Sustainability and Growth of University Global Health Programs

AUTHORS

Alastair I. Matheson
Judd L. Walson
James Pfeiffer
King Holmes

CSIS | CENTER FOR STRATEGIC & INTERNATIONAL STUDIES

UNIVERSITY OF WASHINGTON
DEPARTMENT OF GLOBAL HEALTH
START PROGRAM

Sustainability and Growth of University Global Health Programs

Authors
Alastair I. Matheson
Judd L. Walson
James Pfeiffer
King Holmes

A Report of the CSIS Global Health Policy Center

May 2014

CSIS | CENTER FOR STRATEGIC & INTERNATIONAL STUDIES

UNIVERSITY OF WASHINGTON
DEPARTMENT OF GLOBAL HEALTH
START PROGRAM

About CSIS

For over 50 years, the Center for Strategic and International Studies (CSIS) has worked to develop solutions to the world's greatest policy challenges. Today, CSIS scholars are providing strategic insights and bipartisan policy solutions to help decisionmakers chart a course toward a better world.

CSIS is a nonprofit organization headquartered in Washington, D.C. The Center's 220 full-time staff and large network of affiliated scholars conduct research and analysis and develop policy initiatives that look into the future and anticipate change.

Founded at the height of the Cold War by David M. Abshire and Admiral Arleigh Burke, CSIS was dedicated to finding ways to sustain American prominence and prosperity as a force for good in the world. Since 1962, CSIS has become one of the world's preeminent international institutions focused on defense and security; regional stability; and transnational challenges ranging from energy and climate to global health and economic integration.

Former U.S. senator Sam Nunn has chaired the CSIS Board of Trustees since 1999. Former deputy secretary of defense John J. Hamre became the Center's president and chief executive officer in 2000.

CSIS does not take specific policy positions; accordingly, all views expressed herein should be understood to be solely those of the author(s).

Center for Strategic & International Studies
1616 Rhode Island Avenue, NW
Washington, DC 20036
202-887-0200 | www.csis.org

Sustainability and Growth of University Global Health Programs

Alastair I. Matheson, Judd L. Walson, James Pfeiffer, and King Holmes[1]

Introduction

The past two decades have seen a dramatic expansion of global health training, service, and research activities at universities. In 2009, the Centers for Strategic and International Studies (CSIS) documented the massive increase in the number of global health programs at U.S. universities and identified three key drivers of growth: a greater emphasis on internationalization at U.S. universities in response to student demand; heightened visibility of global health as a foreign policy element; and increased levels of funding from governments, foundations, and private donors.[2] Five years on, these factors have continued to drive expansion of university global health programs. However, significant questions regarding the sustainability of this growth have been raised. These concerns include whether universities can continue to secure adequate financial support for training, service, and research activities; whether graduates are developing marketable skills and finding employment in global health post-graduation; whether university career reward systems recognize faculty engagement in global health activities; and whether partnerships with external institutions result in sustainable mutual benefit.

In response to these concerns, CSIS requested a follow-up survey to document the progress of global health activities in North American universities since 2009, with a specific focus on the future trajectory and sustainability of the growth in university global health activities. In examining the opportunities and challenges for the development of sustainable global health programs at North American universities, we present a framework for assessing the sustainability of global health programs. We also examine changes in global health activities and funding since 2009 and explore anticipated changes in the coming five years. The assessment provided is based on a relatively limited survey of institutions and students and interviews with a select group of global health university leaders. The intent of this document is to serve as a framework for discussion as university leaders navigate the development and growth of global health programs within the university context.

---

[1] Alastair I. Matheson is with the Department of Epidemiology at the University of Washington. Judd L. Walson, MD, is with the Departments of Global Health, Medicine (Allergy and Infectious Disease), Pediatrics and Epidemiology at the University of Washington. James Pfeiffer is with the Departments of Global Health, Anthropology, and Health Services at the University of Washington. King Holmes, MD, is with the Departments of Global Health, Medicine (Allergy and Infectious Disease), Epidemiology, and Microbiology at the University of Washington.

[2] M. Merson and K. Chapman Page, *The Dramatic Expansion of University Engagement in Global Health: Implications for U.S. Policy* (Washington, DC: CSIS, April 2009), http://csis.org/files/media/csis/pubs/090420_merson_dramaticexpansion.pdf.

Methods

We used a combination of quantitative and qualitative methods to document growth of global health activities and issues surrounding sustainability.

For the quantitative component, we developed two web-based surveys: one for tertiary educational institutions with global health programs and one for current or former students who incorporated global health into their studies. Targeted institutions were located through member lists of the Consortium of Universities for Global Health (CUGH) and the Global Health Council, the list of global health programs in the 2009 report,[3] and by two Google searches using the following terms: (1) "global health" university -CUGH, and (2) "global health" university Canada -CUGH. The first 10 pages from each search were examined to identify institutions with global health programs. We identified 140 institutions and emailed them the survey, of which 35 programs (25 percent) responded.

Targeted institutions were asked to distribute the student survey to current students and recent graduates. From these requests, we received 53 completed surveys from 8 different institutions. Both surveys ran from March 30 to April 11; institutions and individuals were requested to complete the surveys within 12 days of receiving them to accommodate the short timeline of the project.

For the qualitative component, we interviewed 11 senior members of global health programs in 10 U.S. universities (see Appendix A). Almost all the interviews took place between March 13 and March 28, 2014. The topics covered in the interviews included history of the program, finances, faculty recruitment and retention, student experiences, partners, and general sustainability issues. We used purposive key informant sampling to ensure that a range of universities was included in terms of geographic location, length of time operating, size, structure in the university, and global health activities. Having identified potential respondents from the list of institutions, we prioritized those who were available in the time window available for interviews. Interviews were carried out by phone, lasted approximately 60 minutes, and were conducted using semi-structured, open-ended interview guides. We used audio recordings and notes to identify key themes and note where differences arose among respondents.

Current and Projected Status and Growth in Global Health at Selected U.S. and Canadian Universities

The number of global health programs within North American institutions has continued to increase over the past decade. Among surveyed institutions, there has been a stable increase in global health programs since 2000, with an approximate tripling of the number of initiatives every five years (Figure 1). While several universities reported having some formal global health activities present at their university for more than 10 years, a primary focus on global health was a relatively new endeavor for most respondents. Only 3 institutions surveyed had established global health initiatives by 2000 and 14 institutions reported a start date of 2009 or later.

[3] Ibid.

Figure 1: Survey respondents reported a steady increase in the number of global health initiatives since 2000

