had an impact on hospital visits for OUD
- Develop an algorithm to measure the cost of caring for OUD hospital visits
- Other thoughts?

# Questions, Comments, Suggestions

**Gloria Kupferman**

Chief Data Strategy Officer

American Hospital Association – Center for Health  
Innovation

(312) 422-3399

[gkupferman@aha.org](mailto:gkupferman@aha.org)



*Advancing Health in America*