

# EXCESS FACILITY-BASED C-SECTION RATES IN NEPAL HIGHLIGHTS CHALLENGE IN HARNESSING PRIVATE SECTOR CAPACITY TO MEET MATERNAL HEALTH GOALS IN LOW-INCOME COUNTRIES

Maureen Dar lang, Madhu Devkota, Shanti Mahendra, Vishnu Prasad Sapkota, Alison Dembo Rath and Punya Poudel

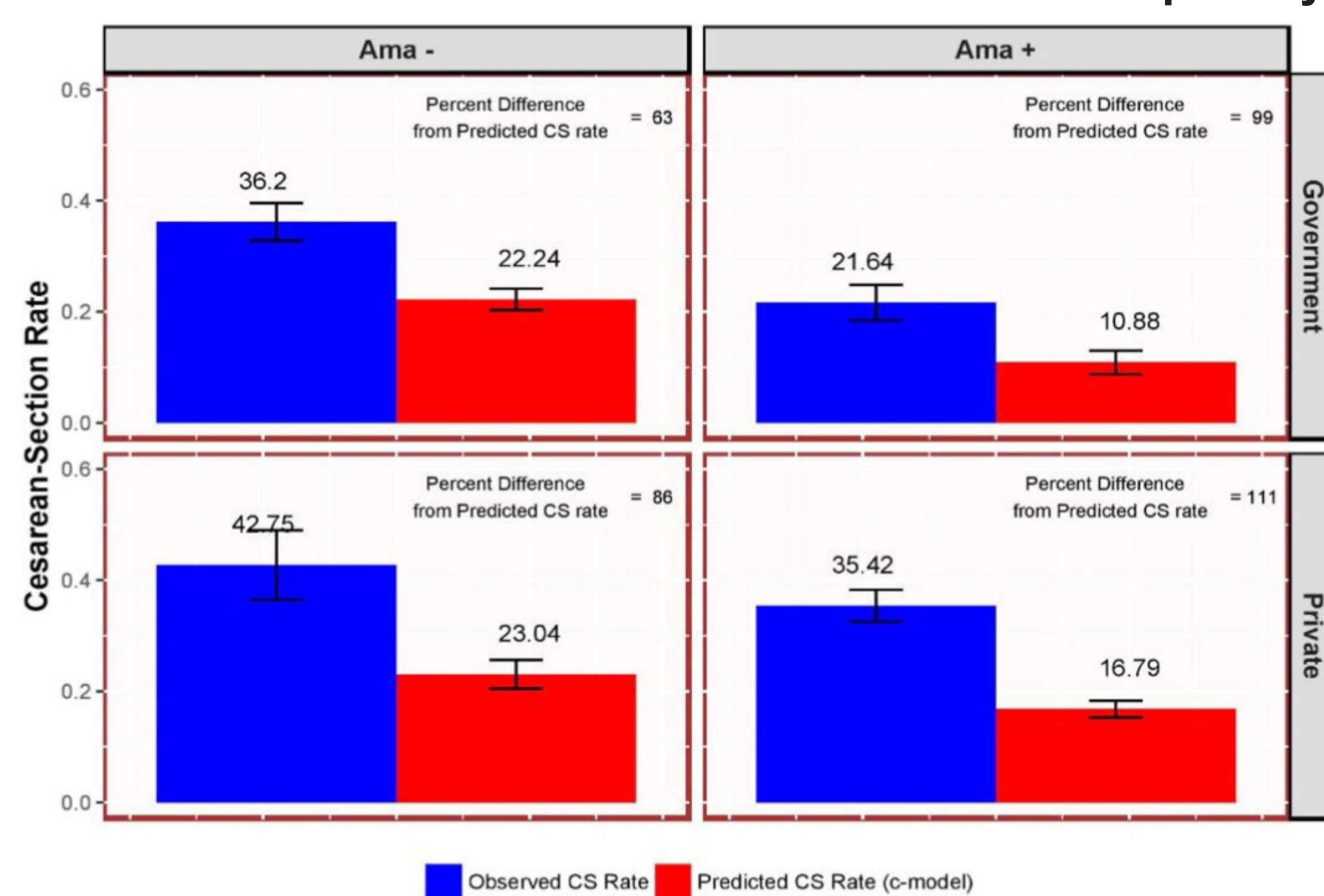
## BACKGROUND

In Nepal, 43% of all births are in public and 10% in private facilities, with Caesarean section rates of 12% and 35% respectively. Nepal's population-level C-section rate of 8.6% falls within WHO recommended 5-15%, but appropriateness of observed rates at facility-level is difficult to assess, due to differences in case mix. Access to obstetric care is supported through the Government 'Aama' programme, which pays enrolled public and private hospitals' costs for providing normal and complicated deliveries, with different reimbursement rates for each.

