

15x15: A Global Surgery Initiative

Surgery in low-resource settings symposium
**Netherlands Society for International Surgery/ Deutsche Gesellschaft
für Tropenchirurgie**



**Amsterdam,
November 14th, 2014**

Michael H. Cotton
MA, FRCS, FACS,
FCS(ECSA), FMH
Chair

Jaymie Ang Henry, MD,
MPH
Executive Director



ICES

International Collaboration for Essential Surgery

Need for surgery



- **11% of global burden of disease = surgical**
- **80% of deaths from these surgical conditions occur in Low-Medium Income Countries.**
- **Including...500,000 maternal deaths/year.**
- **Mortality from injury in rural East Africa: 1/1000**
- **10-20% of deaths in young adults could be prevented by very simple measures**
- **Estimated 2,000,000,000 have no access to surgical care**

Access to Surgery





Basic resources



Anne Yzebe/MSF



Massimo Mastrorillo/MSF



Marlies van
Bouwel/MSF

Guy Tillim/MSF

Low technology centres



High volume practice



Olivier Jopard/Sipa Press



Rio Kameyama/MSF



Anne Yzebe/MSF



Paco Arevalo/MSF

Global Surgery ?



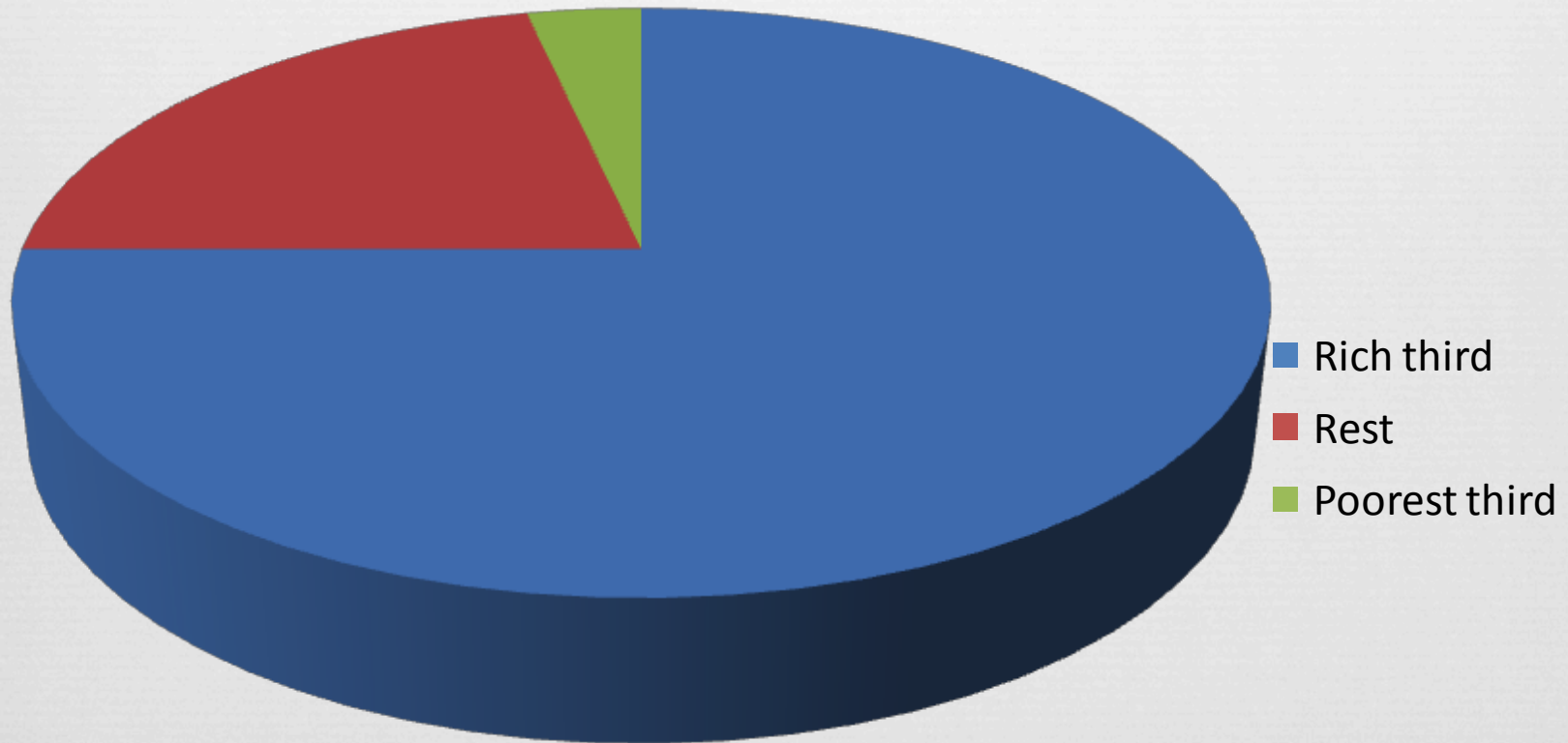
Definition?



