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Reimagining Maternal Newborn Health – Actions for the Unfinished Agenda

Safe Surgery: How to Make Obstetric and Anesthesia Care Available Everywhere

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Outline

- Context
- What does it mean to improve access to safe surgery
- What are the key areas of intervention
- What to prioritize

The Lancet Commission on Global Surgery

*5 billion people do not have access to safe, affordable surgical and anaesthesia care when needed. Access is worst in low-income and lower-middle-income countries, where **nine of ten people cannot access basic surgical care...***



33 million individuals face catastrophic health expenditure due to payment for Surg/Anes

Surgical Disease Burden

11-18% of Burden of Disease



143 million surgical procedures needed every year to save lives and prevent disability

33 million individuals face catastrophic health expenditure due to payment for Surg/Anes

Cost of Increasing surgical capacity in developing countries:

\$350 Billion

Cost of NOT investing in essential surgical and anaesthesia care:

\$12.3 Trillion

Context

- Sustainable Development Goals (SDGs) proposals include highly ambitious targets that would require high rates of change by 2030

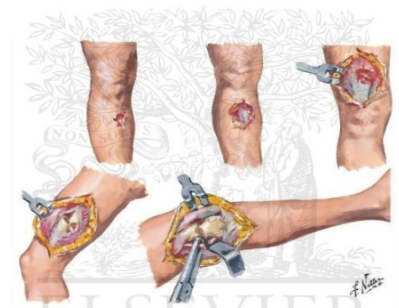
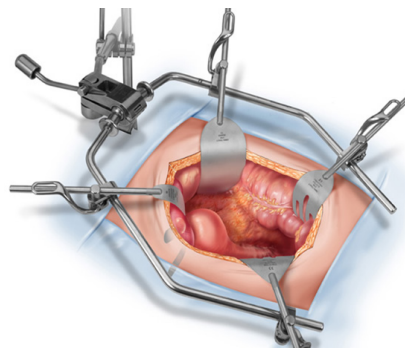
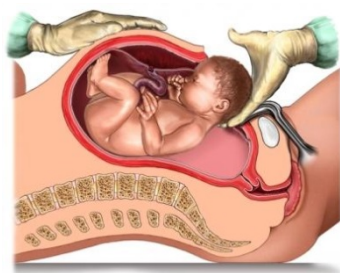
For example, child and maternal mortality would need to decline in all low-income and middle-income countries at rates observed among “best performer” countries of about 6–7% per year (best performers are those that have achieved the fastest historical declines in mortality)

