

Considerations in Developing Thoughtful Anesthesia Global Health Programs

Michelle R. Duperrault, M.S., M.H.A.

Rebecca R. McGoldrick, M.D.

Ana Maria Crawford, M.D., M.Sc.

Committee on Global Humanitarian Outreach

Global health is sexy. Years ago, faraway lands enticed us through glossy photos in *National Geographic* magazines. Today, endless information is easily found online. International travel is more accessible, and cultures once only read about can be personally experienced. As we become more interconnected, it is increasingly important to understand the cultures and practice settings of foreign colleagues.

Interest in global health creates a significant impact on medical education. Global health programs are emerging across academic institutions. Prospective trainees evaluate residency programs for their international experiences; more opportunities for service-based trips exist, and more students report international projects on their applications. Academic programs respond in order to enhance recruitment and competitiveness.



Michelle R. Duperrault, M.S., M.H.A., Stanford Global Anesthesia Program Manager, is currently conducting a study in health care management education at the University of Zimbabwe, College of Health Sciences.



Rebecca R. McGoldrick, M.D., is Clinical Assistant Professor of Anesthesiology, Perioperative and Pain Medicine, and Division Director of Global Anesthesia, Stanford University, Stanford, California.

Global health has allure for both trainees and faculty. Trainees gain exposure to diseases they may otherwise not see and obtain skills for delivering anesthetics in austere environments. Junior physicians seek global health exposure not available during their own training, and retiring faculty view volunteering as a transition from clinical work. In response, the academic community has developed global health tracks, global health fellowships, global health master's degrees and global academic partnerships. Increasingly, medical teams travel to low-income countries to provide opinions, to volunteer, to donate equipment and to share knowledge.

Accommodating visitors can weigh heavily on the host. Surgical complications go unmanaged by teams that have departed. Closets fill with donated but non-functioning equipment without bioengineers to complete repairs. Local surgery lists halt as volunteer teams complete their own operations. There is a revolving door of volunteers with expert opinions and constant comparisons to the unattainable high-resource settings.

Local physicians remain appreciative, but also under-resourced, under-staffed and over-worked. Hosting visitors adds further burden by taking time away from clinical care, education and research. Solutions offered by volunteers can be short-lived and ineffective for the local population, and often the health care system poses the problem, where no amount of donated medication, equipment, volunteer staff or Western advice will lead to change.



Ana Maria Crawford, M.D., M.Sc., is Adjunct Clinical Assistant Professor, Division of Global Anesthesia, Stanford University, Stanford, California.

Volunteers are obligated to measure their own impact. Interventions in one environment may be inappropriate for another. Responsible involvement shifts a volunteer's role to consultant-collaborator rather than authoritative-instructor. Collaboration facilitates system-appropriate solutions and stakeholder buy-in. Bidirectional partnerships, wherein programs bring physicians from low-resource settings to high-resource health care systems, allow for greater exposure to adaptable solutions.

Global health is inspiring, but physicians must question the allure lest we further burden the system. Practitioners who are driven by patient advocacy, safe and effective health care, and equal access to medical training and research level the partnership balance. Global health programs are obliged to ensure responsible involvement and commitment, otherwise global health program needs remain greater than their contributions.

What Is Global Health?

Global health is global patient advocacy, ensuring equity in health and access to health care. Formerly "international health," global health has a history in colonialism and public health initiatives developed during world wars. Previously focusing on infectious diseases, the field has evolved to recognize non-communicable diseases, economics, public safety, gender, environment, politics, culture and myriad additional factors correlating to health outcomes.

Who Benefits From Global Health?

Striving toward equity and global patient advocacy, global health focuses on populations with poor health outcomes and their health care systems. Educational benefits for medical students, trainees and faculty from high-resource settings should be secondary, as should the competitive benefit provided to academic departments.

How Do You Start a Global Health Program?

Successful programs form initiatives around the assessed needs of the local community and undergo continuous evaluation and monitoring. Without collaboration, programs fail to receive buy-in from key stakeholders. Whether joining established programs or starting new relationships, development of trust and partnership is imperative.

Augmenting established programs requires less initial investment unless a strong novel partnership with clearly identified needs arises. Learning from others experienced in global health further supports strengthening existing programs versus starting new initiatives. Recognizing cultural barriers and understanding what has previously failed and

why are also informative. Flexibility, patience and adaptability are paramount as local needs and priorities often change.

Provide Service or Build Capacity?

Providing service can address acute needs of a community and drastically change individual patients' lives. These programs are indispensable during natural disasters and in conflict zones. Service missions also address chronic lack of access to surgical and anesthesia services in communities. However, unanticipated complications with these types of interventions, both with individual patients and on the health care system's capacity to provide usual care, are not uncommon.

Capacity-building encompasses the health care system, including – but not limited to – training of providers, medical research, funding access, facilities development and health care policy. Capacity-building focuses on improving health care delivery and population outcomes rather than the impact on individual patients' lives. These interventions require longer-term investments and adaptability to the changing needs of the patient population and health care system.

Rotation Abroad or Rotation at Home Institution?

Formal needs assessments identify and prioritize issues faced by local health care systems. Largely, rotations are started abroad where providers travel from high- to low-resource settings providing service, teaching, mentorship or consulting. However, consideration should be given to the opposite partnership structure, as true partnership is bidirectional. Foreign providers who travel from low- to high-resource settings have a unique perspective to recognize limitations and strengths of adapting interventions to their home setting. Although mutually beneficial, experience for trainees from high-resource programs should be secondary to the benefits for their peers practicing in low-resource systems.

How to Schedule Global Health Rotations?

Supportive departmental leadership is key. Flexible scheduling of time for faculty and residents is essential for the continued involvement necessary for building strong partnerships. Residency programs with global health programs are more competitive – the return on investing in the development of global health programs. Current faculty and residents also often seek these enriching experiences. Framing the benefits of global health in this manner serves to encourage departmental leadership to value global health initiatives.