Global Health Telemedicine Conferences: The System We Save May Be Our Own

Sriram Shamasunder, MD, DTM&H
Ethel Wu, MD

During rounds with Liberian nurses and a visiting African physician, an older man who was hunched over and gasping for breath caught our attention. He could not speak in full sentences. The lack of air was causing a state of near panic. After a brief listen and percussion of his lungs, it was clear he had a lot of fluid accumulated in his left lung, which we needed to drain. We said we thought it would make him feel better. His first question was not about the risk of the procedure, if it would hurt, or what the chances were that it would truly make him feel better. His first question was, "How much will it cost?" A dying man's first thought was about money.

This degree of fear surrounding cost penetrates into our own neighborhoods in the United States, although it may not be heard as frequently. Patients thinking about cost and our health system are pushing us as health care professionals to consider it more and more. This is a signal that we need to address the pressure to achieve better outcomes at a fraction of the cost. Residency programs must begin to integrate high-value care, knowledge about the pitfalls of overuse, and cost-conscious use of resources into their curricula. Identification of avoidable tests and guidelines, such as the Choosing Wisely Campaign, are an invaluable education piece.[1] At the University of California, San Francisco (UCSF), Dr Chris Moriates, a leader in value-driven care, is championing this new movement through an innovative effort that seeks to change culture and the approach to practice.[2] The experience of global health practitioners and those who have worked in resource-limited settings has a great deal to add to this conversation.

In the last decade, residency programs have developed international electives and didactic programs in order to keep pace with trainee interest, as well as attract applicants who are increasingly demanding global health training.[3,4] Involvement in on-the-ground delivery of care in global health settings can be invaluable. One among myriad of lessons to be gained from this experience is the importance and practice of honing clinical and physical examination skills when there are few tests to rely on. These lessons are often taught and learned informally, and often feel disconnected or irrelevant when trainees return. Even less emphasized has been the potential role for global health to bring lessons back home.

At UCSF, in the familiar setting of clinical case presentations, we have started telemedicine conferences with our international partner sites as a forum to discuss global health cases. We have begun to use these discussions to raise cost awareness among trainees in a formalized way.

Our global health conferences are held once to twice monthly via telemedicine from San Francisco to, alternatingly, Haiti, Liberia, India, and an Indian Health Service site in New Mexico—sites where UCSF residents and fellows are working. They are hour-long conferences that use Skype or desktop computers with microphones and webcams. Within the framework of an unfolding clinical case, presented by the abroad trainee, we aim to integrate questions on test utility, specificity, and sensitivity with time for management decisions within our known context and the context of the local setting. The goal is to provide a high standard of care within the confines of limited resources. We now increasingly include a focus on cost awareness for trainees in the United States. For example, does the case of pancreatitis in Haiti require a computed tomography (CT) scan? If we would have obtained a CT scan in San Francisco, was it necessary? If we could not or did not get a CT scan in Haiti, does the lack of access to a test move from inconvenient to undesirable, or from unjust to a human rights violation? How much do simple lab tests cost the system, and how much must be covered by the patient? These discussions can be invaluable in teaching a generation of residents the importance of high-value care.

The experience of practice in global health or a resource-poor setting, an already growing part of trainee education, can be formalized to integrate high-value care into the curriculum and can begin to change the culture of medicine, including how we as physicians approach health delivery. In a recent survey of more than 2500 physicians, respondents indicated they thought trial lawyers, health insurance companies, hospital and health systems, pharmaceutical companies, and patients all had a "major responsibility" in reducing health care costs, but less frequently attributed that same "major responsibility to the members of their own group."[5] Delivery of the best standard of care with cost and value in mind should be an integral part of the approach to practice. Bringing these

All authors are at the University of California, San Francisco. **Sriram Shamasunder, MD, DTM&H,** is Assistant Clinical Professor of Medicine; and **Ethel Wu, MD,** is Assistant Clinical Professor of Medicine.

Corresponding author: Sriram Shamasunder, MD, DTM&H, University of California, San Francisco, Department of Medicine, 533 Parnassus Avenue, San Francisco, CA 94143, 415.502.7103, sshamasund@medicine.ucsf.edu

DOI: http://dx.doi.org/10.4300/JGME-D-13-00430.1

Downloaded from https://prime-pdf-watermark.prime-prod.pubfactory.com/ at 2025-10-27 via free access

ideals to the forefront early into trainee curricula is crucial. Global health and global health telemedicine conferences may be a step toward having a generation of physicians become more proactive about costs their patients and the system bear.

Telemedicine conferences between resource-poor settings and residency programs in the United States are uniquely suited to contextualize value and cost in a way other didactics cannot. This approach can be easily built on a staple of residency education—the case conference. These conferences can piggyback on existing global health rotations for many US residents, and participation will prompt value questions and help trainees develop a cost consciousness that has not been requested or needed by prior generations of US physicians. As global health interest exponentially increases among trainees, telemedicine case conferences centered around clinical care, value, and cost using international examples may be worth scaling up. It will be one piece of the puzzle in educating a generation of physicians who must deliver more effective care with less money. As global health efficiency and value lessons come home, the system we will be saving may be our own.

References

1 Clark C. How hospital practices are trimmed at UCSF. HealthLeaders Media. August 8, 2013. http://www.healthleadersmedia.com/content/QUA-295035/How-Hospital-Practices-are-Trimmed-at-UCSF##. Accessed June 17, 2014.

2 Moriates C, Shah N, Arora VM. Medical training and expensive care. *Health Aff (Millwood)*. 2013;32(1):196.

3 Drain PK, Primack A, Hunt D, Fawzi W, Holmes K, Gardner P. Global health in medical education: a call for more training and opportunities. *Acad Med*. 2007;82(3):226–230.

4 Kerry VB, Ndung'u T, Walensky RP, Lee PT, Kayanja VF, Bangsberg DR. Managing the demand for global health education. *PLoS Med*. 2011;8(11):e1001118. doi:10.1371/journal.pmed.1001118.

5 Tilburt JC, Wynia MK, Sheeler RD, Thorsteinsdottir B, James KM, Egginton JS, et al. Views of US physicians about controlling health care costs. *JAMA*. 2013;310(4):380–389. doi:10.1001/jama.2013.8278.

Downloaded from https://prime-pdf-watermark.prime-prod.pubfactory.com/ at 2025-10-27 via free access