

Role of WHO in Improving Global Surgery:

*Strengthening emergency & essential surgical care
and anesthesia as a component of universal health
coverage*

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Role of WHO in Improving Global Surgery:

Strengthening EESC & Anesthesia as a component of UHC

Emergency and essential surgical care

Areas of work

Strategies

Global Initiative (GIEESC)

Education and training

Partnerships

Publications



The WHO Programme for Emergency and Essential Surgical Care (EESC) is dedicated to strengthening health systems, achieving universal health coverage, and ensuring the safety and efficacy of clinical procedures in Anaesthesia, Surgery, Orthopaedics, and Obstetrics.

WHO Integrated Management for Emergency and Essential Surgical Care Toolkit
WHO Global Initiative for Emergency and Surgical Care (GIEESC)
WHO Global Database of Surgical Capacity

Program established

Ensure Safety & Efficacy of Clinical Procedures in Anaesthesia, Surgery, Orthopaedic, Obstetrics

Norms & Standards

Policies evidence-based

Ministries of Health

Convene Global stakeholders expertise

Challenges to Surgical Care



Injuries



Cancer



Disasters and Emergencies



Infectious Diseases



Pregnancy-related complications



Congenital Anomalies

Role of WHO in Improving Global Surgery: Strengthening EESC & Anesthesia as a component of UHC

Cancer

- 7.6 million deaths (around 13% of all deaths) in 2008

injuries,
violence,
disasters

Diabetic Complications:

- About 347 million people worldwide have diabetes

diabetic
complications

pregnancy-
related

com

- Hernia, Abdominal conditions
- Blindness

Female Genital

About 140 m
consequences

Maternal & Child Health

- 800 women/day die due to preventable causes related to pregnancy & childbirth, mostly in low resource settings

Congenital anomalies

Congenital anomalies affect an estimated 1 in 33 infants and result in approximately 3.2 million birth defect-related disabilities every year.

develop obstetric fistula

surgical
conditions

- Elderly population (greatest number of fatal falls)

Disasters: Natural; Conflict

- Failure in health services and health systems

Access to Surgical & Anaesthesia Services

Challenges: Infrastructure & Equipment

- **Infrastructure**
 - Water/Electricity
 - oxygen
 - sterilization
- **Basic Emergency Equipment**
 - non-functioning/inventory
 - maintenance
- **Access & Use**
 - Equipment & procedures mismatch
 - Training & skills



Challenges: **Health Workforce**

- Today: shortage of 7.2 million
- 2035: shortage 12.9 million

Sub Saharan Africa carries **24%** of the global burden of disease, but has as little as **3%** of the world's health workers

- Specialists
- Skilled Health Providers

World Health Assembly Resolution, World Health Report

- Rapid scale up of health workforce

WHO World Health Report 2006, Working together for health, p. 9

WHA resolution2006

Fragmented Approach Capacity Building

- Anaesthesia technology is advancing to enable complex surgical procedures



BUThas this advanced in parallel in the LMICs ??

- Training programs imbalanced:

Surgery versus **Anesthesia**

- Role of Anesthesia extends beyond Operating Room
- Workforce trained in basic anesthetic techniques at **PHC** level can also resuscitate /stabilize critically ill and trauma patients

Building and retaining the neglected anaesthesia health workforce: is it crucial for health systems strengthening through primary health care? Bull World Health Organ. 2010 ;88(8):637-639. Cherian MN, Choo S, Wilson I, Noel L, Sheikh M, Dayrit M.

Priority Actions to increase the political priority of Emergency & Essential Surgery (EES)

1. Organizational

- Coordinate EES stakeholders into a unified effort.
- Create opportunities for surgeons /anesthetists to gain expertise in policy & global public health: during/after residency

2. Symbolic

- Reframe EES as an essential component of Primary Health Care (PHC) (publications, policy, media)
- Capture attention & resources: media campaigns using high-profile EES issues: maternal health, injuries etc.

Political Economy of Emergency and Essential Surgery in Global Health. Hedges JP, Mock CN, Cherian MN. World J Surg. 2010.

Priority Actions to Increase the Political Priority of EESC

3. Economic

- Promote national health insurance schemes and novel mechanisms of sustainable funding.

4. Research

- Advocate for increased resources for research relevant to EES
- Expand collaborative research partnerships.

5. Political

- Apply the sum product of the above actions to influence policymakers to promote the EES agenda.

Collaborations & Partnerships

WHO Global Initiative for Emergency & Essential Surgical Care (GIEESC)



Collaborations for access to **timely & safe** surgical emergencies, trauma, obstetrics, anaesthesia services

Multidisciplinary stakeholders

Health authorities, academia, professionals, societies,
international organizations, NGOs