Commit to the 2030 Agenda for Sustainable Development

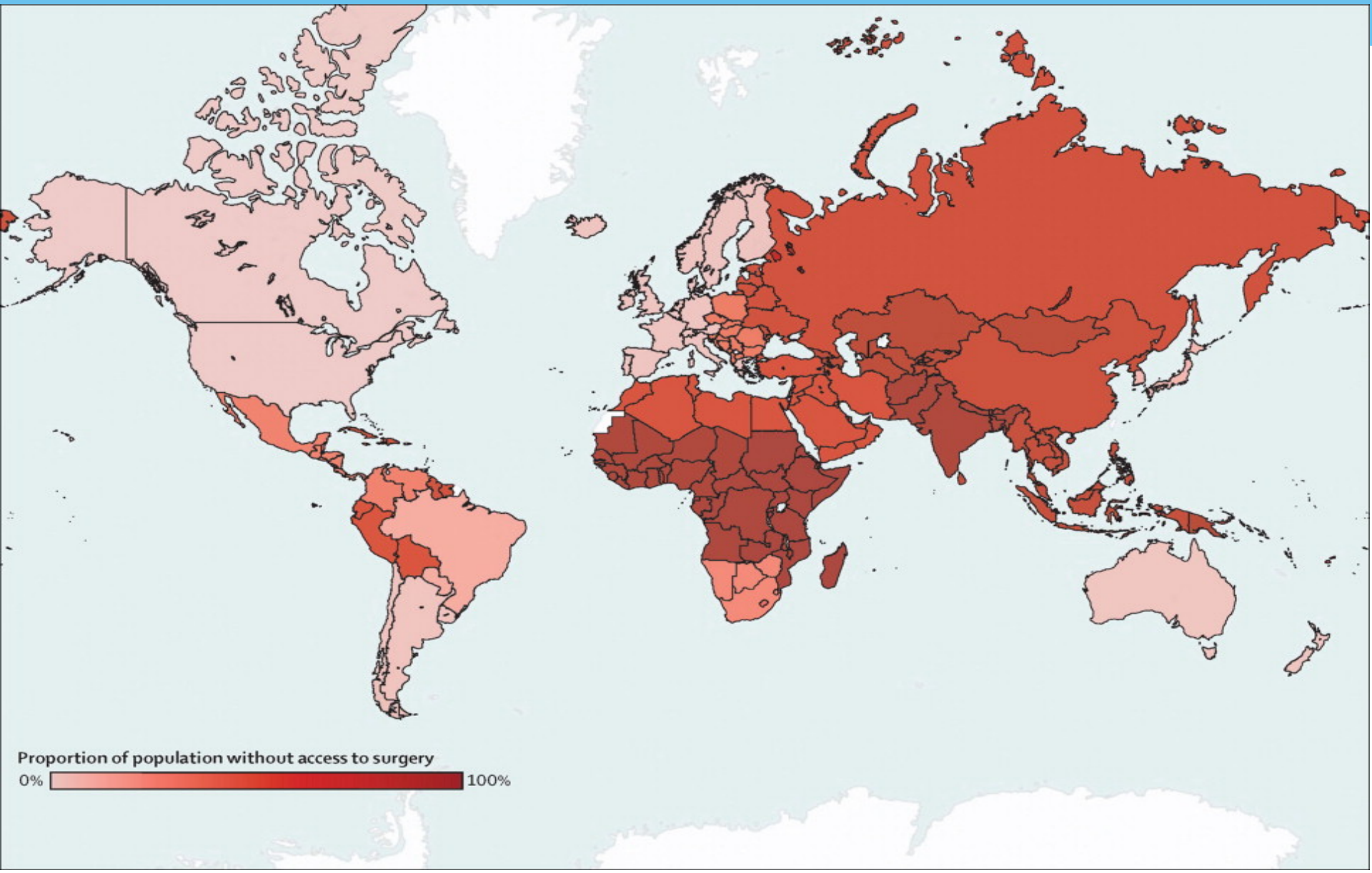


	Definition	Target
Access to timely essential surgery	Proportion of the population that can access, within 2 hr, a facility that can do Caesarean delivery, laparotomy and treatment of open fractures	A minimum of 80% coverage of ESS and Anesthesia services per county by 2030
Specialist surgical work force density	Number of specialist surgical, anesthetic and obstetric physicians who are working per 100000 population	100% of countries at least 20 surgical, anesthetic and obstetric physicians per 100000 by 2030

