

# The Global Impact of Surgical Volunteerism

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You must give some time to your fellow man. For remember, you don't live  
in a world all your own. Your brothers are here too.

—Albert Schweitzer, MD

Surgeons have a proud tradition of responding to societal needs beyond their classic role as caregivers to individual patients. Whether active in local communities or global initiatives, surgical volunteers experience a profound sense of meaning that resonates with the altruistic roots of the surgical profession.

Beyond its transformative effect on providers and recipients, it is fair to ask some fundamental questions about volunteer care. What is the significance of volunteerism to what might be called the overall surgical industry? Can volunteerism shape systems, societies, and economies? Often considered little more than a collection of small-scale enterprises, the magnitude and potential influence of the volunteer sector is still not fully appreciated. Until recently, existing analyses did not accurately reflect the economic impact of the voluntary and nonprofit sectors. However, there is both qualitative and quantitative evidence that illustrates the magnitude of impact of surgical volunteerism.

## **Assessing the scope of the voluntary and nonprofit sector**

A robust method for assessing the scope of the voluntary and nonprofit sector has been jointly developed by the Johns Hopkins Center for Civil Society Studies and the United Nations Statistics Division. Their initial study of 30 countries confirms “what many people already suspected: that nonprofit organizations and volunteering constitute a massive economic force” [1]. In

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fact, the nonprofit and volunteer sector in the United States has been growing at a rate exceeding that of the overall GDP by 20% [1] and is larger than the agriculture, construction, transportation, and utilities sectors [2].

Such economic magnitude carries with it significant influence in the realms of policy, partnerships, and practices. The voluntary sector possesses unique flexibility to respond to perceived gaps in services provided by existing governmental and institutional programs. It also possesses tremendous potential energy and catalytic power in the dedication, imagination, and entrepreneurship of its constituency. It is increasingly apparent that addressing the “serious global social and economic problems that plague our communities will require...the ingenuity and initiative of the world’s growing nonprofit sector and the millions of volunteers it can help mobilize. They have the ability to extend the Government’s reach, engage grass-roots energies, build cross-sector partnerships and reinvigorate democratic governance” [1]. Understanding the dynamic power of this sector provides context for the important role that volunteer surgeons play.

### **The role of surgeons in the voluntary and nonprofit sector**

In examining the role and contributions of surgeons in the nonprofit/voluntary sector, the bulk of activity occurs on the international stage. Historically, major humanitarian efforts have been undertaken in foreign lands, with thousands of medical nonprofit organizations providing services ranging in nature from education to clinical medicine to telemedicine and other emerging technologies. No less than two dozen initiatives successful in providing surgical care, education, training, and needed supplies have been founded by member surgeons of the American College of Surgeons.

These considerable accomplishments are significant, not only to individuals and communities served, but also on a personal and professional level to those providing care. For every hospital built in a community once lacking health care, the resulting benefits extend beyond providing care for local citizens to professional training, economic growth potential, and infrastructure to support healthy communities. For every training program implemented to help eradicate debilitating congenital or acquired surgical conditions, individuals, systems, and communities are transformed. For every international partnership established, generations of collaboration and exchange are possible.

Measuring positive impact and demonstrating lasting effect has been a challenge for the nonprofit sector. Because of a perceived lack of meaningful gauges of effectiveness of nonprofit efforts, there is growing interest in defining and applying measures of the impact and sustainability of humanitarian work. The Sphere Project, an international initiative established in 1997 in Geneva, Switzerland, has developed a *Humanitarian Charter and Minimum Standards in Disaster Response* dedicated to improving the

effectiveness and accountability of disaster response, with a focus on what those affected by disasters have a right to expect from humanitarian aid [3].

The Humanitarian Accountability Partnership (HAP), also Geneva-based, was implemented in 2003 to make “humanitarian action accountable to beneficiaries” by means of an international self-regulatory body that monitors, guides, and supports nonprofit humanitarian programs. HAP provides certificates to those programs that adhere to defined standards and practices [4].

The University of Washington recently announced the launch of the Institute for Health Metrics and Evaluation with a \$105 million grant from the Gates Foundation [5]. Their stated mission is to “guide international policy-making” using high-quality data on needs and outcomes analyses [4]. Examining what works and trying to determine the portability of effective programs to different cultures, economies, or climates are positive steps forward. The increased scrutiny and attention to benchmarking should greatly enhance the mission and efficacy of existing efforts.

