

## INTRODUCTION

Respectful Maternity Care (RMC) is critical for improving maternal outcomes, patient satisfaction, and trust in healthcare systems, especially in resource-constrained settings. However, disparities in infrastructure, staffing, training, and accessibility continue to affect the quality of RMC experienced by women. Previous assessments often relied on simple Ordinary Least Squares (OLS) regressions without addressing the structural complexities inherent in healthcare service delivery. This study applies a range of advanced econometric techniques to disentangle how facility-level and patient-level factors influence RMC, providing more robust and policy-relevant insights.

## RESULTS

### Clustered OLS regression:

The clustered OLS model identifies key facility and clinical variables associated with Respectful Maternity Care (RMC). Higher KAT scores, better labor room quality (Total\_score\_LR), and greater emergency nursing staff (CEMONC\_number\_SNs) improve RMC, while higher maternal death rates, shortage of clinical inputs, and longer travel times reduce it. Although robust to intra-district correlation, this model remains vulnerable to bias from unobserved facility characteristics.

### Fixed Effects (FE):

The Fixed Effects model controls for unobserved differences across facility types, improving causal interpretation. Inputs shortage, fewer sanitation workers, and overburdened maternity staff significantly reduce RMC within facility types, while better operating theatre conditions improve it. Interestingly, higher KAT scores are negatively associated with RMC, highlighting a potential disconnect between technical training and patient-centered behaviors.

### Random Effects (RE):

After confirming RE validity via Hausman testing, the Random Effects model shows that travel time and type of delivery are the strongest predictors of RMC. Facilities with longer travel burdens and more non-consensual deliveries report significantly worse care experiences. The RE model captures both within- and between-facility variation, making it useful for broader health policy design despite its reliance on orthogonality assumptions.

## OBJECTIVE

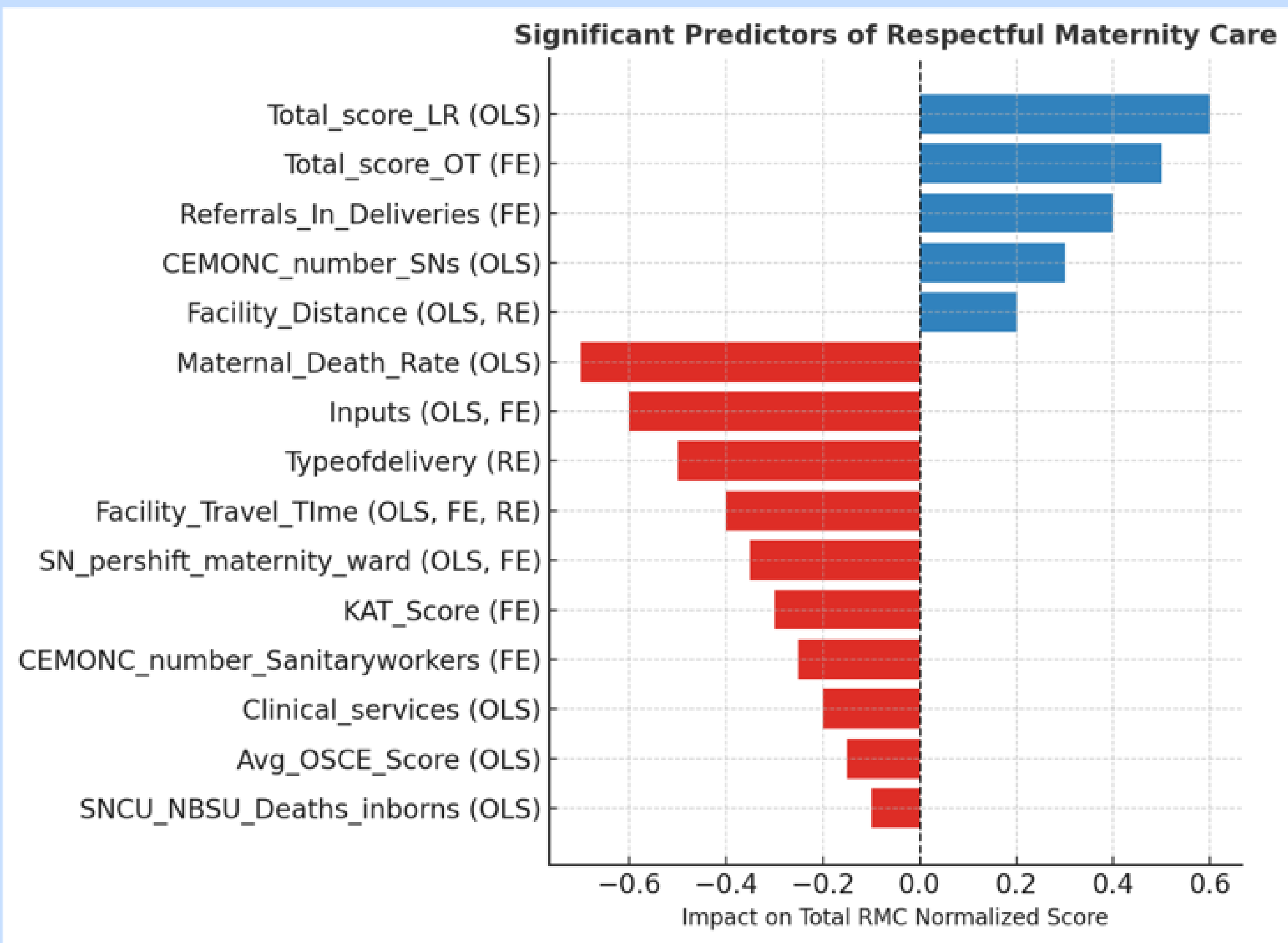
The primary objective of this study is to identify and rank the key drivers of Respectful Maternity Care outcomes across healthcare facilities. Specifically, we aim to examine the relationship between healthcare inputs (infrastructure, staffing, training) and RMC experience.

## METHODOLOGY

We utilized a multi-method econometric approach. We used the following methods to account for intra-district error correlations and control for unobserved heterogeneity across facility types and districts.

- Clustered OLS regression
- Fixed Effects (FE) model
- Random Effects (RE) model

Figure 1: Significant predictors under econometrics scope.



## CONCLUSION

Key facility factors like staffing, clinical resources, and travel time significantly influence Respectful Maternity Care. Robust econometric analysis highlights urgent priorities for targeted healthcare improvements.

## REFERENCES

LaQshya Program Raw Dataset, Ministry of Health and Family Welfare, Government of India.