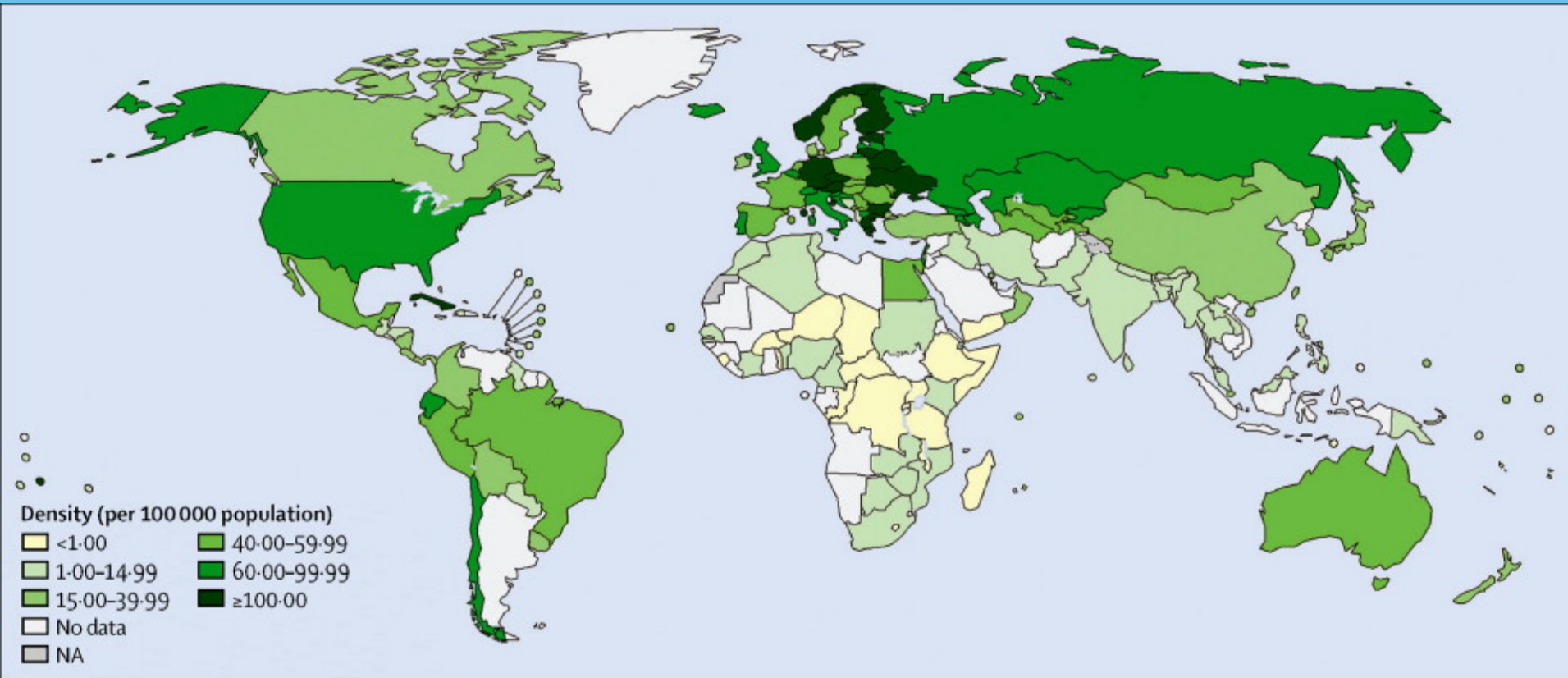
Table: Core Indicators for Monitoring of Universal access to safe, affordable surgical and anesthesia care when needed



Proportion of population without access to Surgery



Insufficient work force in locations with highest need

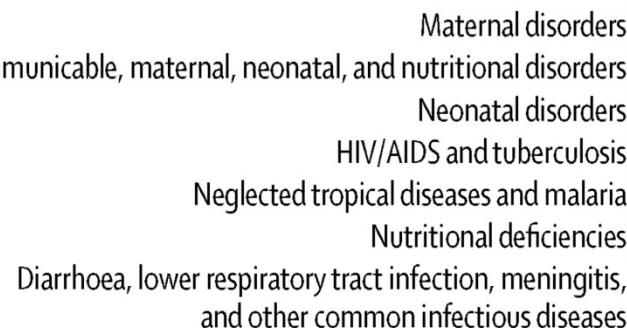


Figure

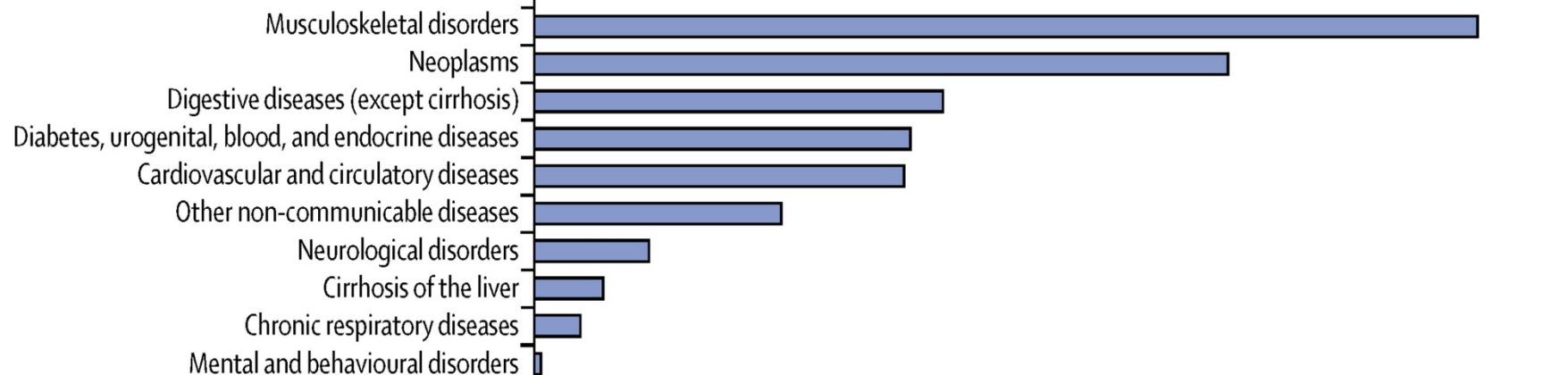
- Global distribution of surgeons, anesthesiologists, and obstetricians, per 100 000 population
- NA=countries or territories that are not WHO members and thus excluded from our data.