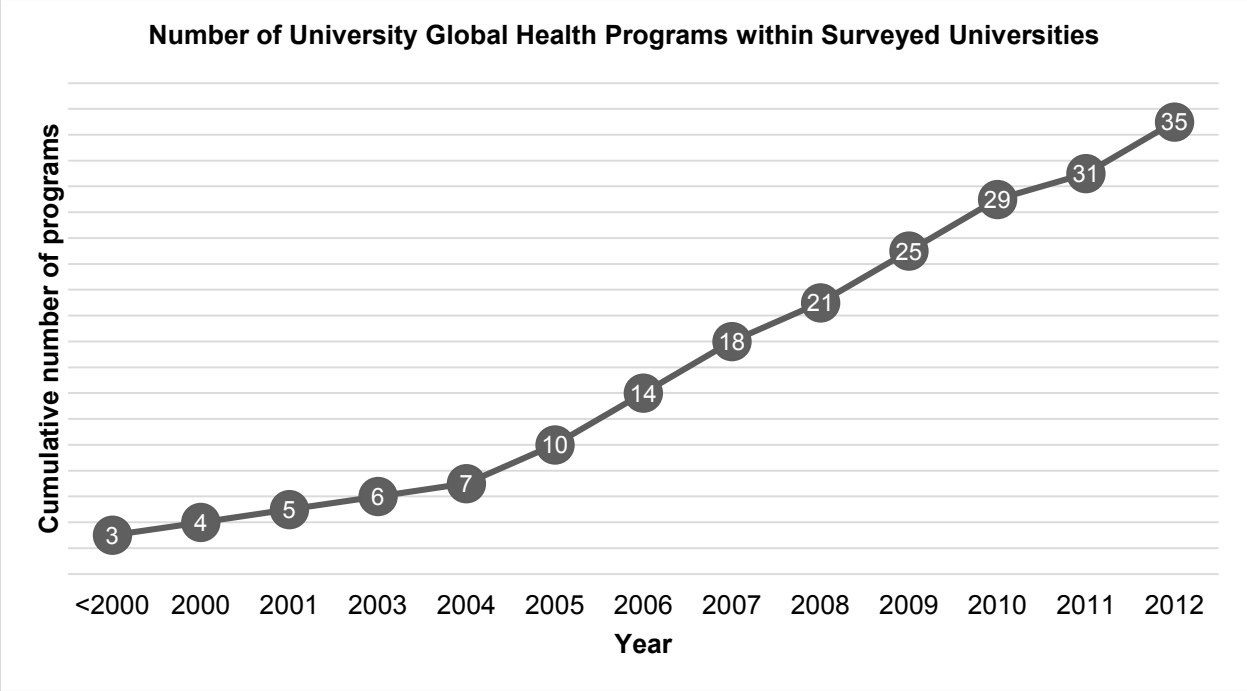
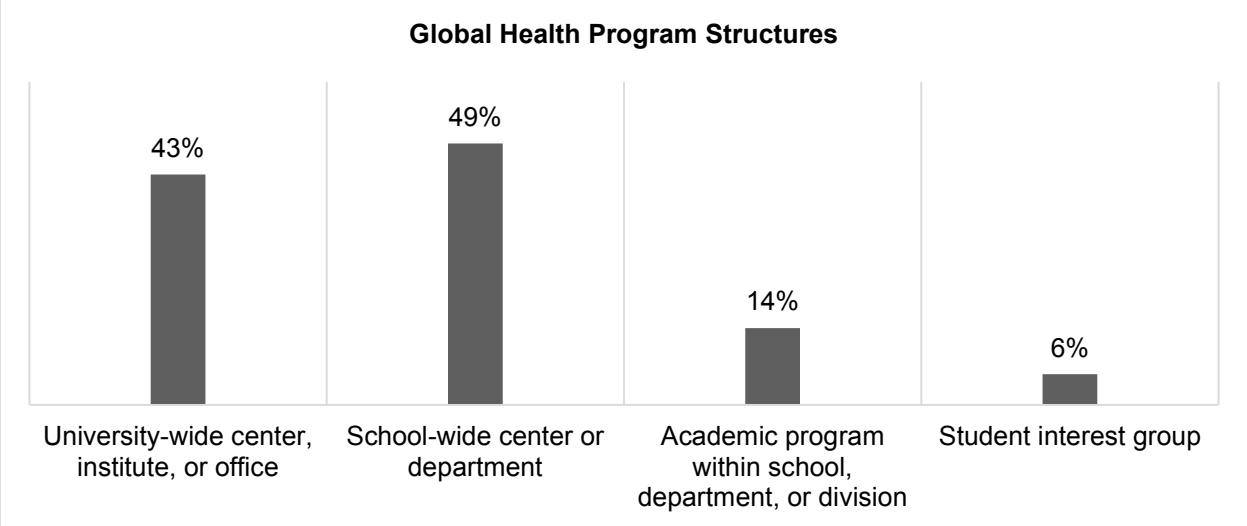


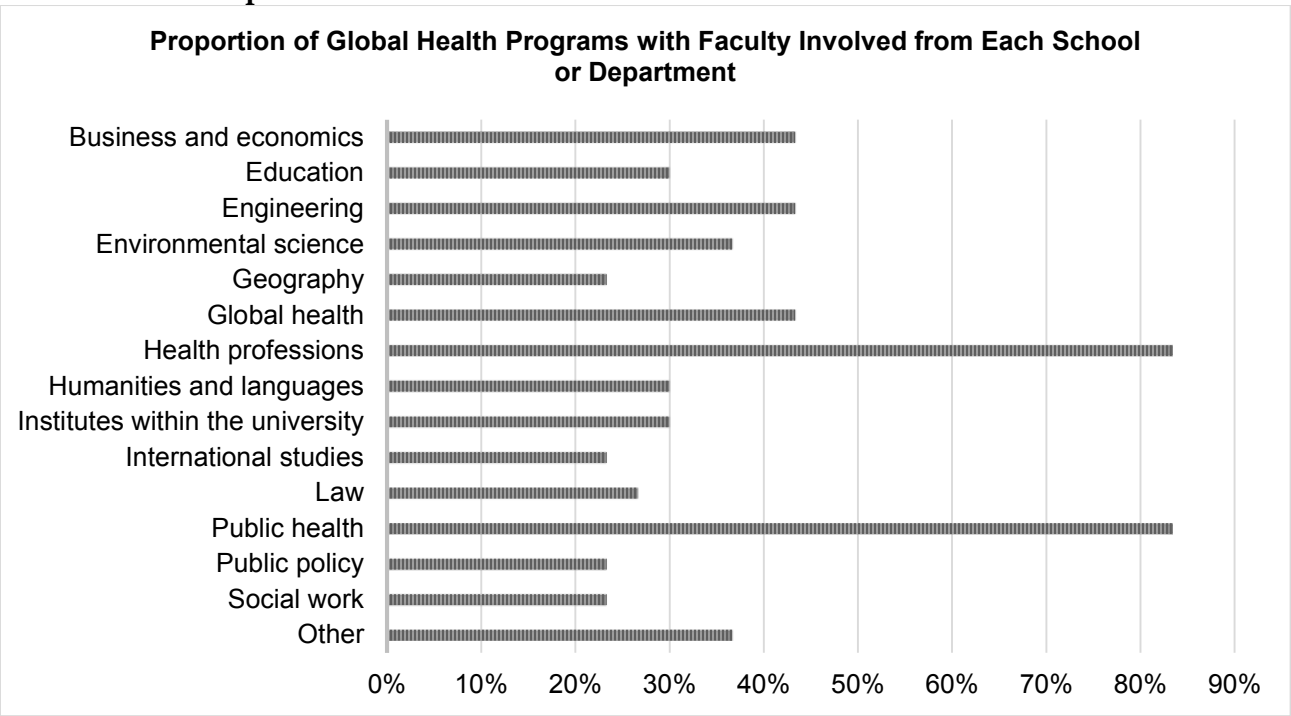
Figure 2: Most global health entities are university-wide institutions/centers or school-wide departments/centers



NB: Some institutions had multiple entities in different categories.

Institutions reported a variety of ways in which global health activities were structured. Most surveyed institutions reported that global health entities were established either as a university-wide center, institute, or office, or as a school-wide or departmental center,

Figure 3: Most institutions had involvement in global health activities from faculty in public health and health professional schools



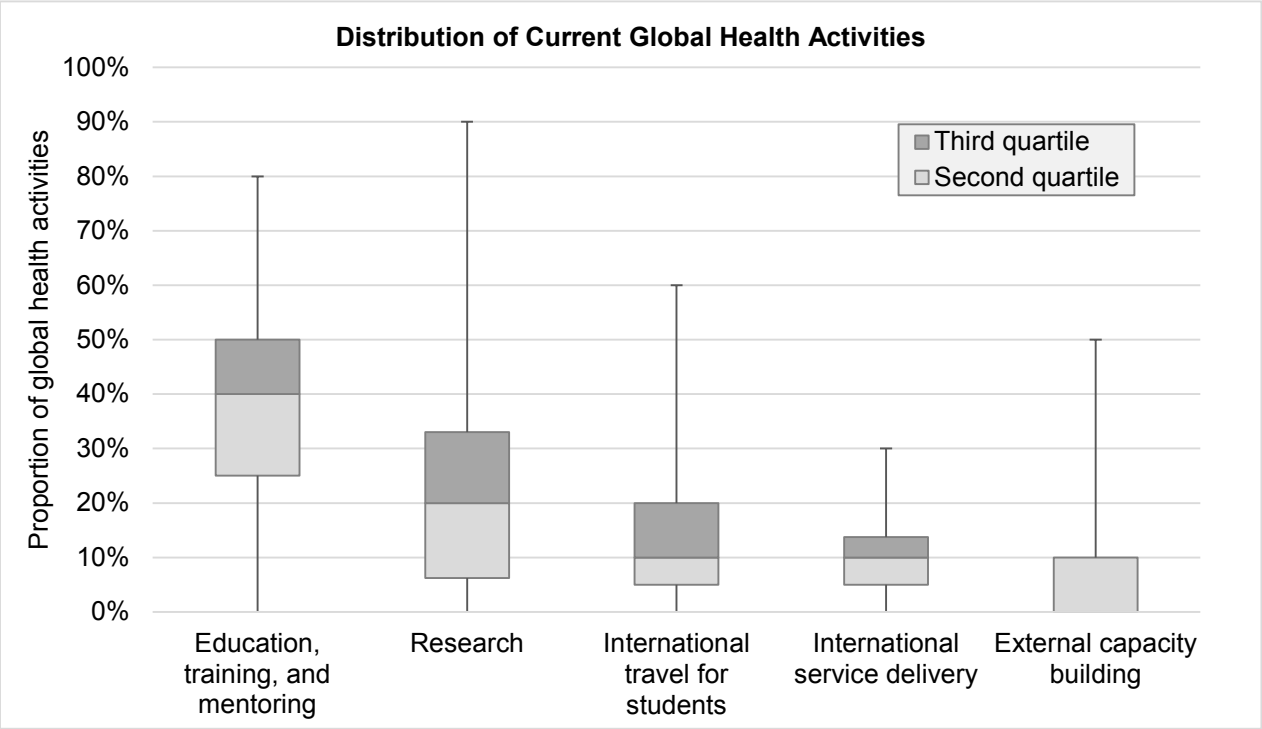
institute, or office (usually housed in or affiliated with medical and public health schools). The former structure in particular reflects the multidisciplinary engagement that is viewed by some as a key distinguishing aspect of the discipline of global health.[4] Although most universities responded that global health activities were led at the university, school, or departmental level, only a third (32 percent) of institutions surveyed reported that global health faculty appointments were offered through their center, institute, or office.

