

# COMMUNITY OF PRACTICE: Mental Health Services for Children



The Community of Practice (CoP) series was developed through a partnership with IMPACT WV and the WV Home Visiting Program to help participants exchange technical information and share experiences about serving clients currently experiencing or who have past experiences with substance use and neonatal abstinence syndrome (NAS).

\*The information in this IMPACT WV product was taken from Community of Practice presentations by: Mir Ali, PhD a Health Economist for the USDHHS Office of the Assistant Secretary for Planning and Evaluation (ASPE) Specialist in behavioral health economics, and Kristina West, M.S., LL.M a Policy Analyst for the USDHHS Office of the assistant secretary for planning and evaluation.

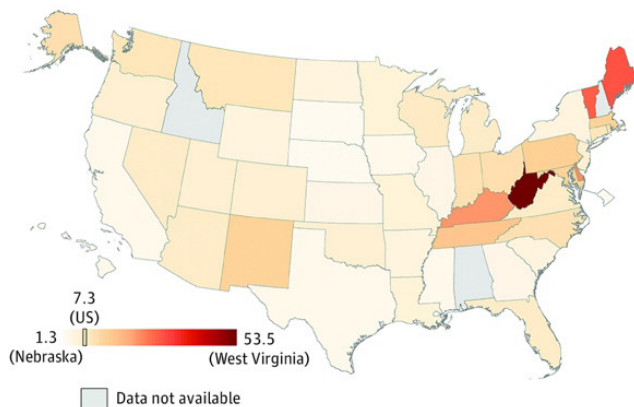
## Objective

The purpose of this Community of Practice was to provide information about hospital readmission related to NAS.

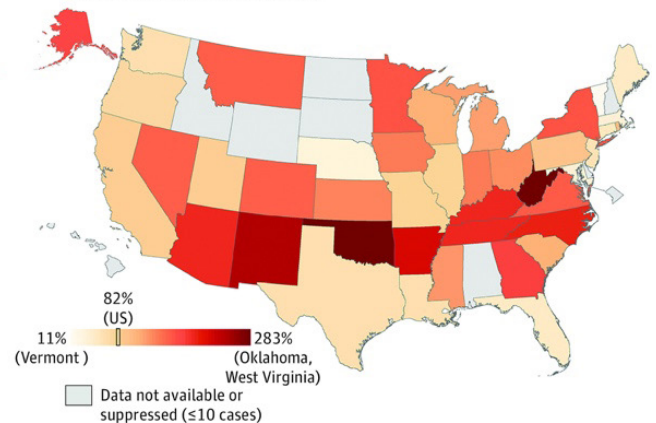
## Background

- In 2017, 53.5 infants per every 1,000 deliveries in WV had been hospitalized for NAS

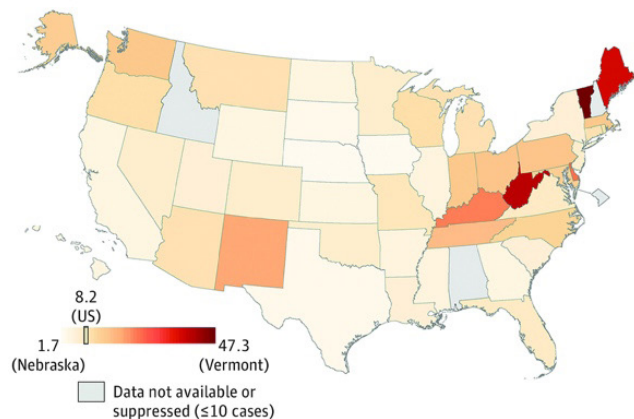
**A** Neonatal abstinence syndrome rate per 1000 birth hospitalizations in 2017



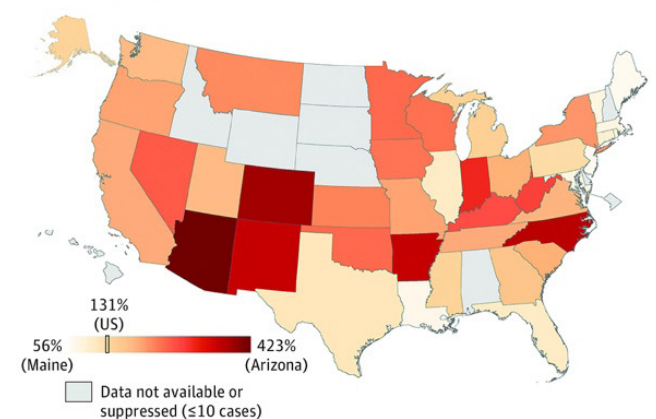
**B** Percent change in neonatal abstinence syndrome rate per 1000 birth hospitalizations from 2010 to 2017



**C** Maternal opioid-related diagnoses rate per 1000 delivery hospitalizations in 2017



**D** Percent change in maternal opioid-related diagnoses rate per 1000 delivery hospitalizations from 2010 to 2017



(Hirai et al, 2021)

- Infants with NAS or those who are exposed to opioids are more likely to be hospitalized within four weeks and a year after birth, and 50% of children diagnosed with NAS will be diagnosed with a mental disorder before the age of five years old.

