

Utilizing Claims Data to Identify the Drivers of Disparities in Health Care Journeys

maternal health

The United States is ranked last among industrialized nations in maternal mortality rates. Out of the 10 major cities in the US, **rates of infant mortality and low birthweight are the highest in Philadelphia**. In our city, non-Hispanic Black women are about **four times more likely to die of pregnancy-related causes** than are non-Hispanic white women. **Accelerate Health Equity (AHE)** and **Independence Blue Cross (IBX)** have begun analyzing claims data in Philadelphia to help reduce inequities in maternal health outcomes.

This research focuses on treatment of patients with Iron Deficiency Anemia (IDA). IDA in pregnancy is associated with **adverse fetal outcomes**, such as low Apgar scores and birth weights, and neonatal intensive care admission. If identified during pregnancy, IDA can be treated with **oral or Intravenous (IV) iron during the pregnancy to reduce negative health outcomes**.

findings

- **Black patient are more likely to present with severe anemia (Hemoglobin<9.5 g/dL) during their pregnancy episode than non-Black patient episodes (12.5% vs. 2.6%)**
- **Close to 90% of patients have at least one hemoglobin test during the pregnancy episode**, although only about 30% have a test in all three trimesters and about 11% have a test in only in the third trimester. Patients who were only tested in the third trimester tended to have **lower Hemoglobin levels**
- Rate of IV Iron treatment is **26% among pregnancy episodes with severe anemia in the third trimester**; with a rate of **23% for Black patient episodes** and **28% for non-Black patient episodes**
- While **timing of first prenatal visits is comparable among Black and non-Black patient episodes** as well as the timing of the first hemoglobin test after prenatal treatment has begun, **non-Black patients tend to see greater improvements in hemoglobin levels than Black patients**: 44% of non-Black patient episodes that had anemia (**Hemoglobin< 11 g/dL**) in the 1st/2nd trimester did not have anemia in the 3rd trimester compared to 23% of Black patient episodes. For severe anemia the rates were **63%** and **51%**, respectively
- **Black patients experienced a higher rate of severe anemia** upon admission for delivery or 7 days prior than non-Black patients (**16.3% vs. 10%**) among those tested



recommendations

Given our findings, we recommend **increasing the frequency of hemoglobin screenings of patients during pregnancy** (with possible emphasis on 2nd and 3rd trimesters), **increasing usage and access to IV Iron** for patients with severe anemia, and **increasing tracking of Oral Iron recommendations for patients**.

next steps

- Examine differences in outcomes between practices/systems; possibly for under performers or positive deviance.
- Acquire Medicaid claims data in order to further diversify the sample of patients in the cohort.