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Global medicine

World Health Organization: Leading surgical care toward sustainable development in the era of globalization ☆

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In today's shrinking world, the role of the World Health Organization as the leader of global health is of increasing importance. This review addresses how the organization is evolving to meet new demands, with a focus on its relevance for surgery worldwide.

Global organizations for global health

In today's shrinking world, global organizations have become critical to international collaboration, and their role is rapidly expanding. Awareness of health inequity is growing, as is its link to poverty and pandemics. The health of regional populations does not necessarily respect the boundaries of the nation-state, and as such, health promotion, disease prevention, and global health security need to transcend those geographic boundaries.

The following 4 papers in this *SURGERY* policy series will explore the 4 principal global health organizations in the world today: the World Health Organization (WHO), the United States Agency for International Development (USAID), the World Bank, and the Bill and Melinda Gates Foundation. Each organization is different in its background, organization structure, and mission; however, all 4 are aligned around the concept of health equity, social justice, health security, and universal health coverage.

In the first manuscript of this series, we review the history and structure of the WHO, followed by current trends in WHO leadership and direction that affect its work. Then we focus on the relationship of the WHO with surgery, current efforts in advancing global surgical care, and recommendations for the future role of the WHO in promoting universal health coverage in the era of Sustainable Development Goals (SDGs). The United Nations General Assembly adopted the SDGs in 2015 in the wake of the Millennium Development Goals as 17 broad priorities for development around the world. SDG 3 specifically address good health and well-being, divided into multiple targets (Fig 1).

Background

From its inception, WHO's focus has been on international public health issues; its constitution states that the organization's objective is "the attainment by all people of the highest possible level of health."[1] The WHO occupies a unique role not only in establishing minimal standards and practice guidelines but also as a neutral organizer with a broad, almost universal, mandate from its member states, the countries around the world. Its role also includes guiding global research and knowledge dissemination, providing technical support for efforts in health care in the member states, and monitoring and assessing health trends worldwide.

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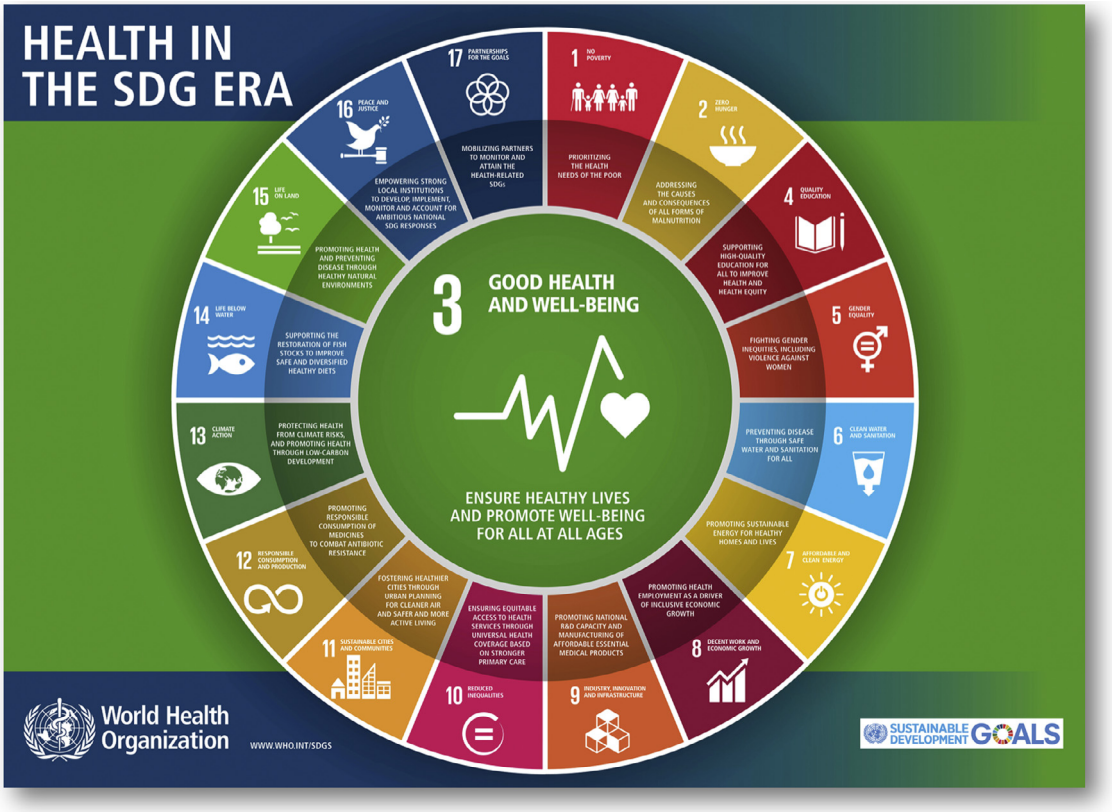

Figure 1. The United Nations Sustainable Development Goal (SDG) 3: Good health and well-being. Available from http://www.who.int/sdg/infographics/en/ (accessed April 22).

