

The impact of surgical task-sharing in Sierra Leone: a nationwide longitudinal study on surgical capacity and activity, 2012 to 2023

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Background:

A surgical task-sharing programme redistributing surgical tasks within a limited healthcare workforce was initiated by the Sierra Leonean Ministry of Health in 2011. The aim was to enhance public surgical capacity, equalize access between urban and rural populations, and strengthen emergency obstetric care.

Methods:

This longitudinal nationwide study, involving all healthcare facilities with an operating theater in Sierra Leone, analyzed changes in volume and population rates of surgery and distribution of surgical resources before (2012), five- (2017), and ten-years after introducing the task-sharing initiative (2023).

Results:

Surgical volume rates increased from 400 to 506 procedures per 100,000 population between 2012 and 2023. The public sector became the main provider performing 60.5% of all operations in 2023, up from 39.6% in 2012 (Fig. 1).

Rural surgeries increased by 55.4% over the decade, far more than in urban areas. In rural areas, there was a transition from non-specialized physicians performing 46.2% of operations in 2012 to associate clinicians performing 54.9% in 2023 (Fig. 2).

Nationwide cesarean section rates increased from 1.4% (2012) to 5.3% (2023). Cesarean sections were in 2023 mostly performed in public facilities (85.5%) by associate clinicians (57.7%) (Fig. 3).

Conclusion:

Sierra Leone experienced the past ten years a transition of surgical provision from private to public institutions, from urban to rural areas, a strengthened emergency obstetric care.

The introduction of a nationwide surgical task-sharing initiative to strengthen district governmental hospitals in 2011 emerged as the major contributor to the transition in surgical activity and output observed in the last decade.

