



Intersectoral Integration of National Surgical Plans

John G Meara^{1,2}, Craig D. McClain^{1,3}, Kee B. Park¹

Correspondence: John G Meara, MD, DMD, MBA, Department of Plastic and Oral Surgery, Boston Children's Hospital, Boston, MA, USA 02115. Email: john.meara@childrens.harvard.edu; ORCID: <https://orcid.org/0000-0003-4369-3209>

1. Program in Global Surgery and Social Change, Harvard Medical School, Boston, MA, USA
2. Department of Plastic and Oral Surgery, Boston Children's Hospital, Boston, MA, USA
3. Department of Anesthesiology, Critical Care and Pain Medicine, Boston Children's Hospital, Boston, MA, USA

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Surgical and anesthesia care, in all its forms and including all workforce cadres, must be firmly integrated into a holistic approach to strengthening health systems. Historically, there has been a bias in favor of narrow vertical interventions in global health. This false preference for vertical interventions that do not address the holistic nature of health care delivery comes from what Paul Farmer called a “socialization for scarcity,” a belief that there are not enough resources for the poor, so we become accustomed to filling the voids with a patchwork of incomplete and inconsistent lean solutions. Health equity will require competent and resilient health systems that are resourced properly, not vertical interventions that are only a fraction of what Universal Health Coverage stands for or requires. In the coming decade, we must commit ourselves to creating surgical systems for the 21st Century, not the last. To get there, we must also address three grand challenges - climate change, pandemics, and forced human migration. Our approach must not be limited by a myopic post-Westphalian “sovereign autonomy” approach to surgical care delivery. Our thinking must be transnational, interdisciplinary, and integrative.

The intersection between climate change and surgical care is complex and involves a complicated relationship where each affects the other in myriad ways. Surgical care is estimated to account for up to 70% of healthcare-based greenhouse gases emissions. At the same time, the changing climate challenges improving access to surgical care through climate disaster destruction of infrastructure and disaster-related trauma and infections. (1) While high-income countries have entrenched, carbon-intensive surgical systems, low and middle income countries (LMICs) who are going through formal national surgical planning, have an opportunity to ensure through policy implementation a greener surgical system designed to simultaneously provide safe and high-quality

care while limiting their carbon footprint.(2)

The COVID-19 pandemic revealed the world's flaws and weaknesses in responding to a global public health emergency. The Pandemic Fund, launched in November 2022, represents a collective effort by donors to help poor countries prepare against future pandemics.(3) Although the value of existing surgical capacity (e.g., surgical workforce, beds, ventilators, monitors, etc.) is unquestionable during surges of pandemic cases, the priority areas of the Pandemic Fund largely center around strengthening surveillance, laboratory systems, and workforce. We believe the investments in surgical capacity building in LMICs represent some of the “best buys” in health system strengthening for pandemic preparedness.(4) The new capacity serves a dual role – one that serves to meet the unmet surgical needs when there is no pandemic but can be rapidly transformed into additional beds when needed for pandemic surges or other disasters, natural or man-made.

Forced human migration also impacts and intersects with surgical care delivery and national surgical planning, and the scope of the problem is unprecedented socially, politically, financially, and ethically. The recent conflicts in Sudan, Ukraine, and Gaza bring into stark contrast the human toll and the surgical access needs for the civilian population that is displaced internally or internationally. This also occurs in the absence of overt nation-state conflict. Climate change and economic and social disparities also create forced migration. In the United States, over 10 million undocumented immigrants have been entering each year for over a decade.(5) What are the implications of forced human migration on surgical care delivery? This kind of human migration creates rapid surges in surgical care needs. And this is in populations that are frequently sick and malnourished. National surgical strategy must include contingency



plans to accommodate these surges in population while also serving the ongoing surgical needs of the local population without destabilizing the local healthcare workforce, supply chain, and infrastructure.

The future of surgical care will not look like the past. As countries seek to strengthen surgical systems, integration is essential at the policy level and during financing and implementation. Given all the national surgical planning processes underway and given the two most recent World Health Assembly resolutions devoted to surgical care delivery, we must not recapitulate surgical systems from the 20th Century. We must re-imagine surgical and anesthesia care delivery and capacity development so that we will have competent, robust, resilient surgical systems for the 21st Century that integrate into a holistic, unified system (not co-adjacent vertical interventions) to treat contextually appropriate surgical disease patterns that can also accommodate and mitigate three major global human threats of climate change, pandemics and forced human migration to achieve universal health coverage and true health equity.

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