As each community in need presents a different combination of resources, politics, challenges, and opportunities, a spectrum of responses is both valid and appropriate. While no simple solutions exist, several elements are always appropriate, whether volunteering in the United States or abroad. These include cultural sensitivity, mutual respect, well-managed expectations, and partnership with those served. An appreciation of the role of long-term relationships is essential in effecting sustainable change. In an ideal world, volunteer outreach pursuits would consist of true partnerships working toward sustainable solutions to identified problems, which ultimately would obviate the need for the volunteer effort. In the real world, of course, political, social, economic, religious, and practical issues intervene.

The recent work of Salamon and colleagues in assessing the economic significance of the voluntary sector raises the question of whether the proper measurement tools have yet been identified for assessing true impact. Are we examining these issues through the proper lens?

### **Examining the impact of the voluntary and nonprofit sector**

Touted as a collateral benefit of medical outreach with deeply important consequences, the concept of *medical diplomacy* recently has been emphasized. The nonprofit organization, Terror Free Tomorrow, has examined the impact of American humanitarian leadership in potentially “hostile” regions. Their work has demonstrated that outreach to countries in need, as in Indonesia following the 2004 tsunamis or after Pakistan’s devastating earthquake in 2005, has had sustainable impact not only in reversing negative attitudes towards the US but also decreasing popular support for global terrorists [6].

After the tsunami, the hospital ship USNS Mercy was deployed to the region with a combined crew of military and volunteer medical staff from the

nonprofit organization Project HOPE. After a follow-up mission to the region, a 2006 survey conducted in Indonesia and Bangladesh, the world's largest and third largest Muslim countries respectively, demonstrated a 63% favorable response to the humanitarian medical mission of the USNS Mercy among Indonesians, and a 95% favorable response among Bangladeshis [6]. Not only did this mission favorably change public opinion towards the United States, but also the "consensus approval of the Mercy mission cut across every demographic and political view" [7]. In a similar fashion, Terror Free Tomorrow concluded that 78% of Paistanis had a more favorable opinion of the United States because of American earthquake relief [8]. "Importantly, this change in perception lasted beyond the initial aid and service, underscoring that America's actions can have a lasting impact" [9].

The Pentagon's Joint Chiefs of Staff conclude in *The National Military Strategic Plan for the War on Terrorism* that American humanitarian assistance is "often key to demonstrating benevolence and goodwill abroad...[and] countering ideological support for terrorism" [8]. Understanding the correlation between political unrest, economic instability, and poor health, the significance of these interventions is further magnified. A Brookings Institute policy group observed, "The role of international volunteer service in building bridges across growing global divides has never been more critical to the future of our nation, and global peace and stability" [9].

Other initiatives leading to sustained impact include contributions to the medical education, medical infrastructure, and medical economics of developing countries. Academic partnerships such as the Touch Foundation, which joins the Weill Cornell Medical College with the Bugando University College of Health Sciences in Mwanza, Tanzania, represent long-term commitment to collaboration [10]. Additional global health initiatives fostering international exchange have been established by the medical schools at Brown University, the University of California, San Francisco (UCSF), Johns Hopkins, the University of Colorado, New York University, and others. These academic partnerships have placed a focus on teaching and training directed to local needs and resources. The Pan African Academy of Christian Surgeons has implemented general surgical residency programs in Sub-Saharan Africa in collaboration with Loma Linda Medical University. Oversight is provided by the West African College of Surgeons and the College of Surgeons of East, Central, and Southern Africa.

### **The needs at home**

The only real nation is humanity.

—Paul Farmer, MD

Some may question why most medical outreach occurs in countries other than our own. The striking disparity of resources between the United States and other countries provides some insight. Half the world's population lives

on less than \$2 a day. Tanzania has only two physicians for every 100,000 people, as compared with 256 for every 100,000 people in the United States [11]. This parallels a widespread lack of access to care in many developing nations.

