Global Surgery 2030

Core indicators for monitoring universal access to safe, affordable surgical and anaesthesia care when needed

Indicator	Definition	Rationale	Data Sources	Responsible Entity	Comments	Target
Group 1: Preparedness for surgical and anaesthesia care						
Access to timely essential surgery	Proportion of the population that can access, within 2 hours, a facility that can do caesarean delivery, laparotomy and treatment of open fracture (the Bellwether procedures)	All people should have timely access to emergency surgical services. Bellwether procedure performance predicts accomplishment of many other essential surgical procedures; 2 hours is a threshold of death from complications of childbirth	Facility records and population demographics	Ministry of Health	Informs policy and planning regarding location of services in relation to population density, transport systems and facility service delivery	A minimum of 80% coverage of essential surgical and anaesthesia services per country by 2030
Specialist surgical workforce density	Number of specialist surgical, anaesthetic and obstetric physicians who are working, per 100 000 population	The availability and accessibility of human resources for health is a crucial component of surgical and anaesthesia care delivery	Facility records, data from training and licensing bodies	Ministry of Health	Informs workforce, training and retention strategies	100% of countries with at least 20 surgical, anaesthetic, and obstetric physicians per100 000 population by 2030
Group 2: Delivery of surgical and anaesthesia care						
Surgical volume	Procedures done in an operating theatre, per 100 000 population per year	The number of surgical procedures done per year is an indicator of met need	Facility records	Facility, Ministry of Health	Informs policy and planning regarding met and unmet need for surgical care	80% of countries by 2020 and 100% of countries by 2030 tracking surgical volume; 5 000 procedures per 100 000 population by 2030
Perioperative mortality rate (POMR)	All-cause death rate prior to discharge among patients who have undergone a procedure in an operating theatre, divided by the total number of procedures, presented as a percentage	Surgical and anaesthesia safety is an integral component of care delivery; perioperative morality encompasses deaths in the operating theatre and in the hospital after the procedure	Facility records and death registries	Facility, Ministry of Health	Informs policy and planning regarding surgical and anaesthesia safety, as well as surgical volume when number of procedures is the denominator	80% of countries by 2020 and 100% of countries by 2030 tracking perioperative mortality; in 2020, assess global data and set national targets for 2030
Group 3: Impact of surgical and anaesthesia care						
Protection against impoverishing expenditure*	Proportion of households protected against impoverishment from direct out-of-pocket payments for surgical and anaesthesia care	Billions of people each year are at risk of financial ruin from accessing surgical services; this is a surgery-specific version of a World Bank universal health coverage target	Household surveys, facility records	World Bank, WHO, USAID	Informs policy about payment systems, insurance coverage, and balance of public and private services	100% protection against impoverishment from out-of-pocket payments for surgical and anaesthesia care by 2030
Protection against catastrophic expenditure†	Proportion of households protected against catastrophic expenditure from direct out-of-pocket payments for surgical and anaesthesia care	Billions of people each year are at risk of financial ruin from accessing surgical services; this is a surgery-specific version of a World Bank universal health coverage target	Household surveys, facility records	World Bank, WHO, USAID	Informs policy about payment systems, insurance coverage, and balance of public and private services	100% protection against catastrophic expenditure from out-of-pocket payments for surgical and anaesthesia care by 2030

*Access, workforce, volume, and perioperative mortality indicators should be reported annually. Financial protection indicators should be reported alongside the World Bank and WHO measures of financial risk protection for universal health coverage. These indicators provide the most information when used and interpreted together; no single indicator provides an adequate representation of surgical and anaesthesia care when analysed independently. USAID=US Agency for International Development. Equity stratifiers are listed in report's discussion. *Impoverishing expenditure is defined as being pushed into poverty or being pushed further into poverty by out-of-pocket payments. †Catastrophic expenditure is defined as direct out-of-pocket payments of greater than 40% of household income net of subsistence needs.*

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