



Program in Global Surgery and Social Change

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Background

Surgery has long been a neglected area of public health. Although diseases treatable by surgery remain a ranking killer of the world's poor, public attention and public health dollars most often target infectious diseases such as HIV, tuberculosis, and malaria. This outpouring of support has led to the development of public health resources across the globe. In turn, these resources have led to the growing recognition of the need for surgical care in low- and middle-income countries. Only recently has surgery been accepted as an equal partner in the fight against global health care inequity.

The global burden of surgical disease is estimated at 15 percent of the total worldwide disease burden. Preliminary research has shown that more than 500,000 women die each year in childbirth; these deaths are attributable to an absence of surgical services. Surgically treatable conditions like cataracts, hernias, and unintentional injuries are easily resolved with basic surgical procedures and if left untreated lead to lost productivity in the patients and their caretakers.

The Program in Global Surgery and Social Change aims to combat the burden of surgical disease across the globe through a combination of surgical training, research, and advocacy efforts that focus on the needs of low- and middle-income countries across the globe.

Program Objectives

Projects undertaken by the Program in Global Surgery and Social Change are linked to the ongoing research, education, care delivery, and advocacy efforts in low- and middle-income countries in the Americas, Africa, and the Caribbean. Program objectives include:

- *Creating and enhancing research programs* that define the burden of surgical disease and barriers to surgical care and surgical-care delivery systems, and, subsequently, developing the best strategies for surgical-care delivery.
- *Training medical students, residents, and fellows in global surgery* through rotations at established academic medical centers in North America and through skills-building sessions that focus on the assessment, evaluation, and improvement of national systems.
- *Offering global surgery fellowships for all specialties*, with the option of pursuing a master's degree at the Harvard School of Public Health or the Harvard Kennedy School.
- *Developing the academic careers of faculty* committed to addressing issues associated with disparities in surgical care, and supporting global surgery mentors for young surgeons interested in academic careers in research and advocacy.
- *Developing best practices for national health services* that embrace aspects as varied as the building of physical infrastructure and the development of human capital.
- *Increasing public-awareness advocacy efforts* designed to improve the financial and human capital resources directed toward global surgery research, education, and delivery.

Featured Initiatives

Defining the Burden of Surgical Disease

In collaboration with Children's Hospital Boston, the nonprofit Partners In Health (PIH), and Brigham and Women's Hospital, the Program has selected the first research fellow for a project that will calculate the burden of surgical disease. The fellow will assess a single definable area in Cange, Haiti—the remote region near Zanmi Lasante, PIH's central clinic in Cange—and will calculate the region's surgical needs, morbidity and mortality, and disability-adjusted life years lost as a result of inadequate surgical-care delivery. This initiative will establish statistical sampling models and techniques for collecting data that can then be adopted for use in other countries served.

Evaluating the “Effector Arm” of Surgical Care Delivery

Through the implementation of continuous clinical audits as well as prospective research projects, this initiative employs care-delivery models to evaluate the quality, safety, and overall value of surgical care. The assessments also seek to determine the effects that investment in surgical-care improvements would have on national economic measures such as per capita GDP, as well as on health measures such as disability-adjusted life years.

The Paul Farmer Global Surgery Fellowship

Children's Hospital Boston established the Paul Farmer Global Surgery Fellowship in a joint effort with Partners In Health and Brigham and Women's Hospital. This fellowship for young surgeons provides a multidisciplinary approach to health care that combines surgical training with the advanced study of public health. It offers two tracks, one for surgical trainees interested in research initiatives in global surgery and one for recent surgical residents interested in clinical and surgical training in resource-poor settings. Over time, this fellowship program is slated to host fellows from a variety of surgical disciplines. Fellows travel to participating countries to investigate and contribute to the specific surgical-care systems. Through the Paul Farmer Global Surgery Fellowship, dedicated surgeons obtain the clinical, research, and policy skills necessary for leading change and improving surgical-care delivery in resource-poor settings.

Training Nonphysician Midlevel Providers

To support a strategy of building sustainable surgical delivery systems and introducing cost-effective methods that reduce surgical morbidity in low- and middle-income countries, this initiative assesses perioperative-skills training programs being offered by various groups to nonphysician midlevel providers. These programs have included such aspects as identifying delegate hospitals in developed nations to serve as mentors to providers from resource-poor settings, offering training programs for local medical providers during short-term medical missions, and linking first-world hospitals with delivery centers in resource-poor countries. This initiative of the Program assesses all implemented strategies for patient safety, efficacy, and impact.

Institutional Linkages

The Program in Global Surgery and Social Change is dedicated to developing strong ties with institutions that share its goals. Current affiliations include Children's Hospital Boston, Brigham and Women's Hospital, Harvard School of Public Health, Partners In Health, Operation Smile, American College of Surgeons, and World Health Organization.

Program Director

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