1700 members **129** countries

A Unified Coordinated Effort

WHO GIEESC Biennial Global Meetings

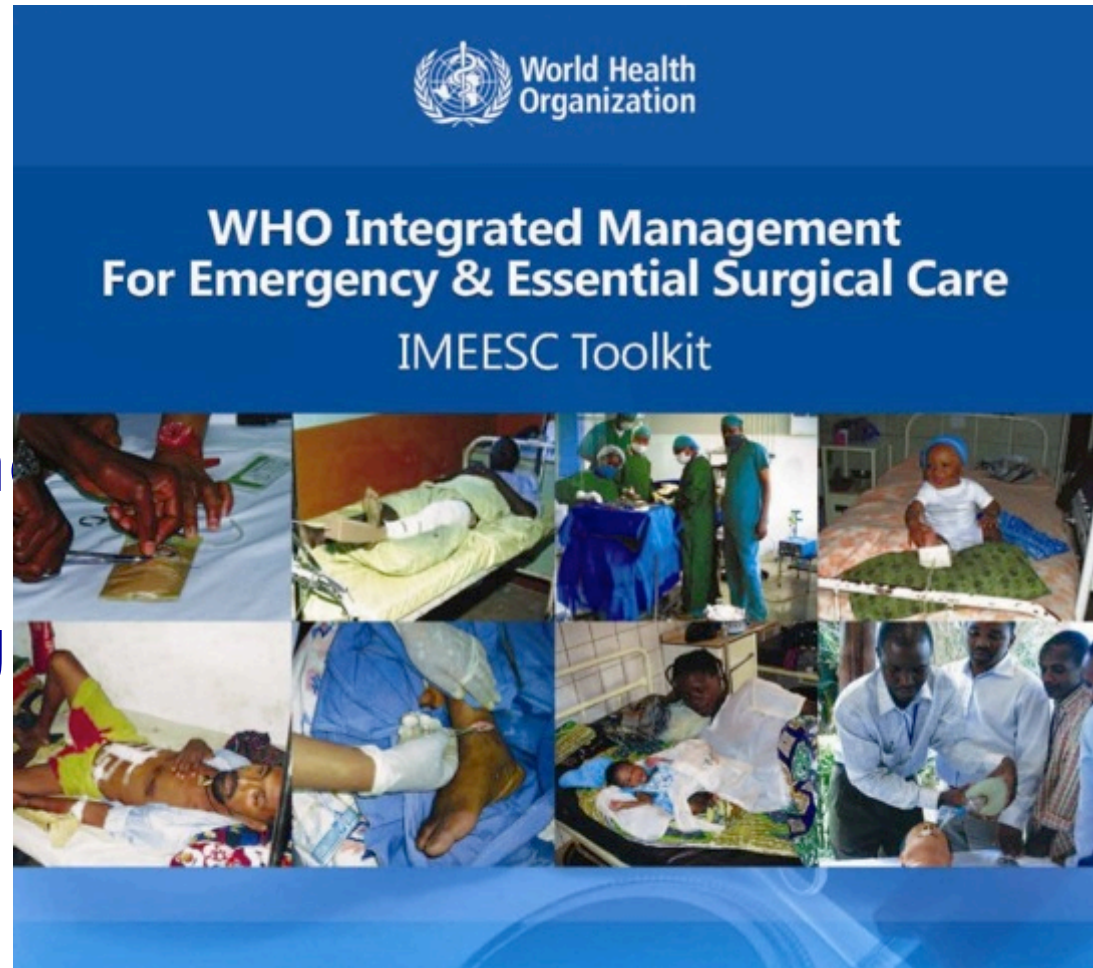
- 2005 WHO Headquarters, Geneva, Switzerland
- 2007 Tanzania Ministry of Health
- 2009 Mongolia Ministry of Health
- 2011 USA
Academic institutions
- 2013 Trinidad & Tobago
Ministry of Health



WHO Standards for Improving Surgical Care Systems

- Policy-makers
- Managers
- Health providers
- Pre-service training
- In-service training

www.who.int/surgery



Tools Meeting Local Needs

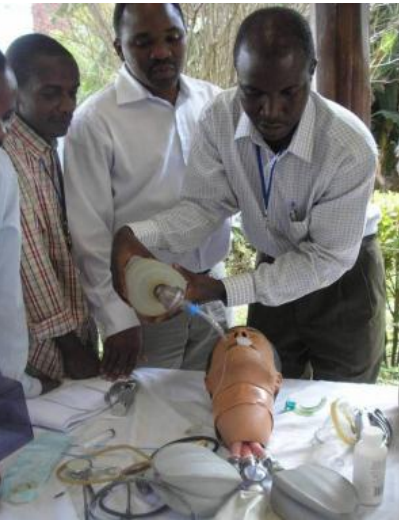
- Mongolian
- Korean
- Dari
- Farsi
- Vietnamese
- French



WHO Emergency & Trauma Care (ETC)

Training Course Modules for Frontline Health Providers

Injuries in women, children, elderly



1. Principles & Techniques of Trauma Care
2. Basic Surgical Skills
3. System Specific Trauma
4. Practical Anesthesia
5. Surgical Care System (Disaster Management)



- **Facilitators Guide**
- **Time-Table**
- **Practical sessions:**
Role play, case scenario

WHO Tools: Quality & Safety

Access to Timely and Safe Surgical Care

Best Practice Protocols Clinical Procedures Safety

Posters for Implementation at point of care

- Emergency room
- O.R
- ICU
- Wards
- Obstetrics
- Disaster situation

List of Contents

1. Ethical Patient Consent
2. Record keeping
3. Operating Room (O.R.)
4. Hand Washing Techniques
5. Scrubbing and gowning
6. Prevention of Transmission of HIV
7. Infection Prevention and Universal Precautions
8. Waste disposal in clinical procedures at resource limited health care facility
9. Diagnosis of Labour
10. Diagnosis of vaginal bleeding in early pregnancy
11. Severe Pre-Eclampsia and Eclampsia
12. Eclampsia Management
13. Urinary Retention: Emergency Drainage
14. Caesarean Section
15. Check List Prior to inducing anaesthesia
16. Managing unexpected effects of a spinal anaesthetic
17. Postoperative management
18. Postoperative pain relief
19. Cardiac life support
20. Airway Management
21. Surgical Cricothyroidotomy
22. Cast Application
23. Splint application
24. Caring for a cast or splint
25. Removing a cast
26. Hand lacerations
27. Disaster Planning
28. Trauma Team Leader Responsibilities
29. Abdominal Trauma
30. Burns Management: adults and children
31. War-related Trauma
32. Transportation of critically ill patients

National Policy & Plans

PRIMARY SURGICAL CARE PACKAGE (PSCP)

Details of the procedures explained in the WHO manual *Surgical Care at the District Hospital (SCDH)*.

Procedures Requiring Advanced Training Skills can be integrated into the PSCP to meet country needs.