Basic data of surgery done



% World Population

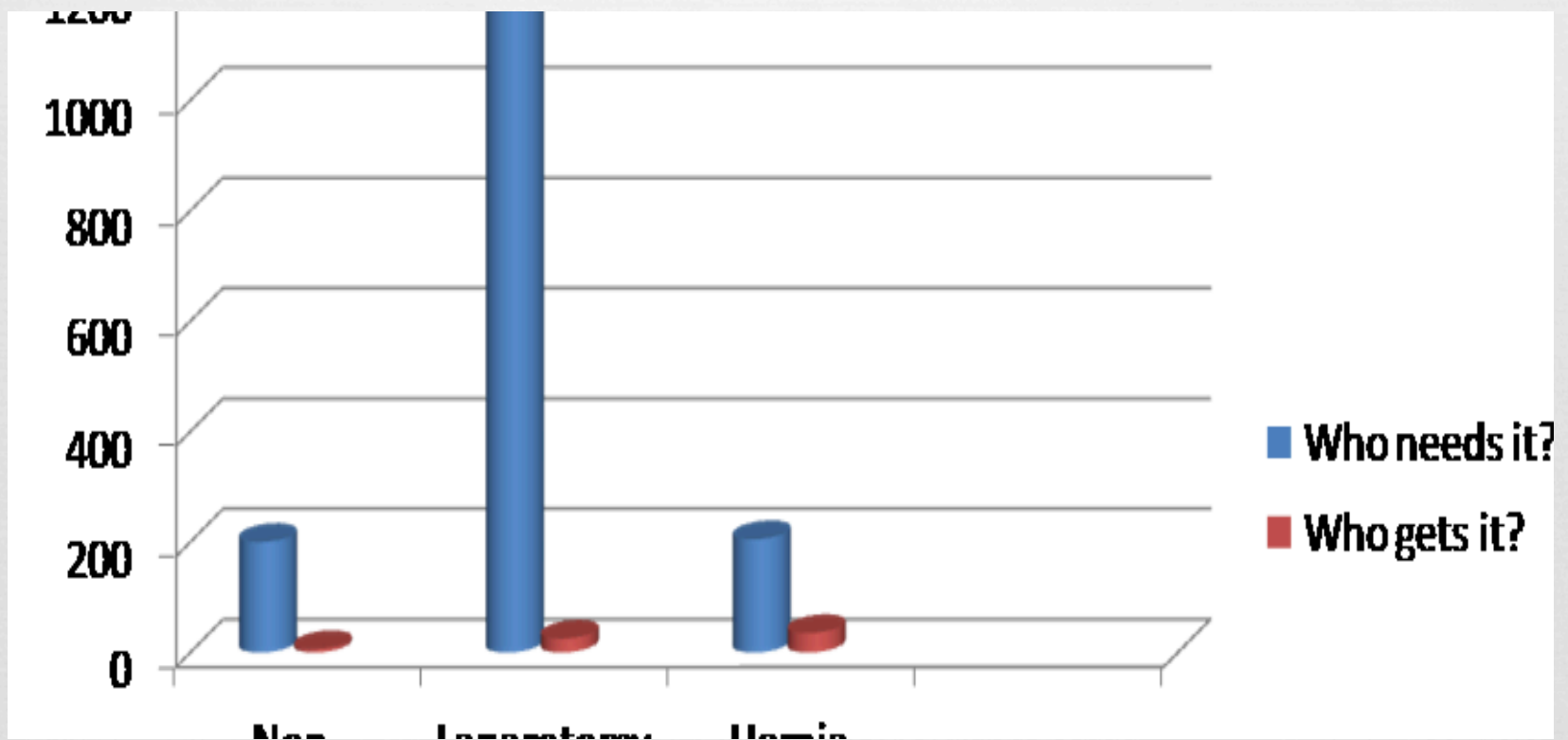


Obstetric care



- ❧ 1:26 women die in childbirth in sub-Saharan Africa.
- ❧ <1:200 get a Caesar when needed in some 15 countries of the world.
- ❧ 3,000,000 obstetric fistulas untreated in Africa.
- ❧ 10,000 new obstetric fistulas/yr in Ethiopia.

Estimated Need for surgery (per 100,000 people)



INTERNATIONAL COLLABORATION for ESSENTIAL SURGERY



ices

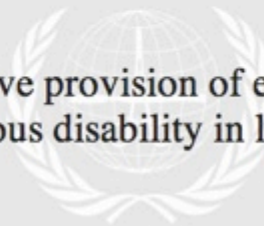
International Collaboration for Essential Surgery

[Home](#) [About Us](#) [Blog](#)

Essential Surgery *Definition: Noun*

1. Basic surgical procedures that prevent permanent disability and life threatening complications.
2. Simple, affordable surgery that saves lives.

Our mission is to promote the effective provision of essential low-cost surgical care to save lives & prevent serious disability in low-resource settings.



Essentials of essential Surgery



1. Caesarean Section, Symphysiotomy & ERPC

2. Incision & Drainage of Abscesses

3. Debridement of Wounds & Fasciotomy

4. Skin grafting & burns management

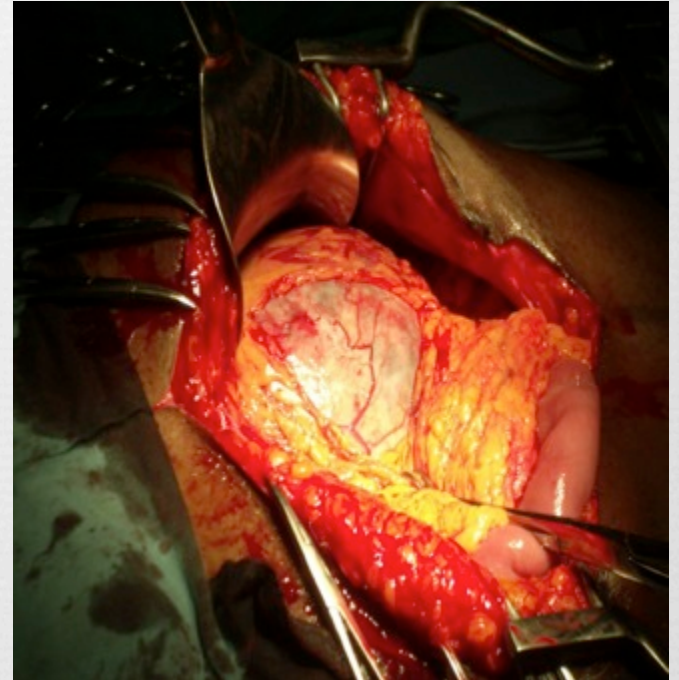
5. Hernia repair



Essentials of Essential Surgery



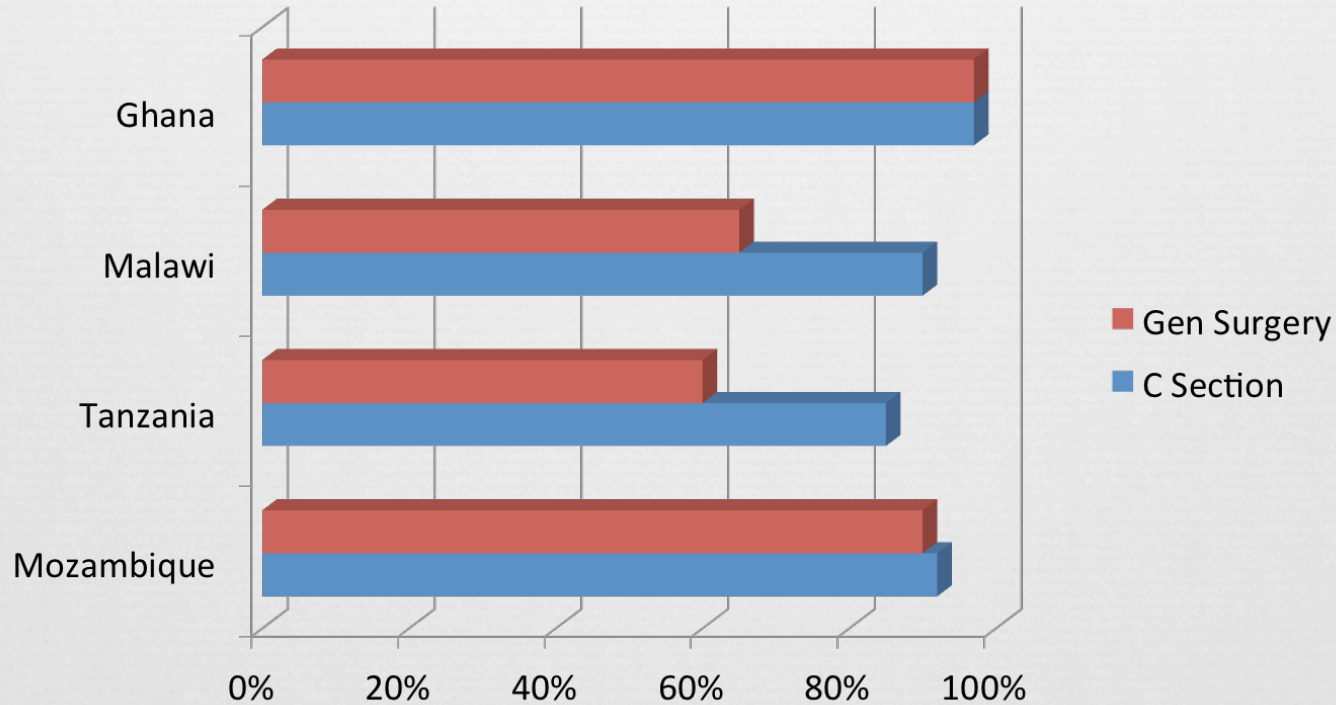
- 8. Intercostal Drainage**
- 9. Emergency Exploratory Laparotomy**
- 10. Amputations**
- 11. Cranial Burr Holes**
- 12. Dental Extraction**
- 13. External Fixation of Fractures**
- 14. Suprapubic Catheterization**
- 15. Cataract Extraction**



