

Title: Evaluating Ethiopia's Current Surgical Capacity Utilizing the Lancet Commission on Global Surgery 2030 Metrics: A Narrative Review

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ABSTRACT

Background: Surgical, anesthetic, and obstetric (SAO) care is rapidly recognized for its pivotal contribution to reducing global mortalities. The Lancet Commission on Global Surgery (LCoGS) outlined six indicators to further strengthen SAO care. The WHO also recommends SAO services integrations into the country's healthcare to understand service provisions in assisting in devising policies to navigate gaps in service delivery. Ethiopia's surgical services remain unevaluated utilizing the LCoGS framework. This study reviewed Ethiopia's current surgical capacity using the six LCoGS indicators.

Methods: We conducted a narrative review of published literature on critical LCoGS metrics to extract information on key domains; service delivery, workforce, infrastructure, finance, outcome, and information management.

Results: Immature healthcare systems, alongside other challenges, affected Ethiopians receiving high-quality SAO care. The surgical volume and specialist physicians' rate were 43 and 0.5 per 100,000, respectively. Of the facilities analyzed, 44% were capable of bellwether procedures. Over 80% of operations were essential; primary hospitals had limited operative infrastructures. 50% of Ethiopians did not live within 2-hour access to surgery-ready hospitals. 98% faced impoverished expenditures due to surgery, defined as out-of-pocket expenses that would drive a person into extreme poverty. Disparities in surgical capacity remain; approximately 90% of surgery-ready facilities were in cities, leaving Ethiopia's 80% of the rural population with insufficient access to surgical care. The absence of perioperative mortality rate (POMR) tracking systems made understanding outcomes challenging.

Conclusion: Ethiopia's surgical capacity is distant from the LCoGS recommendations due to several obstacles, mainly lacking adequate infrastructure and data retrieval techniques. Comprehensive scaling-up of surgical access, workforces, public insurance plan, and data tracking systems are critical to strengthening services.

Keywords: Ethiopia; surgical, anesthetic, and obstetric care; bellwether procedures; surgical capacity; Lancet Commission on Global Surgery; surgical services