Procedures	SCDH Page
Resuscitation (airway, bleeding, CPR)	13-1
Peripheral venous cut down	13-14
Cricothyroidotomy/tracheostomy	PTCM-5, 16-10
Chest tube insertion and needle decompression	16-8
Suturing (including episiotomy), laceration and wound management	Chapter 4, Chapter 5
Incision and drainage of abscesses	5-19
Burn management	5-13
Removal of foreign body	5-16
Suprapubic puncture/cystostomy	9-4
Fracture immobilization	17-6, 18-1
Dilatation and curettage for retained products of conception	12-18
Local anesthesia	14-21
Ketamine anesthesia	14-25

Procedures Requiring Advanced Training Skills	SCDH Page
Cesarean section	11-13
Uterine rupture/ectopic pregnancy	12-19, 12-21
Skin grafting and contracture release	5-3
Biopsies and needle aspiration	5-30
Hernia repair	8-1
Hydrocelectomy	9-11
Laparotomy for acute abdomen	Chapter 6, Chapter 7
Fractures reduction	17-6
Curettage for chronic osteomyelitis	19-6
Amputation	18-31
Male circumcision	9-8
Club foot repair	19-3
General anesthesia (inhalation)	14-1
Spinal anesthesia	14-23

- Planning Tool Guide National/District Health Plan
- Primary Surgical Care Package

WHO Tools: *Team Work Approach*

Surgical Safety Checklist

Before induction of anaesthesia

(with at least one surgical team member)

Has the patient confirmed his/her identity, site, procedure, and consent?

☐ Yes

Is the site marked?

☐ Yes
☐ Not applicable

Is the anaesthesia machine and medication check complete?

☐ Yes

Is the pulse oximeter on the patient and functioning?

☐ Yes

Does the patient have a:

Known allergy?

☐ No
☐ Yes

Difficult airway or aspiration risk?

☐ No
☐ Yes, and equipment/assistance available

Risk of >500ml blood loss (7ml/kg in children)?

☐ No
☐ Yes, and two IVs/central access and fluids planned

Before skin incision

(with at least one surgical team member)

Confirm all team members introduced themselves by

☐ Confirm the patient's name and where the incision will

Has antibiotic prophylaxis been given in the last 60 minutes?

☐ Yes
☐ Not applicable

Anticipated Critical Events

To Surgeon:

☐ What are the critical or non-routine steps?
☐ How long will the case take?
☐ What is the anticipated blood loss?

To Anaesthetist:

☐ Are there any patient-specific considerations?

To Nursing Team:

☐ Has sterility (including indicators) been confirmed?
☐ Are there equipment issues or additional requirements?

Is essential imaging displayed?

☐ Yes
☐ Not applicable

Postoperative care

Post operative note and orders

The patient should be discharged to the ward with comprehensive orders for the following:

- Vital signs
- Pain control
- Rate and type of intravenous fluid
- Urine and gastrointestinal fluid output
- Other medications
- Laboratory investigations

The patient's progress should be monitored and should include at least:

- A comment on medical and nursing observations
- A specific comment on the wound or operation site
- Any complications
- Any changes made in treatment

Aftercare: Prevention of complications

- Encourage early mobilization:
 - Deep breathing and coughing
 - Active daily exercise
 - Joint range of motion
 - Muscular strengthening
 - Make walking aids such as canes, crutches and walkers available and provide instructions for their use
- Ensure adequate nutrition
- Prevent skin breakdown and pressure sores:
 - Turn the patient frequently
 - Keep urine and faeces off skin
- Provide adequate pain control

Discharge note

On discharging the patient from the ward, record in the notes:

- Diagnosis on admission and discharge
- Summary of course in hospital
- Instructions about further management, including drugs prescribed.

Ensure that a copy of this information is given to the patient, together with details of any follow-up appointment

This checklist is not intended to be comprehensive. Additions and modifications to fit local practice are

Post-operative
Care &
Pain Relief

WHO Tools: Equipment Inventory

WHO GENERIC ESSENTIAL EMERGENCY EQUIPMENT LIST

GUIDE TO INFRASTRUCTURE AND SUPPLIES

AT VARIOUS LEVELS OF HEALTH CARE FACILITIES

Emergency and Essential Surgical Care (EESC)

Compiled from the WHO Manual *Surgical Care at the District Hospital 2003*

- Essential
Emergency
Equipment
List

Level 1 Small Hospital / Health Centre	Level 2 District / Provincial Hospital	Level 3 Referral Hospital
<ul style="list-style-type: none"> Rural hospital or health centre with a small number of beds and a sparsely equipped operating room (OR) for minor procedures Provides emergency measures in the treatment of 90–95% of trauma and obstetrics cases (excluding Cesarean section) Referral of other patients (e.g., obstructed labour, bowel obstruction) for further management at a higher level 	<ul style="list-style-type: none"> District or provincial hospital with 100–300 beds and adequately equipped major and minor operating theatres Short term treatment of 95–99% of the major life-threatening conditions 	<ul style="list-style-type: none"> A referral hospital of 300–1000 or more beds with basic intensive care facilities Treatment aims are the same as for Level 2, with the addition of: <ul style="list-style-type: none"> Ventilation in OR and ICU Prolonged endotracheal intubation Thoracic trauma care Hemodynamic and inotropic treatment Basic ICU patient management and monitoring for up to 1 week: all types of cases, but with limited or no provision for: <ul style="list-style-type: none"> Multi-organ system failure Hemodialysis Complex neurological and cardiac surgery Prolonged respiratory failure Metabolic care or monitoring