These facts do not obviate the unmet patients' needs that continue to exist in the United States. With nearly 45 million uninsured in the United States who have limited access to nonemergent care, administering appropriate and timely surgical care to this cohort is a challenging situation. The question of how to provide medical care for the underserved is decidedly different than how to provide surgical care.

Much that occurs on the international stage can inform and enhance the delivery of care in the United States. Surgeons volunteering internationally return to their own communities with enhanced awareness of cultural influences on health and a sensitivity to the economic importance of allocating limited resources. Such returning travelers can better appreciate the way our United States systems operate and envision the possibility of providing local care with less elaborate support systems.

Still, most surgeons find it easier to volunteer outside the United States than within it. Liability, licensing, and logistical considerations complicate the provision of humanitarian care in the United States, especially with the wide variations resulting from different state regulations.

Another consideration for surgeons and others who perform procedural care in the United States, is that most of them cannot provide that care within the system of free clinics, because of how they are designed currently. The dependence on an appropriate facility in which to operate, and collaboration with the entire team needed to administer preoperative, interoperative, postoperative, and follow-up care, increase the level of complexity for surgical outreach. Effective delivery of surgical care to this population requires coordinated donation of the spectrum of services from all members of the surgical team and is contingent on committed support from the hospitals or surgi-centers where such care can be provided.

In May 2007, *Health Affairs* reported that "uninsured patients and those who pay with their own funds are charged 2.5 times more for hospital care than those covered by health insurance and more than 3 times the allowable amount paid by Medicare" [12]. Thus, it is easily understood how a "routine" outpatient operation for a hernia or a torn meniscus would be financially devastating. Being uninsured in the United States means receiving less care and less timely care.

### **Innovative solutions**

Several innovative programs created by surgeons have addressed the issue of providing outpatient surgical care to uninsured patients, with strikingly similar solutions. Central in each is partnership with the administration of a local hospital or outpatient surgical clinic in delivering this humanitarian

care. By leveraging the relative availability of hospital operating rooms on weekends and benefiting from altruistic volunteers across the spectrum of surgical care providers, each has arrived at an arrangement appropriate for their hospital and tailored to their community's needs and resources.

Operation Access [13] uses operating rooms available on weekends in 19 hospitals in the greater San Francisco area to provide outpatient, elective surgical care to the working poor. In existence since 1993, it now serves patients from 60 community clinics and draws on the services of over 400 health care volunteers. In 2006, Operation Access provided \$1.3 million in donated surgical care.

Surgery on Sunday, a similar program in Lexington, Kentucky, donates a full spectrum of outpatient surgical care one Sunday a month. The organization has met with such success in its first year that it is in the process of replicating its plan in other regions of Kentucky [14].

Fresh Start Surgical Gifts in San Diego has been integrating surgical care, surgical training for providers, and research into its Surgery Weekends since 1991 to provide disadvantaged children and young adults with corrective surgery for birth defects, accidents, abuse, or disease. Over the course of seven Surgery Weekends in 2006, Fresh Start delivered \$1.4 million in reconstructive surgery and related medical services [15].

Mission Cataract USA demonstrates another innovative approach to serving the uninsured in one's own community. It aids ophthalmologists in establishing designated cataract days when the uninsured can benefit from donated cataract operations [16].

Several common themes characterize these programs. Foremost, they have reframed the central issue: uninsured patients exist in every community, and they will need surgical care. Establishing a mechanism to proactively provide donated care transforms the burden of uncompensated care into an intentional humanitarian act which both honors and respects the patients and the care team. By designating "surgery days", the donated care is quantifiable and provides a concrete demonstration of a deep commitment to community. And, at least theoretically, providing this care in an elective fashion prevents late presentations of surgical conditions and diseases, eliminating the downstream expense of neglected surgical conditions. The organizations above demonstrate volunteerism's potential to transform systems of care and positively impact societal and economic issues.

A vast and largely untapped resource for domestic medical volunteerism is the estimated 160,000 retired surgeons and physicians in the United States. A widely expressed sentiment among this constituency is a reluctance to leave practice altogether, despite limited options for remaining clinically active. Provided with the proper opportunities, licensing, credentialing mechanisms, and charitable immunity protection, this cohort constitutes an enormously powerful force. The Volunteers in Medicine Institute [17] and the American Health Initiative's TAP-IN [18] are programs that recognize and capitalize on this experience pool to care for the uninsured in

communities across the United States. Unique constraints still apply to retired surgeons who need hospital operating privileges to do more than diagnose surgical conditions.

