

# Data-Enabled Health Equity: Creating a Framework for Action



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## Learning Objectives

- Describe the evolution of the use of data and visualization tools to identify and combat health disparities.
- Discuss the challenges of and lessons learned about the collection, standardization and stratification of complex demographic and socioeconomic data.
- Outline the use of analytics in identifying the root cause of disparities and helping to improve stakeholder engagement.

## Goal

- Identify existing health disparities among demographic groups at Loyola Medicine and measure the impact of the hospital-level health-equity initiatives.

## Background

- The CDC defines health equity as “the state in which everyone has a fair and just opportunity to attain their highest level of health”
- Racial and ethnic groups experience higher rates of morbidity and mortality compared to their White counterparts.
- COVID-19 pandemic exacerbated existing preventable health disparities

## Method

- Data sources: EHR & Chart Abstraction Databases
- Demographic data self-reported
- Develop visualizations stratifying health outcomes by demographics.
- Identify health disparities and create more visualizations stratifying by known risk factors by demographics

## Outcome/Impact

- Identified a disparity in low-risk cesarean birth rates (TJC measure PC-02): White patients had a rate of 24.1%, compared with 34.3% for Hispanic or Latino patients and 36.9% for Black patients.
- Data-guided education and improved risk stratification methods helped reduce the gaps by approximately 8.1% over nine months.
- Real-time reporting tool for stakeholders to identify emerging trends.

## Lessons Learned

- Use existing literature as starting point
- More visualizations ≠ more insight
- Partnership with clinical leaders & DEI leaders is integral for success

## References

- Centers for Disease Control and Prevention (CDC) July 1 2022. What is Health Equity? Retrieved from <https://www.cdc.gov/healthequity/whatis/index.html>
- Centers for Disease Control and Prevention (CDC) November 24 2021. Racism and Health Retrieved from <https://www.cdc.gov/minorityhealth/racism-disparities/index.html>

