



# Breaking Barriers: Social Vulnerability and Retention among Pregnant Women with Opioid Use Disorder

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## Introduction

- Pregnant women with Opioid Use Disorder (OUD) represent an especially vulnerable population particularly within the perinatal period.
- Adverse Social Determinants of Health (SDoH), including the **Social Vulnerability Index (SVI)**, contribute to poor maternal and neonatal health outcomes.
- Social vulnerability refers to the demographic and socioeconomic factors, such as income, employment, education, health insurance, language proficiency, housing, and transportation, that influence health and contribute to inequities.
- In 2016, the Allegheny Health Network (AHN) created the Perinatal Hope Program (PHP) which provides comprehensive and coordinated treatment and support for pregnant and postpartum women who have substance use disorders (SUD), including OUD.

## Objective

- To explore social vulnerability and investigate whether SVI is a significant predictor of pregnancy-related healthcare utilization and neonatal health among women with OUD

## Methods

- Target population: Pregnant women with OUD
- Patients with OUD were seen at Perinatal Hope Program (PHP) – which offers prenatal OBGYN visits, parenting education, counseling sessions, MOUD, transportation services via a multidisciplinary team.
- Retrospective chart review of patient records from January 1, 2016 through October 1, 2024.
- Retention in care was defined as number of PHP appointments attended by the patients during pregnancy and within the first 2 years after pregnancy.
- SVI was calculated using a CDC data set compiled from US Census tract data and mapped to patient zip code

