



Global Perspectives in Rural Surgical Services

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CPD for ESS/OSS
Banff, AB
Jan 16, 2020





WORLD HEALTH DECLARATION

I

We, the Member States of the World Health Organization (WHO), reaffirm our commitment to the principles enshrined in its Constitution that the enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being; in doing so, we affirm the dignity and worth of every person, and the equal rights and responsibilities of all for health.

II

We declare that the improvement of the health and well-being of people is the ultimate aim of the health system. We are committed to the ethical concepts of equity, solidarity and social justice, and to the perspective of the health of the whole population. Therefore, it is imperative to put the principles of health for all, receiving inadequate services for health or otherwise, into practice. We are committed to addressing the basic determinants and prerequisites for health. We recognize that the health situation requires that we give effect to the "Health for all" goal. We are committed to the development of national policies and strategies.

Alma-Ata Declaration

The Conference strongly reaffirms that health, which is a state of complete physical, mental, and social well-being, and not merely the absence of disease or infirmity, is a fundamental human right and that the attainment of the highest possible level of health is a most important world-wide social goal whose realization requires the action of many other social and economic sectors in addition to the health sector.

Primary Health Care Pushed Aside

SELECTIVE PRIMARY HEALTH CARE: AN INTERIM STRATEGY FOR DISEASE CONTROL IN DEVELOPING COUNTRIES*

JULIA A. WALSH and KENNETH S. WARREN

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New York, NY 10036, U.S.A.

Abstract—Priorities among the infectious diseases affecting the three billion people in the less developed world have been based on prevalence, morbidity, mortality and feasibility of control. With these priorities in mind a program of selective primary health care is compared with other approaches and suggested as the most cost-effective form of medical intervention in the least developed countries. A flexible program delivered by either fixed or mobile units might include measles and diphtheria-pertussis-tetanus vaccination, treatment for febrile malaria and oral rehydration for diarrhea in children, and tetanus toxoid and encouragement of breast feeding in mothers. Other interventions might be added on the basis of regional needs and new developments. For major diseases for which control measures are inadequate, research is an inexpensive approach on the basis of cost per infected person per year.

Growth monitoring

malnutrition's many causes ; the growth
monitoring approach ; the involvement of
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immunization and primary health care.
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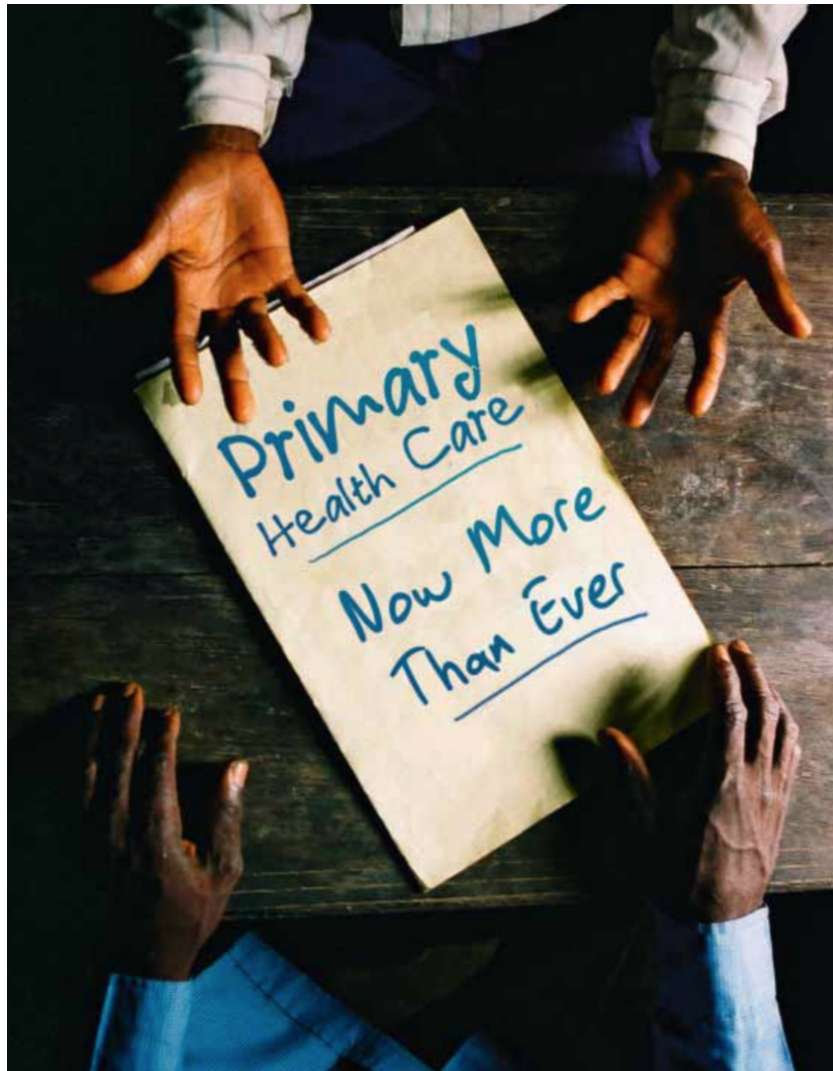
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GOBI VERSUS PHC? SOME DANGERS OF SELECTIVE PRIMARY HEALTH CARE

BEN WINNER

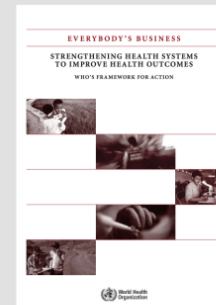
Henry Luce Professor of Food, Resources and International Policy, School of Social Science,
Hampshire College, Amherst, MA 01002, U.S.A.

Abstract—This article enters the debate concerning comprehensive versus selective primary health care by focusing on UNICEF's 'child survival revolution'. It is argued that UNICEF is dangerously mistaken in believing that its present emphasis on selective primary health care is a precursor or 'leading edge' of comprehensive primary health care. The approach of UNICEF—diffusion of a package of technologies by campaigns organized from the top down—is more likely to undermine the social basis for comprehensive care.



The Return to Primary Health Care

World Health Report 2008



Alma Ata and primary healthcare: back to the future

After 40 years, global health is returning to the vision of the Alma Ata declaration

Zulfiqar A Bhutta *professor*^{1 2}, Rifat Atun *professor of global health systems*³, Navjoyt Ladher *head of scholarly comment*⁴, Kamran Abbasi *executive editor*⁴

¹Centre of Excellence in Women and Child Health, Aga Khan University, Karachi, Pakistan ; ²Dalla Lana School of Public Health, University of Toronto, Toronto, Canada; ³Harvard University, Boston, MA, USA; ⁴The BMJ, London, UK

In 1978, when the world looked different geopolitically, the Soviet Union hosted a landmark international conference on primary healthcare. Organised by the World Health Organization and Unicef, the conference took place at Alma Ata (now Almaty) and considered the role of primary healthcare in population health. It finished with a declaration that promised “health for all by the year 2000.”¹

The Alma Ata declaration was signed by 134 countries and 67 international organisations and was groundbreaking in several ways. The declaration promoted a holistic definition of health “as a state of complete physical, mental and social wellbeing.

health.”^{2 3} The outcome was a package for reducing child mortality based on growth monitoring, oral rehydration, breastfeeding, and immunisations (GOBI). Once expanded to include food supplementation, female literacy, and family planning, GOBI-FFF became a rallying cry for Unicef and other agencies for more than a decade.