Most surveyed institutions also reported broad involvement of faculty and students from multiple disciplines in global health activities. Public health and medicine were most commonly cited as being involved in university global health activities, although a wide array of other disciplines were also noted, including nursing, anthropology, engineering, political science, sociology, theology, and veterinary medicine (Figure 3).

Student demand for global health education and experience was cited in the 2009 report as one of the key drivers of program growth in U.S. universities and others have documented the massive growth in student interest at all levels, from undergraduate to medical residency.[5–9]

[4] R. Beaglehole and R. Bonita, "What Is Global Health?," *Global Health Action* 3 (April 2010).
[5] D. R. Hill, R. M. Ainsworth, and U. Partap, "Teaching Global Public Health in the Undergraduate Liberal Arts: A Survey of 50 Colleges," *American Journal of Tropical Medicine and Hygiene* 87, no. 1 (July 2012).
[6] V. B. Kerry et al., "Managing the Demand for Global Health Education," *PLoS Medivinr* 8, no. 11 (November 2011).
[7] O. A. Khan et al., "Global Health Education in U.S. Medical Schools," *BMC Medical Education* 13, no. 3 (January 2013).

Figure 4: Education, training, and mentoring remain the focus for most university global health activities.



Reflecting this demand, the education, training, and mentorship of U.S. students was the most substantial focus of university global health activities among the institutions surveyed. A large majority (81 percent) reported that a significant proportion (at least 25 percent) of their global health activities was focused on education, training, and mentoring (median 40 percent). Fewer institutions reported that research activities and travel opportunities for students were substantial areas of focus, while both external capacity building and international service delivery were minimal areas of focus for most institutions surveyed (Figure 4). Apart from an increase in proportion of institutions devoting time to education and training, the allocation of activities does not seem to have changed significantly over the past five years and those surveyed did not project significant changes in the allocation of these activities in the next five-year period (data not shown).

Given the reported focus of most institutions on education and training, it was not surprising that survey respondents saw curriculum and degree offerings as important for developing sustainable programs. Survey respondents reported substantial increases since 2009 in the proportions of institutions offering an undergraduate minor in global health and post-graduate training opportunities in global health. In addition, the proportion of institutions that expected to offer an undergraduate major is expected to more than double by 2019, and large increases were also expected at the certificate and master's levels. However, there did not appear to be similar expected increases for other

[8] Merson and Chapman Page, *The Dramatic Expansion of University Engagement in Global Health.*
[9] M. Rowson et al., "The Evolution of Global Health Teaching in Undergraduate Medical Curricula," *Globalization and Health* 8, no. 35 (November 2012).

Table 1: Post-graduate fellowships and certificates are currently the most common offerings but undergraduate majors and doctoral degrees are expected to become more common

Certificate, degree, or fellowship level	2009 (n=18)	Currently (n=28)	Expected by 2019 (n=24)
Certificate	50%	39%	58%
Undergraduate minor	6%	21%	25%
Undergraduate major	0%	14%	33%
Master's degree	33%	36%	46%
Doctoral degree (PhD, DPH, etc.)	22%	18%	29%
Health professional (nursing, vet, medical)	17%	21%	21%
Post-graduate (fellowships, residents)	33%	50%	42%

types of education offerings. The variations seen may be a result of the types of institutions that have initiated global health programs since 2009.

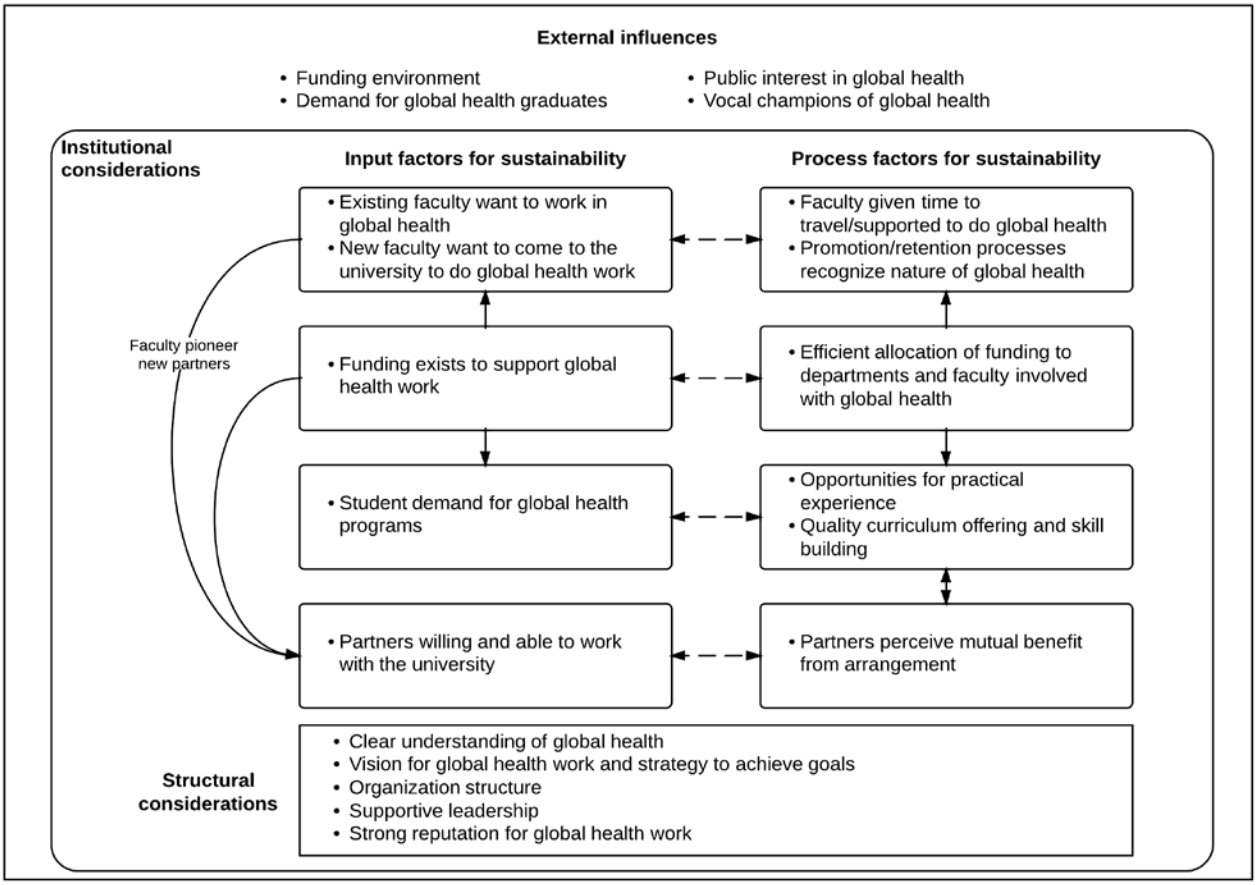
These findings suggest that universities continue to develop new global health entities at a rapid and stable pace. Most of these initiatives are multidisciplinary and organized at the university, school, or departmental level. In addition, student demand for global health education continues to drive training and education as the primary focus for most universities. As existing university global health programs continue to expand, and as additional universities begin new global health endeavors, key questions have arisen regarding the sustainability of university global health programs.

Ensuring Sustainable Growth of University Engagement in Global Health

Sustainability need not be synonymous with growth; it may mean continuing current activities or adapting activities to accommodate new sources of revenue. All of the global health leaders interviewed felt that sustaining current programs was achievable and that current challenges faced by programs were unlikely to threaten the sustainability of existing initiatives. However, many felt as though future growth and expansion of existing programs or the establishment of more additional global health programs could be limited by multiple factors.