### **Volunteers in times of disaster**

Knowing is not enough; we must apply. Willing is not enough; we must do.  
—Johann Wolfgang von Goethe

Potential avenues that enable volunteers to provide surgical care for the domestic uninsured may be gleaned from the process of establishing our response to future domestic disasters. Recent natural and human-made disasters have focused a spotlight on the inefficiencies and obstacles in our current system of response. The need for health care providers to cross state lines to provide relief in a disaster or emergency seems obvious in the wake of these events. So, too, is a scalable response system that can draw from a pool of situationally appropriate disaster responders to provide surge capacity.

Most hospitals, communities, and states have disaster plans, but ensuring that they complement and work in concert with each other is paramount for maximal effectiveness. Collaboration with local, regional, national, and international government agencies, the military, and nongovernmental agencies involved in disaster response is essential. More fundamentally, necessary legal avenues must be established that enable health care providers to contribute care appropriate to the situation and their level of proficiency. In late 2006, the National Conference of Commissioners on Uniform State Laws drafted *The Uniformed Emergency Volunteer Health Practitioners Act*, which proposed a legal means of facilitating the interstate deployment of health practitioners “while still allowing host states to act when necessary to limit, restrict, and regulate the use of volunteer health practitioners within their boundaries” [19]. Compared to existing Emergency Management Assistance Compact mutual aid agreements, this proposal incorporates private sector health providers into state forces rather than enabling only government employees to cross state lines in emergency response. In addition, this comprehensive proposal examines definitions of volunteers, volunteer registration systems, credentialing, liability, and other critical considerations.

If such disaster plans and legislation are established in a broad enough manner, the licensing, credentialing, and liability provisions put in place to protect patients and providers in disasters could be modified for application in everyday circumstances. This would lay the necessary groundwork to enable surgeons and other care providers to volunteer to address the less sensational problems of the uninsured.

By volunteering in their own communities, surgeons also gain a greater awareness of existing community medical assets, how they complement each other, and what resources and partnerships may still be needed. In

the case of a sudden loss of usual infrastructure in a disaster or emergency, the informal networks of the volunteer community may prove critical for identifying appropriate individuals for a surge capacity group familiar with alternate strategies for delivering care.

### **The educational value of volunteerism**

The next generation of surgeons, while meeting needs locally, must also take a leadership role globally—the need for international partnership has never been greater.

—Doruk Ozgediz, MD

There is a groundswell of understanding, interest, and action in surgical volunteerism. This is especially apparent in the emerging generation of health care providers. Increasingly, students entering medical school have international volunteer experience and an avid interest in global health issues. Opportunities abound for students to nurture this interest during medical school with greater availability of global health programs and formal international elective opportunities. In addition, 52% of medical schools have opportunities for outreach in the local community by means of student-run clinics for the uninsured [20].

This passion finds few formal outlets in surgical residency, as there is a paucity of organized opportunities to participate in volunteer outreach. The complexities are well recognized—an 80-hour work week, logistics, costs, liability and safety concerns, and oversight of educational experience.

Balancing these concerns is the assertion that participation in volunteer medical experiences will enrich resident education in concrete and abstract ways. In considering optimal educational outcomes, volunteer experiences provide many learning opportunities that appear to ideally complement clinical rotations and didactic sessions. There is the potential to increase cultural sensitivity, gain a broader perspective of the American health care system, develop experiential insights on the influence of resource allocation on global health issues, and be exposed to a different spectrum of pathology. Resourcefulness and critical thinking skills that come from working without the benefits of a well-equipped American hospital are difficult, if not impossible, to replicate in the current training paradigm. Arguably, such skills will be required for leaders of the health care systems of the future.

### **Proven models**

An international one month elective in Kenya has been in place for 9 years for general surgery residents at Brown Medical School. A retrospective study was recently conducted to assess the perceived educational, professional, and social growth of participants from the first eight years.