## FINDINGS

- In all four categories of facilities, the observed C-section rates were higher than the predicted reference rates, with the greater difference noticed in private facilities.
- C-section rates observed in Aama enrolled government facilities were 22% versus 11% predicted, and 36% versus 22% in non-Aama government facilities.
- In private facilities enrolled in Aama, the observed rates were 35% versus 17% predicted and 43% versus 23% in non-Aama private facilities.
- In private hospitals enrolled in Aama, among women with first pregnancy (full-term single baby, cephalic presentation), 22% with spontaneous onset of labour and 76% who had induced or pre-labour underwent a C-section. The C-section rates for these two groups of women were highest in private facilities.
- In public hospitals enrolled in Aama, these rates were 13% and 68% respectively. These two groups of women contributed to nearly half of all the deliveries.
- Almost 85% of women with a previous C-section had another C-section for their next birth.

Predicted and Observed C-Section Rates across Hospital Types



## CONCLUSION

The results of this study suggest facility C-section rates in Nepal are high, relative to the WHO reference rate, markedly so in private facilities (both Aama and non-Aama). The public-private partnership for Aama that exists in Nepal for maternity care aims to reduce mortality and morbidity. However, excessive C-section rates subvert this goal and absorb scarce public funds. Strategic purchasing arrangements with the private sector need to be reviewed to ensure they are not incentivising oversupply. C-section rates can be monitored periodically against benchmarks.

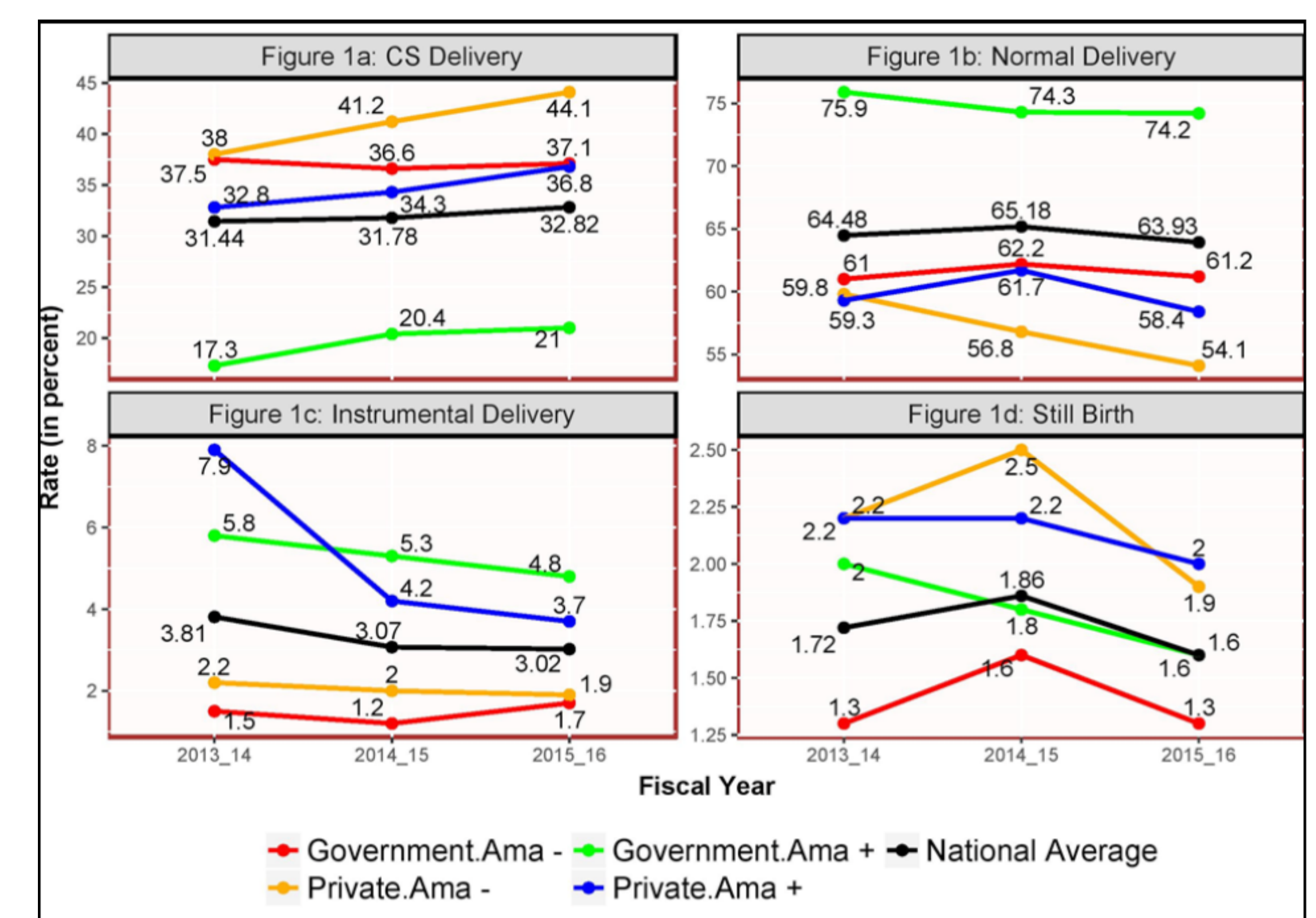
### References

- JP Souza, AP Betran, A Dumont, et al. A global reference for caesarean section rates (C-Model): a multicountry cross-sectional study. *BJOG* 2016;123:427-436.
- M Robson, M Murphy, F Bryne. Quality assurance: The 10-Group Classification System (Robson classification), induction of labor, and cesarean delivery, *International Journal of Gynecology and Obstetrics* 131 (2015) S23-S2