Figure 1. Example Visualizations Showing Health Disparity Analysis

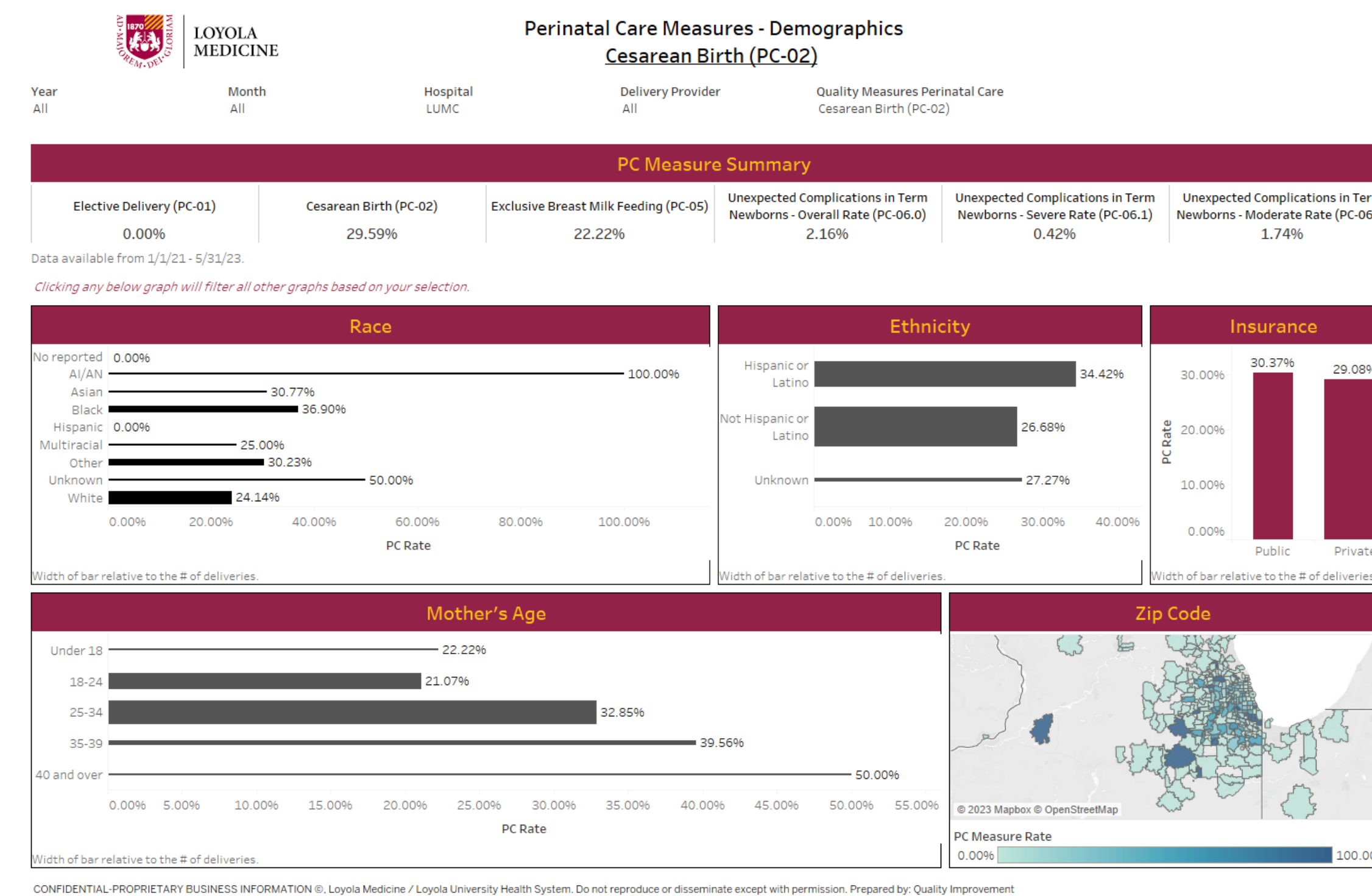
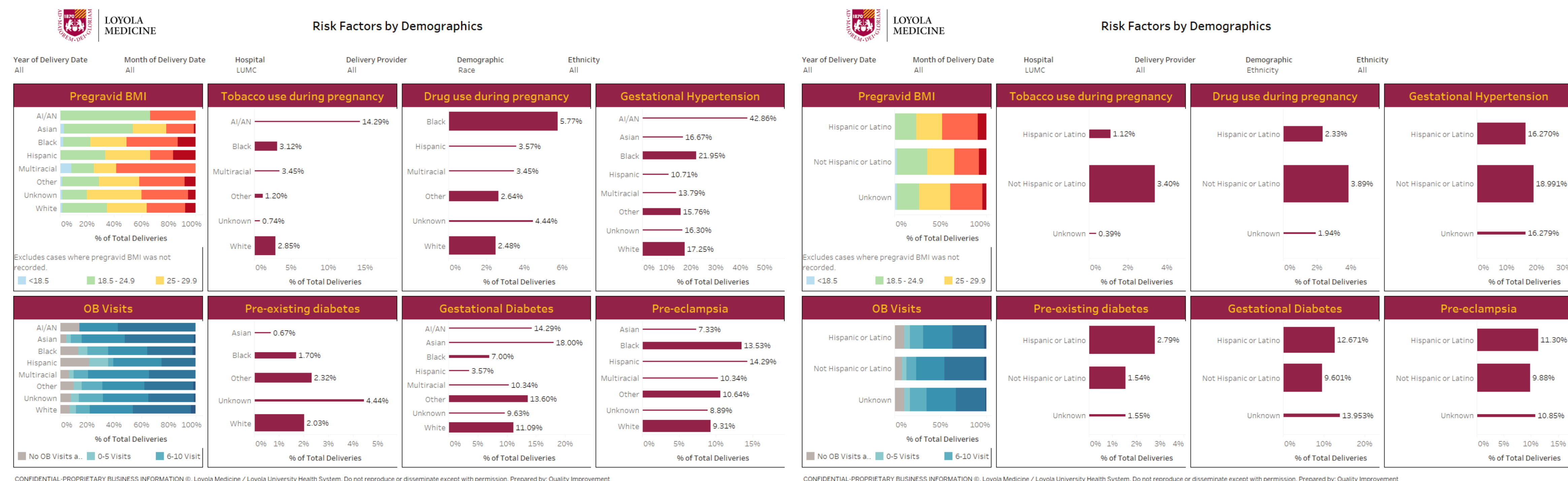