Historically, many of the WHO's efforts have been linked to primarily medically treatable infectious diseases, with substantial progress toward controlling major public health concerns, such as malaria, polio, HIV/AIDS, and tobacco use. These efforts, however, have largely overlooked surgery. Surgery has not developed enough traction at the WHO because of the WHO's focus on health emergencies, communicable diseases, and other public health concerns. Rather, surgery affects most areas of the WHO's work, but the influence of surgery has thus been somewhat diluted and has lacked a high-profile focal champion to bring awareness to the enormity of the global burden of surgical diseases and the economic impact. As noted previously by leaders in the field, fragmentation and lack of leadership and guiding institutions plague global surgery.[2]

As a result of this inattention, an estimated 5 billion people remain without adequate access to surgical care, encompassing a global economic burden of 1.25% of world gross domestic product over 15 years.[3,4] If the situation does not improve, the total value of lost economic output in 128 countries would amount to US $20.7 trillion because of surgical conditions not treated as a result of lost income, disability, and mortality between 2015 and 2030. Because the scale of the surgical problem has recently come to light with acknowledgment of its importance by the WHO, surgery has gained momentum on the global stage, culminating in the passage of World Health Assembly Resolution 68.15 in 2015 by the WHO member states to strengthen emergency and essential surgical and anesthetic care.[5] This resolution was the first to focus exclusively on access to surgical and anesthetic care as a critical component of universal health coverage (UHC), thus marking a monumental step toward acknowledging the importance of surgery and the global burden of surgical disease.

History and structure of WHO

The WHO is the specialized agency for health in the United Nations system (Fig 2). At the inception of the United Nations in San Francisco in 1945, diplomats discussed the idea of an institution for health. The WHO came into existence when its constitution was signed on July 22, 1946, by 61 country representatives and subsequently ratified on April 7, 1948. From the first World Health Assembly (WHA) in June 1948, the member states established priorities for health that grew rapidly into visible global efforts to tackle all manner of diseases and public health issues. The WHO acts as the Health Cluster Lead on health discussions at the UN. Conversely, various bodies from within the UN provide input to the WHO and attend the WHA as observers.

The WHO governance functions through 2 main bodies: the WHA and the Executive Board (EB) (Supplemental Fig 1; online version only). The WHA is the supreme decision-making body; it convenes annually in May and is attended by the ministers of health and their respective delegations from each of the 194 member states, as well as nonstate actors, such as civil societies, nongovernmental organizations, universities, and funders or professional societies in official relationship with the WHO as observers. Delegates gather in Geneva to set policy priorities via resolutions, vote on the annual budget, and select leadership. These resolutions represent the most important pathway by which member states can make their voices heard and guide the WHO in its actions and implementation. The WHA also serves as a forum for member states to discuss important issues via side events, which also draws many other nonstate actors.

The second body, the EB, is composed of 34 persons technically qualified in the field of health, each designated by a member state

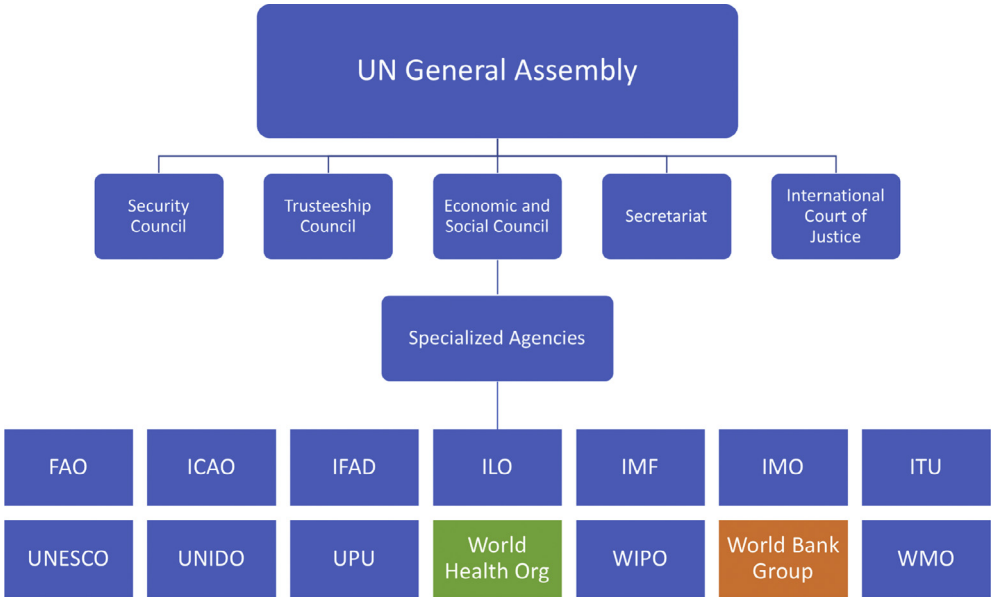

Figure 2. The World Health Organization as a specialized agency within the United Nations (UN) system. This graphic is a selective representation of UN entities. FAO, Food and Agriculture Organizaton; *ICAO,* International Civil Aviation Organization; *IFAD,* International Fund for Agricultural Development; *ILO,* International Labour Organization; *IMF,* International Monetary Fund; *IMO,* International Maritime Organization; *ITU,* International Telecommunication Union; *UNESCO,* United Nations Educational, Scientific and Cultural Organization; *UNIDO,* United Nations Industrial Development Organization; *UPU,* Universal Postal Union; *WIPO,* World Intellectual Property Organization; *WMO,* World Meteorological Organization.

elected to do so by the member states appointing a person to the EB are elected for 3-year terms by the WHA. The EB members prepare the WHA agenda, select resolutions to be reviewed by the Assembly, and facilitate and implement decisions and policies of the WHA via biannual meetings. The WHA agenda is set at the January meeting each year by the EB, which reconvenes in May after the WHA to review resolutions that were passed and plan their implementation. This work is supported by approximately 8,000 staff members across the Secretariat at the headquarters in Geneva, 6 regional offices around the globe, and 147 country offices (Fig 3). The work of the organization is undertaken by mandate from the 194 member states and driven by requests from governments. The normative and regulatory activities take place primarily at the Geneva headquarters. The regional offices have regional committees of delegates from the ministries of health of the member states who are meeting annually to decide the regional agenda. This agenda is implemented thereafter by the country offices and ministries of health with support and coordination by the regional office.

