Technical matters:

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

Universal health coverage (UHC) emphasizes the availability, accessibility, affordability and acceptability of services provided. The Sixty-sixth Session of the Regional Committee adopted resolution SEA/RC66/R4 on Health Intervention and Technology Assessment in support of Universal Health Coverage.

Surgically-treatable conditions are among the top 15 causes of disability worldwide. Conservative estimates suggest that 11% of the burden of diseases in the world can be attributed to health problems that could have been successfully treated with surgery, even in low-resource settings. As local surgical services are not available or are limited at the lowest levels of health-care facilities in many low- and lower-middle-income settings, these conditions remain untreated. There is a need to include emergency and essential surgical care and anaesthesia as part of UHC in order to make them accessible and affordable.

Strengthening emergency and essential surgical care and anaesthesia services will strengthen health services and improve the outcomes of populations who need these services, such as mothers and children as well as populations at risk. The value of incorporating surgical care into health services as a step towards providing UHC has been underscored in many World Health Assembly resolutions.

The High-Level Preparatory (HLP) Meeting held in the Regional Office in New Delhi, India, from 14 to 17 July 2014 reviewed the attached working paper and made the following recommendations:

**Actions by Member States:**

1. Member States should consider the development of appropriate health policies, plans and roadmaps to introduce emergency and essential surgical care and anaesthesia services at appropriate levels.

2. Health technology assessment should be conducted in order to introduce and establish appropriate, cost-effective health technologies, including emergency and essential surgical care and anaesthesia services by levels of care.
(3) Appropriate measures should be adopted to develop the human resources required to introduce emergency and essential surgical care and anaesthesia services, and include training modules in the undergraduate medical and nursing curricula.

(4) Blood transfusion services should be established in health facilities together with emergency and essential surgical care and anaesthesia services to reinforce health benefits.

(5) Member States should consider the establishment of trauma centres at strategic locations and develop a good referral system with ambulance services.

**Actions by the WHO Regional Office:**

(1) The WHO Regional Office should support Member States, upon request, in developing norms, guidelines and protocols to establish emergency and essential surgical care and anaesthesia services at different levels of health-care facilities.

(2) Member States should be supported in developing human resource capacities by organizing short training courses in surgery, anaesthesia and trauma care for medical, nursing and PSM (professions supplementary to medicine) teams.

(3) Technical support should be provided to Member States, upon request, to develop checklists, guidelines and tools to monitor and ensure the safety of surgical and anaesthesia services provided at health facilities and establish hospital accreditation systems.

The working paper and HLP recommendations are submitted to the Sixty-seventh Session of the Regional Committee for its consideration.
Introduction

1. The Sixty-fifth Regional Committee in 2012 adopted resolution SEA/RC65/R6 on Regional Strategy for Universal Health Coverage (UHC) to address gaps in the MDG and post-MDG health agenda to assist the Member States of the South-East Asia Region. UHC emphasizes the availability (what services are provided and geographical distribution), accessibility (which populations are covered), affordability (financial risk protection and prevention of catastrophic expenditure) and acceptability (socially and culturally) of services provided. The Regional Strategy makes four key recommendations: to base UHC on the principles of primary health care; expand social protection for better health equity; improve efficiency in service delivery; and, strengthen country capacity for evidence-based national UHC strategy development. The Sixty-sixth Session of the Regional Committee in 2013, adopted resolution SEA/RC66/R4 on Health Intervention and Technology Assessment in support of Universal Health Coverage recognizing the importance of evidenced-based decisions on resource allocation, service systems designs, and translation of policies into practice, as well as reaffirming the roles and responsibilities of the World Health Organization (WHO) to provide support to strengthen health research capacity and utilization in Member States.

2. Similarly, there is a requirement to strengthen emergency and essential surgical care and anaesthesia as a component of UHC in order to make these services accessible and affordable. It is estimated that more than 2 billion people in the world lack access to basic surgical care, even though it is an integral component of primary health care. This is mainly due to lack of basic surgical care services in primary health-care centres and lack of trained human resources. In addition, the delivery of anaesthesia, which is essential for surgical services, is limited by deficiencies in human resources, skills and equipment, as well as system capacity issues.

3. Research has identified that strengthening surgical capacity, particularly at the district hospital level, is a highly cost-effective method of reducing the global burden of diseases due to surgical conditions that can arise as a result of pregnancy-related complications, injuries, infections and noncommunicable diseases. Notably, strengthening local surgical capacity would provide a high degree of financial protection to patients and reduce the disability-adjusted life years lost in a cost-effective manner. It has been found that the cost–benefit ratio of expanding surgical capacity at the district hospital level is 1:10; i.e. every US$ 1 spent on strengthening local surgical capacity at the district hospital generates a benefit of US$ 10 through improved health and increased productivity.

4. Therefore, there is a need to strengthen surgical capacity at the district-level in order to provide emergency and essential surgical care and anaesthesia services and include these services in the UHC package to ensure better availability, accessibility and affordability.

Burden of surgical conditions

5. Surgically treatable conditions are among the top 15 causes of disability worldwide. Conservative estimates suggest that 11% of the world’s burden of diseases is due to health problems that could be successfully treated with surgery, even in low-resource settings. As local
surgical services are not available or limited at the lowest levels of health-care facilities in many low- and lower-middle-income settings, these conditions remain untreated. Minor surgical conditions may thus become lethal, and treatable injuries progress to death. Obstructed labour, congenital anomalies, diabetes-related conditions, cancer, cardiovascular diseases, burns, falls and injuries from road traffic accidents are the commonest conditions that require surgical care, and affect all socioeconomic and ethnic groups.