We frame sustainability of programs as a balance between inputs necessary to support and sustain growth (adequate funding; engaged faculty; and student interest in global health issues such as climate change, pandemics, and population growth) and outputs/process indicators that will demonstrate success and drive sustainability (measurable impact; partners engaged with university in mutually beneficial activities; faculty encouraged, recognized, and promoted based on global health involvement; students developing necessary skills to find meaningful employment after graduation) (Figure 5). Both factors are shaped both by structural considerations (e.g., a vision for global health activities at an institution, supportive leadership, and a strong reputation for global health work) and by external considerations such as public perceptions of global health (influenced by current events and vocal champions of global health) and political attitudes toward global health. For example, a scenario in which inadequate job

Figure 5: A framework for examining the sustainability of global health programs in universities



opportunities exist for graduates will eventually lead to a reduction in demand from students, negatively impacting sustainability.

In addition to many potential opportunities for growth and expansion of global health programs, university global health leaders raised multiple potential barriers to sustainable growth. Here, we highlight and discuss several key topic areas thought by the interview and survey respondents to be potential threats to the continued growth of sustainable global health programs:

1. A lack of consensus as to what global health is (and is not) and how universities should focus global health activities.

2. A perception of stabilization or reductions in funding for global health activities.

3. A perception that job opportunities for global health graduates may be limited and supply of graduates may outpace demand.

4. Difficulty engaging university leadership to support the complexities of multidisciplinary activities of faculty and students.

5. Challenges in structuring recruitment, retention, and promotional procedures to support faculty engagement in global health activities.

6. Difficulty defining and achieving mutually beneficial partnerships with external institutions.

7. Uncertain metrics with which to measure impact of university global health activities.

Surveyed institutions were asked to rank perceived challenges to sustainability and highlighted funding and leadership as the key issues (Table 2).

Table 2: Ranking of perceived threats to sustainability

Challenges to sustainability	**Overall rank (n=34)**
Research funding availability	1
Maintaining or increasing support from host university leadership (e.g., due to change in leadership)	2
Non-research funding availability	3
Maintaining or expanding overseas partnerships	4
Success of graduates in finding desirable employment	5
Ability to recruit, promote, and retain quality faculty members	6
Ability to recruit quality students	7
Declining perception of the importance of global health	8

1. Lack of Consensus as to What Global Health Is (and Is Not) and How Universities Should Focus Global Health Activities

Although North American universities are increasingly becoming involved in global health, there was no single definition of global health articulated by university leaders during the interviews. The definition of global health that an institution adopts has potential implications for sustainability as the definition frames the institutional approach to teaching, research, and service activities, and may impact the sources of funding that are pursued.[10]

> "It has been absolutely critical for us to define what we do, and therefore… define what we don't do."—University global health leader

Several respondents referenced the Koplan et al.[11] definition of global health, which defines global health as a field of study, research, and practice that prioritizes achieving health equity, involves multiple disciplines within and beyond health sciences, bridges population-based prevention and individual-level care, and emphasizes transnational issues and solutions. Several respondents

[10] M. Rowson et al., "Conceptualising Global Health: Theoretical Issues and Their Relevance for Teaching," *Globalization and Health* 8, no. 36 (November 2012).
[11] J. P. Koplan et al., "Towards a Common Definition of Global Health," *Lancet* 373, no. 9679 (2009).

emphasized that the term global health implies a greater emphasis on multidisciplinary and cross-cultural collaboration.[12] As such, global health is related to, but defined separately from, international health and public health. However, other respondents did not agree with such the distinctions outlined by Koplan, and argued that global health and public health are indistinguishable.[13] Several interviewees emphasized focus on working with underserved communities, either in other countries or within the local state or region. The importance of incorporating a global-to-local philosophy at the university was also highlighted as critical for improving buy-in from stakeholders that may not otherwise be supportive of international activities (e.g., hospital leadership recognizing the applicability of international experiences to local clinical practice). Several respondents highlighted the need for a clear mission, vision, and strategic objectives, in combination with the organization structure (see below), as a necessary foundation to ensure that the global health program remains sustainable.

Questions for future discussion

How does your institution differentiate the field of global health from international medicine or public health?

How does this distinction impact the ability of university leadership to support global health at your institution?

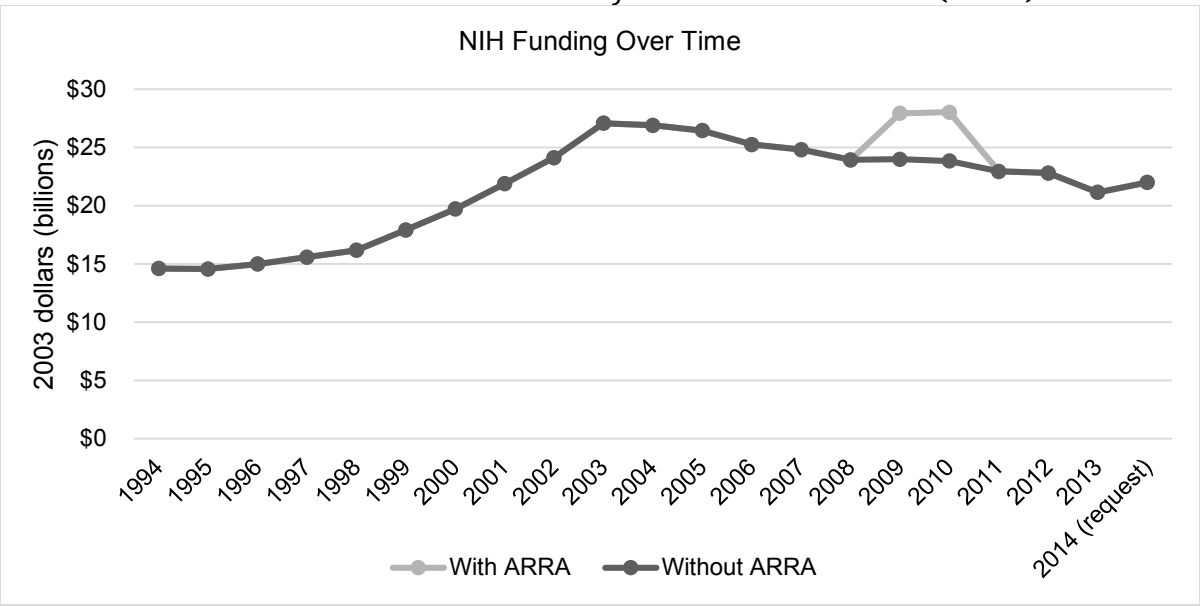
2. Perception of Stabilization or Reductions in Funding for Global Health Activities

One potential threat to sustainability frequently articulated by university global health leaders was the possibility of reduced funding for global health activities. Both in the discussions with university leaders and in the institutional survey, we examined three primary aspects of financial sustainability: the initial investment in the global health programs, current sources of funding, and future sources of revenue.

The prospect of reduced global health funding in response to the global economic downturn was raised as a key concern in 2009.[14] This possibility was seemingly reinforced in 2013 when the U.S. federal government's budget sequestration required a 5 percent cut in National Institutes of Health (NIH), Centers for Disease Control and Prevention (CDC), and National Science Foundation (NSF) spending, and the October shutdown of the government delayed many decisions on grant applications.[15–17]

[12] See Beaglehole and Bonita, "What Is Global Health?"
[13] See L. P. Fried et al., "Global Health Is Public Health," *Lancet* 375, no. 9714 (2010).
[14] Merson and Chapman Page, *The Dramatic Expansion of University Engagement in Global Health*.
[15] Centers for Disease Control and Prevention, "Fact Sheet: Impact of Sequestration and Other Budget Changes on the Centers for Disease Control & Prevention," April 2014, http://www.cdc.gov/fmo/topic/budget%20information/appropriations_budget_form_pdf/Sequester_Impacts.pdf.
[16] National Institutes of Health, "Fact Sheet: Impact of Sequestration on the National Institutes of Health," June 3, 2013, http://www.nih.gov/news/health/jun2013/nih-03.htm.
[17] National Science Foundation, "Impact of Fy 2013 Sequestration Order on Nsf Awards," February 27, 2013, http://www.nsf.gov/pubs/2013/in133/in133.pdf.

Figure 6: Total NIH funding has decreased in real terms since 2003 apart from the short-term fiscal stimulus of the American Recovery and Reinvestment Act (ARRA)[18]



However, despite these predictions and perceived threats, U.S. government contributions to global health have continued to rise throughout the recession, increasing from $7.6 billion in 2008 to $11.2 billion in 2011. In fact, worldwide funding for global health reached an all-time high of $31.3 billion in 2013 (all in 2011 dollars).[19] In addition, budget deals blunted the impact of the budget sequestration for the 2014 financial year[20] and proposed global health funding appears to be stable.[21] It is also important to note that stabilization or declines in funding to universities are not unique to global health; overall NIH funding has also decreased over this same time period (Figure 6).