The WHO Director-General (D-G), as the leader of the agency, is the lead voice representing all member states in matters of health and is elected every 5 years at the WHA. The current D-G, Dr Tedros Adhanom Ghebreyesus (Dr Tedros), is the 9th D-G and the first to originate from Africa, having previously served as the Ethiopian Minister of Health and Minister of Foreign Affairs. His predecessor, Dr Margaret Chan, served 2 consecutive terms as D-G. Her terms were notable for a move toward universal health coverage, health care for all, and attention to health emergencies and noncommunicable diseases. Although resolution WHA 68.15 was passed in 2015 during her term, surgery was only beginning to garner global attention as a part of health care for all.

WHO Today

Despite all the realized and potential achievements, WHO has received criticism related to its functioning. The broad base and strong link to the member states gives WHO credibility and yet simultaneously weakens it. The member states control the organization tightly, and their sometimes conflicting demands limit the Secretariat. Other factors that prevent WHO from optimizing its efficacy are insufficient institutional structures for financial management and transparency and pronounced regionalization, which adds logistic and challenges in information flow.[6] One of the key issues, however, is its funding structure, which limits its functional capacity. The $4.4 billion program budget of the WHO for the biennium of 2018 and 2019 is largely inadequate for the mandate and is overshadowed by the budgets of funders like the Bill and Melinda Gates Foundation ($4.6 billion in 2016), the Centers for Disease Control and Prevention ($11.1 billion for 2018), and USAID ($22.7 billion in 2017). The distribution of program budget sources is found in Fig 4.[7-11]

The funds are composed of 2 parts: assessed contributions collected from member states and voluntary contributions from governments and nonstate actors. These are further divided into “earmarked” funding and flexible funding. The assessed contributions are not based on actual calculated need but rather on the population of each member state’s and country’s wealth (measured by gross domestic product). These represent the dues countries must pay to be a member state of the organization. The voluntary contributions that are earmarked target specific programs and diseases, and hence WHO has little influence over their allocation (Supplemental Fig 2; online version only).

Because of the evolving global health needs and priorities, change is needed, and much attention is being directed to the ongoing structural changes from recently elected D-G Tedros Adhanom Ghebreyesus (Fig 5).[12] The WHO and its new D-G are focusing on improving and evolving the structure to adapt to the changing landscape of global health.

During his campaign before the D-G election, Dr Tedros outlined the following 5 key health priorities in his vision statement: (1) universal health coverage; (2) health emergencies; (3) women’s, children’s, and adolescent health; (4) health impacts of climate and environmental change; and (5) a transformed WHO.[13] UHC is increasingly prominent in Dr Tedros’s agenda and will be one of the strategic pillars in the coming years at WHO. Central is also his determination to reform WHO to be a more effective, efficient, and coherent modern organization. To help with the