## Description of Program

A study was conducted using a convenience sample of Medicaid health insurance claims from 8-10 states between 2008 and 2017. (**MarketScan Multi-State Medicaid Claims**)

Health services and insurance claim utilization was observed for the children, over the five-year span. The primary goal was to identify if a mental health diagnosis was present when the child reached the age of five. 3,075 Infants who were diagnosed with NAS at birth were identified between 2008 and 2012, and were followed until the age of 5.

In those who had a diagnosis, it was further observed whether or not they were taking any psychotropic medications (antidepressants, antipsychotics, etc), and/or psychotherapy or psychotropic interventions

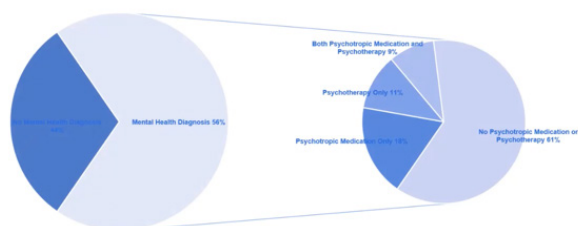
The treatment variable was then categorized into four mutually exclusive categories

- Group 1- if the child is receiving psychotropic medication only
- Group 2- if the child is receiving just therapy
- Group 3- if the child is receiving both psychotropic medication and psychosocial services and therapy
- Group 4- if the child is receiving no treatment

## Findings and Results

- Outpatient pharmacological treatment within 3 months of birth
  - Most pharmacological treatment for infants happens at the hospital, but it can be cost-effective, be a more effective form of treatment, and help the mother and infant bond as well
  - There is a steady decline in utilization of outpatient pharmacological treatment after hospital discharge within the first three months of birth
  - At the beginning of the study (2008) about 15% of infants were receiving outpatient pharmacological treatment, by the end (2017), there were only about 5%. From 2008 – 2017 there has been a drop of infants who were receiving outpatient pharmacological treatment (15% - 5%).
- Hospital readmission/emergency department visits within 3 months after birth
  - The rate of hospital readmission/emergency department visits post discharge from hospital was between 20-25%
  - About 25% of infants diagnosed with NAS experience hospital readmission or emergency department visits, within 3 months of birth
- Mental health condition and treatment among school-aged children diagnosed with NAS at birth

**Mental Health Condition & Treatment among School-Aged Ready Children Diagnosed with NAS at Birth**



- About 56% of children have a mental health diagnosis, of that, 61% used no psychotropic medication or psychotherapy, 18% used psychotropic medication only, 11% psychotherapy only, and 9% used both psychotropic medication and psychotherapy
- Almost 56% of children have a mental health diagnosis of some form by the time they're school aged, and of those a majority is not receiving any treatment
- If they do receive treatment, the majority use medications only

## Conclusions

- Integration of pediatric and behavioral health services can help provide services to children where they are, through telehealth, early intervention, and school-based care services
- Use non-pharmacological care and outpatient care, beyond the traditional residential care model
- Improve prenatal and postpartum screenings to help prevent NAS
- Treatment should not be provided to child without providing prevention to mom
- Use dyadic approaches and family-centered care

## Future NAS/MOD Work

- Analyzing Medicaid/CHIP claims
  - to see continuum of coverage, well child visits and treatment service utilization among infants through age 5
  - to observe insurance coverage of postpartum and health care use among pregnant and postpartum women with SUD

## Policy Implications regarding NAS

- 2015: The Protecting Out Infants Act (POIA)
- 2017: POIA strategy
- 2018: The SUPPORT Act
- 2018: Family First Prevention Act
- 2019: SUPPORT Act and CMS Information Bulletin on pediatric recover centers
- 2021: The SUPPORT Act
- 2021: American Rescue Plan
- 2021: HHS Overdose Prevention Strategy

## Articles

Hirai, A. H., Ko, J. Y., Owens, P. L., Stocks, C., & Patrick, S. W. (2021). Neonatal abstinence syndrome and maternal opioid-related diagnoses in the US, 2010-2017. *JAMA*, 325(2), 146. <https://doi.org/10.1001/jama.2020.24991>

Ko, J. Y., Yoon, J., Tong, V. T., Haight, S. C., Patel, R., Rockhill, K. M., Luck, J., & Shapiro-Mendoza, C. (2021). Maternal opioid exposure, neonatal abstinence syndrome, and infant healthcare utilization: A retrospective cohort analysis. *Drug and Alcohol Dependence*, 223, 108704. <https://doi.org/10.1016/j.drugalcdep.2021.108704>

Sherman, L. J., Ali, M. M., Mutter, R., & Larson, J. (2018). Mental disorders among children born with neonatal abstinence syndrome. *Psychiatric Services*, 70(2), 151–151. <https://doi.org/10.1176/appi.ps.201800341>