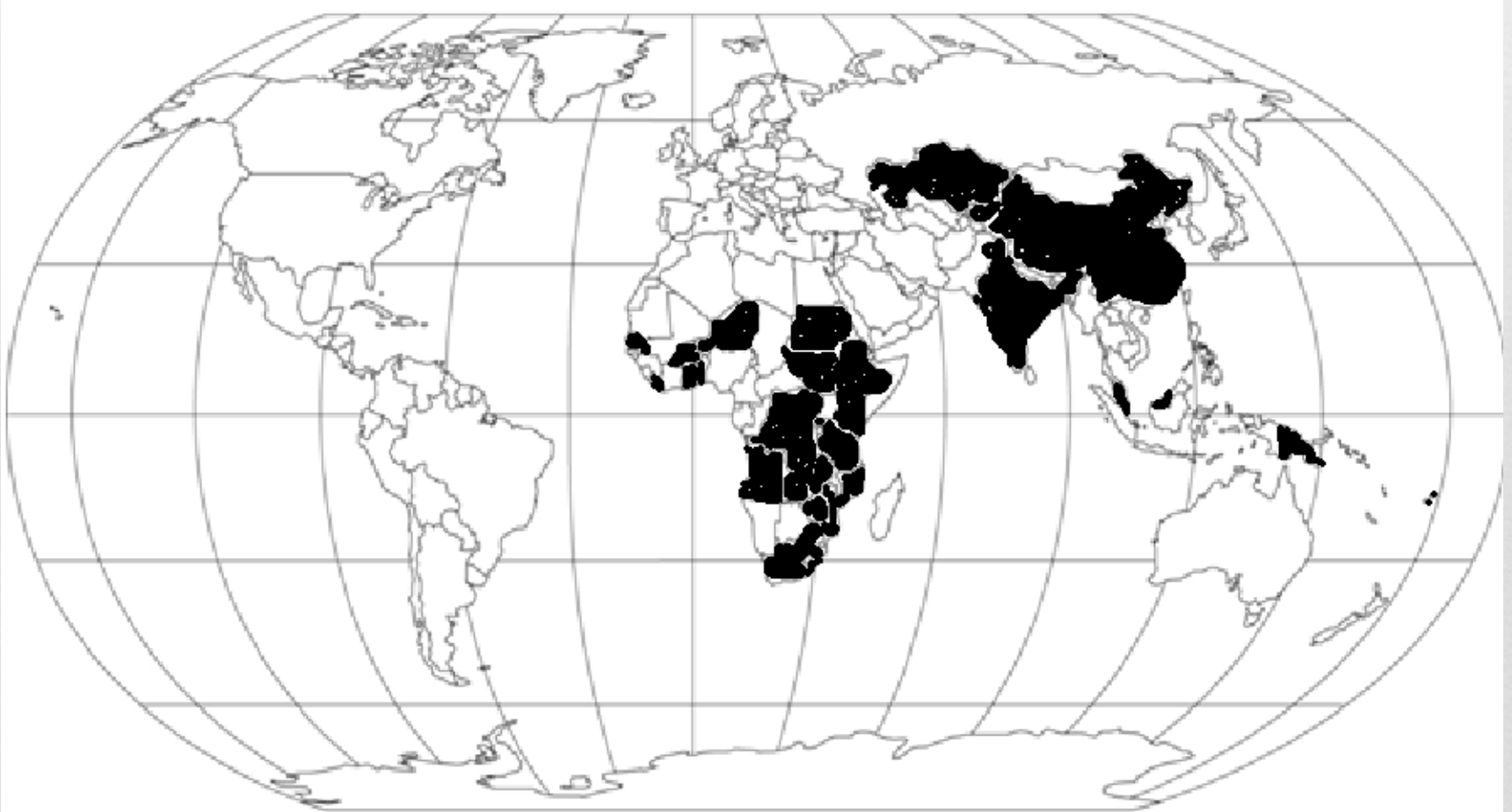
Common Operating Facilities



Surgery done by non-specialists



Countries with Non-Physician Clinicians



Physician Assistant; Assistant Doctor; Health Extension Worker; Assistant Medical Officer; Medical Assistant; Surgical Technologist; Medical Licentiate; Clinical Associate; Rural Surgeon; Feldscher

Local Training



Task Sharing



Locally Based Teaching



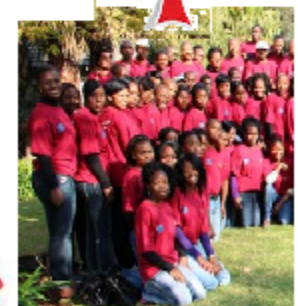
COSECSA

College of Surgeons
of East, Central and
Southern Africa



COSECSA: Shaping and leading surgical training in East, Central and Southern Africa





Training surgical specialists



or

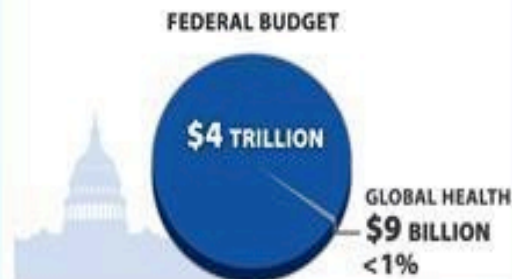
Training surgical technicians

Hamilton Naki Mamitu Gashe



A SNAPSHOT OF US GLOBAL HEALTH FUNDING

Global Health Funding as a Share of the US Federal Budget, FY 2015



US Global Health Funding, FY 2001 – FY 2015

IN BILLIONS



*President's Emergency Plan for AIDS Relief

US Funding for Global Health by Country, FY 2013



US Global Health Funding by Area, FY 2015

IN BILLIONS

TOTAL FUNDING = \$8.7 BILLION



*Global Fund to Fight AIDS, Tuberculosis and Malaria



ELSEVIER

Contents lists available at [SciVerse ScienceDirect](#)

Health Policy

journal homepage: www.elsevier.com/locate/healthpol



World Health Assembly Agendas and trends of international health issues for the last 43 years: Analysis of World Health Assembly Agendas between 1970 and 2012

Tomomi Kitamura^a, Hiromi Obara^a, Yoshihiro Takashima^b, Kenzo Takahashi^c,
Kimiko Inaoka^a, Mari Nagai^a, Hiroyoshi Endo^d, Masamine Jimba^e, Yasuo Sugiura^{a,*}