- Anaesthetic
Infrastructure
Supplies

PROCEDURES	PROCEDURES	PROCEDURES
<ul style="list-style-type: none"> Normal delivery Uterine evacuation Circumcision Hydrocele reduction, incision and drainage Wound suturing Control of hemorrhage with pressure dressings Debridement and dressing of wounds Temporary reduction of fractures Cleaning or stabilization of open and closed fractures Chest drainage (possibly) 	<p>Same as Level 1 with the following additions:</p> <ul style="list-style-type: none"> Cesarean section Laparotomy (usually not for bowel obstruction) Amputation Hernia repair Tubal ligation Closed fracture treatment and application of plaster of Paris Eye operations, including cataract extraction Removal of foreign bodies, e.g. in the airway Emergency ventilation and airway management for referred patients such as those with chest and head injuries 	<p>Same as Level 2 with the following additions:</p> <ul style="list-style-type: none"> Facial and intracranial surgery Bowel surgery Pediatric and neonatal surgery Thoracic surgery Major eye surgery Major gynecological surgery, e.g. vesico-vaginal repair
PERSONNEL	PERSONNEL	PERSONNEL
<ul style="list-style-type: none"> Paramedical staff without formal anesthesia training Nurse-midwife 	<ul style="list-style-type: none"> One [two] trained anesthetists District medical officers, senior clinical officers, nurses, midwives Visiting specialists or resident surgeon and/or obstetrician/gynecologist 	<ul style="list-style-type: none"> Clinical officers and specialists in anesthesia and surgery
DRUGS	DRUGS	DRUGS
<ul style="list-style-type: none"> Ketamine 50 mg/mL injection, 10 mL Lidocaine 1% or 2% Diazepam 5 mg/mL injection, 2 mL injection [Epinephrine (adrenaline)] 1 mg [Atropine 0.6 mg/mL] 	<p>Same as Level 1, but also:</p> <ul style="list-style-type: none"> Thiopental 500 mg/1gm powder Suxamethonium bromide 500 mg powder Atropine 0.5 mg injection Epinephrine (adrenaline) 1 mg injection Diazepam 10 mg injection 	<p>Same as Level 2 with the following additions:</p> <ul style="list-style-type: none"> Vecuronium 10 mg powder Pancuronium 4 mg injection Neostigmine 2.5 mg injection Trichloroethylene, 500 mL inhalation Calcium chloride 10%, 10 mL injection

WHO Tools Quality & Safety

- Safe Surgery & Anaesthesia
- Obstetric Safety
- Monitoring & Evaluation

MONITORING AND EVALUATION TOOL FOR PROGRESS ON SURGICAL CARE HEALTH SYSTEMS

OBJECTIVE: To assess the impact of utilizing the WHO Integrated Management for Emergency and Essential Surgical Care (IMEESC) Toolkit on strengthening surgical care health systems and quality of care.

www.who.int/surgery/publications/imeesc/en/index.html

The form should be completed again 6 months after training. Please send completed forms to cherianm@who.int

PERSON COMPLETING FORM		HEALTH CARE FACILITY	
LAST NAME	GIVEN NAME(S)	NAME OF HEALTH CARE FACILITY	
TELEPHONE NUMBER include country code		STREET	
EMAIL ADDRESS		CITY	COUNTRY

TYPE OF HEALTH CARE FACILITY Please check one		DATE OF FORM COMPLETION	MOST RECENT TRAINING SESSION
<input type="checkbox"/> Primary or First Referral-Level Facility / District Hospital / Rural Hospital		DD / MM / YYYY	DD / MM / YYYY
<input type="checkbox"/> Health Centre	<input type="checkbox"/> Teaching Hospital		

In the past year, has the WHO IMEESC Toolkit, including the *Surgical Care at the District Hospital* manual, been utilized for training or education in the for the following people? *Select all that apply*

☐ Doctors ☐ Medical Students ☐ Nurses ☐ Clinical Officers / Technicians ☐ Continuing Education ☐ None

In the past year, for what practical topics has the WHO IMEESC Toolkit been used? *Select all that apply*

☐ Emergency / Trauma ☐ Anesthesia ☐ OB / Gyne ☐ Infection Control ☐ Surgery ☐ None

In the past 3 years, how strong has improvement to surgical care been at your facility?

☐ Very Strong ☐ Somewhat Strong ☐ Weak ☐ None

In the past year, indicate the number

☐ PERIOPERATIVE DEATHS WITHIN 24hrs (including anaesthesia, obstetrics, trauma and surgery) ☐ FUNCTIONING OPERATING ROOMS

☐ INFECTIONS / COMPLICATIONS post-surgical or post-obstetric interventions ☐ SURGEONS (qualified)

☐ GENERAL DOCTORS / OFFICERS / NURSES (Non-Specialists) providing surgery, including obstetrics ☐ ANESTHESIOLOGISTS (Qualified)

☐ GENERAL DOCTORS / OFFICERS / NURSES (Non-Specialists) providing anaesthesia ☐ OBS / GYNECOLOGISTS (Qualified)

Do you have the following facilities? *Select all that apply* ☐ ER ☐ ICU / Recovery Room ☐ Neonatal Unit ☐ None

Has the *WHO Situational Analysis Tool to Assess Emergency and Essential Surgical Care* been completed for this health facility? www.who.int/surgery/publications/WHOtoolSituationalAnalysisEESC.pdf

☐ Yes ☐ No ☐ Unsure

When referral to a higher-level health facility is required, is transport provided by your health facility? *Not applicable for teaching hospitals or national hospitals.* ☐ Yes ☐ No

Is there a system for reporting surgical/obstetric adverse events for patient safety? If so, how often?

☐ Yes, monthly ☐ Yes, yearly ☐ Yes, _____ ☐ No

Of the WHO Best Practice Protocol posters listed below, which are posted in point-of-care areas? For example, posters in the wards, ORs, ER, ICU, Recovery Room: www.who.int/surgery/publications/imeesc/en/index.html *Select all that apply*

☐ Safe Surgery & Safe Anesthesia Protocols ☐ Post-Operative Care ☐ Obstetric Safety Protocols ☐ Scrubbing & Gowning

☐ Emergency Resuscitation ☐ Post-Operative Pain Management ☐ Female Genital Injury Management ☐ Waste Disposal

☐ Burn Management ☐ Intensive Care Unit ☐ HIV Prevention Protocol ☐ Ethics: Patient Consent, Record Keeping

☐ Wound Management ☐ Hand Washing Techniques



World Health
Organization

Patient's Communication Tool for Surgical Safety

***If you or your child will shortly undergo a surgical procedure,
communicate the following to your health-care provider***

(you may wish to involve a family member or friend)

Before Surgery

1. Tell them about your previous surgeries, anaesthesia and medications, including herbal remedies
2. Tell them if you are pregnant or breast-feeding
3. Tell them about your health conditions (allergies, diabetes, breathing problems, high blood pressure, anxiety, etc.)
4. Ask about the expected length of your hospital stay
5. Ask for personal hygiene instructions
6. Ask them how your pain will be treated
7. Ask about fluid or food restrictions
8. Ask what you should avoid doing before surgery
9. Make sure that the correct site of your surgery is clearly marked on your body

