

Research Proposal – Evaluation of severe maternal morbidity and maternal mortality by level of maternal care designation pre- and post-designation

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Introduction

- Levels of care were developed to standardize risk-appropriate maternal care:
 - *Basic care (Level I)*
 - *Specialty care (Level II)*
 - *Subspecialty care (Level III)*
 - *Regional perinatal health care centers (Level IV)*
- Designed with the goal of concentrating care of women with most complex pregnancies at designated regional perinatal health centers (Level IV) to reduce maternal morbidity/mortality
- *“Improved maternal outcomes may accrue with appropriate use of levels of maternal care assignments include reduction in preventable severe morbidity and mortality such as stroke, returns to the operating room, complications from known or suspected placenta accrete and unplanned intensive care unit admissions”*

Objective

- **Primary**: To assess the impact of instituting levels of maternal care (LOMC) in Texas on the rates and location of severe maternal morbidity (SMM) and mortality across levels (I-IV)
 - *Hypothesis: After LOMC designation, the incidence of SMM and maternal mortality should decrease in Level I/II centers*
- **Secondary**: To assess changes in the types of SMM pre- and post-institution of levels of maternal care across centers.
 - *Hypothesis: After LMOC designation, the distribution of categories of SMM at all centers will change*

Methods

- Retrospective/Prospective data collection
- Data extracted:
 - *Demographic characteristics (if available)*
 - *Maternal death*
 - *CDC SMM indicators (21 indicators)*
- Review data 2 years pre- and post-LOMC implementation
- Confounder – COVID-19

Impact

- If LOMC has not changed rates/distribution of SMM/mortality, then additional evaluation will be indicated to improve current practices
- If there is a difference in SMM type between facilities focused level-specific education can be directed to improve those rates