^a National Center for Global Health and Medicine, 1-21-1 Toyama, Shinjuku-ku, Tokyo 162-8655, Japan

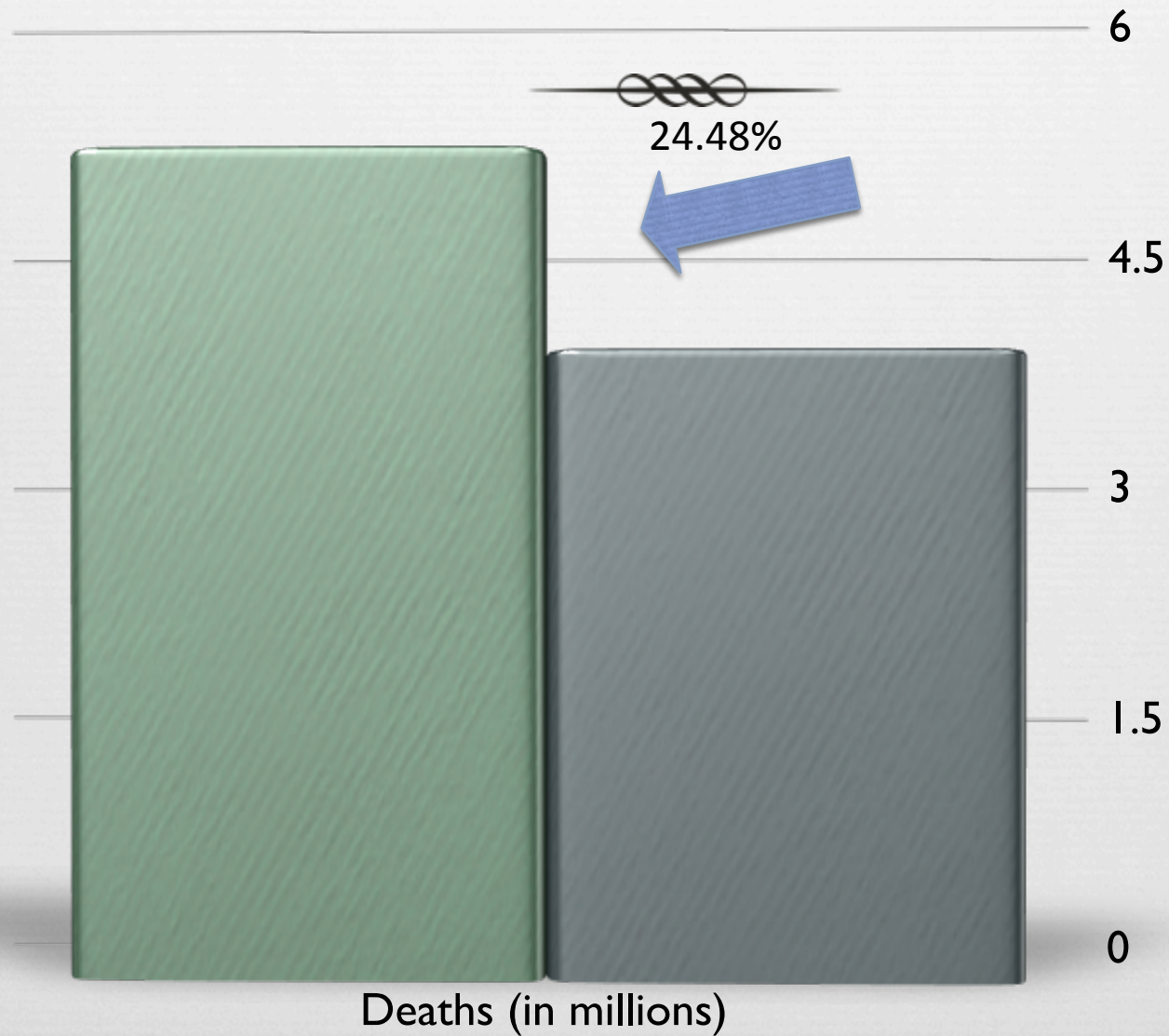
^b World Health Organization, Western Pacific Regional Office, 1000 Manila, Philippines

^c Department of Epidemiology and Public Health, Yokohama City University Graduate School of Medicine, 3-9 Fukuura, Kanagawa-ku, Yokohama, Kanagawa 236-0004, Japan

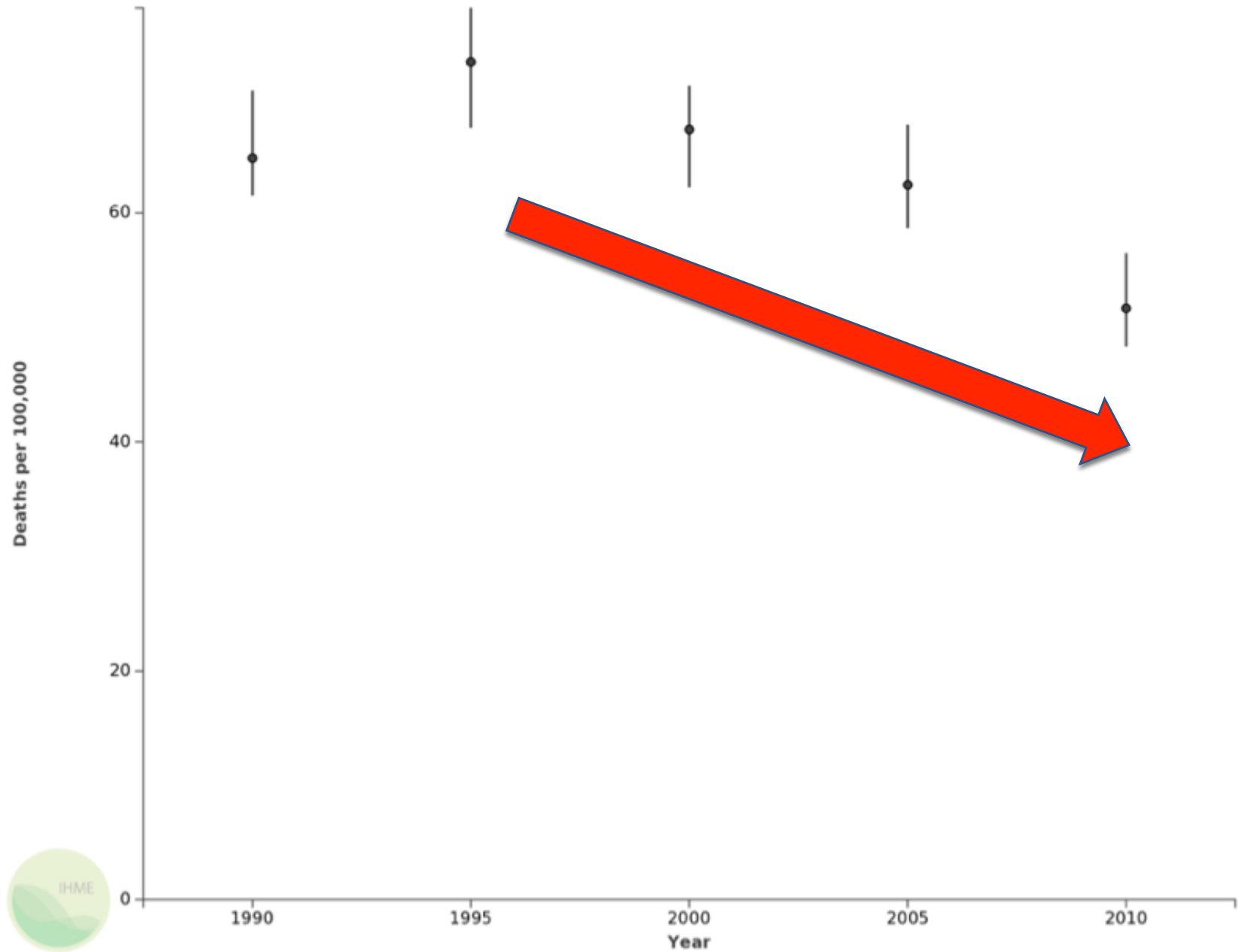
^d Department of International Affairs and Tropical Medicine, Tokyo Women's Medical University, 8-1 Kawada-cho, Shinjuku-ku, Tokyo 162-8666, Japan