After Surgery

1. Tell them about any bleeding, difficulty breathing, pain, fever, dizziness, vomiting or unexpected reactions
2. Ask them how you can minimize infections
3. Ask them when you can eat food and drink fluids
4. Ask when you can resume normal activity (e.g. walking, bathing, lifting heavy objects, driving, sexual activity, etc.)
5. Ask what, if anything, you should avoid doing after surgery
6. Ask about the removal of stitches and plasters
7. Ask about any potential side effects of prescribed medications
8. Ask when you should come back for a check-up

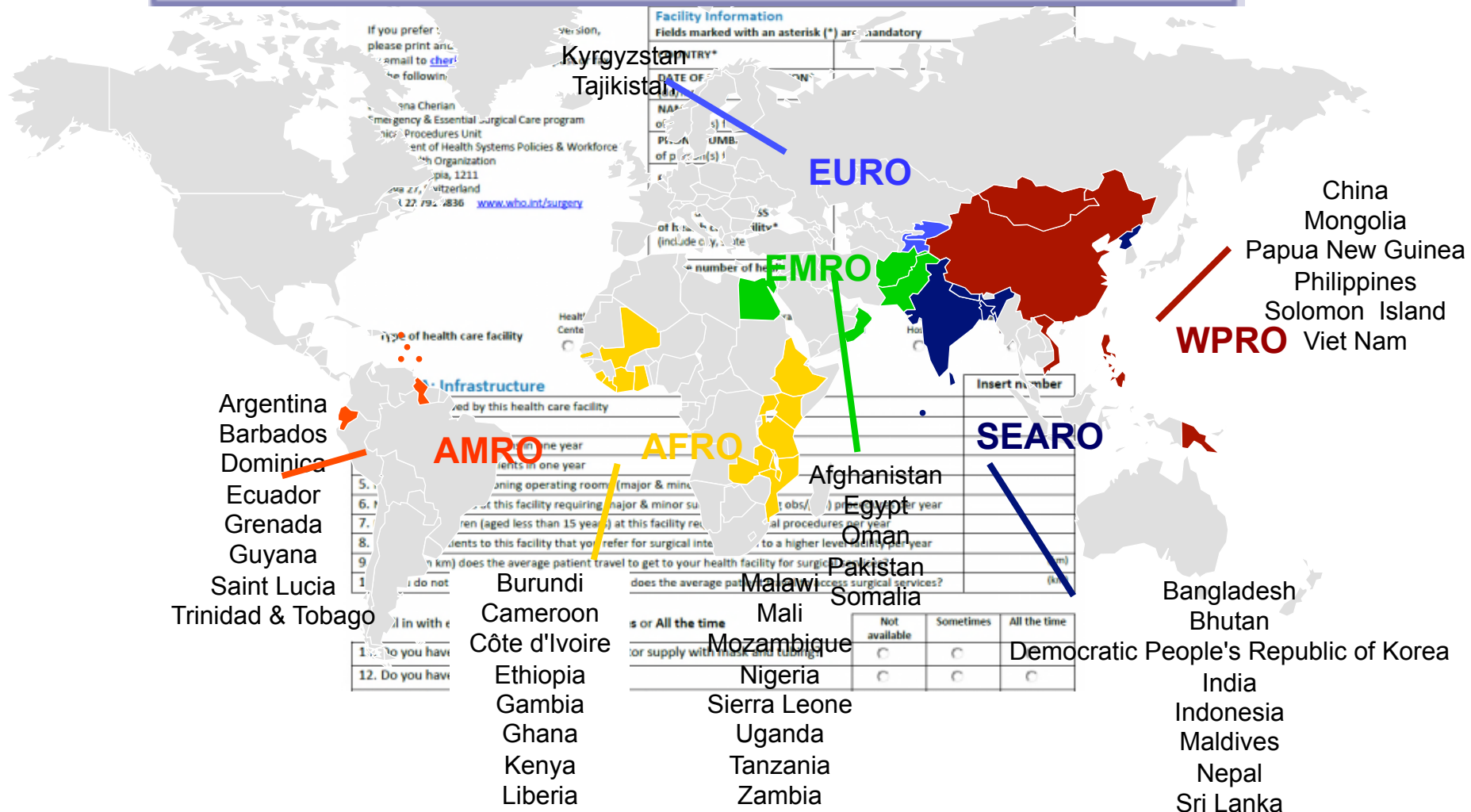
Emergency and Essential Surgical Care Programme & Patients for Patient Safety Programme
the Service Delivery and Safety Department, World Health Organization, Geneva, Switzerland
www.who.int/surgery | surgery@who.int

WHO Global Database for Evidence Based Planning

W
50

WHO EESC Situation Analysis Tool 108 data points

H



WHO Global Database: Generating Evidence

Assessment of Oxygen in 12 African countries

Table 2. Number and percentage [n, (%)] of health facilities that reported at least one of the items below was either always, sometimes, or not fully functioning and available for use at the time of inquiry.