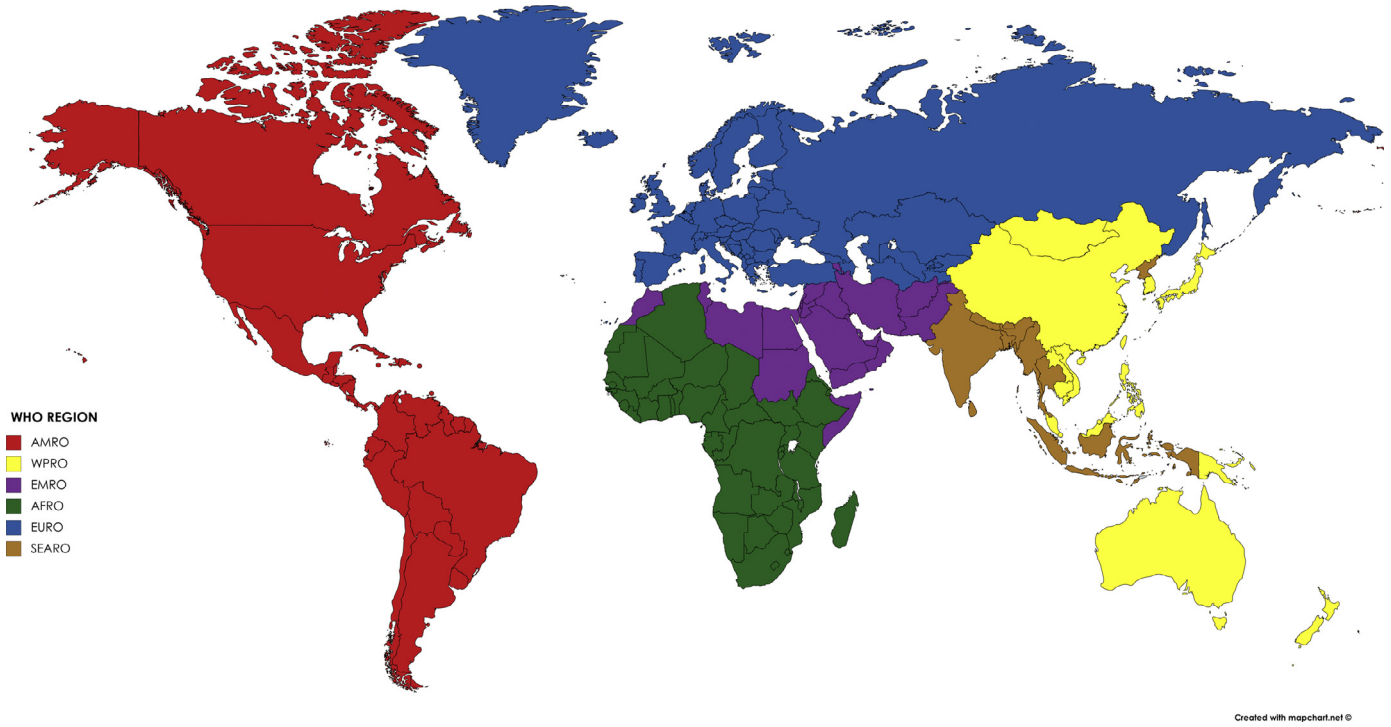

Figure 3. World Health Organization (WHO) region composition. *AFRO,* Africa; *AMRO,* America; *EMRO,* Eastern Mediterranean; *EURO,* Europe; *SEARO,* South East Asia; *WPRO,* Western Pacific.

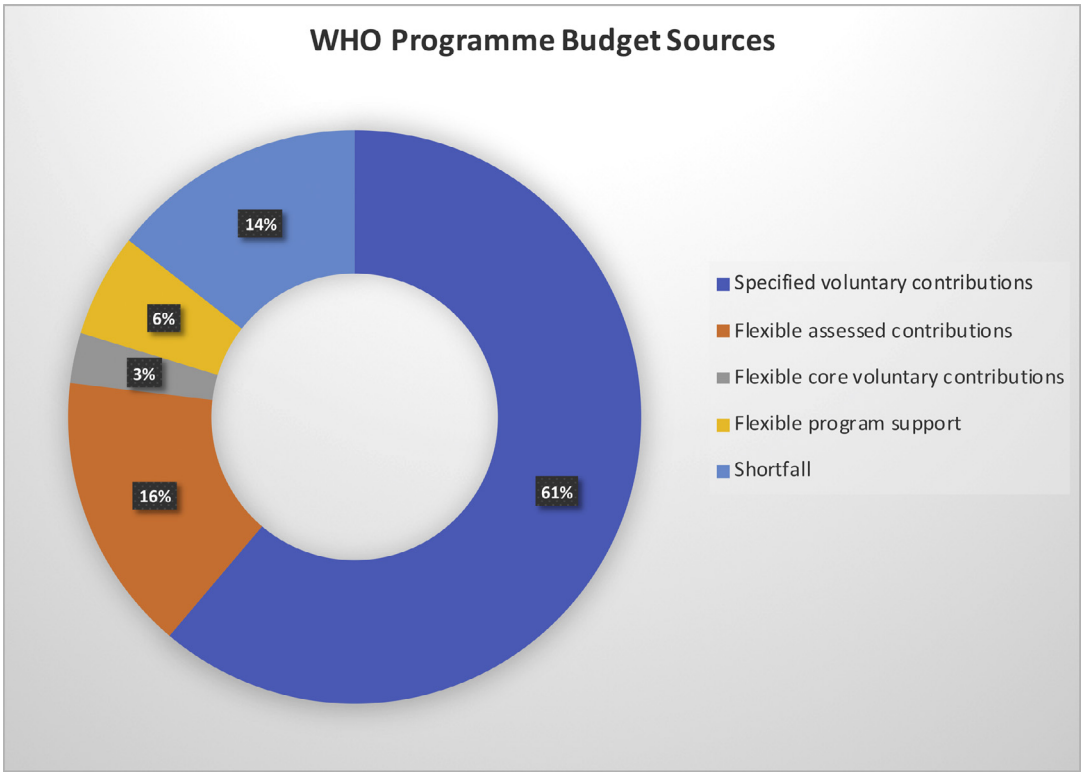

Figure 4. Program budget sources of the World Health Organization (WHO) 2018–2019.[11]

reformation of the WHO, several structural and priority changes are underway. One of the roles of the D-G is to set global priorities for the WHO via a 5-year plan reviewed by the WHA, called the General Program of Work. The current 13th edition (GPW13)[14] is the high-level strategic WHO document issued to set the agenda for the coming years. Its vision, mission, and strategy for the WHO for 2019–2023 "aligns closely with the SDGs, is grounded in our core values of equity, human rights, and universality, and begins to enunciate a new way of working for WHO."[14] The GPW13 delineates the following 3 overarching strategic priorities: (1) healthier populations; (2) universal health coverage; and (3)