^e Department of Community and Global Health, Graduate School of Medicine, The University of Tokyo, 7-3-1 Hongo, Bunkyo-ku, Tokyo 113-0033, Japan

■ Injuries ■ HIV, TB, Malaria

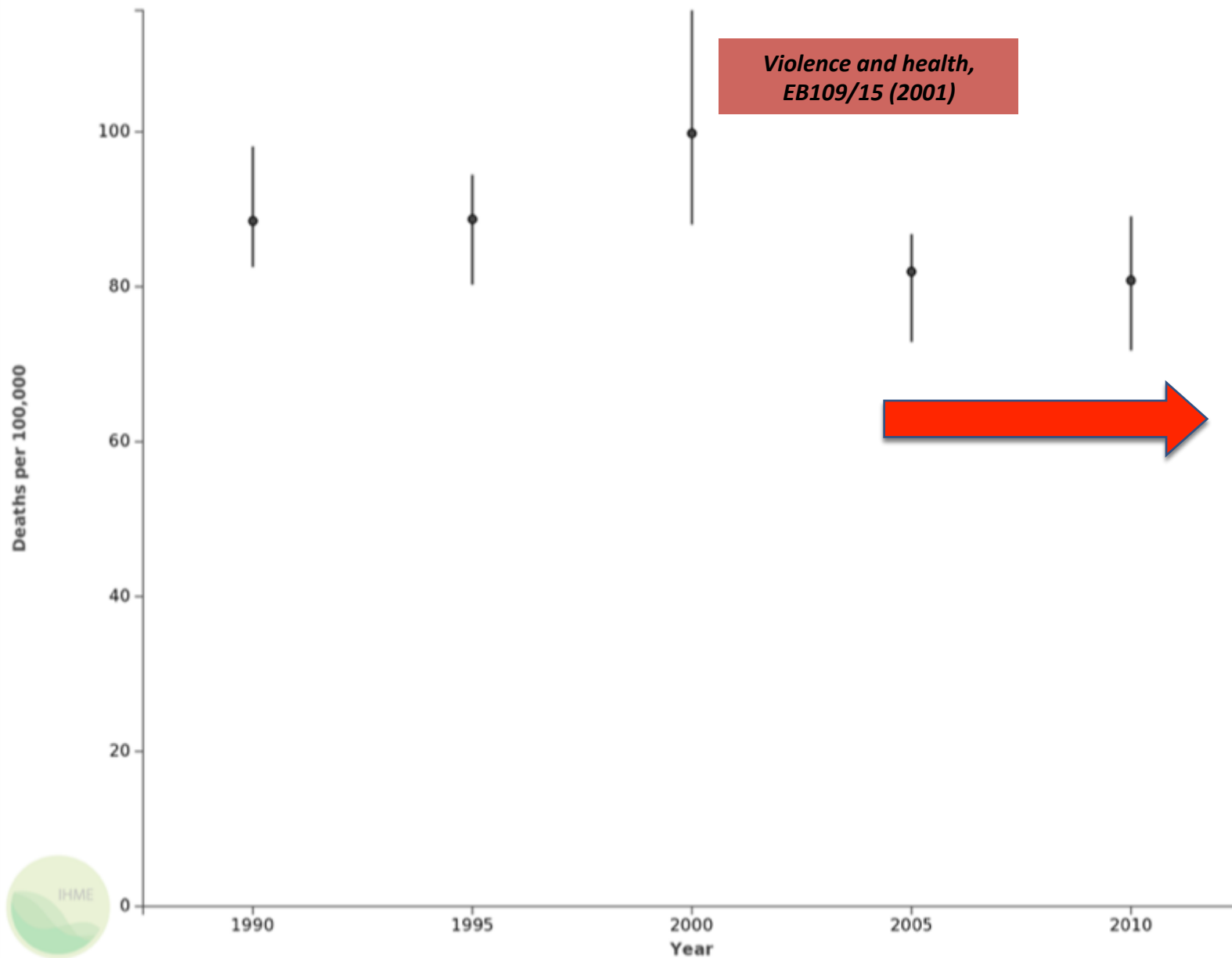


Developed
Injuries
Both sexes, Age-standardized

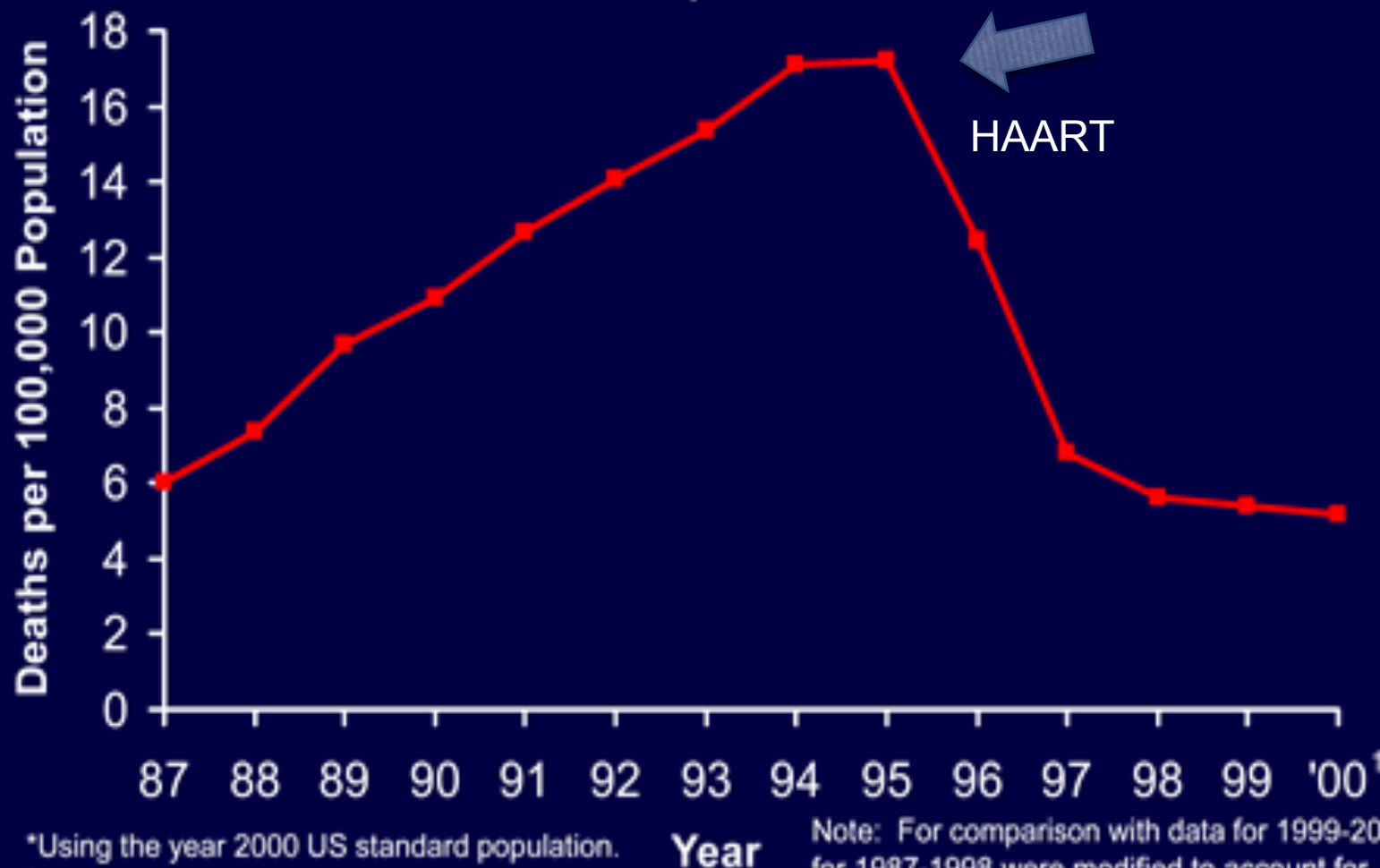


Developing
Injuries
Both sexes, Age-standardized

*Violence and health,
EB109/15 (2001)*



Trends in Age-Adjusted* Rate of Death due to HIV Infection, USA, 1987-2000



*Using the year 2000 US standard population.

[†]Preliminary mortality data for 2000

Note: For comparison with data for 1999-2000, data for 1987-1998 were modified to account for ICD-10 rules instead of ICD-9 rules.



Elements of Success



- Predictable, adequate funding from international and local sources
- Political leadership and champions
- Technological innovation within an effective delivery system, at a sustainable price
- Technical consensus about the appropriate biomedical or public health approach
- Good management on the ground
- Effective use of information (ie, metrics)



The Value of Campaigns



Helping to reduce
premature cardiovascular
disease deaths
by 25% by 2025





15X15

THE YEAR OF SURGERY

3 focus areas:



∞ Advocacy

∞ Data

∞ Policy

Partnerships and Engagement



THE RIGHT TO HEAL

Special Film Screening

Monday January 13, 2014, 12:00pm

Sommer Hall (E2014)

Johns Hopkins Bloomberg School of Public Health
615 N. Wolfe Street

- Introduction by Dean Michael J. Klag, MD, MPH
- Screening of limited release film The Right to Heal
- Q&A featuring:
 - Film Producer Dr. Jaymie Ang Henry
 - Dr. Keith Martin, Executive Director, Consortium of Universities for Global Health
 - Dr. Henry Perry, Senior Associate, Department of International Health

www.therighttoheal.org

All are welcome!

GoldenHourFilms

- ❧ ~100 screenings
- ❧ 60 countries
- ❧ Lancet film review
- ❧ Hosted at Lancet
- ❧ Advocacy tool
- ❧ 30/10/3

Screenings



ASGBI

Association of Surgeons of Great Britain and Ireland



Consortium of
Universities
for Global Health



Operation  Smile



JOHNS HOPKINS

BLOOMBERG SCHOOL
of PUBLIC HEALTH



PHILIPPINE COLLEGE OF