GBD disease categories

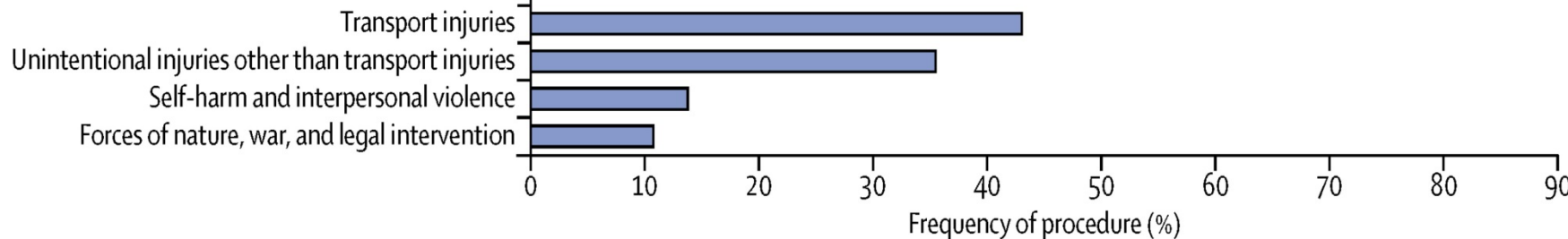
1. Communicable, maternal, neonatal, and nutritional disorders



