



Global Surgery 2030

evidence and solutions for achieving health, welfare, and economic development

Policy Brief:

ACTIONS AND OPPORTUNITIES FOR LOW-INCOME AND MIDDLE-INCOME COUNTRIES

Global Surgery 2030: evidence and solutions for achieving health, welfare, and economic development provides a compelling argument that surgery is an indispensable part of a functional health system for countries at all stages of development. In most low-income and middle-income countries (LMICs) access to safe, affordable surgical care when needed remains out of reach for over 90% of the population. In the absence of surgical services, common, treatable conditions such as appendicitis, broken bones, and obstructed labour have high death rates. In addition to the health impacts, untreated surgical conditions significantly affect economic productivity, growth, and development. The Global Surgery 2030 report shows that without urgent scale-up of surgical care, LMICs will have projected economic losses from surgical conditions estimated at \$12.3 trillion dollars (2010, US\$, PPP) between 2015-2030, reducing annual income growth by as much as 2% in some countries. However the report also outlines that scale-up of surgical care in LMICs over the next fifteen years is affordable, cost-effective, feasible, and can result in widespread health, welfare and economic returns on investment, both for individuals and their countries.

Although the causes of inadequate and inequitable surgical care are a global concern and responsibility, improvements in surgical care will ultimately be realised at the national level, through the programs, services and policies implemented in LMICs by national governments and delivered by local providers. Global Surgery 2030 outlines key recommendations for countries to follow, including a template for a national surgical plan, that can accelerate surgical scale-up and facilitate substantial health, welfare, and economic gains.

Improve health, welfare, and economic development through increased access to surgical and anaesthesia care

Scale up surgical and anaesthesia care, focusing on attaining good population coverage with first-level surgical services

To improve health, welfare, and economic development in LMICs, national governments must make a political commitment to scale-up surgical care, and mobilise the necessary human, technical and financial resources to do so. In the poorest countries, the focus should be on attaining good population coverage with first-level (district) hospital services capable of providing safe and timely surgical care. Global Surgery 2030 identifies three key indicator operations that predict the ability of a first-level hospital to provide a broad range of essential surgical services: these are caesarean delivery for obstructed labour, laparotomy for abdominal emergencies, and treatment of open fractures following trauma. In middle-income countries, where there is generally better coverage with basic surgical care, a focus on quality, safety, and equity in access to surgical care is needed. All countries should aim for a minimum operative volume of 5000 procedures per 100,000 population in order to realise associated health and development gains.

Increase domestic spending on health and invest in the health system, including surgical and anaesthesia care

Scale-up of surgical care in LMICs will require both broad health systems investment and targeted financing of surgical services, including investments in physical infrastructure, equipment, supply chains, and human resources. The total cost of surgical scale-up represents about 1% of current total annual health expenditures for upper-middle income countries, and about 6% and 8% for lower-middle income countries and low-income countries respectively. Although the costs of achieving surgical scale-up are high, particularly in the poorest countries where surgical resources are severely lacking, the projected economic benefits of scale-up significantly exceed the costs of the initial investment. While low-income countries will require some external assistance to finance surgical scale-up, many middle-income countries will be able to meet the costs of scale-up through the mobilisation of domestic resources alone.

Aggressively scale-up human resources for health, including for surgical and anaesthesia care

One of the major barriers to realizing the health, welfare, and economic gains better access to surgical care can bring to populations is the severe deficit of trained providers in LMICs. This includes surgical, anaesthesia and obstetric (SAO) providers, as well as those in ancillary services such as laboratories, blood banks, radiology, pathology, nursing, and physiotherapy. Countries must be proactive in planning, funding and implementing human resource programs for surgical care, at both a training and vocational level in order to meet population needs. Ministries of Health should develop surgical workforce plans to achieve surgical workforce SAO densities of 20-40 per 100,000 population with adequate rural and urban distribution. Wherever possible graduate and postgraduate training of surgical providers at accredited institutions should occur within the country, and trainees should be exposed to a variety of practice settings including rural settings. The international community can partner with countries to strengthen training and expand the surgical workforce by providing technical and financial support.

Embed surgical and anaesthesia care and strong health systems within key national health and development goals

Develop a national surgical plan to quantify baseline surgical capacity and track progress over time

Ministries of Health should develop a national strategic health plan that specifically addresses surgical care and sits within a broader strategy for national health system improvement. A national surgical plan is essential for the proper planning and delivery of services, training and research. *Global Surgery 2030* provides a template for a national surgical plan that addresses five major domains of surgical system development: infrastructure, workforce, service delivery, information management, and financing. This template also provides recommendations to national governments on areas of focus for step-wise improvement in each domain, as well as methods to monitor and evaluate progress.

Commit to health financing mechanisms that provide financial risk protection and promote health equity

In order to improve access to surgical care and reduce poverty associated with paying for surgical treatment in LMICs, countries must commit to the introduction of health financing mechanisms that safeguard people from catastrophic health expenditure. For many LMICs this requires moving away from direct health financing mechanisms that rely on out-of-pocket payment for surgical services at the point of care, to indirect financing mechanisms such as general taxation and social insurance, which pool risk. Universal health coverage (UHC) should be the ultimate goal of national governments. Governments should adopt health policies that support progressive expansion of services towards UHC, and commit to covering the poor (who are the most likely to face impoverishment from disease) from the outset.

Include surgical and anaesthesia care within the essential package of health services covered under Universal Health Coverage (UHC) policies

Although surgical care can improve health and fight poverty in LMICs, use of surgical services can also be impoverishing for households in the absence of effective financial risk protection. National UHC policies should cover a minimum basic package of essential surgical care early in the coverage expansion pathway. The precise components of such a package should be determined at a country level. Several features of surgical care necessitate its inclusion within essential health coverage packages in LMICs. A substantial proportion of surgical conditions in LMICs are time-critical and life- or limb-threatening. User fees for surgical care are often high and payments made out-of-pocket by patients can result in large rates of catastrophic expenditure and impoverishment relative to other health interventions. Emergency surgical conditions (e.g. trauma) are not predictable, making it difficult for households to foresee, plan, or save for the financial outcomes.

Ensure health policies and services aimed at curbing maternal and neonatal deaths, non-communicable diseases, and injuries include provision of surgical and anaesthesia care

Surgical care plays an integral role in averting death and disability from maternal conditions such as obstructed labour, neonatal conditions such as cleft palate, NCDs such as breast and cervical cancer, and injuries. Governments must therefore ensure that health policies and services targeted to the prevention of maternal and child deaths, NCDs, and injuries specifically make provision for surgical services in order for these policies to be effective.

Develop clinical audit, impact evaluation, and health research capabilities to generate locally relevant data on surgical and anaesthesia services and outcomes.

Measuring surgical volumes, baseline surgical capacity and surgical outcomes at a country level are important for identifying and addressing strengths and weaknesses in surgical care provision. Ministries of Health, academic institutions, and health service providers can all participate in monitoring and evaluation and research activities to generate locally-relevant surgical and anaesthesia data.

Commit to collecting data on key surgical indicators and use this data to monitor progress and inform health policy and service provision

Ministries of Health should commit to collecting data on key global surgical indicators, as outlined in the *Global Surgery 2030* report. These indicators cover access to timely essential surgery, specialist surgical, anaesthesia and obstetric workforce density, surgical volume, perioperative mortality rate, and measures of financial risk protection at the country level. Collection of standardized surgical indicators allows countries to identify areas of unmet need and monitor progress over time, as well as benchmark their performance against that of other countries at similar levels of development. It is vital that collected data is used to inform rationale decision-making by countries regarding policy-setting and resource allocation.