Hence, although some countries in Latin America—notably Brazil, Cuba, and Nicaragua—introduced a new model of comprehensive primary healthcare inspired by the Alma Ata declaration,¹ the vision lost momentum in most countries. Instead, a more selective version of primary healthcare gained

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The Global Burden of Disease Study 2015



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the
GBD Study

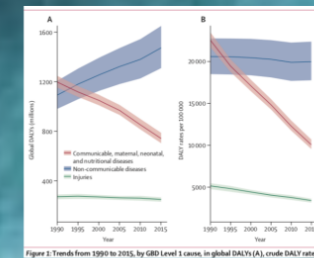
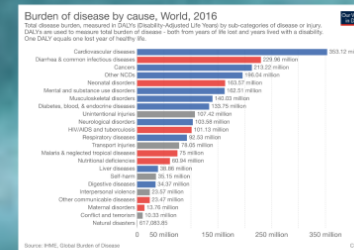
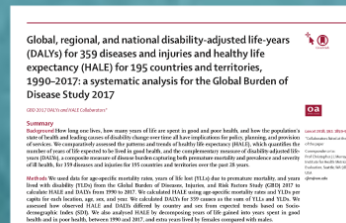
the
Surgical
Burden

A New
Priority

A New
Field

The Global Burden of Disease Study

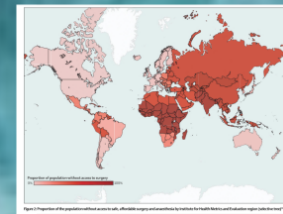
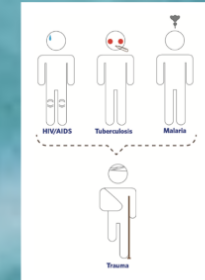
- started in 1990
- uses a metric called the Disability-Adjusted Life Year (DALY)
- most comprehensive study we have for global patterns of disease
- used to set health priorities, policies, research agendas



The Burden of Surgical Disease

Surgical Condition:

any condition that requires suture, incision, excision, manipulation, or other invasive procedure that usually, but not always, requires local, regional, or general anaesthesia



"Surgery may be thought of as the neglected stepchild of global public health."

- Paul Farmer and Jim Kim

Global surgery: defining an emerging global health field

Anna J Dare, Caris E Grimes, Rowan Gillies, Sarah L M Greenberg, Lars Hagander, John G Meara, Andrew J M Leather



Global health is one of the defining issues of the 21st century, attracting unprecedented levels of interest and propelling health and disease from a biomedical process to a social, economic, political, and environmental concern. Surgery, however, has not been considered an integral component of global health and has remained largely absent from the discipline's discourse.¹ After much inattention, surgery is now gaining recognition as a legitimate component of global health. In January, 2014, Jim Kim, President of the World Bank, urged the global health community to challenge the injustice of global inequity in surgical care, stating that "surgery is an indivisible, indispensable part of health care and of progress towards universal health coverage".² However, defining a place for surgery within the current global health paradigm of disease-based care and issue-specific advocacy remains a challenge—surgery is not a distinct disease entity such as HIV/AIDS, nor does it target a specific demographic such as reproductive, maternal, neonatal, and child health. Rather, surgery plays a part in addressing a diverse set of cross-cutting health challenges within a health system³ and is crucial to the full attainment of global health goals.

Individuals and groups committed to addressing global inequity in access to surgery and improving the status of surgical care within global health have started to come together under the umbrella of global surgery. Although the term global surgery has rapidly entered the vernacular, a definition has not been provided. Here, we discuss the importance of defining global surgery to advance its role as an indivisible component of global health and propose a working definition that can serve as a focal point around which both the surgical and wider global health community can unite. Increased awareness of the place for surgery within global health will benefit not only the surgical community, but all those working to improve health outcomes, strengthen health systems, and reduce health inequities at a local and global scale.

Common definitions in global health are central to the setting of objectives, priorities, and strategies, communication of goals and vision, and channelling of resources.⁴ They can also act as a rallying point, to unify different actors and create strong community cohesion, which is key to generation of political priority.⁵ The nascent global surgery movement would do well to learn from global health's mistakes. Failure to define global health early in its own development allowed and even encouraged several, competing, and sometimes contradictory frames of reference to emerge.⁶ The confusion was damaging and created silos and factions among groups instead of cohesion and cooperation.⁷

Although global surgery has not been defined formally, definitions for various related terms including surgical

care, surgical conditions, and surgical providers have been proposed (appendix). These definitions take a broad, inclusive approach to the definition of surgery, recognising that surgical care is usually delivered within multidisciplinary teams. Such care does not always involve an operation or procedure and can be delivered at primary care level and in the hospital setting.

Underpinning the emergence of the term global surgery has been a desire to link surgical need with the overall global health agenda. To define global surgery conceptually, the central tenets of global health therefore need to be incorporated. These tenets have themselves been the subject of much analysis and debate,^{8,9} but are broadly considered to include the global conceptualisation of health, the synthesis of population-based approaches with individual level clinical care, the central concept of equity in health, and the cross-sectoral, interdisciplinary approach to the understanding of ill health and its solutions.¹⁰

The term global in global health refers to health issues that are worldwide or universally present, that transcend national boundaries, and are supraterritorial—such as, for example, climate change.¹ The key commonality is that global is used to refer to the scope of the problems not their physical location.¹ So too for global surgery. In the absence of a clear definition, global surgery has been increasingly used to refer to surgery within geographical boundaries, and particularly within low-income and middle-income countries. A focus on these countries is appropriate because inequity is greatest in these regions. However, definition of the specialty as referring only to the problems of specific countries or regions would be incorrect. Concentration on the scope of the problems and the processes driving them rather than the geographical boundaries in which they are contained allows for greater insight into determinants and solutions.

A global approach to surgery will mean a change in the way responsibility and accountability for surgical care are approached. Because the causes of inadequate or inequitable surgical care and the solutions are often interconnected or interdependent, the burden and responsibility for improving care is collective and needs to extend beyond sovereign borders. Identification of successful strategies for increasing collective responsibility, action, and accountability at a global level, which are also locally grounded, will be crucial to meaningful progress in global surgery. The emergence of several transnational initiatives that address globally relevant issues in surgery such as patient safety,¹¹ hospital-acquired infection,¹² and international organ trafficking¹³ are examples of strategies that have been conceived at a global level, developed on the basis of collective responsibility, and adopted within countries and local institutions.

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See Online for appendix

For more on global surgery see http://www.thelancet.com/commission/global-surgery

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surgical inequity in the world's poorest regions.

Global surgical inequity is not only present in low-income and middle-income countries. In many countries with advanced economies, individuals who are indigenous, poor, uninsured, from an ethnic minority, or live in a remote area, are also substantially less likely to receive adequate, timely surgical care.¹⁷⁻¹⁹ Conflict, displacement, and natural disaster can also result in the sudden absence of surgical care irrespective of a country's

Global Surgery Initiatives



Emergency and essential surgical care

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About us



The WHO Programme for Emergency and Essential Surgical Care (EESC) is dedicated to strengthening health systems by improving access to safe, timely and affordable surgical, obstetric and anaesthesia care, to optimize health outcomes.

The programme was established to take the lead in efforts to reduce the global burden of surgery-related diseases resulting from injuries, pregnancy-related complications, communicable and noncommunicable diseases, disasters and humanitarian crises, but which still too often lead to premature death and disability.

Universal access to safe, affordable surgical and anesthesia care when needed saves lives, prevents disability, and promotes economic growth.

Read our policy briefs to learn more:



Global Surgery 2030
Report Overview



The economics of surgery
A powerful argument for investment



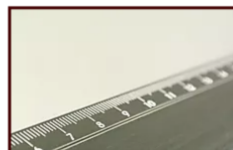
Assessing access
Indicators for a healthy surgical system



National governments
Actions and opportunities for governments

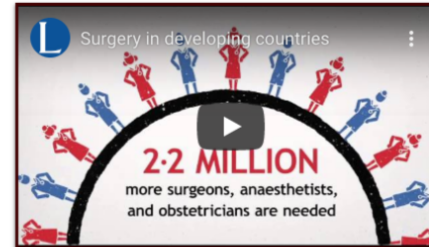


International community
Financing and supporting a global scale-up



Measure and plan
A quick reference

The Lancet: Global Surgery



Dr Jim Kim: Address to The Lancet Commission on Global Surgery



GLOBAL SURGERY 2030

Essential Surgery



Key Messages

Full provision of essential surgical procedures would avert about 1.5 million deaths a year or about 6-7% of all avertable deaths in low- and middle-income countries.

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Volume Contents

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- [Part 3: Surgical Platforms and](#)

Foreword by Dr. Paul Farmer

"The Essential Surgery volume of *DCP3* helps definitively dispel many of the myths about surgery's role in global health, in part by showing the very large health burden from conditions that are primarily or extensively treated by surgery. It dispels the myth that surgery is too expensive by showing that many essential surgical services rank amongst the most cost-effective of all health interventions."

Read complete foreword: [HTML](#) | [PDF](#)



Policy Forum

Increasing Access to Surgical Services in Sub-Saharan Africa: Priorities for National and International Agencies Recommended by the Bellagio Essential Surgery Group

Sam Luboga¹, Sarah B. Macfarlane^{2*}, Johan von Schreeb³, Margaret E. Kruk⁴, Meena N. Cherian⁵, Staffan Bergström³, Paul B. M. Bossyns⁶, Ernest Denerville⁷, Delanyo Dovlo⁵, Moses Galukande¹, Renee Y. Hsia², Sudha P. Jayaraman², Lindsey A. Lubbock², Charles Mock⁴, Doruk Ozgediz⁸, Patrick Sekimpi¹, Andreas Wladis³, Ahmed Zakariah⁹, Naméoua Babadi Dade¹⁰, Peter Donkor¹¹, Jane Kabutu Gatumbu¹², Patrick Hoekman¹³, Carel B. IJsselmuiden¹⁴, Dean T. Jamison¹⁵, Nasreen Jessani¹⁶, Peter Jiskoot¹⁷, Ignatius Kakande¹⁸, Jacqueline R. Mabweijano¹⁹, Naboth Mbembati²⁰, Colin McCord²¹, Cephass Mijumbi¹, Helder de Miranda²², Charles A. Mkony²⁰, Pascoal Mocumbi²³, Jean Bosco Ndiokubwayo²³, Pierre Ngueumachi²⁴, Gebreamlak Ogbaselassie²⁵, Evariste Lodi Okitombahe²⁶, Cheikh Tidiane Toure²⁷, Fernando Vaz²⁸, Charlotte M. Zikusooka²⁹, Haile T. Debas², for the Bellagio Essential Surgery Group (BESG)

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DISEASE CONTROL PRIORITIES • THIRD EDITION

1

Essential Surgery



EDITORS

Haile T. Debas
Peter Donkor
Atul Gawande
Dean T. Jamison
Margaret E. Kruk
Charles N. Mock

WITH A FOREWORD BY
Paul Farmer

What
is it?

Where
does it fit
in?

The First-
Level
Hospital

Essential Surgery

Surgical conditions which:

- are primary or extensively treated by surgery
- have a large health burden
- can be successfully treated by cost-effective surgical procedures

Could [the international surgical community] arrive at a limited list of essential surgical procedures, dividing it into two? The first list would include first aid that every health worker, no matter how elementary her or his training, should be able to provide. The second list would comprise essential surgical procedures for first line hospitals that every young doctor should be able to carry out with a minimum of post-graduate training.

- Halfdan Mahler (1980)

Platform for delivery of procedure	
Community facility and primary health centres	First-level hospitals
Dental procedures	Extraction Drainage of dental abscess Treatment for caries?
Gynaecological, obstetric, and family planning	Normal delivery? Caesarean birth? Vacuum extraction or forceps delivery? Ectopic pregnancy? Manual vacuum aspiration and dilation and curettage? Tubal ligation Vasectomy Hysterectomy for uterine rupture or intractable post-partum haemorrhage? Visual inspection with acetic acid and colposcopy for precancerous cervical lesions
General surgical	Drainage of superficial abscess? Male circumcision Repair of perforations (perforated peptic ulcer, typhoid, duodenal perforation, etc.)? Appendectomy? Bowel resection? Colectomy? Gallbladder disease (including emergency surgery for acute cholecystitis)? Hernia (including incarceration)? Hydrocele/curry Relief of urinary obstructions; catheterisation or suprapubic cystostomy (tube into bladder through skin)?
Injury	Resuscitation with basic life support measures? Suturing lacerations? Management of non-displaced fractures? Resuscitation with advanced life support measures, including surgical airway? Tissue debridement (chest drain)? Trauma laparotomy? Fracture reduction? Irrigation and debridement of open fractures? Placement of external fixator; use of traction? Explantation or fasciotomy (cutting of constricting tissue to relieve pressure from swelling)? Trauma-related amputations? Skin grafting Burns?
Congenital	-
Visual impairment	-
Non-trauma orthopaedic	Drainage of septic arthritis? Debridement of osteomyelitis?

Integration of surgery acts as an enabler, raising the ability to deliver other health-care services.

- Meara et al, LCoGS

These rural surgery programs are the cornerstone of rural hospital-based care.

- Jude Kornelsen, Stuart Iglesias, et al.

Surgery is an indivisible, indispensable part of health-care.

- Jim Kim, World Bank

CLINICAL REVIEW

Essential Surgical Services: An Emerging Primary Health Care Priority

Julia Pemberton, BSc (Hons), MSc (c)
Brian Cameron, MD, FRCS

ABSTRACT

Essential surgical services have been a neglected part of global primary health care priorities. This neglect has not been intentional; rather it is a consequence of the logistical, practical and social challenges unique to surgery. Recent literature demonstrates the vast unmet global surgical need and deconstructs the issues underlying the provision of this essential health service. Surgical conditions such as injury, obstetrical complications, and congenital anomalies contribute to 15% of death and disability worldwide, largely in the most resource-poor countries. Yet new evidence confirms that surgical care is more cost-effective than antiretroviral treatment for HIV in preventing death and disability. There has simply been a lack of attention and resources directed at improving the necessary components of surgical care: training of health workers to deliver emergency and essential surgical services, and provision of the necessary ancillary staff, equipment and supplies to provide basic surgical care. Reviewing the current best evidence, this paper reflects on the historical roots of primary health care, and argues that surgical services are an essential component of primary health care that should be universally accessible and affordable.



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Review

Provision of essential surgery in remote and rural areas of developed as well as low and middle income countries

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ABSTRACT

Background: Surgery is increasingly becoming an integral part of public health and health systems development worldwide. Such surgical care should be provided at the same type and level in both urban and rural settings. However, provision of essential surgery in remote and rural areas of developed as well as low and middle income countries remains totally inadequate and poses great challenges.

Methods: Though not intended to be a systematic review, several aspects of primary health care and its surgical aspects in remote and rural areas were reviewed. Search tools included Medline, PubMed and

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

The Sixty-eighth World Health Assembly,

Having considered the report on strengthening emergency and essential surgical care and anaesthesia as a component of universal health coverage;¹

Recognizing that each year more than 234 million surgical procedures are performed globally for a wide range of common conditions requiring surgical care, affecting all age groups – including obstructed labour, birth defects, cataracts, cancer, diabetes, acute abdominal conditions, burns and

Policy Forum

Increasing Access to Surgical Services in Sub-Saharan Africa: Priorities Recommended

Sam Luboga¹, Sarah B. Macfarlane², Bergström³, Paul B. M. Bossy⁴, Sudha P. Jayaraman², Lindsey Wladis³, Ahmed Zakariah⁹, N. Hoekman¹³, Carel B. IJsselmuiden¹³, Kakande¹⁸, Jacqueline R. Mak¹⁰, Miranda²², Charles A. Mkony¹⁰, Gebreamlak Ogbaselassie²⁵, Charlotte M. Zikusooka²⁹, Ha

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Recommendation 1: Strengthen Surgical Services at District Hospitals

Surgical care is usually concentrated in overloaded specialist referral hospitals that are inaccessible to patients who are unable or unwilling to travel. Those patients who do reach a health facility often arrive at a relatively advanced state of disease when the curative window may have passed. For example, 77% of patients with breast cancer evaluated in a tertiary Ugandan health facility presented in advanced stage compared with a much smaller fraction in high-income countries [8].

Sub-Saharan African Surgical Society Group

N. Cherian⁵, Staffan Bergström³, Renee Y. Hsia², Sekimpi¹, Andreas Matsumoto¹², Patrick M. Moot¹⁷, Ignatius M. Mijumbi¹, Helder de Almeida¹⁰, Pierre Nguemachi²⁴, Fernando Vaz²⁸, (BESG)

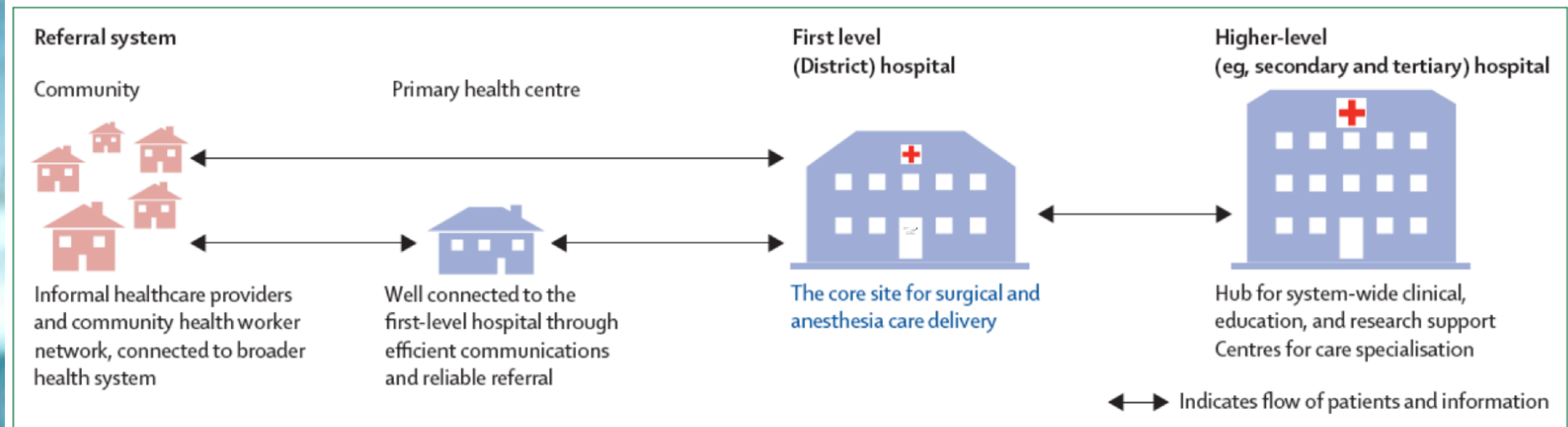


Figure 5: The surgical system

The surgical system is an interdependent network of individuals and institutions that reside within the health system.

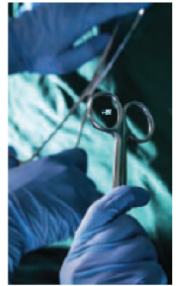
Alternative terms commonly found in the literature

Primary-level hospital
District hospital
Rural hospital
Community hospital
General hospital

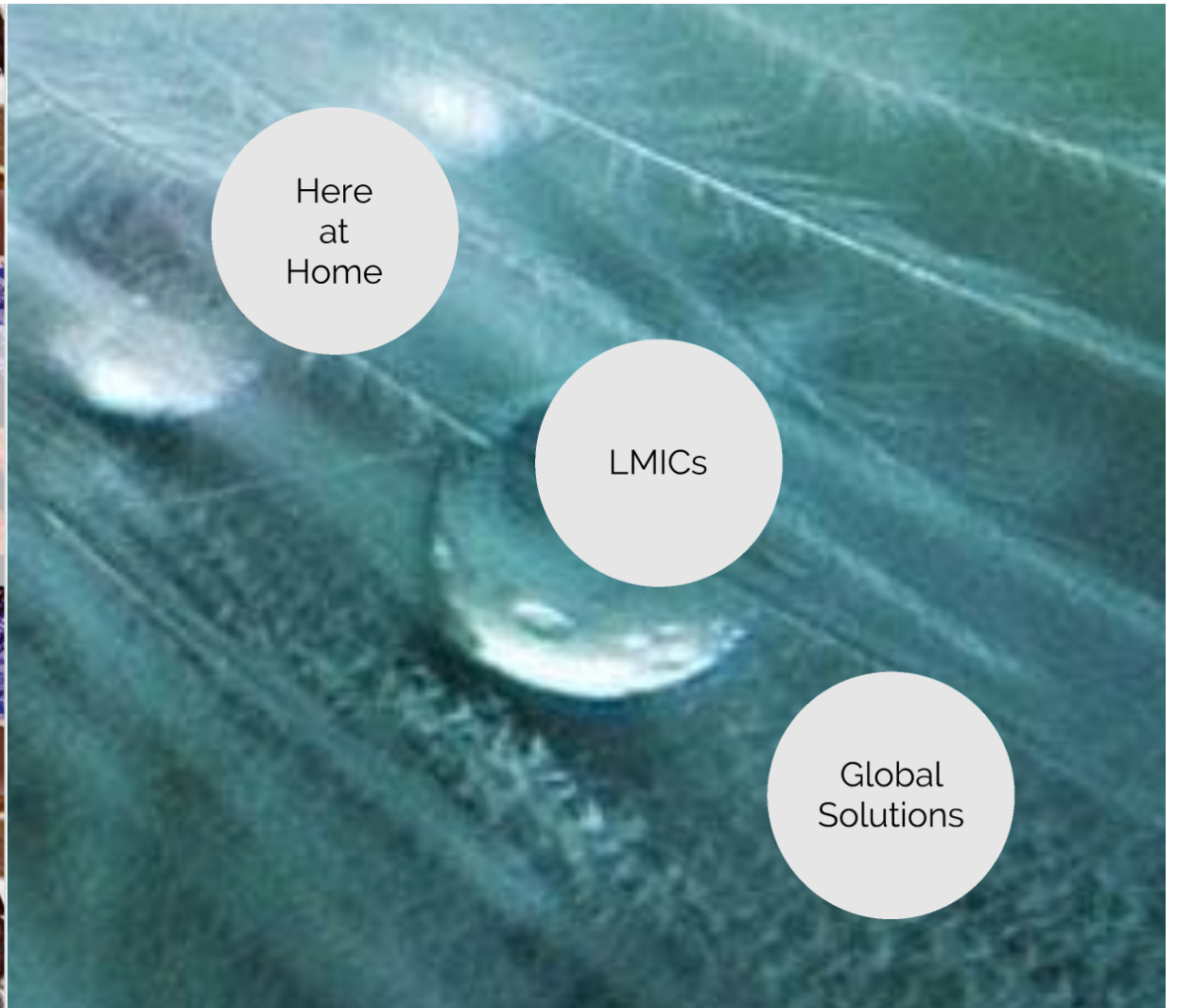
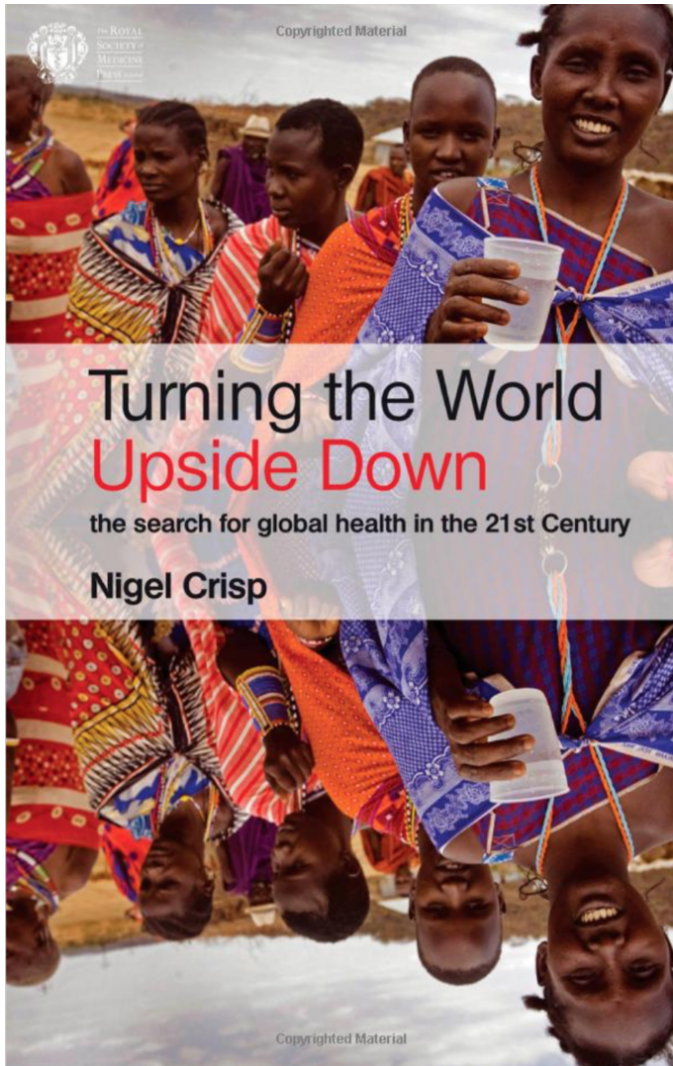
Chapter 12

Organization of Essential Services and the Role of First-Level Hospitals

Colin McCord, Margaret E. Kruk, Charles N. Mock, Meena Cherian,
Johan von Schreeb, Sarah Russell, and Mike English



- in developing countries, 60 to 80% of the population may be served by First-Level Hospitals
- in a high-income country like Canada, perhaps 20%
- priority level of health system strengthening (WHO); Essential and Emergency Surgery should be available



Surgical Services in Rural Canada

Rural Realities

- under-served and low-resourced
- geographic challenges
- half of Indigenous Canadians
- as 'Rural Generalists', this is what we're good at

Current Workforce Issue

- generalist general surgeons retiring
- "GP Surgeons" retiring
- new general surgeons are not generalists



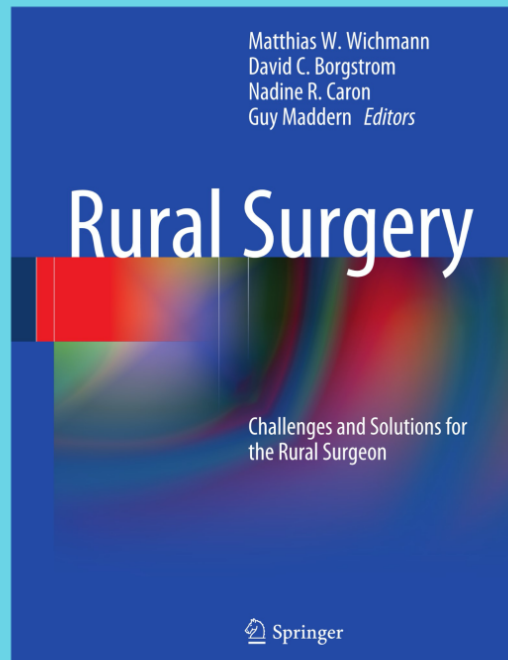
Surgery in Rural Canada: Challenges and Possible Solutions

Nadine R. Caron and Stephen J. Pinney

3

3.3.6 Summary of Challenges

A variety of forces are thus combining to undermine Canada's ability to provide high-quality surgical care in rural areas. Fewer general surgeons are being trained and those who do graduate often are not prepared to provide the breadth of surgical procedures required in a rural community. In addition, trainees have limited exposure to rural surgery and few role models to encourage them to choose a rural surgery practice. The prospect of a demanding on-call schedule and professional isolation with the lack of colleagues may also act as additional deterrents. Combined with limited funding for infrastructure and the lack of an integrated system for providing surgical care, these factors have lessened the ability of rural communities to recruit and retain surgeons.



DISCUSSIONS IN SURGERY •
DISCUSSIONS EN CHIRURGIE

A proposal for the curriculum and evaluation for training rural family physicians in enhanced surgical skills

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Summary

Rural access to enhanced surgical skills is a priority for the College of Family Physicians of Canada (CFPC) in response to the "Necessity of Practice" report. This paper offers a proposal for a curriculum and evaluation for rural family physicians. To our knowledge, however, a curriculum for FES in Canada has not been established formally. In the paper the Canadian Association of Family Physicians (CAFP) and the College of Family Physicians of Canada (CFPC) propose a curriculum for the training and evaluation of the FES skill set.

Introduction

The past 2 decades have led to the need for rural Canadians to travel for even the most basic procedural care.¹ The gap between available rural emergency care and the presence of urban-based emergency centres has led to a need for rural family physicians to have enhanced surgical skills.

COMMENTARY • COMMENTAIRE

The past and future of the generalist general surgeon

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Introduction

Over the past 2 years, the national Task Force on the Future of General Surgery has grappled with questions related to the future capabilities of the generalist. The goal is to ensure existing and potentially proposed programs for practice in the full range of settings where general surgeons work in Canada, while ensuring that the highest quality of care and technical expertise is preserved. Their recommendations, available online in the Task Force final report, set an international precedent for a national approach to general surgery readiness training.¹ In this commentary, we look to the past for the context to which the task force undertook its work.

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JOINT POSITION PAPER
DECLARATION DE PRINCIPLE
COMMUNE

Joint position paper on rural surgery and operative delivery

Our professional organizations have prepared this paper as part of an integrated, multidisciplinary plan to ensure the availability of well-trained practitioner teams to provide safe, effective and high-quality rural surgical and operative delivery services. Without these teams, rural surgery and operative delivery services would be severely compromised. This paper describes the "rural-ready" or "rural-capable" team model, which is a team of well-trained, well-qualified, and well-supported practitioners who are able to provide rural surgical and operative delivery services. The paper also describes the "rural-ready" or "rural-capable" team model, which is a team of well-trained, well-qualified, and well-supported practitioners who are able to provide rural surgical and operative delivery services. The paper also describes the "rural-ready" or "rural-capable" team model, which is a team of well-trained, well-qualified, and well-supported practitioners who are able to provide rural surgical and operative delivery services.

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COMMENTARY

A Competency-Based Curriculum for Training Rural Family Physicians in Operative Delivery

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Low & Middle Income Countries

Rural/District Challenges

- workforce shortage
- infrastructure limitations
- inadequate material resources
- overworked
- professional/geographic isolation
- lack of regional support
- access to continuing education

Task-sharing as a Solution

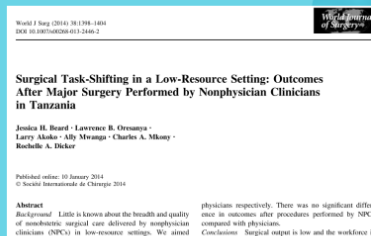
The rational redistribution of tasks among health workforce teams... from highly qualified workers to health workers with shorter training and fewer qualifications.

- LCoGS (2015)

The use of these practitioners ... is the only feasible route to deal with the huge lack of primary surgical care in LMICs, as well as elsewhere.

- Henry et al (2015)





Global Solutions

Turning the World Upside Down

The future for global health
This means of learning from rich and poor is helping to create another way of thinking about health which is not so bound by professions, does not separate health from the rest of society and which understands and embraces the way that culture and social issues impact on health. If health and poverty go hand in hand with poor education and dangerous environments, whilst good health and economic growth are reality.

Rural Generalist Medicine



Educational Support

- shared educational models?
- shared CME tools/content?
- academic/institutional partnerships?
- surgical exchanges?



team-based models of care and thereby worsen inequities in healthcare for rural communities.

- 16 Around the world, health systems are under pressure due to unsustainable growth in expenditures, ageing populations, an increasing burden of chronic non-communicable disease, unwarranted fragmentation and specialization of care, persistent health inequities and, in many countries, large gaps in medical, nursing and midwifery workforce. Rural Generalist Medicine – and clinical generalism more broadly – offers an important positive contribution to meeting these challenges.

Educational Support

- shared educational models?
- shared CME tools/content?
- academic/institutional partnerships?
- surgical exchanges?





Questions?

Ryan Falk

rgfalk@gmail.com



MSF - UBC Essential Surgical Skills Curriculum

A partnership to build capacity in surgical care in the lowest
resource settings

Dr. Emilie Joos
Trauma and Acute Care Surgeon
Vancouver General Hospital

Outline

The need

The actors

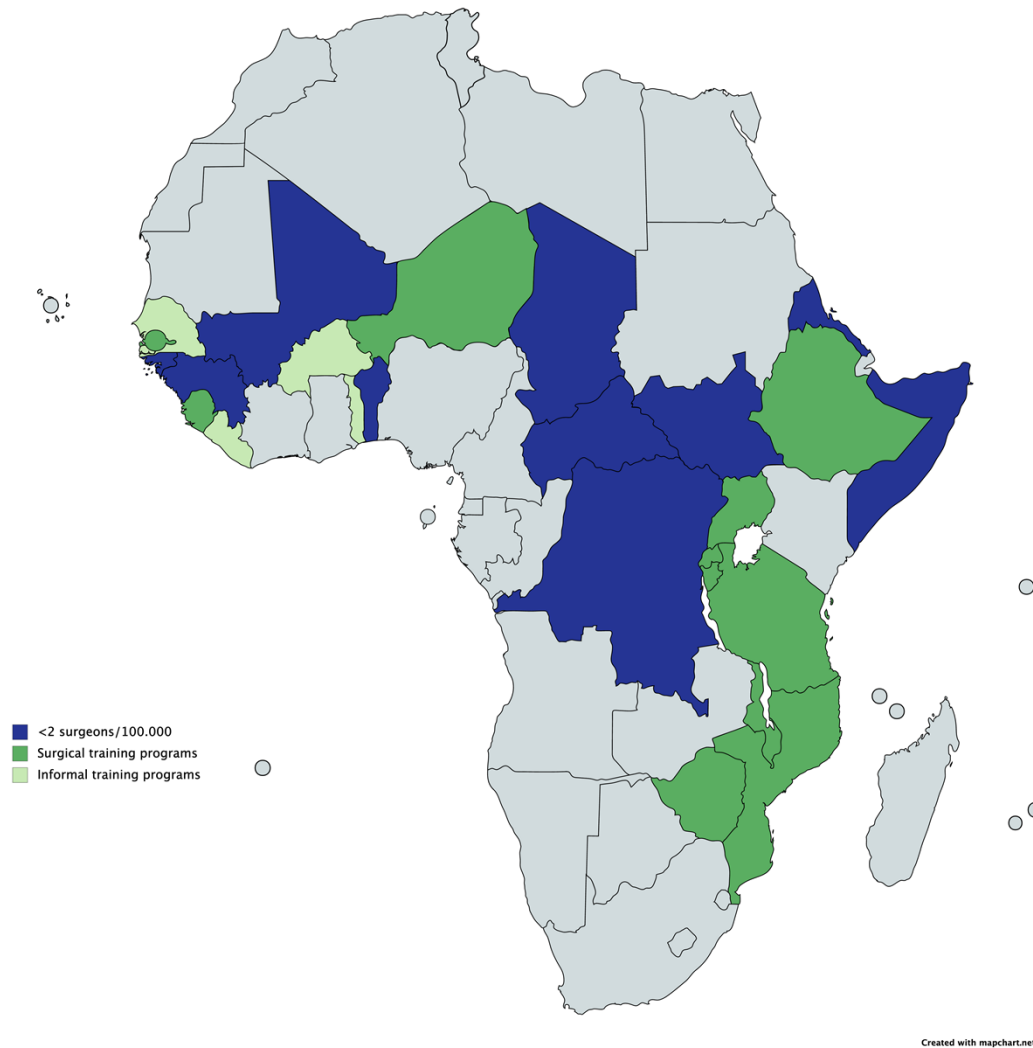
The concept

The application

The pitfalls

Outlook

The need



1

The need: South Sudan

2

Surgical provider density in South Sudan: **0.15/100,000** [1]

SAO target: **20/100,000** [2]

>80% of the population is rural

Volatile security context makes reliance on international care providers risky

[1] Achiek M, Lado D. Mapping the specialist medical workforce for Southern Sudan: Devising ways for capacity building. South Sudan Med J. 2010;3(2):6–92

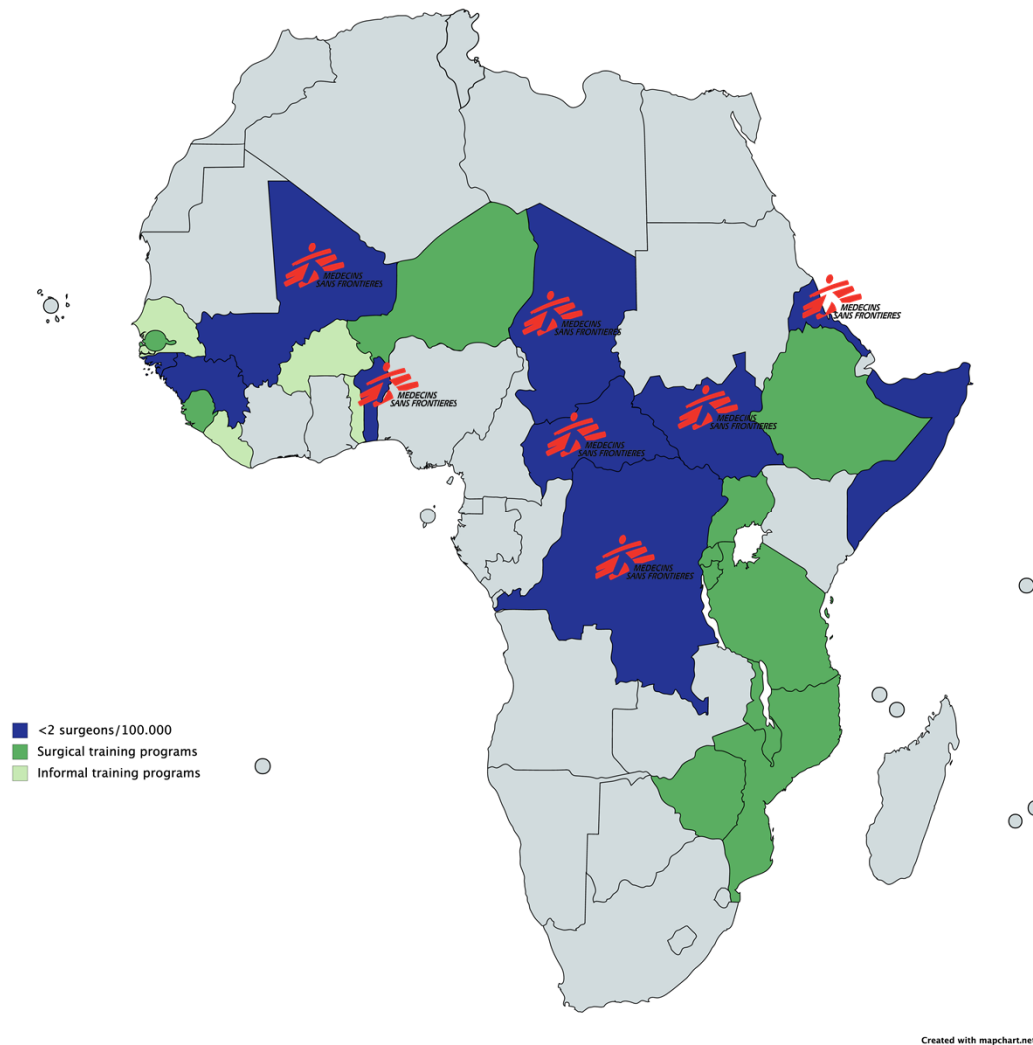
[2] Global Surgery 2030: Evidence and Solutions for Achieving Health, Welfare, and Economic. Development. Lancet Commission on Global Surgery. 2015

3

Slide 4

- 2 If we define this as the need, is the project the solution? Is the true need not the operational necessity for MSF to have local staff able to deliver surgical care in a sustained way in its project? Be independent from expat surgical workforce and build project resilience in case of degrading security. I understand that we should keep the big picture in mind but if we want to sell the approach we need to convince OPS of its benefits
Christian Heck, 11/15/2019
- 3 Specify reference
Christian Heck, 11/15/2019
- 1 Inserted a alternative slide, did not want to mess with your slides :) free to copy or discard
Christian Heck, 11/19/2019

The actors: MSF



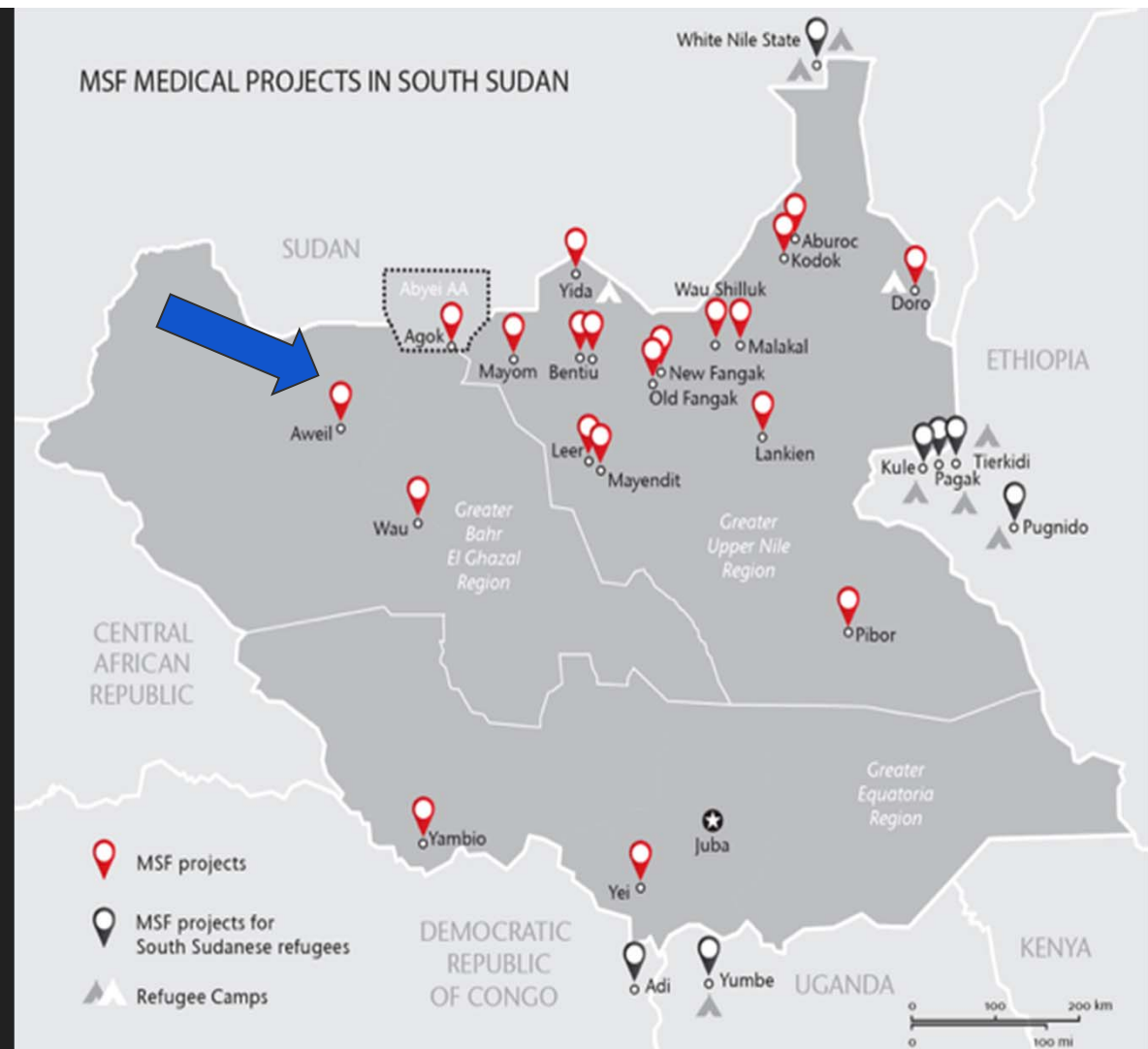
The actors: MSF

One surgical project in South Sudan:

Aweil State Hospital

- 150-beds
- 250-300 surgical procedures/month

Rotating expat surgeons







The actors: UBC

Branch for International Surgical Care: pool of experienced surgical faculty from different specialties and disciplines

Launched Masters in Global Surgical Care (MGSC) in 2018 [3]

Experience in capacity-building projects

Experience in multi-sectoral partnerships

Links to Enhanced Surgical Skills Program in Canada



[3] <https://internationalsurgery.med.ubc.ca/masters-program/>



Essential Surgical Care training in MSF projects
a MSF-UBC partnership

The concept

Task-sharing program

- Cost-effective
- Improves retention [4]

Proposed duration 12-24months

Modular e-learning curriculum with online evaluations

Technical skills taught in the field following CBD principles

Field visits by specialist MSF and UBC surgeons

[4] Pereira C, Cumbi A, Malalane R, Vaz F, McCord C, Bacci A, Bergstrom S. Meeting the need for emergency obstetric care in Mozambique: work performance and histories of medical doctors and assistant medical officers trained for surgery. BJOG 2007;114:1530–1533.

Slide 11

- 1 should we expand more of the scope of surgical skills that is taught ? Where is our focus? reliable "surgical foundations", trauma care, C sections?
how did we select trainees? Any preexisting surgical skills necessary?
christian heck, 11/12/2019

Course Modules: DEVELOPEI X

https://canvas.ubc.ca/courses/31006/modules

Bookmarks ICU stuff Video Archive | Ar... LSHTM Moodle SURG%!\$ Healthy Banana Br... ACS Online Video... National Review o... College of Physi...

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Module One: Safe Surgery and Safe Surgical Practices

1.1. Introduction	✓
1.2. Essential requirements	✓
1.3. Informed consent	✓
1.4. OT teams	✓
1.5. Team communication	✓
1.6. Counting	✓
1.7. Progressive sterility and hygiene	✓
1.8. Workplace safety	✓
1.9. Sterile fields and sterile instrumentation	✓
1.10. Sterilization processes	✓

Competence by design

2 Breaks up medical education into Entrustable Professional Activities (EPA) [5]

Reproducible

Transparent

Promotes accountability

[5] <http://www.royalcollege.ca/rcsite/cbd/rationale-why-cbd-e>

Module 3: Resuscitation

ENTRUSTABLE PROFESSIONAL ACTIVITY (EPA)

3.2. Chest tube placement

Description of activity: Trainee able to successfully define indications, landmarks and type of chest tube and technically able to complete the procedure.

Additional context information:

Based on this observation, overall:

☐ I had to do
☐ I had to talk them through
☐ I needed to prompt
☐ I needed to be there just in case
☐ I didn't need to be there

The following milestones were observed:

	Not observed	In progress	Achieved
Indication for chest tube placement			
Landmarks			
Proper technique			
Chest tube size			
Securing chest tube			
Connection to water seal system			

Slide 13

2

expand on the concept of EPAs as a proven (?) way to evaluate surgical trainees.
it is currently implemented in Canada and Switzerland, the US? Anywhere else ?

christian heck, 11/12/2019

The application

Launched in Aweil July 2019

3 trainees enrolled (Medical Officers)

First 4 months: completed 2/8 modules

MSF surgeon-trainer deployed for 12 months to maintain continuity

Visits: 1 UBC anesthetist x 6weeks; 1 MSF plastic surgeon x 1week

Upcoming: visit by UBC faculty, review of EPAs

The pitfalls

Local buy-in/network creation:

- Stakeholder engagement: Ministry of Health and Ministry of Education
- Trainee retention

Partners buy-in:

- UBC faculty (motivation, sustainability, availability)

Quality of training:

- Selection of trainers
- Mid to long-term program evaluation
- Maintenance of competency
- Scope of practice

Outlook

Technical oversight (MSF Working Groups, BISC, UBC Division of General Surgery, ESS group)

Links with other training initiatives (MSF and non-MSF related)

Can be / needs to be up-scaled !

6 other MSF surgical projects in SSA

Parallel between this project and ESS curriculum in Canada?



**Enhanced Surgical Skills (ESS) and
Obstetrical Surgical Skills (OSS) in Canada**

Thank you!!