2. Non-communicable diseases



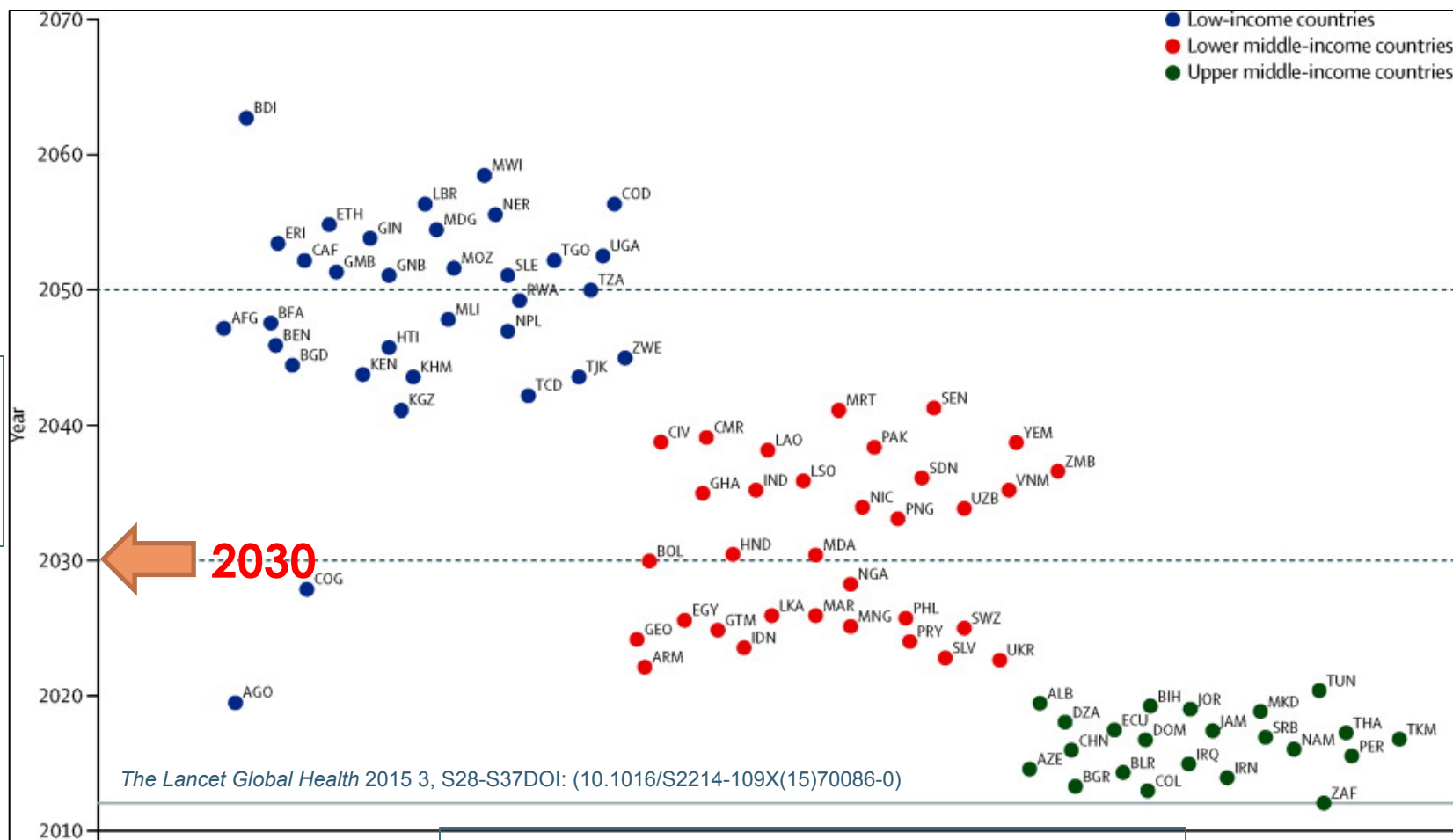
3. Injuries



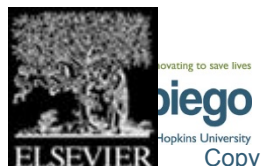
Frequency of operations done per GBD 2010 disease category



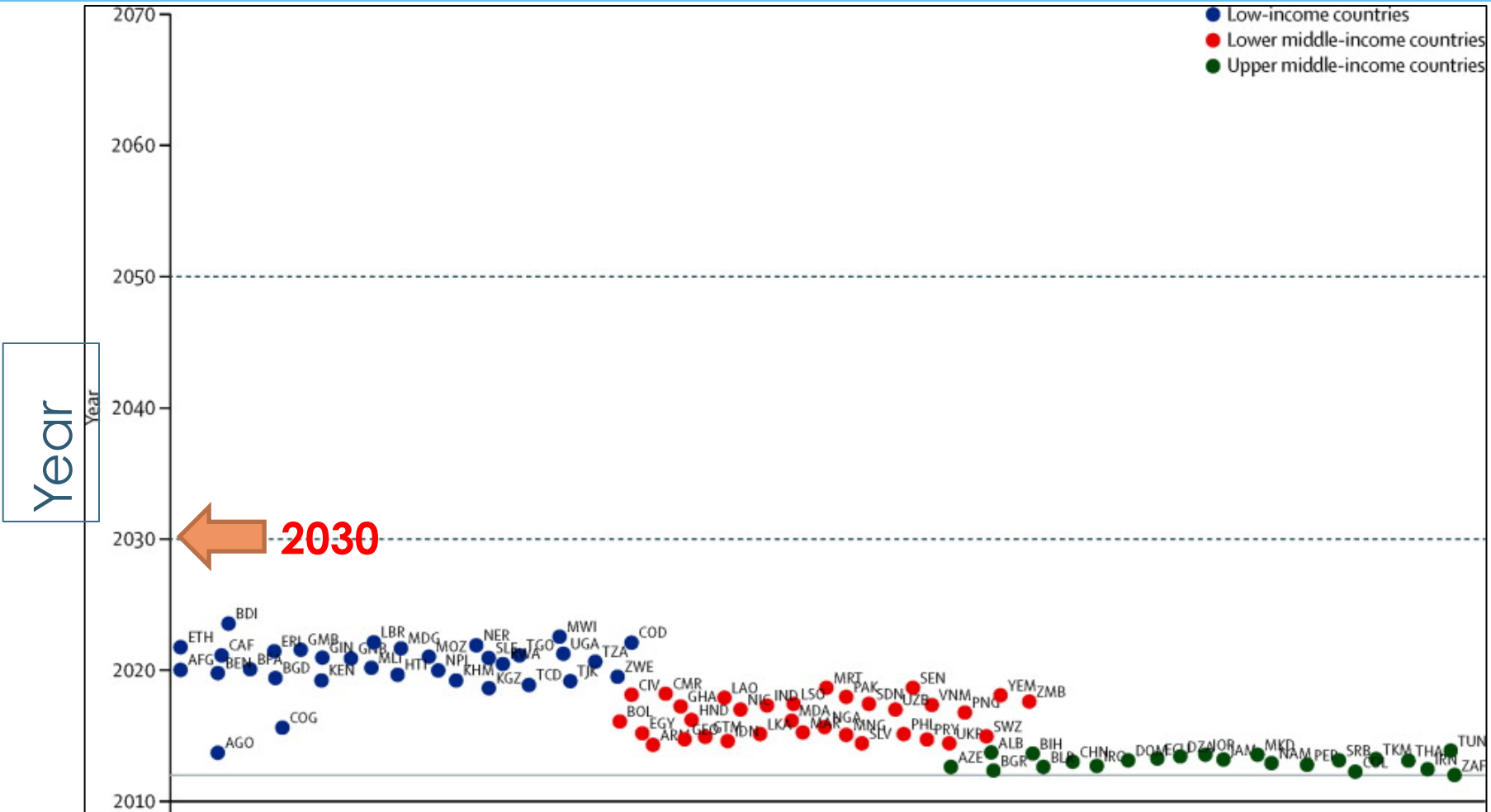
5000 surgical procedures per 100 000 population per year is achieved by 88 low-income and middle-income countries with actual rates of scale-up (5.1% per year)