SURGEONS
WWW.PCS.ORG.PH

UK parliament



International Women's Day

A close-up photograph of a woman's face and shoulder. She has dark skin and is looking directly at the camera. She is wearing a red garment with a yellow pattern. The background is blurred.

INTERNATIONAL
WOMEN'S DAY 2014

Saturday, March 8th.
Everywhere.

We believe in a simple truth: All women deserve the 'right to heal'. We're asking supporters to take action throughout the month of March to make sure that women everywhere can safely give birth. This means making sure that every woman has access to essential surgeries like caesarean section.

Help us ensure women have the Right To Heal.
This March, change starts with you.

Join us

Data/ publications

Cost-effectiveness of Surgery in Low- and Middle-income Countries: A Systematic Review

**Caris E. Grimes, Jaymie Ang Henry,
Jane Maraka, Nyengo C. Mkandawire &
Michael Cotton**

World Journal of Surgery
Official Journal of the International
Society of Surgery/Société
Internationale de Chirurgie

ISSN 0364-2313

World J Surg
DOI 10.1007/s00268-013-2243-y



Health Policy and Planning Advance Access published September 26, 2014

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Health Policy and Planning 2014;1–10
doi:10.1093/heapol/czu102

Surgical and anaesthetic capacity of hospitals in Malawi: key insights

Jaymie Ang Henry,^{1,2*} Erica Frenkel,³ Eric Borgstein,^{1,4} Nyengo Mkandawire^{1,4,5} and Cyril Goddia⁶

¹International Collaboration for Essential Surgery (ICES), New York, NY, USA, ²University of California, Berkeley School of Public Health, Berkeley, CA, USA, ³Gradian Health Systems, New York, NY, USA, ⁴Department of Surgery, University of Malawi College of Medicine, Blantyre, Malawi, ⁵Faculty of Medicine, Flinders University, Adelaide, Australia and ⁶School of Anaesthesia, Queen Elizabeth Central Hospital, Blantyre, Malawi

*Corresponding author. International Collaboration for Essential Surgery (ICES), 101 Avenue of the Americas NY NY 10013, USA.
E-mail: jaymie.henry@gmail.com



Cotton *et al. Globalization and Health* 2014, **10**:1
<http://www.globalizationandhealth.com/content/10/1/1>