> Sustainability is achievable "if one is entrepreneurial… think[s] of industry, and not just pharma."—University global health leader

Almost half (44 percent) of survey respondents expected decreases in funding to have a negative impact on sustainability over the next five years. However, not all interviewees agreed with this perception and none expected their institution's global health activities to cease in the future due to an inability to locate funding. Interviewees did agree that perceived reductions in federal funds meant that universities needed to be adaptive when seeking future funding and explore other potential avenues. For example, one interviewee noted that demographic shifts in the United States will continue to lead to a large intergenerational transfer of wealth that could be channeled toward global health

[18] Adapted from J. Johnson, "Brief History of NIH Funding: Fact Sheet" Congressional Research Service, December 23, 2013, http://www.fas.org/sgp/crs/misc/R43341.pdf.
[19] Institute for Health Metrics and Evaluation (IHME), *Financing Global Health 2013: Transition in an Age of Austerity* (Seattle, WA: IHME, 2014).
[20] B. Plumar, "Here's a Breakdown of What's in Congress' $1.012 Trillion Spending Bill," *Washington Post*, January 14, 2014, http://www.washingtonpost.com/blogs/wonkblog/wp/2014/01/14/heres-a-breakdown-of-whats-in-congress-1-012-trillion-spending-bill/.
[21] A. Wexler and J. Kates, "The U.S. Global Health Budget: Analysis of the Fiscal Year 2015 Budget Request," Kaiser Family Foundation, March 20, 2014, http://kff.org/global-health-policy/issue-brief/the-u-s-global-health-budget-analysis-of-the-fiscal-year-2015-budget-request/.

Table 3: Institutions receive funds from many different sources and typically no one source dominates

Source of funding	Any support			At least 25 percent support		
	2009	2014	2019	2009	2014	2019
Federal contracts	4%	7%	0%	0%	4%	0%
Federal research grants	22%	43%	58%	11%	14%	33%
Grants from other national govt. or international agencies	7%	36%	50%	0%	0%	13%
Philanthropic donations/gifts	33%	61%	71%	19%	32%	38%
Private foundation grant/contract	22%	32%	54%	4%	7%	21%
State/local grants and contracts	7%	14%	17%	4%	7%	8%
University indirect costs	19%	25%	17%	15%	21%	13%
University direct support	26%	50%	46%	7%	14%	17%
No funding	11%	4%	0%	N/A	N/A	N/A
Don't know	22%	11%	21%	N/A	N/A	N/A
Other	11%	11%	17%	11%	7%	13%

activities. Many university global health leaders also commented on the need to identify large reliable sources of funding (e.g., a significant gift) to ensure stability during times of decreased funding availability.

For several interviewees, a large initial investment, either as seed money from the institution or a gift from a private donor, was a catalyst for scaling up global health activities at their institution. However, less than a quarter (22 percent) of survey respondents reported receipt of an initial, significant financial contribution. Of those survey respondents who did report a large initial seed investment, 71 percent reported that some money came from the institution itself and 43 percent reported contributions from private donors. Institutions that developed global health programs without an initial large investment often reported that universities provided a small amount of resources, often only sufficient to cover a portion of the leader's time, with the hope that additional sources of funding would eventually support actual global health activities and lead to growth.

No clear uniform picture emerged in terms of the current sources of funding for global health activities. Some global health entities rely primarily on direct support from their institution whereas others are largely supported by philanthropic gifts (either endowments or recurring donations). The situation was similar for the expected source of funding in 2019 (Table 3), although more institutions expected that at least 25 percent of their revenue would come from federal research grants, an increase from 14 percent in 2014 to 33 percent in 2019.

Questions for future consideration

Do you believe that levels of available funding for global health are declining?

How does the perceived stabilization or reduction in funding for global health differ from reductions in funding seen in other areas (STEM programs, etc.)?

3. Perception That Job Opportunities for Global Health Graduates May Be Limited and Supply of Graduates May Outpace Demand

Among the institutions surveyed, 72 percent felt that the continued demand for global health education and experience would be a strong driver of sustainability over the coming five years. Several interviewees highlighted increasing globalization and the interconnectedness of the global community through the use of social media as drivers of student interest in global health. While none of the interviewees felt that student interest in global health was a temporary "fad," some did feel that interest was at its peak and would likely plateau.

Several possible threats to student demand for global health education, and therefore to the future growth and sustainability of university global health programs, were raised. One survey respondent felt as though student interest may be cyclical and fascination with global health may decrease. Several leaders interviewed expressed a concern that the skills and competencies developed within global health training programs are not standardized and that this could lead to a perception that graduates of these programs do not have valuable skills and experience for future careers in global health or other areas. Finally, an ever increasing supply of global health graduates may outstrip demand for graduates based on static or declining budgets, leading to a more challenging job market and gradual disillusionment with career prospects.

> "I don't think the didactics are particularly well developed yet and I have some concerns about what may be taught at… institutions that don't have much depth but…are offering up global health programs. I think there's a lot of work to be done."—University global health leader

A majority (66 percent) of students surveyed felt that their university adequately prepares students to enter the workforce in a field related to global health. Students repeatedly mentioned the need for applied practical experience as the most important activity to prepare students for careers in global health. In addition, variability in the quality of course offerings in global health was identified as a key challenge to the value of global health education.

Among students of global health programs surveyed, most (61 percent) agreed or strongly agreed that they would find a job in global health upon graduation, and 68 percent thought that they were more likely to do so than their peers (Figure 9 in Appendix C). However, many (71 percent) were concerned about high levels of competition for those jobs. While most interviewees were optimistic about the global health job market, some raised concerns about the prospects of graduates with only undergraduate degrees and those whose sole training was in global health. Several interviewees also commented that global health students who have already completed training in another discipline, for example engineering or law, were well positioned in

> "Global health is a field; global health education for students with skills from specific disciplines such as medicine, public health, economics, business, social sciences, etc., will enable them to apply those skills to a vast global health job market."—University global health leader

the global health job market. This was perceived as particularly true for medical students, where the problem was not so much their general employment prospects but rather how they could combine their medical careers with their global health interests.

Questions for future consideration

Is the supply of global health trainees likely to outpace demand? Will there be adequate opportunities for these trainees in the future?

What specific skills do graduates of global health programs at your university develop?

4. Difficulty Engaging University Leadership to Support the Complexities of Multidisciplinary Global Health Activities of Faculty and Students

The structure of a global health program is representative of, and shapes, the institution's scope of global health activities, funding opportunities, and faculty involvement. For example, survey respondents and interviewees noted the potential advantages of having a university-wide mandate. However, the disadvantages of this structure were also discussed, including possible contention over how revenue is allocated and the fact that "it is very difficult to coordinate activities of any type in a complex matrix organization."

The attitude of university and department leadership obviously has a significant impact on the level of support a global health initiative receives, and therefore its sustainability and potential for growth. Among the interviewees, a division was apparent between the global health programs that are enthusiastically championed by their host institution's leadership and those that are more passively supported or simply left to their own devices. Institutions with supportive leadership tended to be larger, have more steady revenue, and be engaged in broader initiatives to develop campuses or educational initiatives outside the United States. The less well-supported global health initiatives were usually newer and housed in smaller institutions. One interviewee from a smaller institution commented that the dean was increasingly understanding of the importance of global health and shifting funding accordingly, but being at the whim of "arbitrary and capricious" management did not engender a strong sense of sustainability. Instead the interviewee hoped to integrate the global health work into the fabric of the institution and identify more reliable sources of funding.

University involvement in global health activities often involves adjusting to changes in the way financial, human resources, and legal affairs systems are managed to effectively operate programs in other countries. In addition, interviewees noted that this flexibility required an acknowledgment of potential risks to students and faculty engaged in overseas activities, where threats of violence, illness, or accidents may be higher than at home. In addition, there was a perception of financial risk in moving resources out of the country and managing partnerships and activities in other settings. The involvement of university legal and financial entities was voiced as an important aspect of successful risk mitigation and management that enhanced sustainability of overseas involvement. Institutions with senior leadership who understood the potential benefits of global health engagement and who were involved in creating systems to manage and mitigate

these risks reported examples of successful programs at the university level to support global health programs.[22]

Several interviewees also observed that the physical layout of the campus can enhance or limit collaboration across the institution. One interviewee noted that their host department was physically separated from the main university campus and that they had to take a shuttle to get there. This made it harder to foster and maintain relationships with faculty across the university. Another interviewee commented that they can walk to almost any other school they are engaged with within 15 minutes, which fosters collaboration and relationships.