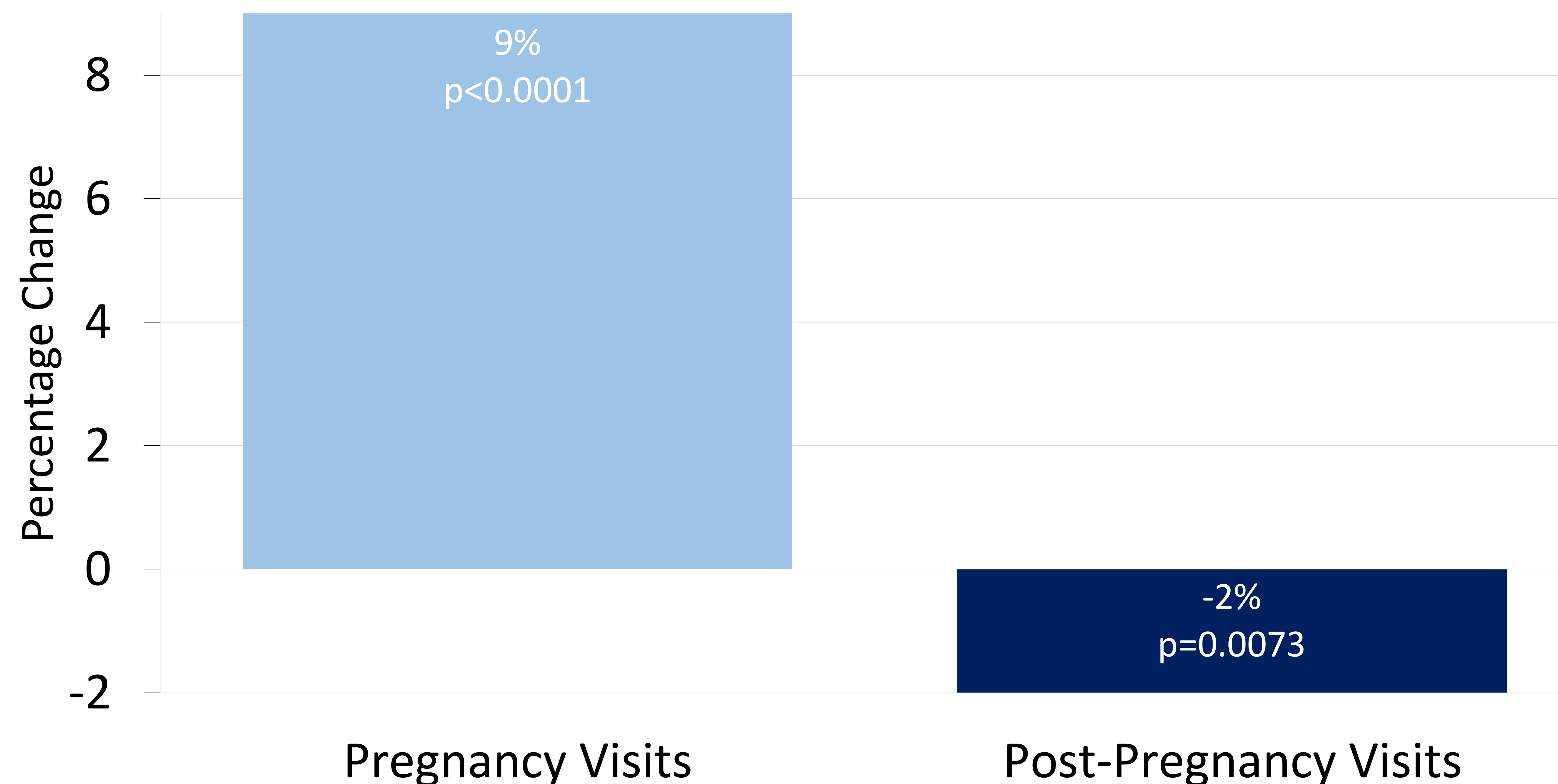
## Results

- N = 234 patients
- Mean age = 30
- **13% were Black, and 87% White. 2% were Hispanic**
- 57% of patients had a mental health comorbidity
- **With one unit increase in SVI, pregnancy visits increased by 9% and post pregnancy visit decreased by 2%.**
- SVI did not impact gestational age at first PHP intake appointment, MOUD days (defined as total number of days on MOUD between intake and end of pregnancy) and NOWS score

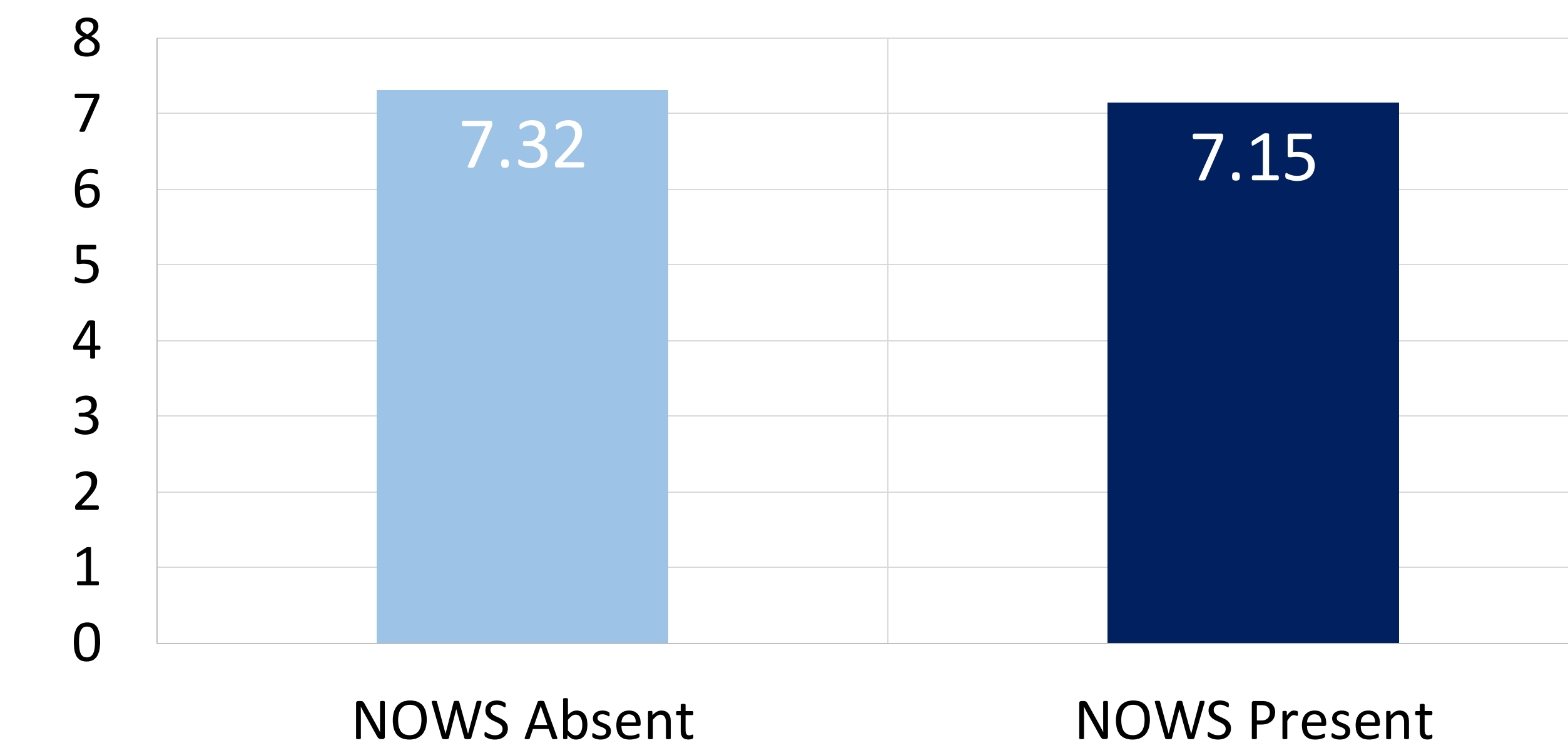
In the prenatal period, a higher SVI was associated with increased treatment engagement and no increase in adverse birth outcomes in pregnant women with OUD.

