

Indiana Pregnancy Promise Program

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What is the Indiana Pregnancy Promise Program?

The **IPPP** is a free, voluntary program for pregnant Medicaid members who use opioids or have used opioids in the past.

Why is the IPPP Important?

- Substance Use Disorder (SUD) was the **most common cause of maternal deaths** in 2018, contributing to over half.
- The Maternal Mortality Review Committee deemed 87% of reviewed pregnancy related deaths **preventable**.
- Treatment during pregnancy has a **high chance of success**.

MCE statistics

By breaking down infant NICU stay length by the respective MCE's, we hoped to gain an insight into accessibility and affordability for mothers in Indiana.

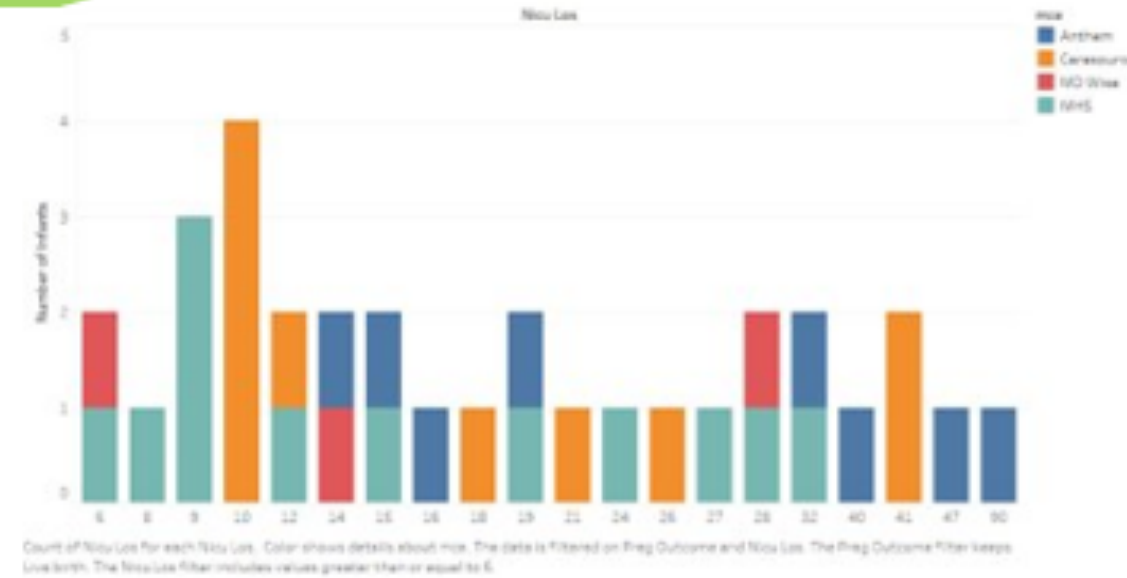


Figure 07: NICU stay length by MCE

Resource Management and Distribution

Encounter Quarter vs Type

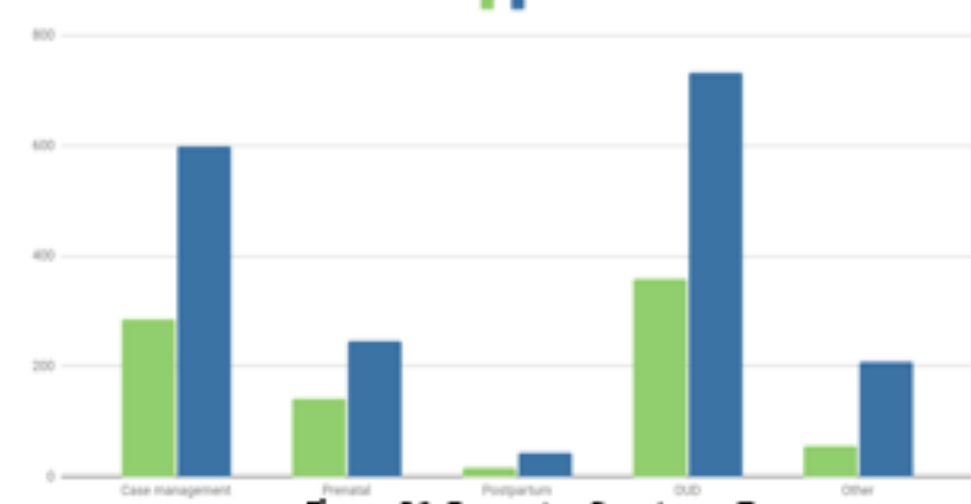


Figure 06: Encounter Quarter vs Type

A large chunk of our analysis was directed towards exploring participant diagnoses, encounter statistics and general effectiveness of the services offered by IPPP. This helps the FSSA allocate resources more effectively.