Questions for future consideration

How does leadership see the "value proposition" of global health at your university?

What are the barriers to successful multidisciplinary engagement of faculty and students in global health at your institution and how can such success be maximized?

5. Challenges in Structuring Recruitment, Retention, and Promotional Procedures to Support Faculty Engagement in Global Health Activities

Another key component of sustainability is the level of faculty interest in global health activities and the willingness of the university to support and recognize those interests. The ability of universities to recruit and support faculty with global health interests was perceived to be a critical factor for sustaining and growing global health programs.

Many interviewees felt as though university global health opportunities were a strong recruitment tool for new faculty and several interviewees commented on the need for institutions to accommodate the growing interest of junior faculty in working in global health. However, some institutions lacked formal mechanisms for describing global health opportunities to potential new hires or for involving the global health program in the hiring process. While some global health program leaders were involved in the recruitment process for hires into other departments, sometimes with a joint appointment, often leaders stated that their role was only to showcase the global health work and opportunities at the institution. The ability of faculty to engage in global health appears to be mixed and largely dependent on the support of the leadership. One interviewee described how a pediatric dentist was able to negotiate an agreement to only work (and be paid for) 10 months at the U.S. hospital so that he could work for the remaining 2 months in Guatemala. Other interviewees commented that this sort of arrangement was often made for certain clinical specialties, such as emergency medicine. However, another interviewee felt that this sort of arrangement would not be possible at their institution.

Interviewees from smaller institutions and those where primary global health activities were housed in the medical school identified faculty engagement as a key challenge to sustainability. In many instances, faculty from some departments relied on continuing medical education time, vacation days, or the goodwill of the department chair to engage

[22] K. Riley, A. Anderson, and L. Robertson, "University of Washington Global Support Project: A Model for Supporting Global Engagement," *Research Global*, no. 18 (February 2008): 10–11.

in global health activities. One interviewee commented that faculty are only willing to use vacation time to lead student training experiences oversees for three to four years before they pass responsibility onto another faculty member. This approach is particularly challenging for sustaining connections with overseas partners, as these relationships typically rely on a faculty champion. Another interviewee observed that there is a need to be sensitive to perceptions of other departments that have faculty who want to pursue global health work, particularly if structured funding to support that time is not channeled through the faculty member's primary department.

> "It takes ongoing effort to maintain cross-departmental, interdisciplinary groups. Cynically, funding will always help…. I think that's…an important way to bring people together."—University global health leader

No single criterion was used to determine promotion for faculty working in global health across the universities surveyed. Many interviewees reported that the standard university approach was used, but several noted that efforts were underway to refine promotional criteria to recognize global health activities and contributions. On the whole, the interviewees did not have the sense that the systems used to determine promotion prospects for faculty were a substantial contributor, positive or negative, to the sustainability of global health activities.

Questions for future consideration

How are faculty members at your institution recognized and rewarded for global health activities? For example, is teaching in another country recognized for promotion? How are these faculty reimbursed for such teaching?

Other than as a tool to recruit faculty interested in global health, how is global health represented as beneficial to other schools, colleges, and departments at your university?

6. Difficulty Defining and Achieving Mutually Beneficial Partnerships with External Institutions

By their very nature, global health programs in North American universities rely on partnerships with institutions in other countries, typically low- and middle-income countries. Therefore, the strength of these partnerships will likely have an impact on program sustainability. When asked about how existing relationships had developed, all the interviewees portrayed organic growth that was largely driven by individual faculty connections or by the wider institution's push to provide education and training opportunities to its own students overseas.

> "Sometimes we put a little seed money into these partnerships, but we are not a funding agency…we cannot maintain funding for anything or anyone…we try to be judicious, we try to be honest."—University global health leader

Surprisingly, most respondents did not see partnerships as a key factor for sustainability. There were some potentially positive aspects to such partnerships raised, including the perception

that having a partner in a low- or medium-income country opens up additional funding avenues, particularly around training grants. In addition, several respondents noted that opportunities for mutual learning and the ability to apply overseas knowledge to practices in the U.S will continue to drive interest in global health and ultimately will be important for the sustainability of global health programs.

However, interviewees raised some issues for considerations. Partnerships can involve additional complexities and challenges associated with formalizing relationships and clarifying expectations. For example, some respondents noted the challenges in implementing a memorandum of understanding with a foreign partner institution and others were concerned about the potential for unintentionally committing the institution to sustained resource input to sustain these partnerships.

Questions for future consideration

Do you feel that existing partnerships with external international institutions are mutually beneficial? How would you articulate these benefits?

How have the most successful partnerships with external institutions emerged?

7. Uncertain Metrics with Which to Measure Impact of University Global Health Activities

The ability to measure and report the success of global health program activities to institutional leadership, funders, and prospective students is an important aspect of sustainability. All interviewees recognized challenges in measuring the impact of global health programs, a task made more difficult by a lack of a clear understanding of what academic global health could or should encompass. Almost all the interviewees commented that any metrics their institution collected were inwardly focused or process measures, such as the number of students sent overseas, an evaluation of their experiences, the number of grants brought in and their associated value, and the number of publications. The need to ultimately demonstrate measurable impact on population health was highlighted as a key metric that should drive global health programs. However, intermediate measures, including educational outcomes, capacity building, receipt of funding, and others are important metrics that many programs are not currently monitoring. Respondents noted that global health metrics will require long-term measurement and may need to be different from traditional university metrics in recognizing the collaborative, cross-disciplinary, and transnational engagement of global health activities.

> "A lot of the metrics at North American universities are fairly inwardly focused right now…. One could argue that…the metrics should be different."—University global health leader

Questions for future consideration

What metrics would define success for global health programs at your institution?

Would the global health program leaders and university leadership agree upon these metrics? If not, how would they differ?

Strengths and Limitations

Strengths of this analysis include the use of both qualitative and quantitative data in an attempt to summarize perceptions of sustainability among university global health leaders, faculty, and students. Individuals and institutions surveyed and interviewed represent a diverse and broad group of institutional global health programs with significant variation in size, funding levels, activities, and recent levels of growth. However, the very short time line (four weeks) provided to design the surveys and to collect, analyze, and summarize these data resulted in several important limitations. First, the survey response rate was relatively low, and the institutions that responded tended to be state run or larger private universities. These institutions may have been more motivated to respond, or may have had primary sustainability issues that were different from nonrespondents. For the student survey, we targeted institutions and asked them to contact students and it is unclear how successful this strategy was at reaching representative samples of student respondents. Response rates were likely constrained by the short time frame offered to respondents to complete both the interviews and the surveys. Although we were able to interview leaders from a wide range of institution types, sizes, and locations, having additional time to interview senior figures from other universities may have yielded alternative viewpoints. Finally, the primary objective of this analysis was to examine the challenges of sustainability of global health programs. We view these results as preliminary data for generating discussion and prompting further research. The inclusion of additional survey respondents from both the institutional and the individual trainee and faculty level would add to these preliminary findings. In addition, a comparison of programs with successful patterns of growth to those that have not been able to achieve such success would highlight important aspects of program priorities and vision as well as strategies for successful management and leadership.

Conclusions

Universities continue to expand their involvement in global health, as demonstrated by increasing numbers of global health programs and initiatives, steadily growing numbers of faculty and students engaged in global health, increasing development of global health degree and certificate programs, and broadening and expanding global health activities at universities. While all university leaders interviewed were excited about the future of global health, and none saw the threats to sustainability as likely to lead to an end to global health engagement at their university, they also agreed that there are concerns about long-term sustainability that need to be anticipated and addressed.

This assessment highlighted the significant differences in the size, scope, depth, and breadth of global health activities at different institutions. Universities interested in small global health programs to support travel for trainees to gain an appreciation of global health issues or institutions wishing to highlight the importance of global health as a way to train “global citizens” clearly face challenges to sustainability that differ from those faced by larger programs engaged in research, training, capacity building, and service delivery. Clarifying the scope and objectives for global health engagement within a university will help focus attention on issues of sustainability most likely to present a challenge to that institution.

All of the universities surveyed appreciated the broad range of disciplines that define the field of global health. While it is critical that students and trainees are exposed to issues of health care disparity and inequity, global health education is also about developing skills and competencies that enable trainees to act on these issues and to have meaningful impact on global health. The skills required of global health graduates are diverse but can be articulated. For example, clinical and public health expertise, data management and analysis, laboratory science, statistics, health economics, law and policy, social sciences, program leadership and management, and monitoring and evaluation, all are concrete disciplines defined by measurable skills. Competency in these skills is necessary to define global health needs, to innovate and develop solutions, to implement and scale successful interventions, and to measure global health impact. Global health training needs to provide these skills across a range of training opportunities, from undergraduate certificates and degrees, to master's- and PhD-level courses.