COMMENTARY

Open Access

Value innovation: an important aspect of global surgical care

Michael Cotton^{1,2*}, Jaymie Ang Henry^{1,3} and Lauren Hasek⁴

Policy

Provided key input and support of
pending WHA Resolution on surgical care 2015



Advocacy thus far



ICS, FIGO
WFSA, ICM
GIEESC

Trinidad

October

2013

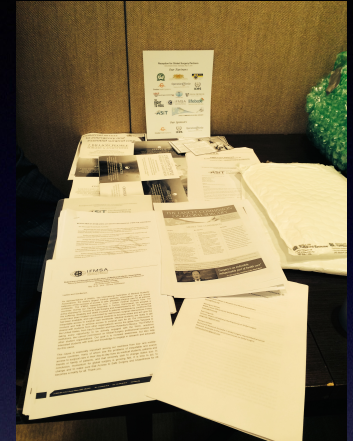


*UN side event
UNFPA
Tanzania*

New York

February

2014



*WHA
reception*

Geneva

May



*Public statement at
UN post-2015
Open Working
Group,
New York*



*Public statement at
UN post-2015
DPI NGO
New York*



*Clinton
Global
Initiative
New York*

June

August

September

2014



**Permanent Mission of the United Republic of Tanzania
to the United Nations**

CHECK AGAINST DELIVERY

PRESENTATION BY

**MS. ELLEN MADUHU, REPRESENTATIVE OF THE UNITED REPUBLIC OF
TANZANIA, DURING THE UNITED NATIONS SIDE EVENT ON THE
IMPORTANCE OF ESSENTIAL SURGICAL CARE IN EMPOWERING WOMEN
AND CHILDREN**

THURSDAY, FEBRUARY 6 | 2014

Metrics



“You can’t manage what you can’t measure”
-W. Edwards Deming

THE LANCET

The Lancet, [Volume 384, Issue 9956](#), Page 1748, 15 November 2014
doi:10.1016/S0140-6736(14)62012-2

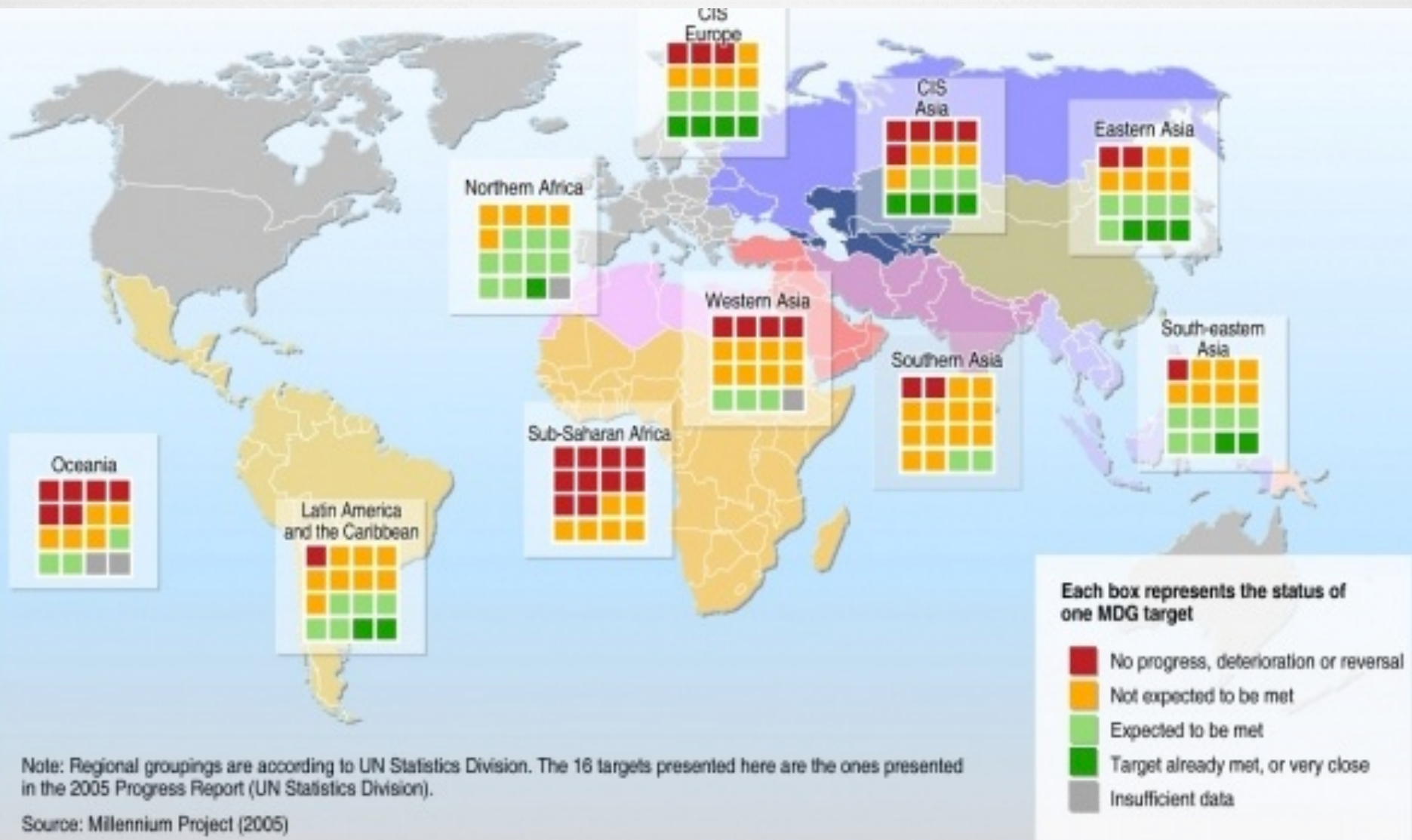
Published Online: 05 November 2014

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Letter to global health agency leaders on the importance of surgical indicators

[Emmanuel Malabo Makasa](#) , on behalf of 100 signatories and supporting organisations listed in the appendix

