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# Essential Surgery Volume Update

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# Focus of Surgery Volume

## Essential surgery in low- and middle-income countries

- Common surgical conditions with substantial burden of disability/death that are amenable to surgery
- Rare but treatable conditions causing severe disability or death

# Volume Outline

## INTRODUCTION

- Surgical conditions in low- and middle-income countries: burden and response
  - *Volume editors*

## PART 1: The Global Burden

- a. The Direct Burden: tables summarizing the relevant Global and Regional Estimates for 1990 and 2010 [Direct burden estimates, in deaths and (if relevant) DALYs, for males and females, in four age groups, and total.]
- b. Risk factors: tables summarizing deaths associated with the most significant risk factors in 2010 and the predicted mortality reduction from a 10% reduction in risk.
- c. Sequelae: tables summarizing YLDs and YLLs associated with major sequelae, including where important, the age distribution.
- d. Indirect burden: a table summarizing the indirect mortality burden of each condition.
- e. Avertable Burden: Summary of avertable burden from district level essential surgery. Summary of direct, indirect, and counterfactual burden from obstetric fistula. Summary of direct, indirect and counterfactual burden from congenital malformations.
  - *Steve Bickler, Hideki Higashi, Marvin Hsiao, Amardeep Thind, Theo Vos, Tom Weiser (authors to be confirmed)*

# Volume Outline

## **PART 2: Surgical Interventions**

- Repair of congenital defects
  - *Diana Farmer, Peter Donkor, Katrine Loftberg, Doruk Ozgediz, Nicole Sitkin, Nilas Young*
- Trauma, orthopedics, surgical infections (including more advanced surgical procedures and burns)
  - *Richard Gosselin, Anthony Charles, Manjul Joshipura, Nyengo Mkandawire, Charles Mock, Ray Price*
- Obstetric surgery
  - *Timothy R.B. Johnson, Richard Adanu, Clark Johnson*
- Obstetric fistula
  - *Mary Lake Polan, Mark Morgan, Mulu Muleta, Ambereen Sleemi*
- Surgical aspects of family planning (including access to safe abortion, tubal ligation, vasectomy, contraceptive implants)
  - *Joseph Babigumura (additional authors to be confirmed)*

# Volume Outline

## **PART 2: Surgical Interventions (continued)**

- General surgical emergencies (acute abdomen, hernias, thoracic emergencies, urinary obstruction)
  - *Colin McCord, Jessica Beard, Haile Debas, Naboth Mbembati, Doruk Ozgediz*
- Dentistry
  - *Richard Niederman, Habib Benzian, Saskia Estupinan-Day, Eyitope Ogunbodede, Marisol Tellez-Merchan, Marko Vujicic*
- Non-emergent essential surgery (hernia, hydrocele, chronic osteomyelitis)
  - *Bill Schecter, Jessica Beard, Michael Ohene-Yeboah*
- Ophthalmic surgery (focus on cataracts)
  - *N. Venkatesh Prajna, Sathish Srinivasan, R.D. Thulasiraj*

# Volume Outline

## **PART 3: Surgical Platforms and Policies**

- Organization of essential surgical services and the role of clinics and first-level hospitals (including outpatient and minor surgery)
  - *Colin McCord, Mike English, Margaret Kruk, Charles Mock, Sarah Russell, Johan von Schreeb, Theo Vos*
- Specialized surgical platforms (vertical surgical programs with extended examples concerning obstetric fistula repair, cataract and trachoma surgery, cleft lip and palate repair, burns, orthopedic surgery, otolaryngologic surgery, hernia, and other areas)
  - *Mark Shrime, Steve Arrowsmith, William Magee, Ambereen Sleemi, R.D. Thulasiraj*
- Pre-hospital and emergency care
  - *Amardeep Thind, Meena Nathan Cherian, Renee Hsia, Jackie Mabweijano, Charles Mock, Eduardo Romero Hicks, Ahmed Zakariah*

# Volume Outline

## **PART 3: Surgical Platforms and Policies (continued)**

- Anesthesia and peri-operative care
  - *Kelly McQueen, Tom Conway, Richard Dutton, Zipporah Gathuya, Florian Nuevo, Andrew Ottoway, Iain Wilson*
- Reducing the surgically-induced burden of disease: policies for improving quality of care
  - *Tom Weiser, Atul Gawande*
- Workforce innovations: surgical training and task shifting
  - *Staffan Bergström, Haile Debas, Delanyo Dovlo, Barbara McPake, Caetano Pereira*

# Volume Outline

## **PART 4: The Economics of Surgery**

- Costs, effectiveness, and cost-effectiveness of selected surgical procedures and platforms: A summary from across the volume
  - *Ramanan Laxminarayan, Steve Bickler, Marvin Hsiao, Sweta Adhikari*
- Extended cost-effectiveness analyses of surgery at the district hospital and of surgical task shifting (incorporating benefits of insurance for averting poverty, borrowing/selling, etc.)
  - *Margaret Kruk, Mark Shrimme, Stephane Verguet, Kjell Arne Johansson*
- Surgery and poverty
  - *Bill Schecter*



# Authors

- All authors have submitted chapter outlines
- All are in process of writing chapter drafts
- Part 2: Surgical Interventions chapter drafts due March 31

# Proposed Timeline

2013												
Activity	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec
Part 2	Part 2 chapter preparation (drafts due 3/31)											
	Mechanical editing (World Bank)											
	Web publication and feedback											
	Author response to feedback											
	Structural editing											
	IAMP-led review											
DCP3 Advisory Committee Meeting, DC (3/13-15)												
Parts 3 & 4	Parts 3 & 4 chapter preparation (drafts due 6/30)											
	Mechanical editing (World Bank)											
	Web publication and feedback											
	Author response to feedback											
	Structural editing											
	IAMP-led review											
Editor/author meeting (TBD)												
Writing of final drafts												
2014												
Activity	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec
IAMP-led review (continued for Parts 3 & 4)												
Writing of final drafts												
Final drafts submitted to editors												
Copy editing												
Volume production												
Volume publication												
Release at UCSF ceremony (TBD)*												
Publication in The Lancet												

# Proposed Template

Chapter length: 12,000 word maximum

## A. Burden of disease due to condition

- Deaths
- Disability
- Other harms (economic effects on families, educational/cognitive)

## B. Current surgical procedures to address this condition

- Describe procedures and necessary inputs in non-technical terms
- Level of the health system where this can be done in low- and middle-income countries
- Surgical skills required for procedures and health workers who can perform it

## C. Effectiveness and cost-effectiveness

- Effectiveness of the procedure in reducing death and disability and improving quality of life (current evidence from literature)
- Cost-effectiveness in low- and middle-income countries (current literature)

## D. Future directions

- Issues such as: implementation challenges in low-income countries and potential solutions, technical innovations to reduce complexity and cost, challenges/successes in scaling up
- Any other important considerations in enhancing access to interventions in resource-constrained settings