Figure 2. Example Visualizations Showing Comorbidity Risk Factors

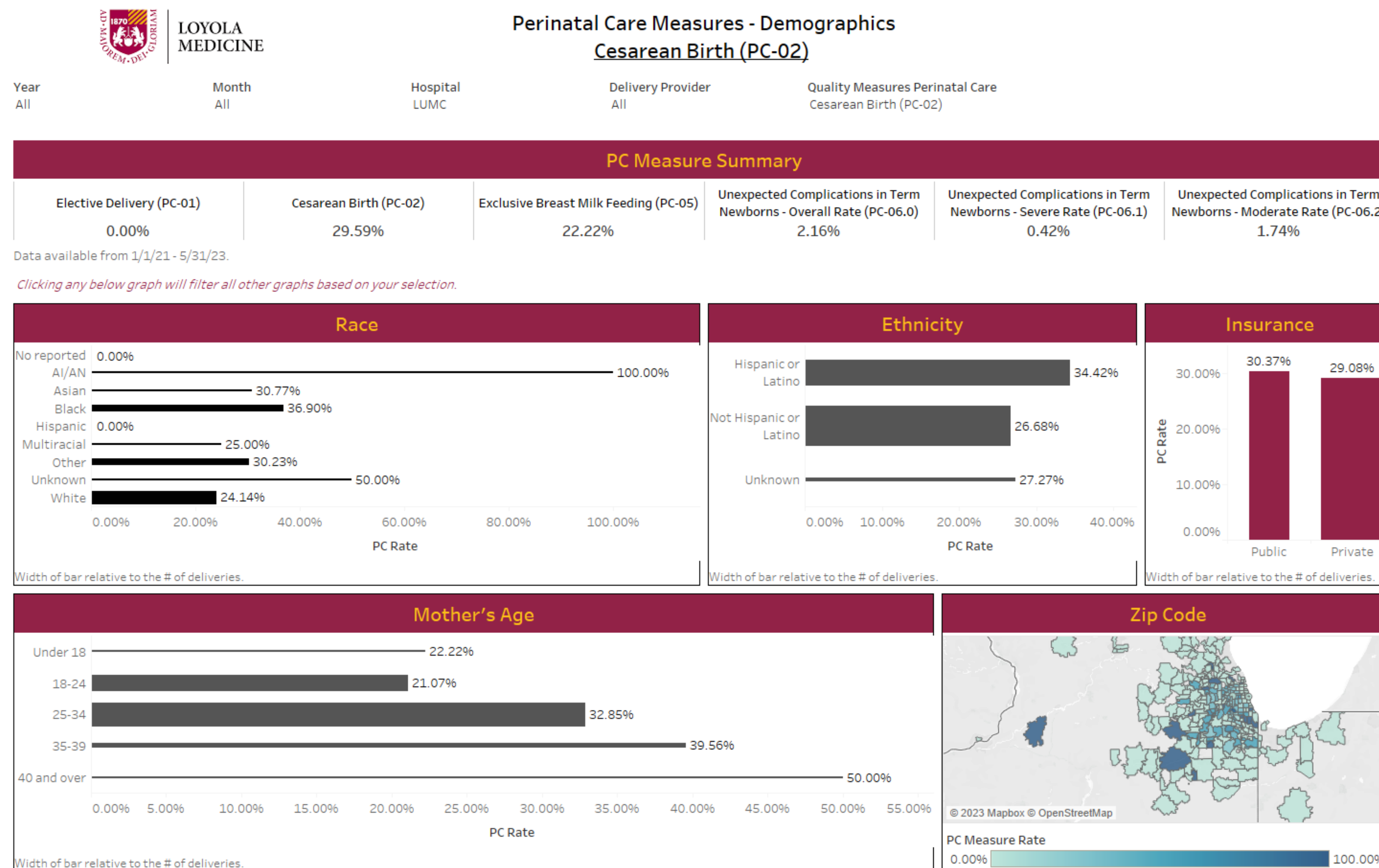


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Figure 1. Example Visualizations Showing Health Disparity Analysis



**Current EHR Race Categories**

- Asian Indian
- Chinese
- Filipino
- Japanese
- Korean
- Vietnamese
- Other Asian
- Native Hawaiian
- Other Pacific Islander
- Guamanian
- Samoan
- Black/African American
- American Indian/Alaskan Native
- White