Fig 1: Surgeries by sector

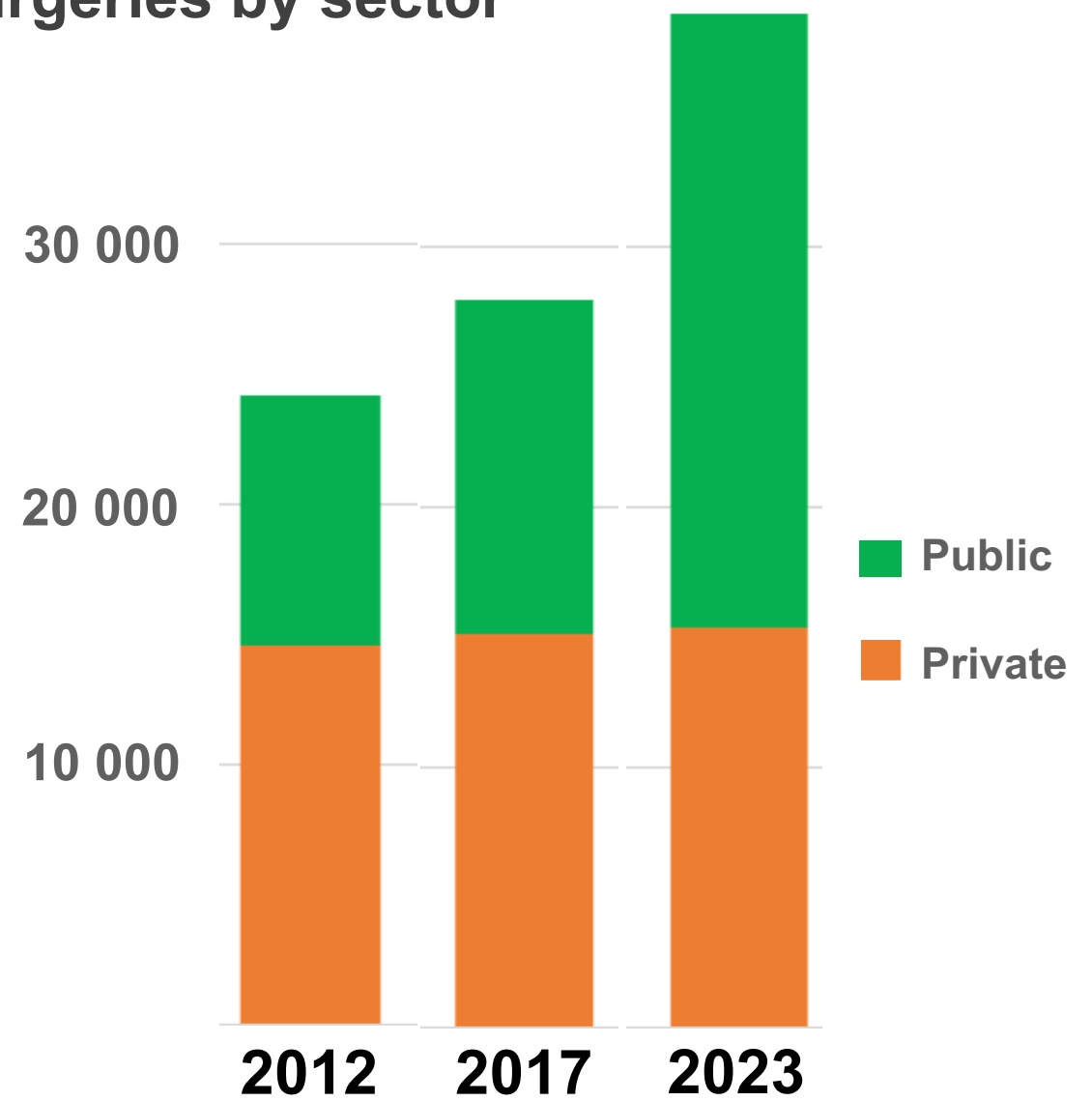


Fig 2: Surgeries by cadre

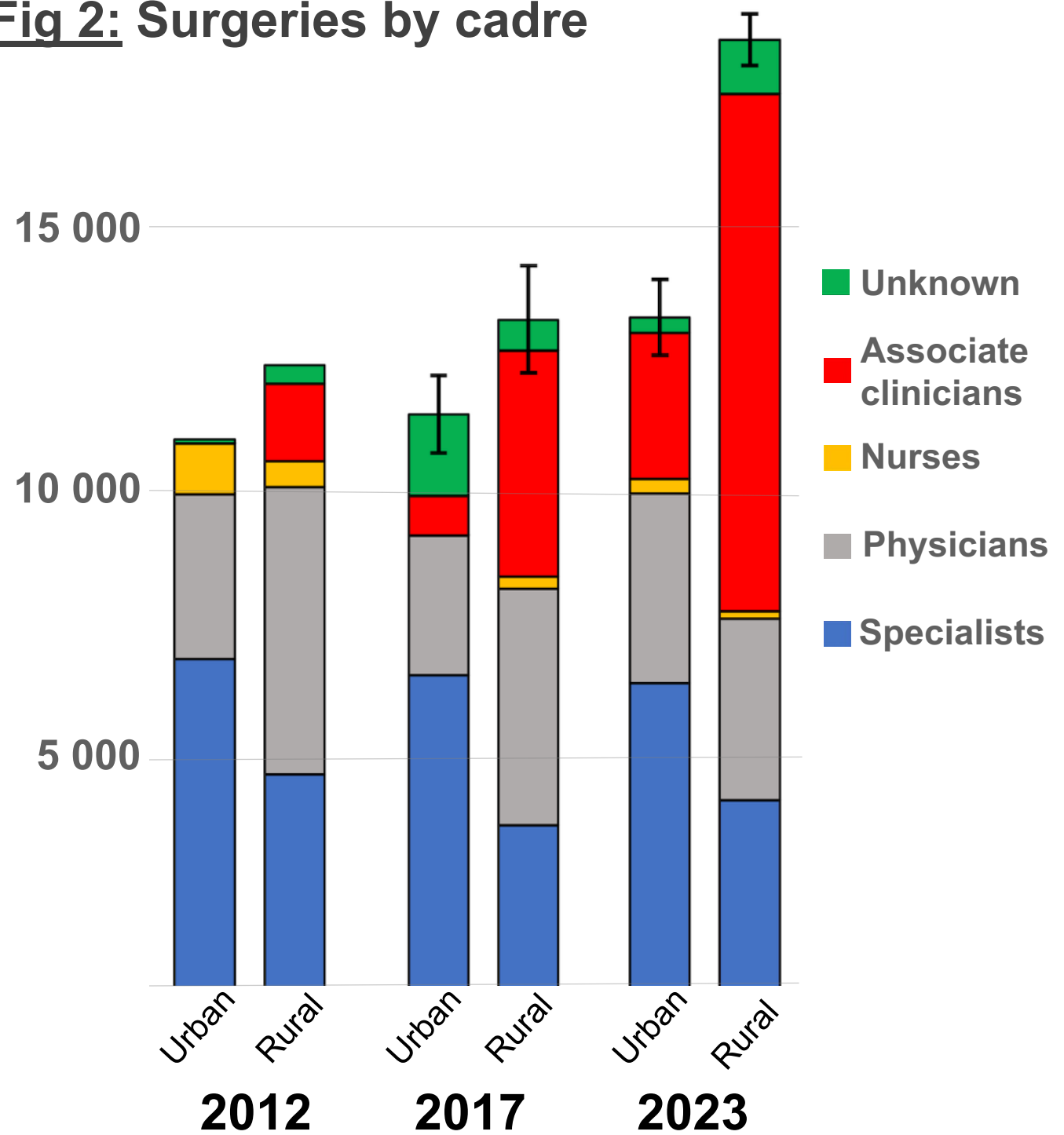


Fig 3: Caesarean sections