6. Conditions for which surgery is one of the primary clinical interventions are expected to become increasingly common in the coming years, as the disease pattern is changing from communicable diseases to noncommunicable diseases in many countries of the South-East Asia Region. It has been estimated that by 2030, over 45% of health problems will be due to conditions such as heart disease, cancer, diabetes and injuries caused by an increase in the number of road traffic accidents.

7. Services for these conditions, including surgical care, are often provided through independent disease-specific initiatives rather than through more sustainable, integrated service delivery approaches. 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 on health systems to provide essential basic surgical care is further increased by acute surgical care needs during disasters and emergencies, which are frequent in the Region.

8. In addition to facing challenges in providing surgical care at lower-level health-care facilities with adequately trained health staff equipped with the appropriate technology, most countries in the Region also face issues related to the quality and safety of the surgical care provided. Surgical misadventures, surgical site infections, health care-associated infections with antimicrobial-resistant organisms and clinical waste management are the major issues that need a systems approach.

9. Strengthening emergency and essential surgical care and anaesthesia services will strengthen health services and improve the outcomes of populations who need these services, such as mothers and children as well as populations at risk. The value of incorporating surgical care into health services as a step towards providing universal health coverage has been implicit in many World Health Assembly resolutions.

10. WHO has developed various guidelines, checklists and tools to assist Member States. The “Integrated management for emergency and essential surgical care e-learning toolkit” is one such tool to guide policies and research for evidence-based planning, monitoring and evaluation, and best practices for improving the quality and safety of surgical services. The toolkit includes the training of health-care workers in essential procedures. Assessments utilizing one element of the toolkit, the tool for situation analysis to assess emergency and essential surgical care, have identified major inadequacies in various countries in the relevant infrastructure and human resources, and in surgical interventions, skills and equipment.¹ In addition, there are numerous actions that can be taken at country level to strengthen emergency and essential surgical care and anaesthesia services.

¹ Available at: http://www.who.int/surgery/publications/topic_publications/en/index3.html
11. Surgical conditions have significant implications for both equity and efficiency linked to UHC. Access to quality emergency and surgical care and anaesthesia is currently limited at lower levels of service delivery – facilities that are key points of entry for health care for lower-income groups. Left unattended, these ailments impose a higher financial burden both for households and the health systems as well as higher morbidity and mortality outcomes. Therefore, in designing the benefit package for UHC, emergency and surgical care and anaesthesia require adequate consideration – and cost-effectiveness analysis can provide useful information for making choices between different service options as well as appropriate level of care.

**Actions at the country level**

12. **Raising awareness**: Awareness needs to be raised and sustained in Member States about the existence of low-cost interventions that reduce death and disability through improved access to safe surgical care. Member States need to encourage the integration of surgical services at the district and subdistrict levels of care as an integral part of the universal health coverage package. As part of this effort, multidisciplinary stakeholders, including policy-makers, health providers and the media, should be sensitized about the value of making the necessary investment to establish a firm evidence base and provide sustainable emergency and essential surgical care services as well as the importance of availability and accessibility at affordable cost at district and subdistrict hospitals/health facilities.

13. **Improving data on surgery for policy decision-making**: Evidence-based plans and policies need to be implemented to ensure the successful expansion of access to essential surgical services. Tools such as the WHO CHOICE project for choosing interventions that are cost-effective and WHO’s global database on emergency and essential surgical care should be used to provide evidence-generated analyses for investment planning and for identifying financial resources to strengthen surgical services.²

14. **Building political commitment**: Political commitment is essential for integrating surgical care initiatives into national health plans as an integral part of universal health coverage package of the country. Political priority should be given to supporting essential surgical care and anaesthesia within primary health care and UHC in all countries.

15. **Monitoring and evaluation**: Monitoring and evaluation are necessary to ensure and sustain both improved access to surgical services and their quality and safety. Maintaining surgical (including anaesthesia) records for reporting adverse events and perioperative mortality, and adequate follow-up are crucial for ensuring safe procedures and their monitoring. Surgical services at the district and subdistrict levels of care (including treatment for emergencies, trauma, obstetrics and anaesthesia) should be assessed and monitored with standardized tools.

16. **Strengthening the surgical workforce and infrastructure**: Member States need to consider strengthening the surgical workforce and infrastructure, including equipment and supplies, in their overall strategies for health system planning. Member States should foster training in surgical care through the exchange of knowledge and expertise, using networks and global partnerships that encourage surgical capacity-building with a special focus on first-referral health facilities and primary health care. Institutions need to review the curricula for surgical and

---

² Available at: http://www.who.int/surgery/eesc_database/en/
anaesthesia training to ensure that they are adapted to meet the growing need for surgical services, and provide continuing education for strengthening the capacity of the surgical workforce.

17. **Fostering global and regional collaboration and partnerships**: Coordination between health ministries, professional bodies, nongovernmental organizations, national governments, international organizations, academia, and the WHO Global Initiative for Emergency and Essential Surgical Care is crucial in order to support Member States in strengthening surgical care systems.

18. **Placing emergency and surgical care and anaesthesia with the broader UHC effort.** The cause and impact of surgical conditions on equity and efficiency must inform UHC strategies, specifically the design of the benefit package including service delivery and financing at different levels of care. While giving emergency and surgical care and anaesthesia due attention, it is important to consider an overall balance between prevention with curative care in the benefit package for sustainable UHC.

**Action by the Regional Committee**

19. The Regional Committee is invited to note this report and to provide further guidance.