**Current EHR Ethnicity Categories**

- Mexican, Mexican American, Chicano/a
- Puerto Rican
- Cuban
- Another Hispanic, Latino/a, or Spanish Origin
- Non-Hispanic or Latino/a

**Other Focus Areas**

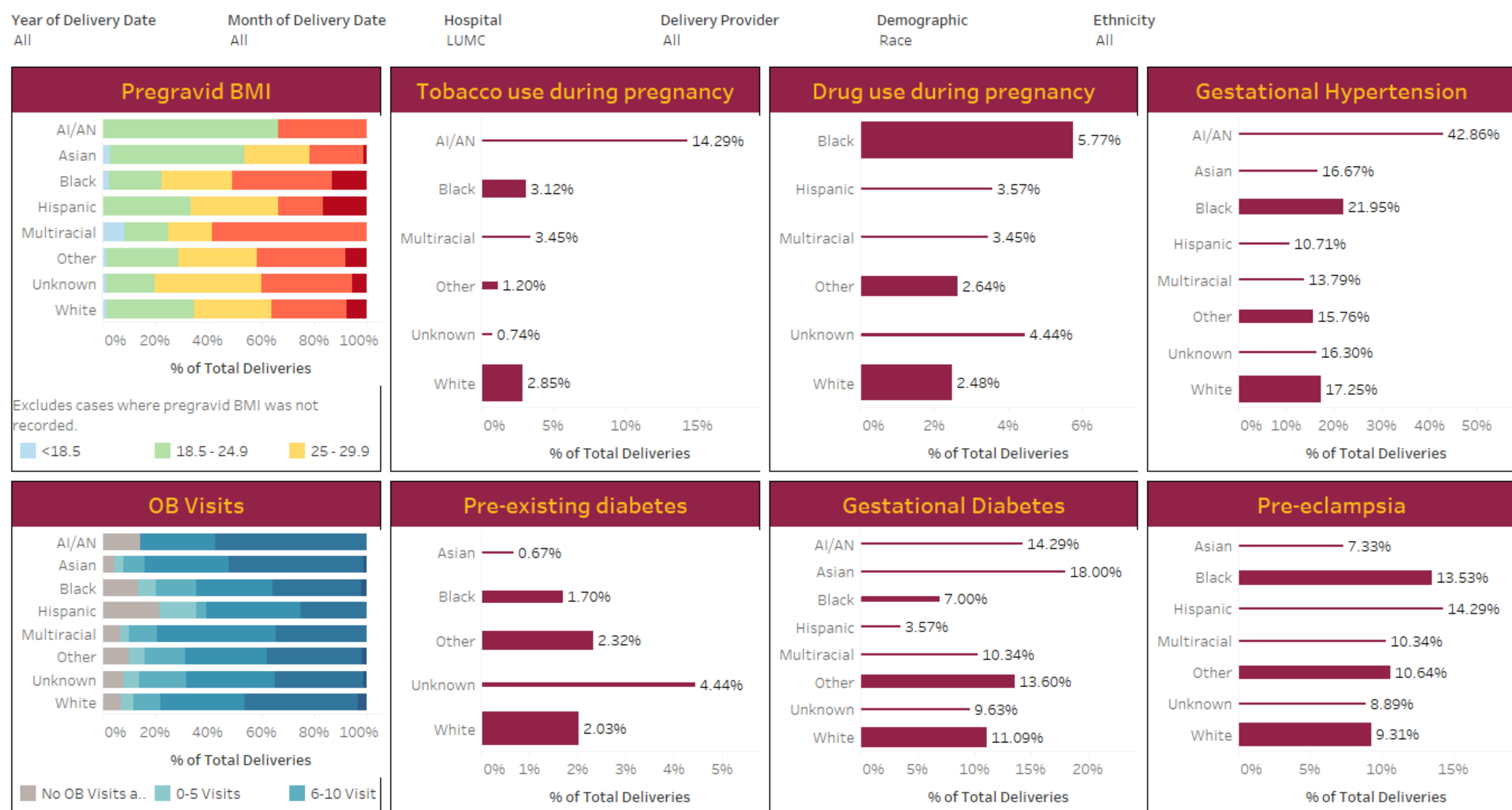
- Readmissions
- PC-02 (Cesarean Section)
- Sepsis
- Maternal Hemorrhage
- Opioid & Naloxone Prescribing



