



SURGICAL SYSTEM STRENGTHENING IN THE PACIFIC ISLANDS

At a glance

- Access, workforce, and financial risk protection are critical issues in surgical, obstetric, and anaesthetic and obstetric (SOA) care delivery in Pacific Island Countries and Territories (PICTs).
- In 2019, Pacific Health Ministers at their 13th meeting championed a Pacific-specific approach to advancing the safe and affordable surgery agenda as a critical component of Universal Health Coverage (UHC) and the Healthy Island Vision, including the development and implementation of National Surgical, Obstetric and Anaesthesia Plans (NSOAPs).
- In October 2020, Member States unanimously endorsed the *Action Framework for Safe and Affordable Surgery in the Western Pacific Region (2021-2030)* at the seventy-first session of the World Health Organisation Regional Committee Meeting for the Western Pacific.
- Since early 2020, five countries (Fiji, Tonga, Vanuatu, Cook Islands, and Palau) are piloting the NSOAP process, and have commenced the development of strategic plans for surgical system strengthening, supported by the Harvard Program for Global Surgery and Social Change (PGSSC), the Royal Australasian College of Surgeons (RACS), WHO West Pacific Regional Office (WPRO), and the Pacific Community (SPC).
- This collaborative has initiated a number of activities in line with the *Action Framework*.

Future vision

Surgical, obstetric, and anaesthetic (SOA) care is an essential component of achieving the Healthy Islands Vision and UHC. SOA care is required to treat 30% of the global disease burden, including maternal and child conditions, complications of non-communicable diseases, and traumatic injuries related to sudden-onset disasters and climate change.¹ During the COVID-19 pandemic, the versatility of surgical systems has become ever more apparent, as operating rooms, surgical human resources, and supply chains have been adapted to provide critical pandemic surge response worldwide. Investing in surgical care not only improves the last frontier of primary health, but also strengthens health system resilience to face a range of future emergencies such as pandemics and climate change.

¹ Meara JG, Leather AJM, Hagander L, Alkire BC, Alonso N, Ameh EA, et al. Global Surgery 2030: evidence and solutions for achieving health, welfare, and economic development. *The Lancet*. 2015 Aug 8;386(9993):569–624.

The Regional Action Framework for Safe and Affordable Surgery (RAF) in the Western Pacific Region illustrates a pathway for surgical system strengthening through a ground-up, system-based, and locally contextualised approach.² In line with the RAF, NSOAP development involves a multi-stakeholder consensus-based process to develop a vision and a strategic plan to strengthen and redesign surgical systems.³ Through adopting a system-based approach, improving safe and affordable surgery could transform health systems more broadly.

Examples of recent progress

Since the last PHMM and the adoption of the RAF, significant progress in surgical system strategic planning has been made. Fiji and Tonga have convened their stakeholder meetings with multi-sectoral input. Both countries are now engaged in the NSOAP drafting process. Vanuatu and Cook Islands have almost completed their situational analyses in preparation for this next step. The first draft of the Tonga NSOAP is currently under review, and one for Fiji is anticipated in the near future.

In addition to NSOAP development, the collaborative involving SPC, WPRO, Harvard PGSSC, and RACS are providing technical advice on a number of key issues identified during the strategic planning process. Initiatives related to patient safety and quality are under development, including guidelines to facilitate the assessment of adverse patient outcomes such as hospital-acquired infections and sterilisation services. These tools will shortly be ready for testing in the region and will increase the capacity of PICTs to identify health system gaps in the provision of high-quality SOA services.

In conjunction with countries, the collaborative partners are also developing a standardised list of essential SOA equipment and supplies and are working with procurement specialists to supply items to upgrade first-level facilities in Fiji and Vanuatu with the capability of performing essential 'Bellwether procedures'⁴ (laparotomy, caesarean section and open fracture management). Another component of this work entails upgrading internet services and sourcing technologies that will allow remote training and education, as requested by Member States in early 2021. National Regulatory Authorities (NRA) has been highlighted as an issue for PICTs; the collaborative between SPC, WPRO, Harvard PGSSC and RACS have also commenced consultation to strengthen regulatory mechanisms for surgical equipment.

Why urgent action is needed now

Investing in SOA care is cost-effective, saves lives, and promotes economic growth. The cost of increasing surgical capacity by 2030 is not negligible. An estimated investment of \$350 billion is required worldwide; however, this is many magnitudes less than the \$12.3 trillion lost from inaction.⁵ Countries in the Oceania region could stand to lose 2.5% of their GDP annually from the lack of access to safe and affordable surgical care.⁶

² World Health Organization Regional Office for the Western Pacific. Action framework for safe and affordable surgery in the Western Pacific Region: 2021–2030. Manila, Philippines; 2021. Report No.: CC BY-NC-SA 3.0 IGO.

³ Sonderman KA, Citron I, Mukhopadhyay S, Albutt K, Taylor K, Jumbam D, et al. Framework for developing a national surgical, obstetric and anaesthesia plan. *BJS Open*. 2019;3(5):722–32.

⁴ The provision of laparotomy, caesarean delivery, and treatment of open fracture have been found to be bellwethers of a system functioning at a level of complexity advanced enough to do most other surgical procedures. Hence, they are referred to as the Bellwether Procedures.

⁵ Alkire BC, Shrimel MG, Dare AJ, Vincent JR, Meara JG. Global economic consequences of selected surgical diseases: a modelling study. *Lancet Glob Health*. 2015 Apr 27;3 Suppl 2:S21–27.

⁶ *Ibid*

COVID-19 presents both an opportunity and threat for surgical system strengthening. Whilst the COVID-19 pandemic has reduced the fiscal space for surgical care, it has attracted unprecedented attention and funding to public health. There is significant synergy between surgical system strengthening and pandemic preparedness, with intensive care capacity, oxygen supply, and infection prevention and control as examples. The opportunity presented by short-term funding and political attention for the COVID-19 pandemic must be leveraged to build long-term sustainable programs for surgical system strengthening as a part of overall health system strengthening and post-COVID recovery.

Recommendations to be considered by Heads of Health

Recommendations for governments

- To complete the expedient development of NSOAPs and the implementation of the RAF, recognising the synergy between surgical system strengthening and pandemic preparedness.
- To carry out regular monitoring and evaluation of surgical system capacity and performance, adapting standardised global LCoGSC indicators and the RAF.
- To promote timely access to and affordability of SOA care by supporting improved transport for hard-to-reach populations via land, sea and air, and supporting the development of financing mechanisms to reduce catastrophic expenditure as a barrier to seeking SAO care.
- To promote access to and regulation of essential equipment and consumables for SOA care delivery that are affordable, safe, and good quality.
- To strengthen sterilisation and infection prevention and control mechanisms as critical components of safe and quality SOA care.

Recommendations for development partners

- To collaborate and coordinate effectively in supporting countries with NSOAP and RAF implementation.
- To support countries in obtaining and coordinating funding for surgical system strengthening, recognising the economic benefit of surgical service provision and both opportunities and threats posed by the COVID-19 pandemic.
- To facilitate regional collaboration among PICTs in progress reporting, knowledge sharing, and joint action planning to address common challenges, such as pre-hospital access, financial risk protection, and workforce training.
- To support countries with their identified priorities of first-level surgical capacity strengthening and mobile surgical service development by providing technical input on the procurement and regulation of affordable and quality surgical equipment and consumable.
- To support countries in their workforce strengthening needs through developing remote programs for SOA provider training, competency-based supervision, and essential equipment maintenance.

Other potential recommendations

- Support localized remote implementation sites with experience gathering to inform and enable calibration of national planning.