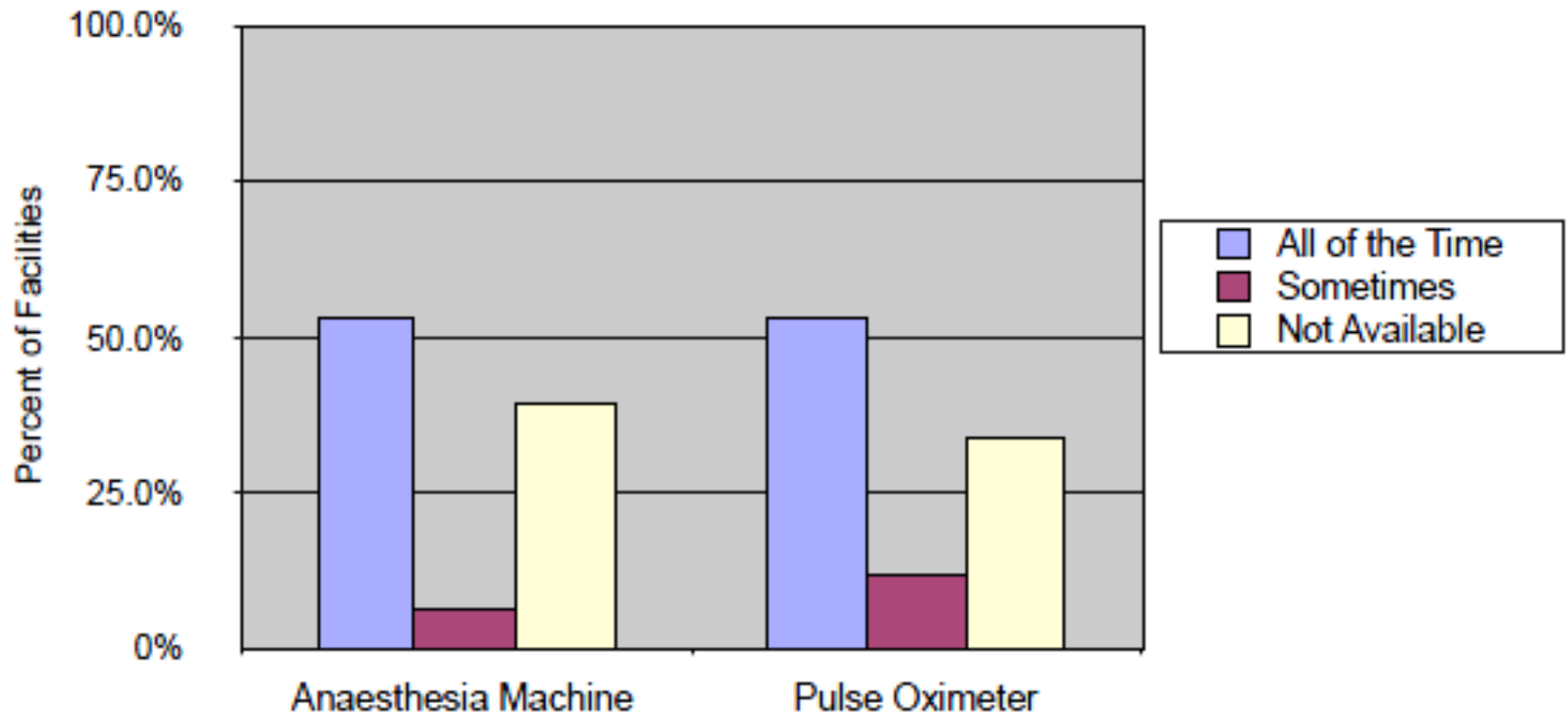
	Electricity	Generator	Any oxygen source	Oxygen Cylinder	Oxygen Concentrator	Face mask and tubing
Always available	81 (35.1)	127 (56.7)	99 (43.8)	66 (29.1)	55 (24.6)	75 (34.3)
Sometimes available	112 (48.5)	59 (26.3)	71(31.4)	55 (22.9)	64 (28.6)	79 (37.6)
Not available	38 (16.5)	38 (17.0)	56 (24.8)	109 (48.0)	105 (46.9)	65 (31.0)



Belle J , Cohen H, Shindo N, Lim M, Velazquez-Berumen A, Ndiokubwayo JB, and Cherian M. Influenza preparedness in low-resource settings: a look at oxygen delivery in 12 African countries. J Infect Dev. Ctries 2010;4(7):419-24

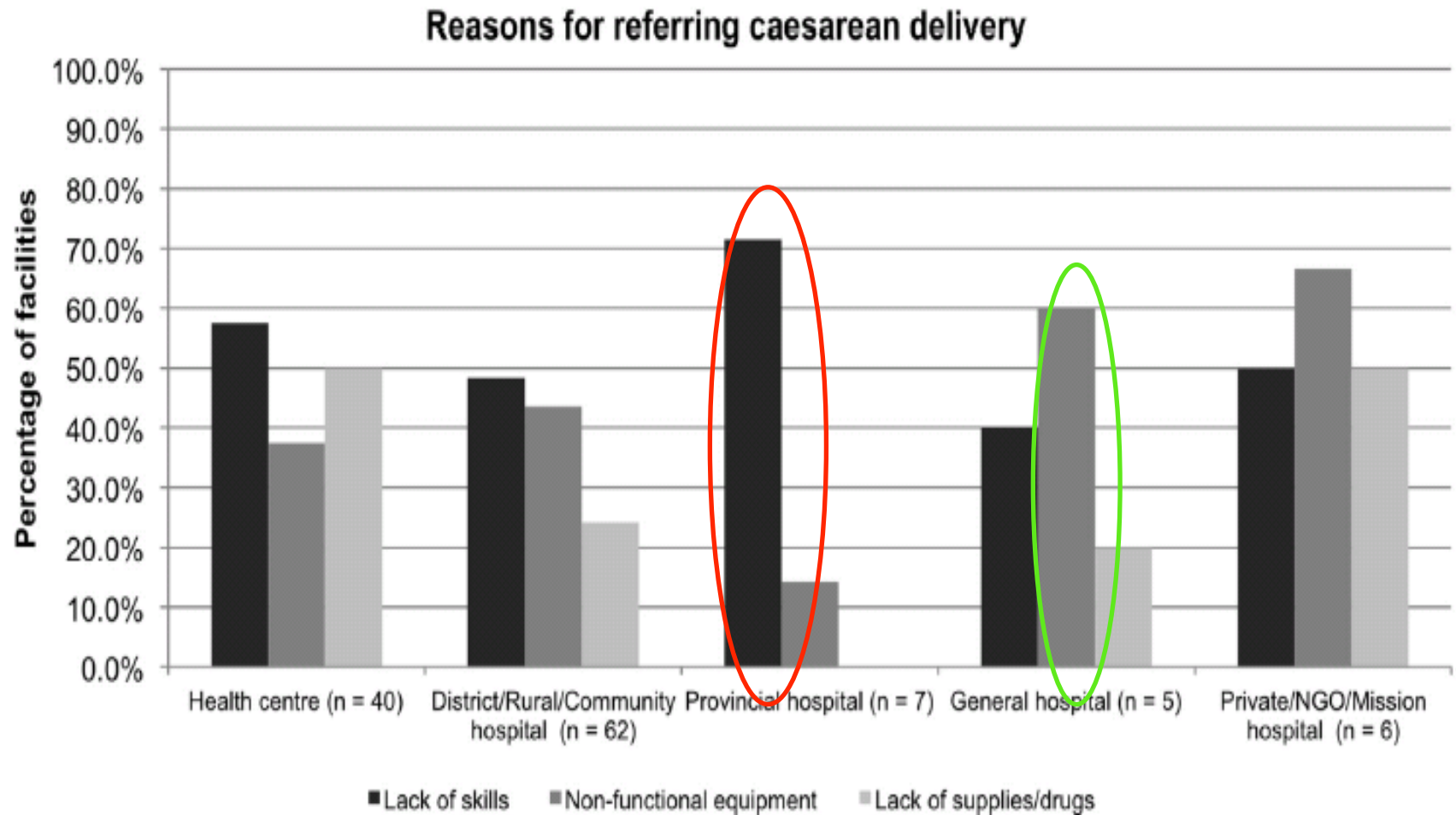
Anesthesia Capacity in 22 Low & Middle Income Countries