Countries by Income Group



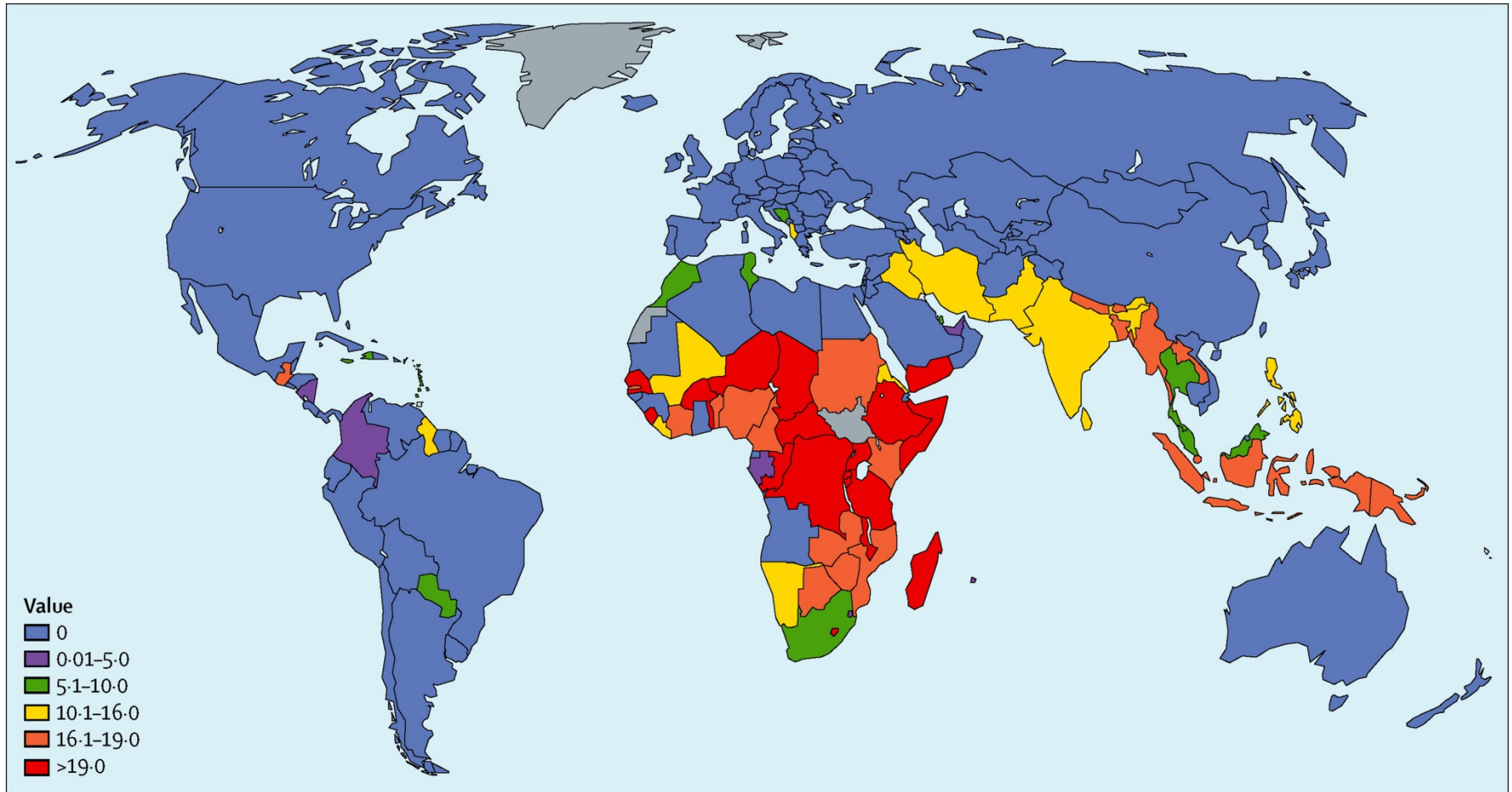
And If every country in LMIC perform as Mexico! 22.5 % per year