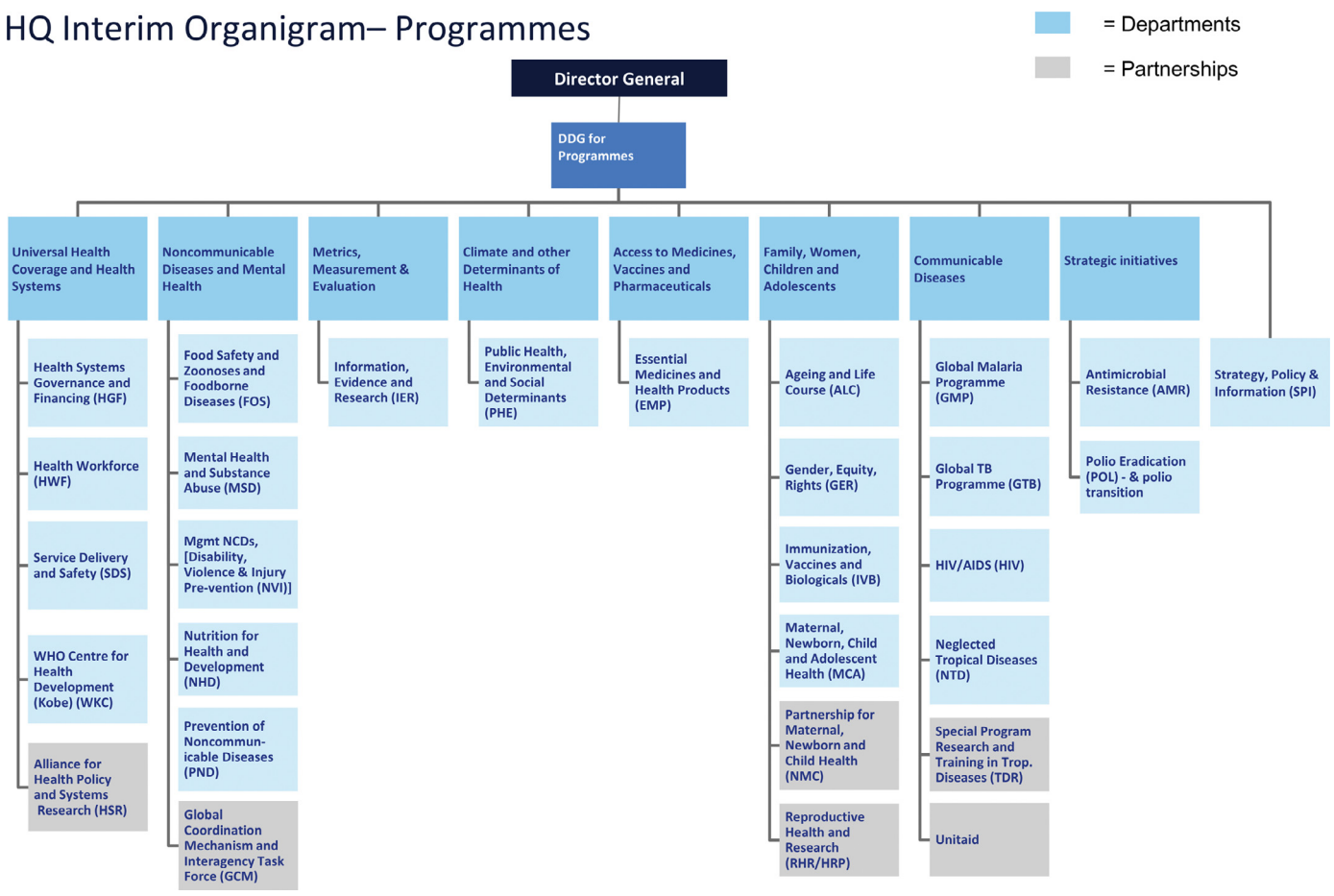

Figure 5. Interim organigram of the World Health Organization headquarters (HQ) 2018.[12]

health emergencies, each with a goal set on reaching 1 billion people, these goals are also known as the triple billion goals.

The GPW13 was discussed by the EB in February 2018, further revision has taken place, and the document was recommended by the EB for discussion and approved by the WHA in May 2018. Some major changes in the functional mechanisms of the WHO have been proposed (Fig 6).

The GPW13 also prominently features a pattern of evolution from vertical programs targeting specific diseases to strengthening of horizontal, matrix-oriented health systems. To meet these strategic priorities, the WHO plans to enhance leadership and strengthen the measurement of impact at the country level. Country approaches are diversified based on national capacity and vulnerability, and the executive leadership team is committed to measuring the national impact and accountability (Supplemental Fig 3; online version only). There is a strong focus on assisting countries in achieving UHC based on national health policies, strategies, and plans. To that end the WHO both gives authoritative advice to governments and the public to implement policies and makes all official documents available to the public. WHO also collaborates with countries to ensure safe and resilient health systems, coordinates responses to health issues, and organizes countries to ally in working toward UHC.

WHO and surgery (1980–present)

Understanding the central role for surgery is not new to the WHO. In his 1980 speech to the International College of Surgeons, the third Director General, Dr Halfdan Mahler, considered surgical care within the context of social justice[15]:

Social injustice is socially unjust in any field of endeavour, and the world will not tolerate it much longer. So the distribution of surgical resources in countries and throughout the world must come under scrutiny in the same way as any other intellectual, scientific, technical, social or economic commodity. The era of only the best for the few and nothing for the many is drawing to a close.