Anesthesia Equipment (n=590)



Vo D, Cherian MN, Bianchi S, Noel L, Lundeg G, Taqdeer A, Jargo BT, Okello-Nyeko M, Kahandaliyanage A, Sentumbwe-Mugisa O, Ochroch A, Okello D, Abdoulie J, Ayankogbe OO, Soyannwo OA, Hoekman P, BossynP, Sani R, Thompson M, Mwinga S, Shyam P, Wekesa M, Toliva O, Kibatala P, McCunn M. Anesthesia Capacity in 22 Low and Middle Income Countries. J Anesth Clin Res 2012 3:4.

Caesarean delivery Availability in 26 Low & Middle Income Countries



Facilities excluded for not providing data on reasons for referral (n = 14).

NGO, nongovernmental organization.

Ologunde R, Vogel JP, Cherian MN, Sbaiti M, Merialdi M, and Yeats J. Assessment of cesarean delivery availability in 26 low- and middle-income countries: a cross-sectional study. Am J Obstet

Attention in Public Health Agenda

Surgical Care Addressing Millennium Development Goals

132 facilities in 8 countries

(Sri Lanka, Mongolia, Tanzania, Afghanistan, Sierra Leone, Liberia, Gambia, Sao Tomè and Príncipe)

Table 4. Overview of MDG-Related Procedures Always Performed and Supplies Always Available for 132 Facilities

	No. (%)
Surgical conditions	
Incision and drainage of abscess	96 (73)
Suturing	105 (80)
Biopsy	53 (40)
Management of osteomyelitis	57 (43)
Appendectomy	63 (48)
Hernia repair	62 (47)
Laparotomy	54 (41)
Injuries	
Cricothyroidotomy	48 (36)
Chest tube insertion	55 (42)
Management of open fracture	44 (33)
Amputation	51 (39)
Management of burns	96 (73)
Child health	
Congenital hernia repair	42 (32)
Clubfoot repair	17 (13)
Maternal health	
Cesarean section	58 (44)
Dilatation and curettage	63 (48)
Tubal ligation	51 (39)
HIV preventive procedures and equipment	
Male circumcision	63 (48)
Gloves	68 (52)
Eye protection	24 (18)
Apron	44 (33)
Sharps container	63 (48)
Sterilizer	62 (47)

Abbreviations: HIV, human immunodeficiency virus; MDG, Millennium Development Goal.

Addressing the Millennium Development Goals From a Surgical Perspective.
Kushner AL, Cherian MN, Noel L, Spiegel DA, Groth S, Etienne C. Arch Surg. 2010; 145(2):154-160.

Role of WHO in Improving Global Surgery: Strengthening EESC & Anesthesia as a component of UHC

Recognition to support Anesthesia & Surgical Care in the Global Health Agenda

- **WHO EESC program created 2004 and 2005 WHO GIEESC**
- **Disease Control Priorities World Bank Book**

2nd Edition 2006: one chapter

3rd Edition 2015: several chapters

- **Academia Global Health Programs**

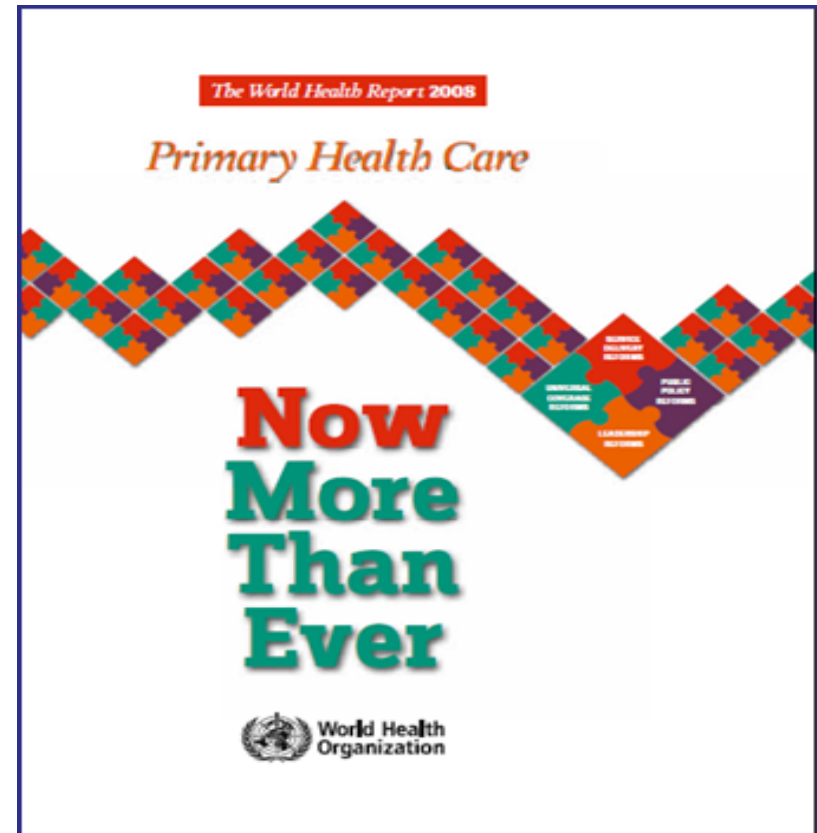
Surgery

- **Lancet Commission**

Global Surgery 2014

Recognition to support EESC at the Global Public Health Agenda

- **The World Health Report**
Surgery 2008
- **WHA resolutions before 2014**
Several specific surgical conditions