Behavioral Health Diagnosis of Participants



Figure 05: Behavioral Health Diagnosis of Participants

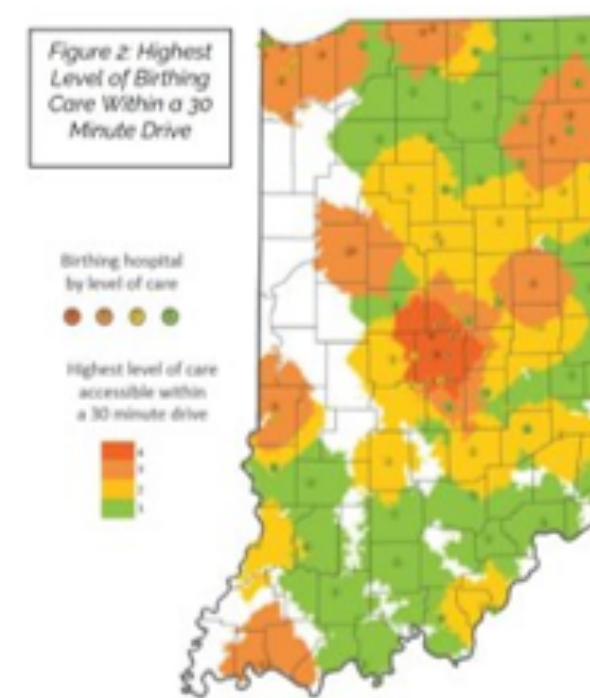


Figure 04: Highest level of birthing care within a 30 minute drive

Objective and Role

Our goal for this semester as the pilot program of the IPPP is to assist in it's aim to serve at least 2,000 pregnant individuals and newborns by 2025. Our student team utilizes data analytics for the FSSA Board to make informed decisions.



Figure 01: Did substance use contribute to the death? MMRIA Decisions Form (n=63)

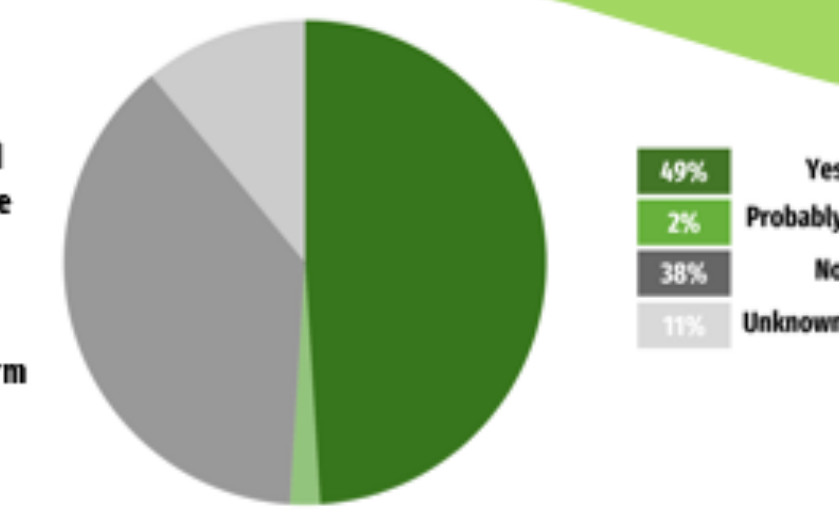


Figure 02: Chance to alter outcomes. Almost 80% of all pregnancy-associated deaths had either a Good Chance or Some Chance to alter the outcome

Exploring Selective Effectiveness

Analyzing date-time trends between races in mothers with SUD helped us observe biases in the effectiveness of the Pregnancy Promise Program and steer it towards those demographics which lagged behind.