In the following decades, however, there was little activity to advance the surgical field. The focus of WHO leading up to the era of the Millennium Development Goals was skewed heavily toward communicable diseases. Finally, in 2004 the Emergency and Essential Surgical Care (EESC) Program was created to support the provision of basic surgical services in low-resource settings. Early achievements by the program included the publication of *Surgical Care at the District Hospital* and its toolkit, *The Integrated Management of Emergency and Essential Surgical Care,* which have been translated into 6 languages.[16]

To promote collaboration and sharing of best practices, the Global Initiative of Emergency and Essential Surgical Care (GIEESC) was developed in 2005. This was an invitation to a broad range of stakeholders in surgery worldwide and led to the creation of a network that today has 2,400 members in 140 countries. The GIEESC is hosted by the EESC Program and is open to any and all interested parties to join. Biennial GIEESC meetings allow for members to present updates on surgical and anesthetic initiatives and encourage discussion across the organization on group priorities and future directions.

One of the key areas of work within the GIEESC is assisting with the assessment of health care facilities. To start improving surgical systems, one must understand the existing readiness to provide care in terms of workforce and infrastructure. By send-

Figure 6. The core changes to WHO strategy proposed in *General Program of Work*, 13th edition (GPW13).

ing researchers to a representative sample of facilities in a country or region performing walk-through surveys interviewing key informants, important information on the structural capabilities of the facilities can be assessed. In 2007 the first version of the Situation Analysis Tool[17] was presented as a method to assess readiness of surgical facilities.

The year 2015 was momentous for global surgery and global development. First the 17 Sustainable Development Goals (SDGs) were adopted and framed in the 2030 Agenda for Sustainable Development, a plan for the international community with goals to be reached by 2030. Notably, SDG 3 is health specific and aims to "ensure healthy lives and promote well-being for all people," stressing a transition from vertical, disease-targeted interventions to strengthening matrix-oriented health systems. One of the 13 targets within goal 3 is the crucial SDG 3.8, achieving universal health coverage, including protection from financial risk. This particular attention to both health systems and UHC serves to advance global surgery given its ubiquitous cross-cutting role in health care.

Three other critical events in 2015 further increased the visibility of surgery on the global health agenda. The landmark publication of both the *Essential Surgery* volume of *Disease Control Priorities,* third edition,[18] and "Global Surgery 2030: Evidence and Solutions for Achieving Health, Welfare, and Economic Development," by the Lancet Commission on Global Surgery[19] strongly underlined the adoption of the WHA resolution 68.15, "Strengthening emergency and essential surgical care and anaesthesia as a component of universal health coverage."[5] This was a landmark event that called for several actions by member states, with the major components outlined in Fig 7.

There was also a call for the Secretariat to report on the progress of implementation in 2017, 2 years later. The importance of this Resolution 68.15 for the global progress of surgery cannot be overestimated. This resolution needed, however, to be followed by implementation, and this requires sufficient funding to be allocated. Unfortunately, the WHO currently has limited ability as an organization to influence the allocation of funding, and many

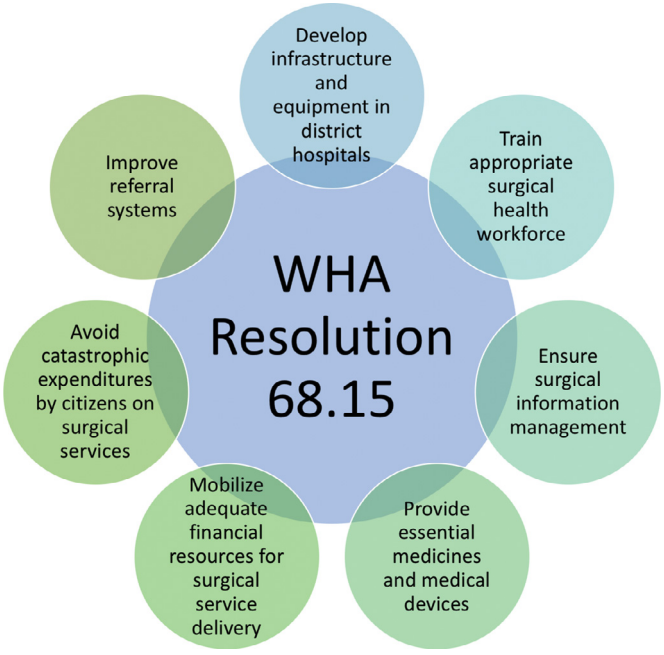

Figure 7. Key points for member states in the World Health Assembly Resolution 68.15.

Figure 8. The responsibilities of the surgical unit at the WHO HQ.

more resolutions are passed than can be fully supported through implementation. The mandates of the WHA 68.15 may never be fully implemented, because the assessed contributions of the current members states are insufficient to cover the operational and programmatic expenses for the WHO. Full realization of the resolution is budgeted at $22.9 million, ostensibly coming from core WHO funds; however, the budget allocated to the work of GIEESC has not been fully available, thus limiting GIEESC engagement. The current EESC Program Lead, Dr Walt Johnson, stepped into his role in the wake of the adoption of this resolution to coordinate WHO and efforts of the member states in advancing global surgery.

The $22.9 million estimate for the 5-year implementation of the resolution consisted of approximately 50% for hiring 7 staff members, 1 person at the WHO headquarters and 1 in each of the 6 WHO regional offices, with the remaining 50% for the program activity budget. A formal budget has not yet been at the disposal of EESC. Unless the WHO receives a large contribution earmarked for surgery or the D-G decides to increase core spending for surgery, full implementation remains uncertain.