From the perspective of participants, fellow residents, and faculty, those residents who took part in the Kenya elective were noted to demonstrate improved physical examination and decision-making skills, greater cost-effectiveness, and a sense of having returned “a better doctor.” It was also learned that many residents had sought out Brown University’s surgery program because such an elective was offered. Among faculty, 97% believed the elective to be a valuable component of surgical education for those involved, and 74% would participate in the international volunteer experience if given the opportunity (Klaristenfeld DD, Chupp M, Cioffi WG, and colleagues, unpublished manuscript, 2007).

Residents in the UCSF Orthopedics program have also had access to an international elective since 1992. Participants have consistently rated this experience as the most meaningful of their training, and most continue to participate in volunteer activities following residency [21]. Based on the enthusiasm and benefits seen with their orthopedic colleagues, the general surgery residents at UCSF are currently developing a similar program in Uganda [22].

Among surgical residents, there is a wealth of initiative, passion, and commitment to health care for the underserved in our country and others. At least two nonprofit organizations have been started by surgeons during their residencies. Doug Burka, MD founded the Carefree Foundation to address treatable conditions in underserved populations, and create “treatment environments that foster hope” [23]. Awori Hayanga, MD established the Ruben J. Williams Foundation to address disparities in the provision of surgical care in developing countries with a specific emphasis on Eastern Africa, and a focus on education and training [24].

### **The role of the American College of Surgeons**

By giving of your time and heart, you will not only help to advance the humane practice of surgery, but you will also reap the rewards of belonging to the greatest humanitarian profession in the world.

—Kathryn Anderson, MD, FACS

Humanitarian instincts and actions are deeply ingrained in surgeons’ professional identity. Sir William Osler noted, “Medicine arose out of the primal sympathy of man with man; out of the desire to help those in sorrow, need and sickness” [25]. This “primal sympathy” and a sense of professional duty motivate many surgeons to offer their services *gratis* to those most in need in their own community or within the global, community. Thousands of years ago, Hippocrates, author of our professional oath, acknowledged this as well: “Sometimes give of your services for nothing. And if there is an opportunity for serving one who is a stranger in financial straits, give full assistance to all such. For wherever the art of medicine is loved, there is also a love of humanity” [26].

Today, the Code of Professional Conduct of the American College of Surgeons (ACS) echoes these same principles with guidelines advising surgeons to:

“Provide necessary surgical care without regard to gender, race, disability, religion, social status or ability to pay;  
Advocate strategies to improve individual and public health by communicating with government, health care organizations, and industry; and  
Work with society to establish just, effective and efficient distribution of health care resources” [27].

The ACS has recognized the magnitude of interest and involvement in surgical volunteerism and is working to make it easier for surgeons to engage in volunteerism at all stages of their careers. The College’s volunteer initiative, Operation Giving Back (OGB) was created to recognize, connect, support, enable, and celebrate those surgeons interested in volunteerism. OGB aims to “facilitate surgical volunteerism” for surgeons of all specialties and at all career stages. Facilitating surgical volunteerism is a simple phrase that encompasses a wide and complex scope of intent, related to all of the topics discussed in this article, and others as they are identified. What distinguishes this effort is the tailoring of its resources and database for and by surgeons, and recognition of the unique challenges involved in ensuring adequate surgical care in diverse circumstances. OGB identifies surgeons with an interest in volunteerism and fosters partnership between individuals in academia and private practice, corporations, foundations, and nonprofit entities, looking toward possibilities for synergy and further transformational potential of surgical volunteerism.

In every community there is work to be done. In every nation there are wounds to heal. In every heart, there is the power to do it.

—Marianne Williamson

The importance of the clinical, societal, political, and economic impact of volunteerism is becoming better appreciated. However, questions remain with regard to providing surgical care to those without adequate means or access. In the end, the most effective mechanisms are sought for translating volunteer interest and effort into meaningful results. Facilitating collaboration among the many individuals and organizations invested in surgical volunteerism will magnify the contributions from the surgical community in caring for the underserved.

The enduring commitment of surgeons to these matters inspires confidence that solutions will continue to come from the surgical community, in keeping with a rich professional legacy. With an emerging generation of surgeons passionate about their ability to give back in a global society, and so many practicing and retired surgeons pursuing similar opportunities to contribute, the time is ripe to foster these interests and actions.

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