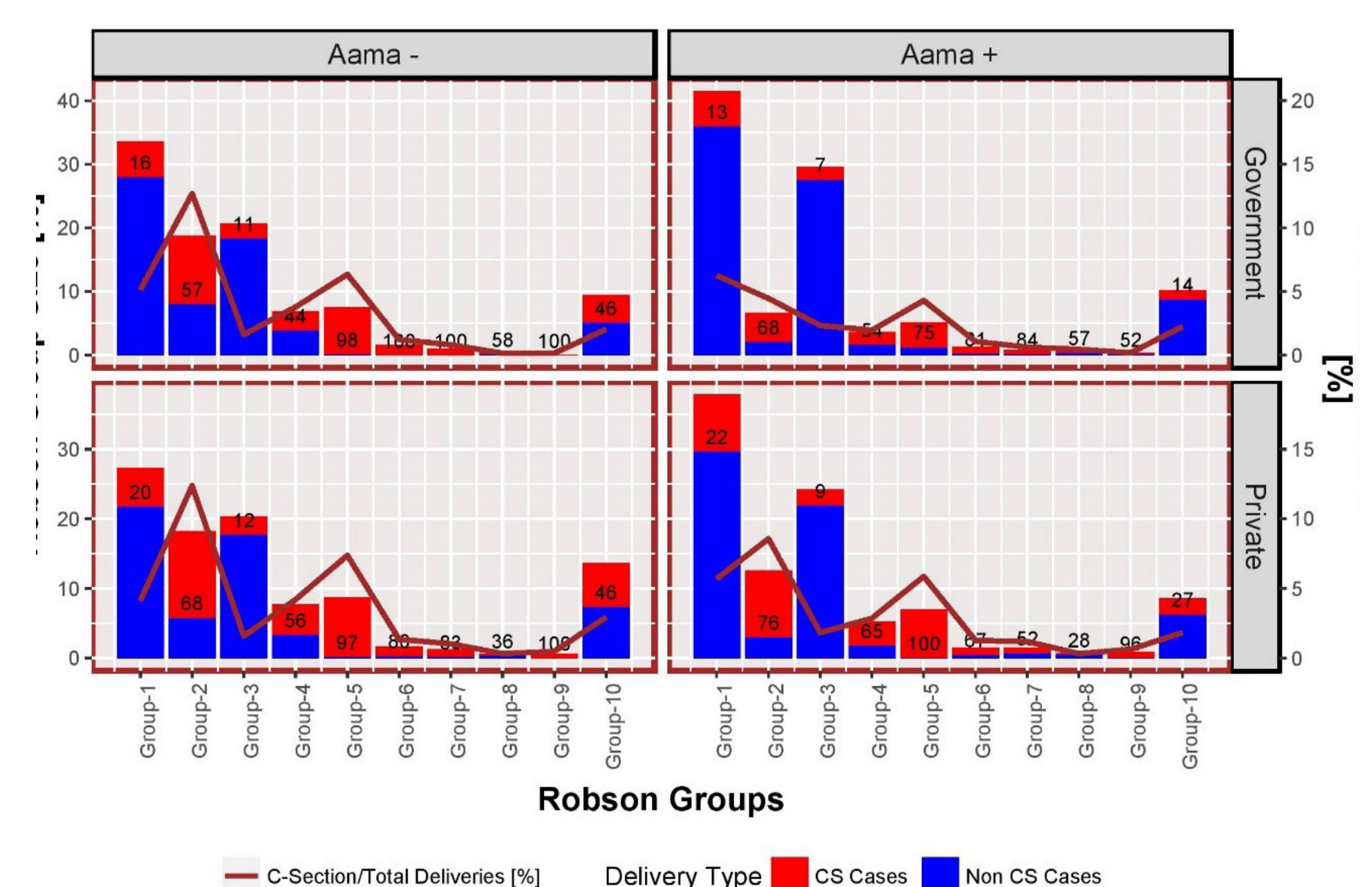
## METHODS

A two-stage stratified cluster random sampling strategy was adopted to randomly selected public and private hospitals, enrolled or not-enrolled in Aama programme. The inclusion criteria were facilities with a minimum of 500 births per-annum and C-section rate >10%. The study included 4680 births at 29 hospitals, of which 18 were in private facilities and 11 in government. Half of the private facilities and nine government facilities were enrolled in Aama. Facility C-section rates were analysed against WHO's C-model benchmarks to explore actual versus predicted rates in four categories, government and private, with or without Aama.

Trend of CS rates across hospital types between 2013 and 2016



Robson Classification of Deliveries at Admission Group-wise and Overall CS Rate



In partnership with and supported by:

