World Health Organization

MEETING REPORT

WHO Global Initiative for Emergency and Essential Surgical Care
Sixth Biennial and Tenth Anniversary Meeting

14-15 December, 2015
WHO Headquarters
Geneva, Switzerland

Emergency and Essential Surgical Care
Services Organization and Clinical Interventions Unit
Service Delivery and Safety Department
World Health Organization

WHO/HIS/SDS/2016.11

Contents

1. Executive Summary

The sixth meeting of the Global Initiative for Emergency and Essential Surgical Care (GIEESC) was convened on December 14-15 at the headquarters of the World Health Organization in Geneva, Switzerland. GIEESC was established in December 2005, and represents the first coordinated effort to address the lack of adequate capacity for emergency and essential surgical care services at the primary referral level in low and middle-income countries (LMICs). The purpose of the meeting was to convene GIEESC members to discuss important current developments and their implications, especially World Health Assembly Resolution 68.15: *Strengthening Emergency and Essential Surgical Care as a Component of Universal Health Coverage*, as well as the roadmap towards implementation of this resolution.

2. Background

Deficiencies in access to emergency and essential surgical and anaesthetic services result in unacceptably high rates of death and disability from a host of surgical conditions, especially at primary health care facilities in LMICs where there are significant gaps in terms of infrastructure, physical resources and supplies, as well as human resources for health. With the goal of strengthening emergency and essential surgical care at the primary referral level, WHO established the Clinical Procedures Unit (CPU) in 2004, which was charged with "ensuring efficacy, safety and equity in the provision of clinical procedures in surgery, anaesthetics, obstetrics, and orthopaedics, particularly at the district hospital level" and "promoting the appropriate effective and safe use of cell, tissue, and organ transplantation". The Services Organization and Clinical Interventions Unit (SCI) has since replaced CPU, although programmes and goals of the EESC programme have remained constant.

The **Emergency and Essential Surgical Care Programme** (EESC) cuts across a wide variety of vertical initiatives which each include components of surgical care, such as maternal and child health, male circumcision to prevent HIV transmission, Buruli ulcer, violence and injury prevention, and many others. Activities have been focused at the country-level, and have encouraged collaboration between WHO, ministries of health, and both local and international partners. Training materials produced include the *Integrated Management of Emergency and Essential Surgical Care* (IMEESC) toolkit and a reference manual entitled *Surgical Care at the District Hospital*. The IMEESC toolkit is a flexible template which may be adapted to local needs, to transfer appropriate technology to primary health centres. Core components include 1) Policies (standards, needs assessment (*Situational Analysis Tool*), essential surgery equipment, anaesthetic infrastructure and supplies), 2) Capacity building (integrated workshops to "train the trainers," which include *Emergency Trauma Care* Course and an eLearning platform), and 3) Reference manuals ("Surgical Care at the District Hospital," as well as slides and other teaching materials), and quality/safety materials (best practices on safety procedures, equipment, disaster situations, monitoring and evaluation of programmes).

The **Global Initiative for Emergency and Essential Surgical Care** (GIEESC) was inaugurated in December 2005 at WHO headquarters in Geneva, and encourages collaboration between a diverse group of individuals, institutions and organizations from various disciplines, all concerned with improving access to safe, timely and quality surgical services, especially at the district level in LMICs. The ultimate goal is to strengthen local and country health care systems by better integrating emergency and essential surgical care and anaesthesia into health system strengthening activities, which will require a multidisciplinary, multisectoral effort. Currently, GIEESC has over 2100 members spread across 140 countries.

3. Objectives

The specific objectives for this sixth WHO GIEESC meeting were:

- to gather input to finalize the roadmap towards implementation of WHA resolution 68.15 that reflect priorities and needs at country level;
- to develop a final draft of the roadmap;
- to reach clear understanding of key roles and timelines of Member States and WHO Secretariat in working towards implementation of the resolution;
- to discuss next-steps forward for WHO GIEESC

4. Session I – Opening Session - Celebration of 2015

- **Introduction by the Session Chairman**
  Dr Emmanuel Makasa

Dr Emmanuel Makasa provided an introduction to guide the discussions that would follow for the next two days. He noted that the implementation of WHA resolution 68.15: S*trengthening emergency and essential surgical care and anaesthesia as a component of universal health coverage*, would require a commitment from both the World Health Organization and its Member States, including at the national, regional and local levels within countries. National leadership will be of key importance during the implementation phase. There will be the need to bring multiple partners together for a concerted effort, including departments at the World Health Organization and other UN agencies, Member States, non-governmental organizations, professional associations and other organizations and individuals. These entities must work in conjunction as a single unit to engage with Member States to implement this resolution. This must be well organized, as "actualization is the most difficult".

4A. Surgery within the context of Universal health coverage and quality care
Dr Edward Kelley

Dr Kelley's presentation focused on surgery as an essential element of both primary healthcare and universal health coverage. He emphasized that the global public health agenda is "extremely crowded" and that the community of individuals and institutions with an interest in promoting the surgical agenda will need to come together now. While universal health coverage is the over-arching concept, the sustainable development goals will also be important over the upcoming years. We, as a group need to focus on how emergency and essential surgical care will increase access to quality services. Discussions will be most important at the country level. The gradual evolution of surgical care at the World Health Organization has included the early work involving patient safety and quality, for which a World Health Assembly resolution (WHA 55.18) came to fruition in 2002, which recognized "the need to promote patient safety as a fundamental principle of all health systems". These efforts led to the birth of the World Alliance for Patient Safety in 2004. Recently there has been significant interest in healthcare associated infections, due to the significant accompanying morbidity, mortality and associated costs. Surgical site infection has also been highlighted. We have seen the emergence of checklists in health service delivery, most notably the WHO Surgical Safety Checklist in 2009. Dr. Kelley discussed the "improvement

continuum", beginning with implementation of that checklist, which has resulted in enhanced surgical safety and safer health care delivery, improved quality of care, robust people-centred health service delivery. All of these steps result in stronger health systems.

With regard to the implementation of universal health care, and surgery within the context of this, Dr Kelley discussed the modification of a "cube" which graphically describes the three dimensions to consider when moving towards universal health coverage, namely 1) which services are covered, 2) who is covered, and 3) financial risk protection. He also mentioned that there should be explicit consideration of quality and safety within the cube, as both are essential components of service delivery. Universal coverage of essential surgery will require approximately $300 billion above current levels of funding, over the next 15 years but would produce a benefit to cost ratio of more than 10 to 1. He then outlined the complex nature of service delivery, with people at the centre, surrounded by important concepts including health promotion, prevention, treatment, palliation, and rehabilitation. Care should be people-centred, of high quality, and ideally delivered within the context of community-based financing. Coverage should be expanded, with quality parameters embedded in enhancing coverage, and the range of surgical interventions meeting the local population's needs. A comprehensive package must be offered with quality, timely service delivery, and financial risk protection as preconditions.

Components of transformative change will include weaving quality into the fabric of the universal health coverage cube, placing people at the centre of service delivery, integrating monitoring and improvement, applying quality improvement tools, developing strong national health policies and strategies surrounding surgical services, and working together to develop contextually relevant solutions with links to the regional and global architecture. There are also important links to target Goal 3.8 of the Sustainable Development Goals, to "achieve universal health coverage, including financial risk protection, access to quality essential health-care services, medicines and vaccines for all."

4B. Surgery within the framework of integrated people-centred health services
Dr Hernan Montenegro

Dr Hernan Montenegro looked at surgery through the lens of the framework on integrated people-centred health services. He noted that the challenges with strengthening health-care delivery with better surgical services are immense, that partnerships will be required, and that we must all work within the context of the roadmap to advance our agenda.

The mandates and commitments required in WHA Resolution 68.15 are explicit for both WHO Secretariat and Member States, and the work should be linked with the health system as a whole at the country level. Components include policies and financing; essential services including access and integration; quality; health care workers; infrastructure and medical devices, medicines and supplies; data and information; monitoring and evaluation; networks and partnerships; and advocacy. The development of appropriate policies and of mechanisms for financing surgical services will be critical, and the approach must emphasize quality and safety. Dr Montenegro outlined five general strategic directions, including creating an enabling environment, coordinating services, strengthening governance and accountability, empowering and engaging people, and reorienting the model of care, each of which have their own strategic goals and objectives. It will also be important to harmonize the humanitarian and development health response, through disease surveillance and early

warning systems, emergency and preparedness response, along with emergency and essential surgical care.

4C. Global surgical workforce update
Dr James Campbell

Dr Campbell discussed surgical care within the context of the sustainable development goals (SDGs) as well as universal health coverage, and emphasized that improvements can only be captured if we have metrics. These will involve some joint work between the World Health Organization and the World Bank, along with other partners, with tracers for progress which include emergency and essential surgical care. He emphasized the importance of population coverage, people-centred service delivery, and financial protection from catastrophic expenditures. The "cube" of universal health coverage was discussed once again, in relation to the health workforce. The dimensions of the cube included people-centred and integrated services, population (including wealth quintiles), and risk protection. In looking at global indicators, there are eight key areas or "tracers," one of which involves trauma and surgical care in the measurement framework. The others are child health, communicable diseases, non-communicable diseases, public health and global health security, mental health, sexual and reproductive health, and maternal and newborn health.

In order to determine the number of health providers required, there are a number of questions to ask, including which interventions, which model, what competencies are required, which educational model for training, and what workforce will be required. The Lancet Commission on Global Surgery has suggested, as a minimum standard, a number of twenty surgical health providers, (defined as Surgeons, Anaesthetists and Obstetricians) per 100 000 population. Our current ability to reach accurate estimates of the surgical workforce is a challenge, as many countries do not have quantitative information on their workforce, and this is difficult to measure. Health workers move within and between countries. In some countries, more than 80% of surgical procedures are performed by non-surgeon health providers.

A joint WHO/European Commission project is currently being carried out in five countries (Ireland, India, Nigeria, South Africa and Uganda) and phase I involves measuring stock and flow (entries and exits) of health workers in these countries. Multiple data sources will be utilized for this purpose. For example, in the state of Kerala in India, we know that there are between 2.6 and 6.8 providers per 100 000 population. Migration between countries is a significant issue, for example many graduates from Uganda can be found in other countries within Africa, and 51% of the surgical workforce in Ireland is made up of international medical graduates. There is a global strategy on human resources for health, and one target is that by 2020 all countries will be sharing data on human resources for health through National Health Workforce Accounts (NHWA) and submit core indicators to WHO annually. A number of organizations will contribute to this effort (WHO, OECD, ILO, World Bank, CDC, USAID, Member States, EU joint action on Health Work Force). Goals include a harmonized, integrated approach for an annual and timely collection of health worker information, improving the information architecture and interoperability, defining core workforce indicators, and defining reporting and open access for global public goods.

4D. Surgery within the context of emergency care
Dr Teri Reynolds

Integrated emergency care is a broad platform for addressing a range of diseases, including injury, communicable and non-communicable diseases, and pregnancy-related complications. Whether the emergency care is framed by disease (injury or NCDs), condition severity (emergent), or an event (disaster or outbreak), surgical and anaesthesia care are critical aspects. Strengthening operative capacity at first-level referral facilities, such as district hospitals, is, therefore, central to implementing WHA resolution 68.15, and many have spoken to this. In addition, increasing capacity at the primary level of the health system for early recognition, resuscitation and transfer for surgical conditions will be key to a more effective utilisation of district-level surgical services.

People accessing the system do not know whether their condition will require surgical care—in most parts of the world, adults and children are seen by front-line providers facing a range of undifferentiated conditions. Disseminating the knowledge and protocols to support these primary-level providers at the first point of access, both pre-hospital and at sub-district facilities—protocols to guide initial management and to facilitate direct transfer to facilities with operative services—will be key to effective and efficient utilization of strengthened operative capacity. In addition, developing these services will be essential to meeting the time-dependent surgical indicators currently under consideration. WHO offers an Emergency and Trauma Care System Assessment Tool, as well as a Basic Emergency Care course and a Trauma Care Checklist to support emergency care delivery. And on the other side of surgical services, early access to rehabilitation will be key to maximising the impact of expanded operative capacity.