At the 2-year reporting of progress on Resolution 68.15 at the WHA in 2017, Decision Point 70.22 was passed,[20] which aims to solidify Resolution 68.15 by requesting the Secretariat to report biennially on its progress throughout the SDG era until 2030. This Decision Point 70.22 provides additional incentive to follow up on the global surgery agenda within WHO and prevent global surgery from becoming invisible. Because it was approved unanimously, the WHA resolution 68.15 also keeps member states accountable for national progress in implementation. This momentum has further been strengthened by an open letter from current D-G Dr Tedros in which he promises to "work in consultation with Member States to build national capacity for emergency and surgical care to implement WHA68.15."[21]

WHO and the future of global surgical care

New structure and function

To deliver on Resolution 68.15 and indeed adapt to the current needs of global public health, the WHO should revise its organizational structure as outlined in the organization's new GPW13. This impending reorganization would enable the transition into a modern, effective organization with a matrix-like collaborative environment instead of outdated vertical, siloed programs. The current responsibilities of the WHO surgical unit are mandated by WHA 68.15 but could be further defined to include several specific activities (Fig 8). The WHO surgical unit should continue expanding its collaborative efforts within and outside WHO, developing global and country-level strategies for advancing surgical care.

Creating a program for a neglected global public health issue such as surgical care does not automatically result in a silo; however, the program will miss out on key opportunities for synergies and efficiencies unless integrated into a mechanism that promotes opportunities for collaboration and coordination throughout the entire organization. Breaking down barriers in the form of internal siloes among WHO program must remain a top priority for the new leadership; this approach would also improve the coordination of resource mobilization. Collaboration across program that share service delivery platforms delivers greater impact and efficiency, aligning well with the priority shift of WHO to implementation. A simple example involves the current upgrading of the district hospitals in Tanzania to Comprehensive Emergency Obstetric and Newborn Care standards. Integrating the emergency and essential surgical package with the Comprehensive Emergency Obstetric and Newborn Care program (with its shared infrastructure and workforce requirements) requires only a marginal increase in cost but results in a manifold increase in benefit and impact. The inefficiencies of funding and staffing 2 separate programs that have a substantial overlap in their service delivery platforms are obvious.

The unique position of WHO on the international stage gives the organization a crucial role in serving the member states as the de facto global coordinator and normative institution for surgical care. The surgery unit should execute its mission in partner coordination; the setting of surgical, anesthesia, and obstetric public health care standards; and the provision of manuals and guidelines; and by organizing benchmarking and initiatives of best practice as requested by countries and surgical communities. These high-level changes cannot be implemented in a vacuum

but must be incorporated as part of the efforts of the new WHO leadership to align global priorities on UHC and strengthen health care systems.

Surgical care is cross-cutting and must engage all aspects of the health system and public health program across governance, service delivery, financing, and health information management, among others. Furthermore, given that approximately 30% of the global disease burden requires surgical treatment,[22] surgical care should be represented within health system discussions and initiatives such as the joint WHO–World Bank UHC2030 partnership.[23] The health systems of the 21st century should be built on a robust platform that delivers safe, timely, and affordable emergency and essential surgical care as part of efforts to expand access to universal health coverage.

National Surgical Obstetric and Anesthesia Plans

The main goal and mandate of the EESC is now to implement all components of Resolution 68.15. Central to its strategy is the coordination and technical support in the development of National Surgical Obstetric and Anesthesia Plans (NSOAPs)[24] for strengthening contextually adapted surgical service delivery systems in member states. A toolkit, the Situation Analysis Tool (SAT), which can be adapted for local context, has been developed in collaboration with the Harvard Medical School Program in Global Surgery and Social Change.[17] Currently both the SAT and the broader Service Availability and Readiness Assessment (SARA)[25] tools are used, and there is a need to integrate these for comprehensive coordinated facility and service delivery assessments. Therefore the WHO EESC is now involved in the process of integrating key elements of SAT with SARA and the Service Provision Assessment of the USAID-funded Demographic Health Survey program together with several tools used in vertical assessments for maternal and child health, HIV, and others. This approach will form a unified tool, the harmonized Health Facility Assessments, which will be published as an updated SARA to replace the older tools.

It is imperative that WHO as an organization now follows through on WHA Resolution 68.15 to ensure mobilization of financial resources from members states and nonstate actors to fund a surgical care program within the organization while supporting member states to develop national surgical health policies (NSOAP) and to implement these as integrated public health programs within the national health systems. Ample evidence supports such a funding allocation, which would be a cost-effective investment that is in line with both Agenda 2030 and the GPW13. To enable fulfilling of its mandate as outlined in the ratified resolution, this program would run out of a unit consisting of, at a minimum, a coordinator, a secretariat, an assistant, and several technical officers at the headquarters, along with the network of surgical care focal persons in each of the regional offices.

One of the key modalities of WHO is policy dialogue, such as the guidance of countries embarking on NSOAP processes. Providing technical support on the strengthening of the surgical system may be accomplished more effectively by regional workshops, which can also encourage collaboration across member states and other organizations. One example is the workshop on NSOAPs in March 2018 in Dubai,[26] which gathered stakeholders from countries in the WHO Africa and Easter Mediterranean regions that were implementing or were interested in such processes to exchange experiences and form best practices. This regional workshop is to be followed by similar workshops in the other WHO regions, with the goal of providing guidance and tools for member states to complete their own surgical system evaluation and plan.