Most programs are engaged in training and education opportunities for students at their own university. Far fewer institutions reported significant focus on external capacity building or service delivery. While a focus on training good global citizens is an important aspect of university training, it alone does not encompass many of the benefits of a global health education. More than 95 percent of the world's population does not live in North America, so for North American students, a global health education opens the door to future careers and contributions in an increasingly global environment. These students are exposed to the experiences, educational opportunities, and perspectives that global health provides and enables trainees in many disciplines, including medicine, nursing, public health, anthropology, law, and engineering, among others, to apply the skills from these fields to improve the health of populations everywhere. For international students, global health training is particularly relevant, especially at the master's and PhD level. These individuals often quickly assume leadership roles and management responsibilities upon their return to their home country and the skills provided in global health training programs can be tremendously useful.

Underpinning much of the concern about the sustainability of U.S. universities involvement in global health is the perception that funding for such activities is stabilizing or declining. This concern was prominent in this analysis, with future funding availability ranking as the largest perceived threat to sustainability among respondents. However, recent data suggest that funding for global health is not declining.[23] In addition, it is important to realize that universities have repeatedly faced cycles of funding reductions in many disciplines and have continued to maintain programs through these periods. Finally, additional funding targeted to global health, including from private philanthropy, represents additional sources of revenue that is increasingly being sought and secured by universities. However, it is also clear that as more universities become involved in global health, and as universities expand their global health activities, competition for available resources will increase.

In addition to needing continued funding, university global health leaders acknowledge the need for university leadership structures to support global health programs. The highly multidisciplinary engagement of faculty and students, shifting metrics for

[23] IHME, *Financing Global Health 2013*.

measuring productivity in global health activities, the need for travel to overseas sites, and the importance of establishing and maintaining partnerships with overseas institutions all present potential, addressable difficulties for university leadership. All of the leaders interviewed recognized that global health opportunities are a powerful tool for faculty and student recruitment and retention. Engaging leadership to create structures that support, reward (including promotion), and encourage active participation in global health activities will be critical to ensure the sustainability of academic global health programs.

While the tremendous expansion of university global health activities raises concerns about future sustainability and growth, there remains tremendous optimism surrounding the potential future of global health engagement among university leaders, students, and faculty. While growth in programs remains strong, university engagement remains overwhelmingly concentrated in education, training, and mentorship. Other important activities (research, travel, building partnerships) receive far less attention. Uncertainty remains in defining global health, developing and sustaining partnerships, creating and collecting metrics, coping with the perceived instability of future funding and employment opportunities, meeting the challenge of enlisting high-level university leadership, and enabling faculty engagement. This report should help stir and inform debate on the future of universities' engagement in global health. The core message is clear: universities are well advised to give careful thought as to how to develop and sustain global health programs into the future.

Appendix A: Interviewees

Name	**Institution**
Michael Merson	Duke University (Global Health Institute)
Oscar Cabrera Susan Kim	Georgetown University (O'Neill Institute for National and Global Health Law)
Stephen Hargarten	Medical College of Wisconsin
Ann Kurth	New York University (Global Institute of Public Health)
Benjamin Fredrick	Pennsylvania State University College of Medicine (Hershey)
Mark Sedler	Stony Brook School of Medicine
Margaret Bentley	University of North Carolina (Gillings School of Global Public Health)
Jonathan Samet	University of Southern California (Institute for Global Health)
Catherine deVries	University of Utah
King Holmes	University of Washington

Appendix B: List of Institutions Surveyed

Institutions that responded are highlighted.

Allegheny College
Arcadia University
Arizona State University
Baylor College of Medicine
Boston University
Brandeis University
Brown University
Case Western Reserve
Cincinnati Children's Hospital Medical Center
Claremont Graduate University
Columbia University
Cornell University
Creighton University School of Medicine
Dalhousie University
Dartmouth College
Des Moines University
Drexel University
Duke University
Emory University
Florida State University College of Medicine
George Mason University
George Washington University
Georgetown University
Glendale Adventist Medical Center
Harvard University
Indiana University
Johns Hopkins University
Loma Linda University
Loyola University Chicago
Massachusetts General Hospital Center for Global Health
McGill University
McMaster University
Medical College of Wisconsin
Medical University of South Carolina
Michigan State University
Mount Sinai
New York University
Northern Ontario School of Medicine
Northwestern University
Ohio State University
Ohio University
Old Dominion University
Oregon Health & Science University
Pacific University College of Health Professions
Penn State University College of Medicine
Princeton University
Queen's University
Rice University
Rosalind Franklin University of Medicine and Science
Rush University
Rutgers Robert Wood Johnson Medical School
Ryerson University
Samuel Merritt University
San Diego State University
Seton Hall University
Simon Fraser University
Stanford University
State University of New York Downstate College of Medicine
State University of New York Upstate Medical University
Stony Brook University School of Medicine
Temple University
Texas A&M College of Medicine
Texas Tech University Health Sciences Center, Lubbock

Thomas Jefferson University
Touro University California
Tufts University
Tulane University
Uniformed Services University of the Health Sciences
University at Albany, SUNY
University at Buffalo, SUNY
University Hospitals
University of Alabama at Birmingham
University of Alberta
University of Arizona
University of British Columbia
University of Calgary
University of California at Berkeley
University of California at Davis
University of California at Los Angeles
University of California at San Diego
University of California at San Francisco
University of California at Irvine
University of California Global Health Institute
University of Central Florida
University of Chicago
University of Cincinnati College of Medicine
University of Colorado Denver
University of Connecticut
University of Denver
University of Georgia
University of Hawaii
University of Illinois at Chicago
University of Iowa
University of Kentucky
University of Louisville Pediatric Residency Training Program
University of Manitoba
University of Maryland, Baltimore
University of Massachusetts Worcester
University of Miami, Miller School of Medicine
University of Michigan, Ann Arbor
University of Minnesota
University of Missouri Columbia School of Medicine
University of Nebraska Medical Center
University of Nevada, Reno
University of New Mexico
University of North Carolina at Chapel Hill
University of North Florida/ Brooks College of Health
University of North Texas Health Science Center
University of Notre Dame
University of Ottawa
University of Pennsylvania
University of Pittsburgh
University of Rochester Medical Center
University of South Carolina School of Medicine
University of South Dakota
University of South Florida
University of Southern California
University of Tennessee College of Medicine
University of Texas Health Science Center at San Antonio
University of Texas Medical Branch at Galveston
University of Texas Southwestern Medical Center at Dallas
University of Toledo
University of Toronto
University of Utah School of Medicine
University of Vermont
University of Virginia
University of Washington, Seattle
University of Wisconsin, Madison
Vanderbilt University
Virginia Commonwealth University
Wake Forest University
Washington State University

Washington University in St. Louis

Wayne State University School of Medicine

West Virginia University School of Medicine

Western University of Health Sciences

Wright State University Boonshoft School of Medicine

Yale University

Yeshiva University

York University

Appendix C: Student Survey Findings

Figure 7: Most (79 percent) of student respondents had not graduated

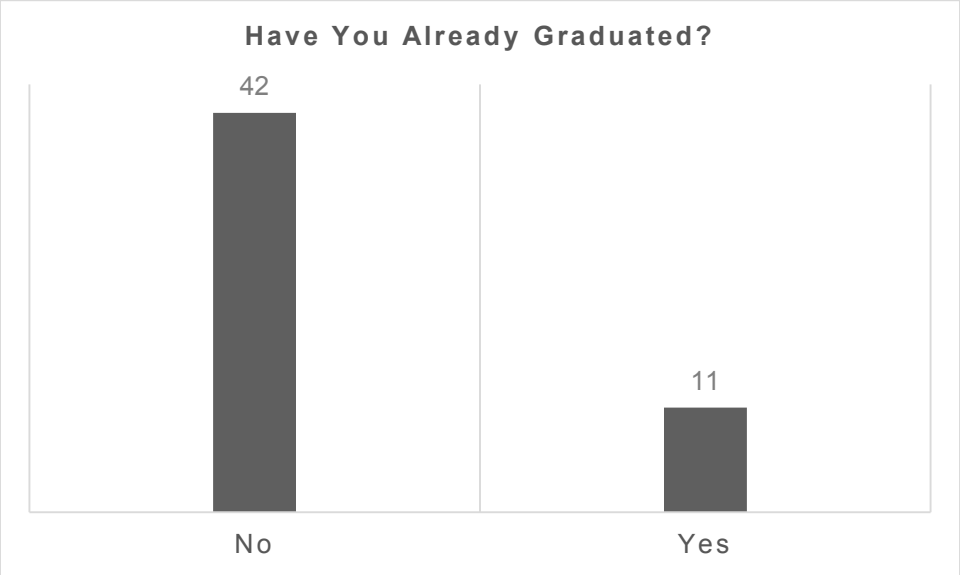


Table 4: Student respondents were evenly distributed among undergraduate, master's, and medical degrees

Degree level	Current students (n=42*)	Former students (n=11)
Undergraduate	24%	27%
Master	26%	9%
Doctoral	12%	9%
Medical	21%	36%
Postdoctoral	2%	0%
Not specified	17%	18%

*Totals add to 102 percent because one student was in an MD, MPH program and was counted twice.