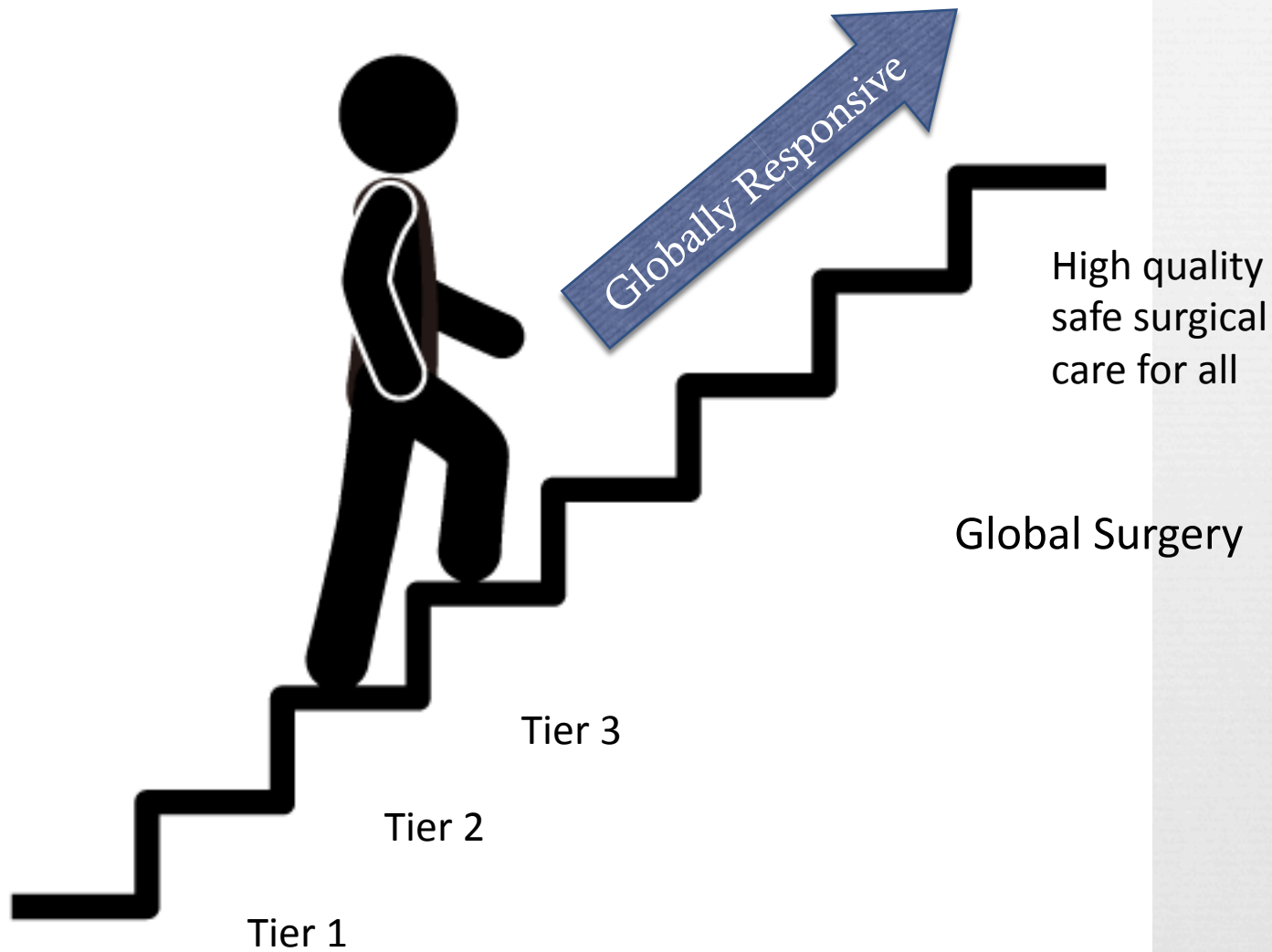
Keeping score



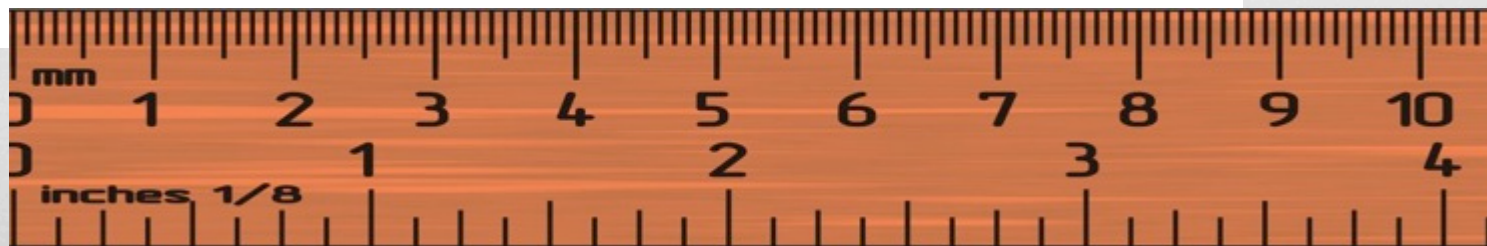
What's next?



- G4 Alliance
- Call your MOH to support the WHO resolution on Surgery
- Keep posted on the ICES/R2H/15x15 website
- Become an ICES member



Essential Surgery








Thank you



www.therighttoheal.org

www.essentialsurgery.com

15 SURGICAL TREATMENTS

TREATMENT	INTERVENTIONS	PREVENTS	TRAINING REQ'D
Fd Fractures & Dislocations	Reduction of fractures and dislocations (including external fixations) Reduction is a medical procedure to reduce a fracture or dislocation to the correct alignment. Open reduction refers to the method wherein the fracture fragments are exposed surgically by incising the tissues. Once the fragments are reduced, the reduction is maintained by application of casts, traction or held by implants which may be for the external or internal. Closed: Ponsati method includes gentle manipulation and casting of the feet at weekly intervals. By applying this technique a clubfoot within the first few weeks of life, most clubfeet can be successfully corrected without the need for major reconstructive surgery.	Disability Deformity	6-9 Months of training
	Anesthesia: Local, Regional, General Equipment:   Facility:  HEALTH CENTER *		
Ce Cataract Extraction	Reduction of fractures and dislocations (including external fixations)	Disability Deformity	6-9 Months of training
Cs Cesarean Section	Reduction of fractures and dislocations (including external fixations)	Disability Deformity	6-9 Months of training
Su Severe Uterine Bleeding	Reduction of fractures and dislocations (including external fixations)	Disability Deformity	6-9 Months of training
Cr Cleft Lip Repair	Reduction of fractures and dislocations (including external fixations)	Disability Deformity	6-9 Months of training
Hr Hernia Repair	Reduction of fractures and dislocations (including external fixations)	Disability Deformity	6-9 Months of training
Si Surgical Infections	Reduction of fractures and dislocations (including external fixations)	Disability Deformity	6-9 Months of training
Sw Severe Wounds	Reduction of fractures and dislocations (including external fixations)	Disability Deformity	6-9 Months of training
Sh Severe Head Injury	Reduction of fractures and dislocations (including external fixations)	Disability Deformity	6-9 Months of training
Ao Airway Obstruction	Reduction of fractures and dislocations (including external fixations)	Disability Deformity	6-9 Months of training
Uo Urinary Obstruction	Reduction of fractures and dislocations (including external fixations)	Disability Deformity	6-9 Months of training
Ci Chest Injury	Reduction of fractures and dislocations (including external fixations)	Disability Deformity	6-9 Months of training
Sa Septic Arthritis	Reduction of fractures and dislocations (including external fixations)	Disability Deformity	6-9 Months of training
Sl Severe Limb	Reduction of fractures and dislocations (including external fixations)	Disability Deformity	6-9 Months of training
Aa Acute Abdomen	Reduction of fractures and dislocations (including external fixations)	Disability Deformity	6-9 Months of training

LEGEND

EQUIPMENT TYPE



BASIC EQUIPMENT: Resuscitators; foot sucker; oxygen concentrator; IV equipment; suction tubes;



ADVANCED EQUIPMENT: Complete anesthesia; resuscitation and airway management system; pulse oximeter; laryngoscope; macintosh blades; oxygen concentrators; adult/peds resuscitator sets; magilla forceps; intubation stylet and/or bougie; IV equipment; suction catheters; gloves/gowns; nasogastric tubes; oral airways; tracheal tubes; spinal

FACILITY TYPE



Small Hospital/Health Center with small number of bed and sparsely equipped OR



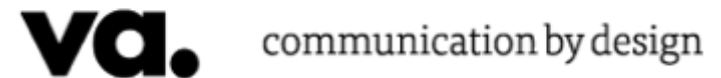
District Level/Provincial Hospital with 100-300 beds and major & minor operating theater





SYMPOSIUM
SURGERY IN LOW RESOURCE SETTINGS
NOVEMBER 14TH–16TH 2014

WHAT
IS YOUR
ROLE?



VERSPREID JE PROEFSCHRIFT ALS MOBILE APP