Data driving decisions

Collecting surgical care indicators is indispensable for the implementation of any surgical system strategy. Standardized measurement of surgical care indicators establishes a baseline and allows for longitudinal follow-up and seamless comparison. It is also crucial that such indicators be patient centered and focused on outcomes rather than output. The WHO can advance data collection by advocating for surgical care indicators to the United Nations Statistical Commission.[27] All but 1 of the 6 core surgical care indicators highlighted by the Lancet Commission on Global Surgery[19] were included in WHO's 100 Core Health Indicators of 2018,[28] covering access and quality of care, workforce, and economic cost of surgical care. Catastrophic health expenditure is not explicitly included in the 2018 edition as it was in 2015, whereas impoverishing health expenditure was retained as an indicator.

The WHO can standardize assessments of facilities by promoting wider use of its tools, such as the Health Facility Assessments and SAT, and include them in larger WHO data sets on health systems, injuries, and emergency care. Health data reporting on surgical care from ministries of health to WHO could also be disseminated on the platform of the World Bank World Development Indicators[29] via their existing data share agreement, as well as through the Global Health Observatory of WHO.[30] In addition, WHO can strategically guide the growth of surgery, anesthesia, and obstetrics workforce density by tracking the global surgery, anesthesia, and obstetrics workforce as part of the Global Health Observatory. Lastly, by advocating for indicators of quality surgical care such as postoperative mortality rates, the WHO can adequately validate them and ensure that surgical care is delivered safely in a timely and affordable manner.

The role of the surgical community

Surgical providers can and must engage with the global health leadership and community at large at every level to lead the future development of our field in an international context. Although we focus here on avenues of collaboration between the surgical field and WHO, there are numerous other opportunities for involvement in global surgery. Organized groups, such as professional societies, academic centers, universities, and other nonstate actors, can work to develop relationships with WHO and eventually can consider applying for official status (Fig 9). Nongovernmental organizations and for-profit entities may of course also be part of the community and can interact similarly with the WHO Surgery Unit and contribute to advocacy, education, and research.

Academic medical centers are supporting the agenda of WHO by allowing academic surgeons, anesthesiologists, and obstetricians to focus their scientific activities around global surgical health systems and global surgery policy. This includes research on NSOAP development and global surgery statistics and indicators. Interested medical scientists should consider attending the WHA in Geneva each May and the United Nations General Assembly in New York each September to stay current on health policy discourse and to build global networks. Academic centers can also consider applying for designation as a WHO Collaborating Center in a specific niche of surgery and thereby extend the capacity of the surgical unit in a concrete way. WHO Collaborating Centers with a surgical or anesthesia profile are currently a network of the following 5 centers globally: (1) University of Western Ontario, Canada; (2) Lund University in Sweden; (3) Program in Global Surgery and Social Change, Harvard Medical School, USA; (4) Mongolian National University of the Medical Sciences in Ulaanbaatar, Mongolia; and (5) the Surgery Unit at Bhabha Atomic Research Centre in Mumbai, India. More centers with a history of WHO collaboration are currently in the process of gaining official status.

Figure 9. Key actions for the surgical community.

Professional societies can be powerful entities in enacting domestic and international changes in the surgical field. The regional WHO offices as well as individual WHO country offices may benefit from support from domestic and local medical societies for collection of indicator data and NSOAP processes in the region. Cross-societal collaborations will be crucial to break down barriers among surgery, anesthesia, and obstetrics, creating a more united global workforce and working toward common goals. This process may be through the development of a consortium of international professional societies of surgery, anesthesia, and obstetrics or coordinated global advocacy and education campaigns. Domestic advocacy by national societies must reinforce these global efforts so that surgical care can be integrated into government-funded programs that contribute to WHO. Professional groups are also important voices in supporting other government or multilateral organizations for indicator collection and creation of NSOAPs, such as the African Union, the ministries of health, and clinical research networks. Direct collaboration with WHO headquarters is also feasible for professional societies, and these could eventually consider applying as nonstate actors in official relations with WHO.

Individual surgical and anesthesia providers can also contribute to this process of surgical strengthening in numerous ways. Aside from being engaged in the previously listed entities, one should engage directly with colleagues in adjacent medical fields and public health fields to find common interests and enable synergies at a local level. Initiatives for ground-level research such as data collection can be made to feed back into the statistics of the national health system and NSOAP implementation. This is an efficient way of bridging the gap from research to policy. Finally, but certainly not least, surgeons, anesthesiologists, obstetricians, and researchers can be community advocates to promote a unified message on the need for universal access to surgical care.

In conclusion, the WHO is in a critical phase of reorganization, with the hope that disease siloes will be replaced by more collaborative matrix systems that will allow for the seamless integration of surgical care into universal health coverage. The mandate of its surgical unit, as delineated by Resolution 68.15, must evolve toward more concrete steps, including data curation, advocacy, and technical support for surgical plans. Today's EESC cannot achieve its mission without its mandated funds and pan-organizational support. The surgical community has a rare opportunity in this process to work directly with WHO to push the surgical agenda and achieve much needed strengthening of surgical systems universally. As the global surgery movement continues to gain momentum, we as surgeons must be its foremost champions. We must collaborate effectively with multinational organizations, especially the WHO, to establish surgical care as a pillar of universal health care and as a cross-cutting domain.

Supplementary materials

Supplementary material associated with this article can be found, in the online version, at doi:10.1016/j.surg.2018.06.057.

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