Figure 8: Current students are more likely to report seeking a job in global health

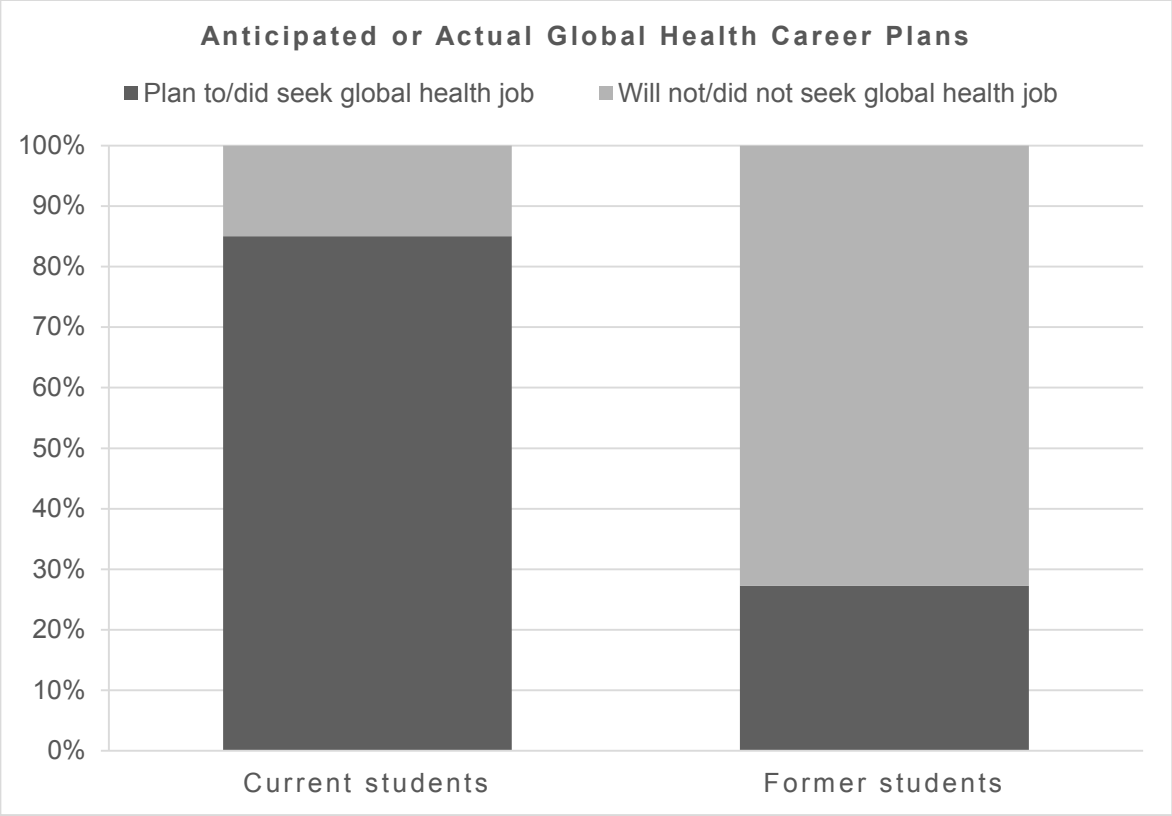
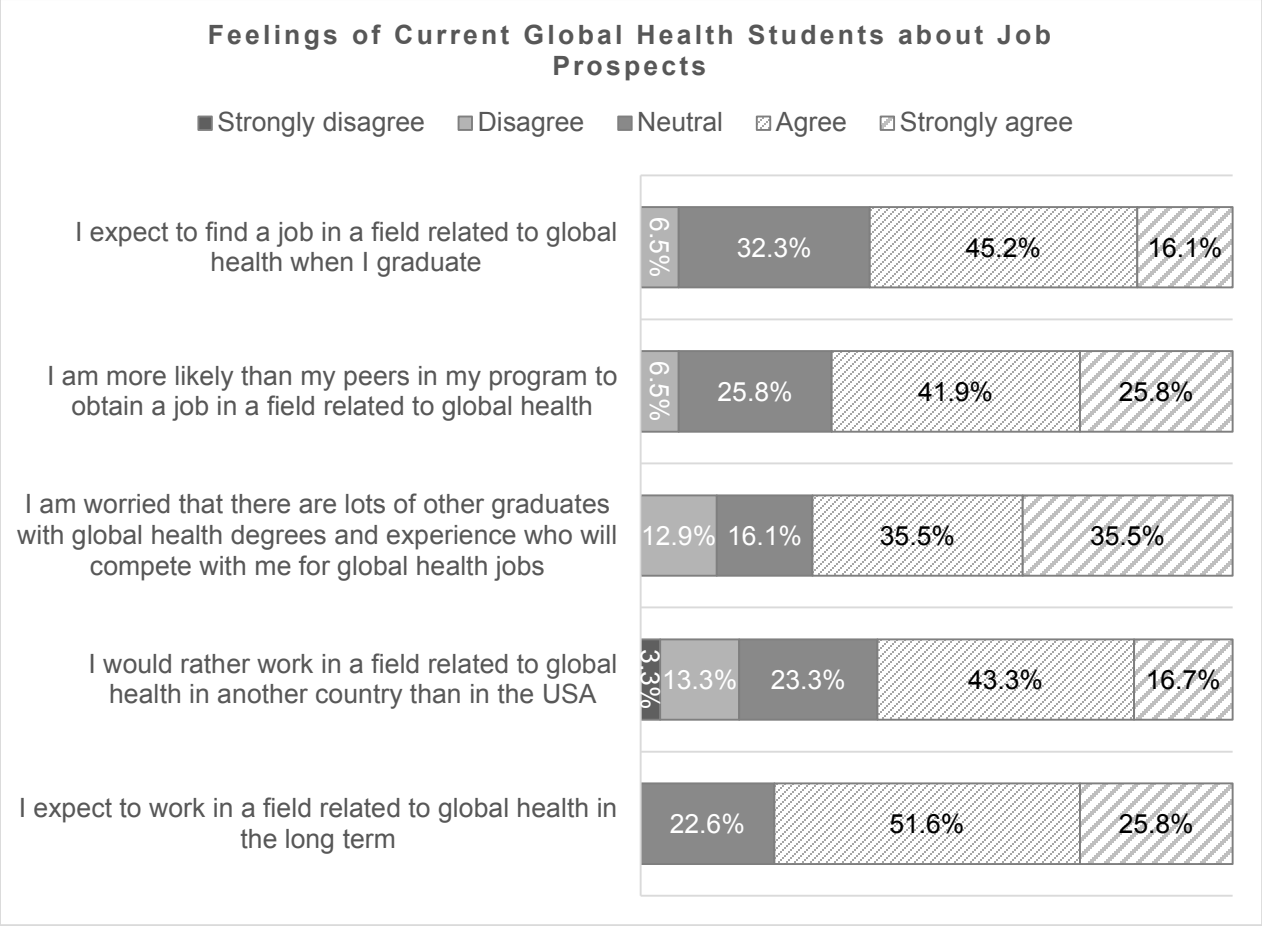


Table 5: Continuing with studies was the primary reason for not seeking a global health job for both current and former students

Graduation status	Reasons for not seeking global health work (n)
Current students	Planning to continue studies (3) More interested in other fields (2)
Former students	Planning to continue studies (3) Too few job opportunities in global health (2)

Figure 9: Most current students who will seek global health work expect to find jobs, though they worry about competition



CSIS | CENTER FOR STRATEGIC & INTERNATIONAL STUDIES

1616 Rhode Island Avenue NW | Washington, DC 20036
t. 202.887.0200 | f. 202.775.3199 | www.csis.org

Cover photo: Shutterstock.com.