



Closing the data gaps for surgical care delivery in LMICs

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In their study in *The Lancet Global Health*, Tarsicio Uribe-Leitz and colleagues¹ find great discrepancies in surgical outcomes across the regions of the world.¹ The authors examined three procedures that are fairly standardised in their operative indications and techniques (caesarean delivery, appendectomy, and groin hernia repair), and thus for which reporting should be nearly uniform. By undertaking a robust systematic review, Uribe-Leitz and colleagues have shown that quality surgical outcome data are a relatively void zone in low-income and middle-income countries (LMICs). Indeed, most LMICs do not currently report surgical outcome data. Comparison of outcomes across the relatively few LMICs that actually report these data shows tremendous variability and much room for improvements to surgical care. Through rigorous modelling efforts, the authors seek to fill some of these information gaps. The resultant analysis gives us an idea of regional so-called hotspots in surgical quality from a 30 000-foot perspective. Thus, this study contributes greatly to the extant literature by providing a broad strokes summary of many of the challenges in global surgical quality. These findings should prove useful in driving home global public health policy agenda that emphasize the need to decrease variability in surgical outcomes to ensure safer surgery in the world, and hence save more lives.

Although the take-home message is clear and to be applauded, the precision of these estimates shows an additional gap in our knowledge. The wide CIs around the data presented by the authors are byproducts of challenging modelling and insufficient primary data. The process of multiple imputation informs us grossly about performance and quality across regions, but it cannot give us granular national and subnational data. This information would show the on-the-ground realities in each country or about the health-care delivery system within each country, which will also show great variability. Thus, although these data represented are useful for global policy advocacy, they cannot help countries, national professional societies, hospitals, or individual practitioners to make decisions on how to improve quality in their daily context. What are needed to assure and improve quality are assessments that originate closer to the ground. To quote Margaret Chan, Director General

of WHO, "...the real need (in global health) is to close the data gaps, especially in low and middle-income countries, so that we no longer have to rely heavily on statistical modelling for data on disease burden."²

More than ever before, there is hope that this level of reporting for the sake of quality improvement can be achieved via several new initiatives. The recent *Lancet* Commission on Global Surgery has advocated that all countries develop National Surgical Plans,³ in which goals for surgical care delivery, quality improvement, and financing are established locally. Such plans should also set goals and standards for data collection on surgical delivery and outcomes. There is also a movement towards organising country-level data collection on outcomes at regional or continental levels. Examples include the European Surgical Outcomes Study (EuSOS),⁴ the South African Surgical Outcomes Study (SASOS),⁵ and the upcoming African Surgical Outcomes Study (ASOS).⁶ Through the collective efforts of the G4 Alliance and the *Lancet* Commission on Global Surgery, the WHO has recently accepted several new surgically oriented indicators to be added to its Global Reference List of Core 100 Health Indicators.⁷ The *Lancet* Commission on Global Surgery has also recently collected data for crucial surgical indicators from more than 70 countries and submitted these data to the World Bank for consideration of inclusion in their World Development Indicators list.⁸ These efforts will hopefully result in annual reporting of surgical indicators by countries around the world. This type of nationally based global reporting of outcomes data will begin to fill the gaps that this study reveals. A final example is the Pan American Trauma Society International Trauma Registry.^{9,10} This is an externally supported, web-based trauma registry currently used in more than ten sites in Latin America, which enables local surgeons to identify opportunities for systems improvements aimed at reducing morbidity and mortality in trauma patients. This registry collaboration ensures that data collection, and its use for quality improvement, is locally driven and still benefits from international support and organisation.

By showing the great variability in surgical outcomes across LMICs, Uribe-Leitz and colleagues¹ have shared with the world instructive knowledge that aids our ongoing advocacy efforts to promote quality in

surgical care in resource-limited settings. Ultimately, for destitute sick and injured patients to receive safe surgical and anaesthesia care when needed, it is necessary for surgeons, hospitals, professional societies, and nations to have access to trustworthy data, that are locally generated, upon which to base quality improvement initiatives. It would seem that the global community might be at the beginning of such an era.

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We declare no competing interests

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