Patients with higher SVI scores had decreased rates of follow-up after delivery.

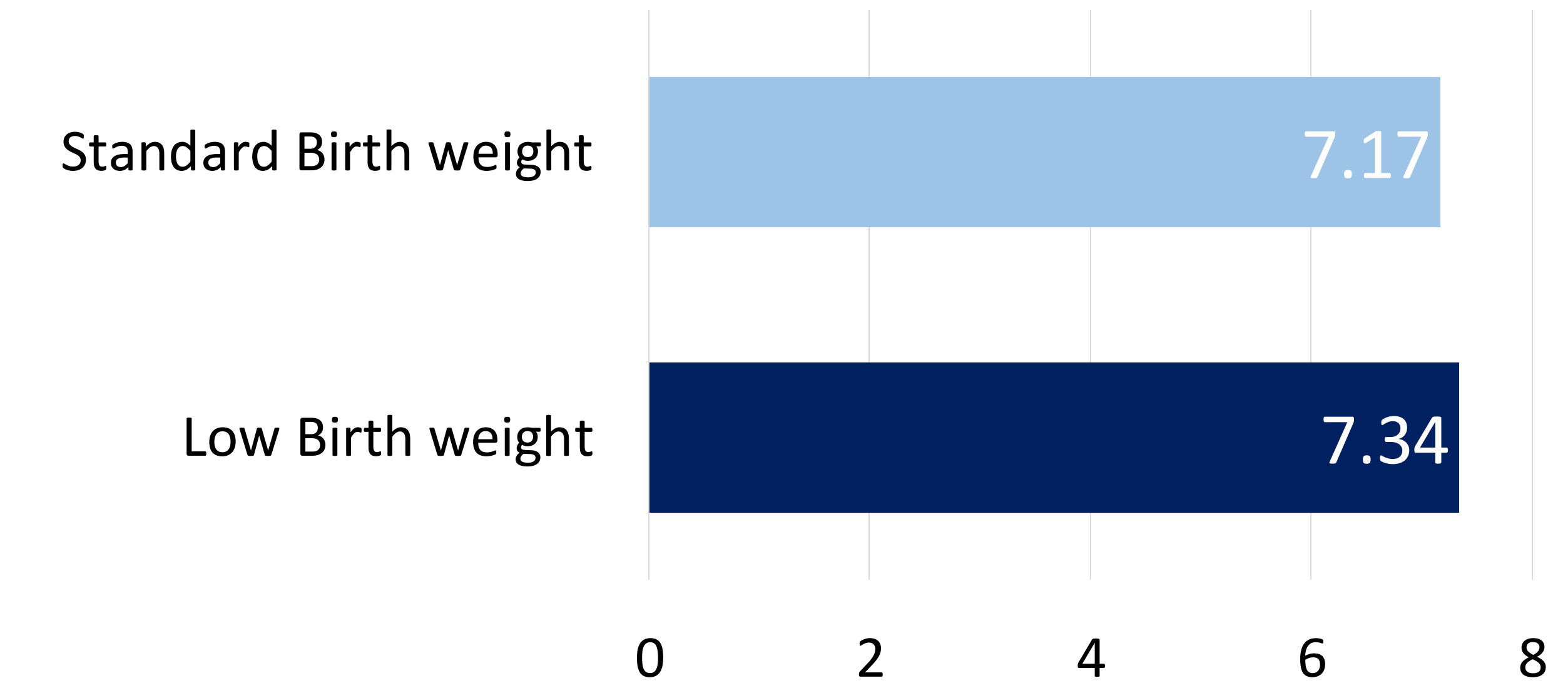
## Effect of Higher SVI on Peripartum Treatment Retention



## Mean SVI by NOWS Outcomes



## Mean SVI by Birth Weight Outcomes



## Discussion

- Pregnant patients with OUD often face significant stigma, marginalization, and barriers to care.
- High SVI typically reflects poverty, limited healthcare access, poor nutrition, stress, and other factors which could contribute to adverse pregnancy outcomes
- It is essential to address those social vulnerabilities so that every patient has a chance to obtain optimal health.
- Programs like Perinatal Hope Program aim to support pregnant women with SUD through a set of comprehensive services such as prenatal OBGYN visits, counseling sessions, MAT treatment, transportation services, and parenting education in a centralized location.
- PHP's multidisciplinary team helped facilitate increased prenatal treatment visits for patients with higher SVI, with no change in neonatal NOWS diagnosis or low birth weight.
- The postpartum period is a time where patients with higher SVI may fade from treatment retention and represents an important potential area for targeted engagement

## References

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