Panel 2: Ten needs for the provision of safe surgical and anaesthesia care

1. Trained surgical provider
2. Trained anaesthesia provider
3. Infrastructure, equipment and supplies necessary to perform safe general anaesthesia, loco-regional anaesthesia, laparotomy, caesarean delivery, and treatment of open fracture (including, for example, electricity, water, personal protective equipment for staff, basic laboratories, and HIV-testing capabilities)
4. Decontamination and sterilisation capacity
5. Blood supply that is safe and affordable (screened and cross-matched blood)
6. Drugs, including antibiotics, pain medicines, and anaesthetics (from the WHO Model List of Essential Medicines)¹¹⁶
7. Nursing care, which includes a record of appropriate physiological observations
8. 24 h surgical cover with the ability to review and respond to a deteriorating patient
9. Quality-improvement processes, including audit of perioperative mortality
10. Risk assessment and operation planning for planned procedures

Change in surgical workforce density needed for specialist SAO-only model to meet 20 SAO providers per 100 000 population by 2030



Who are the service providers?

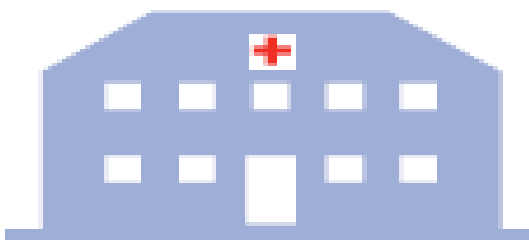
- Nurses, midwives, clinical officers, general practitioners are forced to transcend contextually irrelevant professional constructs and command a broad skillset
- Practice close to most of the 5 billion who don't have access to safe surgery
- Practice in a very taxing environment with no opportunities for professional development, interaction with peers and little recognition



HCW at the center of these tasks ask according to the lancet:-

Better managed health services?
e.g. Indonesia's Clinical Governance

**First level
(District) hospital**



**The core site for surgical and
anesthesia care delivery**

Empower and take ownership of services?
e.g. India's PPIUCD program scale up largely due to nurses

Clear career pathway?
e.g. Ethiopia's Integrated and Emergency Surgical Officers (IESOs)

Access to educational development and CMEs? e.g. HRH program

Leader and champion?
e.g. Tanzania Nurses leading the scale up of VMMC for HIV prevention

Access to low cost technologies
e.g. e-parthograph , ultrasound

Developing the HCW



Training and professional development and **Responsible task sharing**



Maintenance and repair of biomedical equipment



Availability of surgical supplies and equipment

Improve clinical decision-making skills at primary facilities

Improve access to C/s, laparotomy, Open fracture procedures at primary facilities

Improve access to general anesthesia at primary facilities

66% of equipment failures can be addressed by basic non-equipment specific training

Improve equipment access (primary facilities)

Develop theatre equipment solutions that fits country conditions