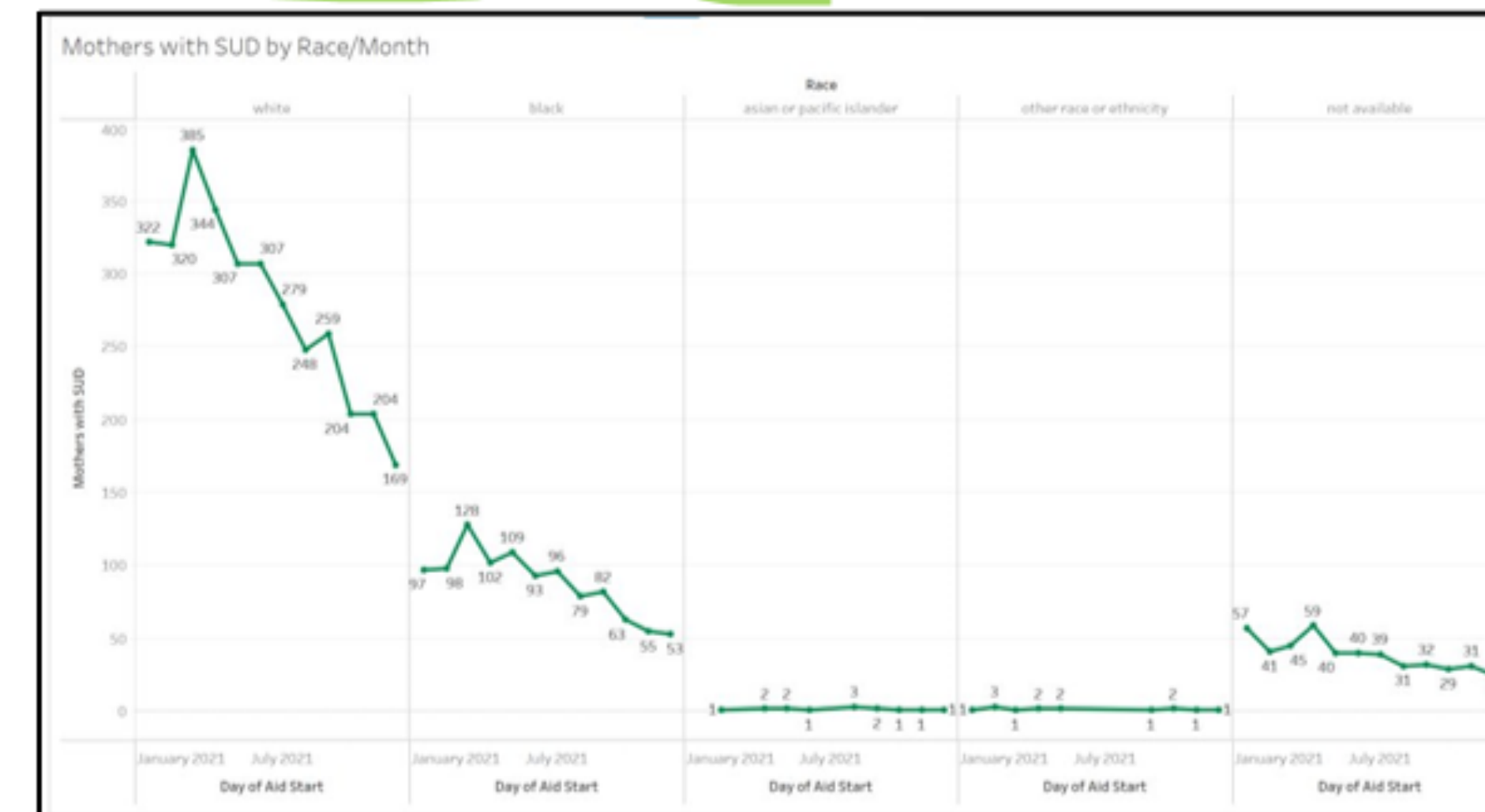


Figure 03: Mothers with SUD by Race/Month

Methodology and Tech Stack

- Using Azure Virtual Desktop, we did most of our work with
- SQL on Azure Data Studio and Tableau for visualizations.
- Got new tasks via Azure Devops, work on it during lab
- Uploaded it to the Tableau dashboard for visibility

Conclusions

In conclusion we: Worked on and visualized data collected by the FSSA to help them create more data-intelligent decisions in furthering the outreach of their programs

Future Goals

- Over the summer and coming semesters, we plan to:
- Complete the Tableau dashboard
 - Create and implement traditional Machine Learning models to predict growth
 - Show our work in the form of solid deliverables

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