Figure 2. Example Visualizations Showing Comorbidity Risk Factors



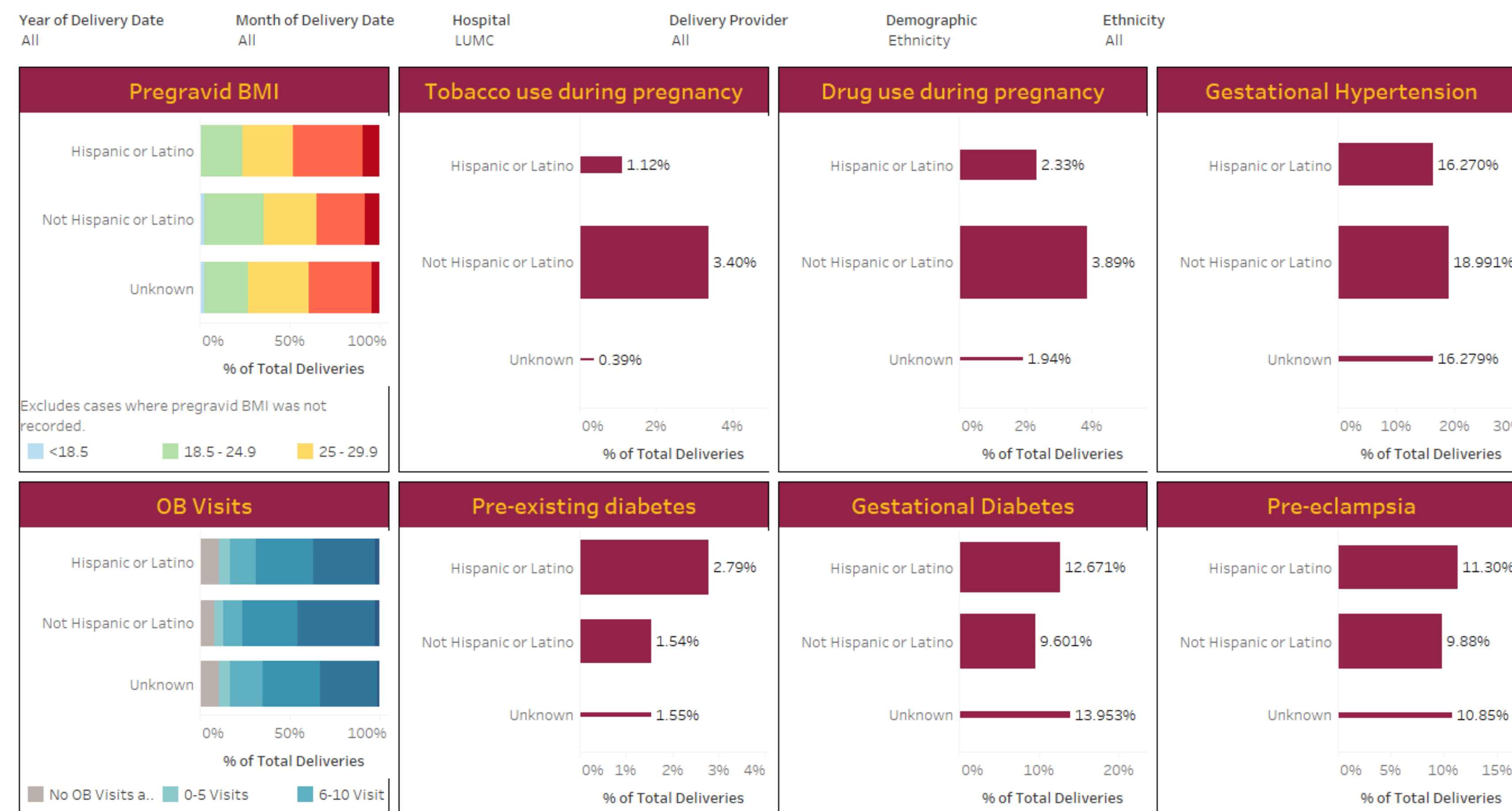
Risk Factors by Demographics



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Risk Factors by Demographics



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