4E. Evolution of EESC at WHO culminating in a WHO resolution
Dr Meena Cherian

Dr Meena Cherian described the surgical care programme at the World Health Organization from its inception in 2004 through the World Health Assembly resolution in 2015. Dr Cherian noted that while the case for emergency and essential surgical care was made by Dr Halfdan Mahler in 1980, by 2001 there was still no surgical care programme at WHO. There were challenges in framing surgical care to resonate with the public health agenda, but gradually data emerged from multiple sources. In particular, the public health community was made aware of the links between emergency and essential surgical care via existing public health programmes, including violence and injuries, pregnancy related complications, congenital anomalies, cancer and others. However these remained mainly vertical, so in 2004, WHO established the Emergency and Essential Surgical Care (EESC) Programme with the goal of ensuring the safety and efficacy of clinical procedures in anaesthesia, surgery, orthopaedics and obstetrics. This programme has aligned with a number of WHO strategies. The WHO Global Initiative for Emergency and Essential Surgical Care (GIEESC) was inaugurated in December of 2005 in Geneva with the principal goal of providing a convenient, global surgical forum of multi-disciplinary stake holders for expertise, partnerships, and collaboration, to strengthen the delivery of essential surgical services around the world. The GIEESC meetings have been held biennially and it currently counts 2,083 members from 140 countries. WHO has developed tools to meet local needs, including the Integrated Management for Emergency and Essential Surgical Care (IMEESC) toolkit, and the manual entitled *Surgical Care at the District Hospital.* The Situational

Analysis Tool (SAT) for assessing the specific infrastructure and availability of surgical services at facility level was developed in 2007 and has subsequently been utilized in 59 low- and middle-income countries, at a total of 1,700 health facilities. A global surgical workforce database has also been developed, and includes data from 164 countries. Numerous publications concerning the availability of essential surgical and anaesthetic services have been published using the SAT, and have outlined significant deficiencies in infrastructure, physical resources and supplies, and human resources available for essential surgical interventions. This has also identified gross deficiencies in the availability of anaesthetic services; it is clearly recognized that the role of anaesthesia extends well beyond the operating room to services which include pain relief, intensive care, and post-operative management.

Data has also emerged concerning large gaps in the surgical workforce, both in terms of absolute numbers and their distribution. In addition to the many publications on emergency and essential surgical care, a number of global health programmes and academia, as well as professional societies are now addressing surgery as a global health issue. The literature has been greatly augmented by the third edition of *Disease Control Priorities*, with an entire volume devoted to Global Surgery. In addition, the Lancet Commission on Global Surgery has provided a wealth of additional information specific to the overwhelming unmet global need for surgical and anaesthesia services, particularly in LMICs. While a number of previous World Health Assembly resolutions touched on a component of surgical care, such as several disease-specific conditions linked to essential surgical services, no specific resolution had been passed concerned with emergency and essential surgical care alone, until the 68th World Health Assembly in 2015. Zambia made a proposal update at the WHO Executive Board meeting in January 2014, and within the next few months a report was prepared for the 135th WHO Executive Board meeting in May 2014. This report was then reviewed and approved at the 136th WHO Executive Board in January 2015, resulting in WHA Resolution 68.15: *Strengthening emergency and essential surgical care and anaesthesia as a component of universal health coverage,* being unanimously adopted by the 68th World Health Assembly on 22 May, 2015. This resolution is now in the implementation phase, where Member State commitments now include integration of surgical services into national health plans, using data to drive health policies and planning, and investing necessary resources into strengthening surgical services. The WHO EESC secretariat has also committed to develop an action plan with a number of Member States through collaborations and partnerships to monitor and evaluate progress, quality and safety and report back to the World Health Assembly in 2017. Now there is a role for all members of WHO GIEESC to participate alongside colleagues, other partnerships, and with countries, to assist in the implementation of this resolution