World Health Assembly Event

21 May 2014, Palais Des Nations, Geneva, Switzerland



WHO EXECUTIVE BOARD MEETING

May 26-27 2014, Headquarters, Geneva, Switzerland

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Emergency and essential surgical care

Emergency and essential surgical care

Areas of work

Strategies

Global Initiative (GIEESC)

Education and training

Partnerships

Publications

Events World Health Assembly and Executive Board



Improving Safe Emergency and Essential Surgical Care and Anaesthesia

67th World Health Assembly

[Read more about EESC WHA event](#)

Strengthening Emergency and Essential Surgical Care and Anaesthesia as a Component of Universal Health Coverage

135th session of the WHO Executive Board Meeting

[Read more about EESC EB event](#)

WHO Executive Board

Statement by Zambia 2014 January

WHO EXECUTIVE BOARD MEETING

May 26-27 2014, Head Quarters, Geneva, Switzerland



EXECUTIVE
135th session
Geneva, 26-



World Health
Organization

EXECUTIVE BOARD
135th session
Provisional agenda item 5.1

EB135/3
16 May 2014

Strengthening emergency and essential surgical care and anaesthesia as a component of universal health coverage

Report by the Secretariat

GLOBAL BURDEN OF SURGICAL CONDITIONS

1. Every year, over 234 million surgical procedures are performed globally for a wide range of conditions involving patients of all age categories and in every WHO Member State. The many conditions requiring surgical care – including obstructed labour, congenital anomalies, diabetes, cancer, cardiovascular disease, hernias, cataracts and injuries from road accidents, burns and falls – are common and affect all socioeconomic and ethnic groups.

2. Surgically treatable diseases are among the top 15 causes of disability worldwide. Conservative estimates find that 14% of the world's burden of disease stems from conditions that could be treated successfully through surgery, with low- and middle-income countries the most affected. As a result of such conditions going untreated, rates of maternal mortality are high, minor surgical pathologies become lethal, and treatable injuries progress to death. In fact, surgery is a potential avenue at some point for virtually every disease included in the Global Burden of Disease Study 2010.

3. The conditions for which surgery is one of the primary clinical solutions are expected to become increasingly common in the coming years, with increases of over 45% anticipated for common conditions such as heart disease, cancer, diabetes and injuries from road accidents by 2030.

4. Services for these conditions, including surgical care, are often provided through independent disease-specific initiatives rather than through a more sustainable integrated approach. The integrated delivery of surgical care is an important and growing need for the treatment of various health conditions across the life-course. The strain placed on health systems by the delivery of surgical care for the existing burden of surgical conditions is further intensified by communities' acute needs in the wake of disasters and emergencies.

THE IMPORTANCE AND COST EFFECTIVENESS OF SURGERY

5. *The world health report 2008* notes that surgical care is an integral component of the continuum of primary care yet,¹ it is estimated that more than 2000 million people in the world lack access to

¹ The world health report 2008. Primary health care – now more than ever. Geneva: World Health Organization; 2008.

5/1 (annotated)
31 March 2014

Executive Board

the Programme,

component of

services at first
communicable
the report and

Coordinated Unified Support

- **WHO Executive Board Meeting January 2015**

WHO HQ, Geneva, Switzerland

10. Health systems

10.1 Strengthening emergency and essential surgical care and anaesthesia as a component of universal health coverage

Document EB136/27

- **World Health Assembly Resolution May 2015**

Palais des Nations , Geneva, Switzerland

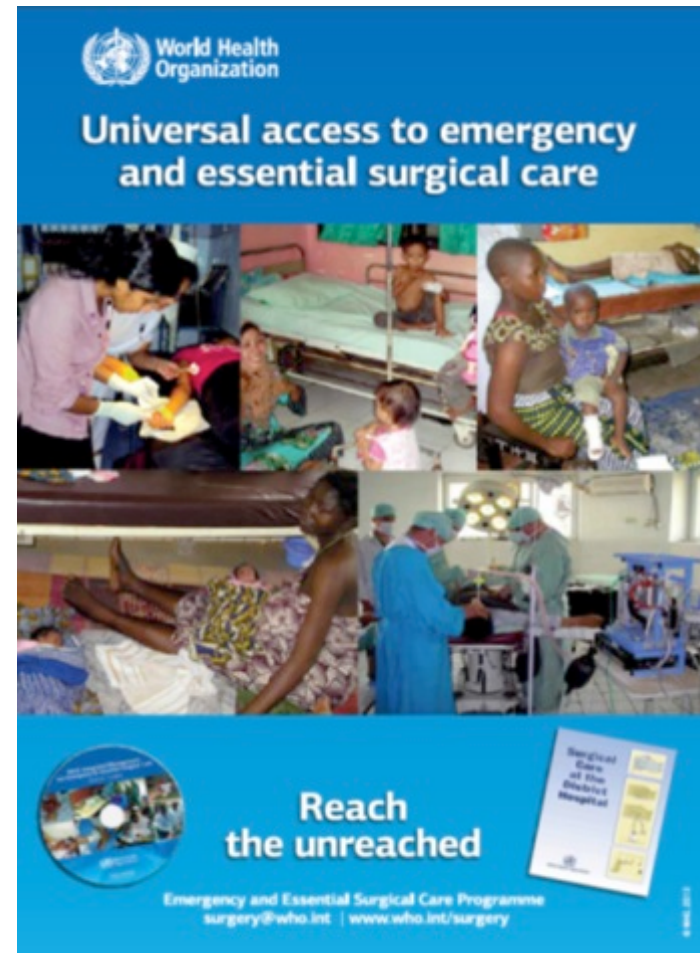
Role of WHO in Improving Global Surgery:

Strengthening Emergency & Essential Surgical Care & Anesthesia as a Component of UHC

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