Piloting a Global Health Equity and Delivery Science Track  
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Background

Nationally and at Dartmouth, global health programs and opportunities for medical students and residents have grown in recent years at an unprecedented rate. While many of these programs concentrate on providing overseas educational experiences to learners, few include a health equity or healthcare delivery science (HCDS) platform. Fewer still provide a graduated curriculum that builds knowledge and technical skills. It is clear the appetite among our learners for these programs continues to increase. Applicants consistently site HCDS and global health as the draw to choosing Geisel/Dartmouth-Hitchcock Medical Center. Demand remains high after they arrive: both global health and HCDS courses are among the most popular electives offered at Geisel. In parallel, Internal Medicine residents and fellows reach out to us seeking opportunities overseas to build upon their earlier experiences. These are typically arranged as one-off electives without formal integration into their training program.

Today, Dartmouth is recognized as a destination to pursue studies in global health and HCDS. Both of these fields are based on the principles of social justice, with an aim of promoting health equity across populations. The core content for both of these areas is currently taught to all students through existing courses in SBM (e.g., Infectious Disease), Patients and Populations, and the soon to be incorporated Health and Values material. Having developed and led programs in both global health and HCDS, we recognized the natural connection and opportunity for creating a complementary, holistic co-curricular program at Dartmouth. In fact, the shared approaches and goals of these fields combined with the existing expertise at Dartmouth provide an excellent platform upon which to build a unique program. Therefore, in response to learner demands, we propose to pilot a distinctive and academically rigorous multi-
year track in Global Health Equity and Delivery Science housed at Geisel’s Center for Health Equity targeting selected medical students and Department of Medicine (DOM) residents and fellows.

Program Description and Progression

Students, residents and fellows will be selected through a competitive application and interview process at the beginning of their first year. We anticipate accommodating 6 learners in the pilot year, with plans to increase to 12 in subsequent years. By including a spectrum of learners, we will foster additional mentoring potential among the participants.

The classroom-based portion of the track will engage learners in preparation through a graduated program of core and supplemental elective courses in years one and two of medical school/residency/fellowship. Required courses will include Case Studies in Global Health and Principles of Healthcare Delivery Science, both currently taught by the proposed track directors, Drs. Lisa V. Adams and Manish K. Mishra through Geisel’s elective program. A third course, Advanced Principles of Global Healthcare Equity and Delivery will be developed and taught by the track directors. Completion of both core electives will be a prerequisite for enrollment in this advanced course. Personal relationships, in a variety of global health settings, will be leveraged by both track directors to create a breadth of exposure. Track participants will be expected to complete these three electives during their first two years of medical school/residency/fellowship. Classes will be taught in the evenings and arranged to accommodate resident and fellow call schedules. A final supervised reading elective will be required and will allow the learner to delve more deeply into their desired topic in the crossover of global health and HCDS.

Track participants will complete a culminating, mentored capstone experience and scholarly article during their final year. Successful accomplishment of all requirements will
result in a certificate of completion from Geisel. Learners will receive intensive mentoring by the track directors and other identified faculty with appropriate expertise in student’s area of interest.

Support for this program will cover the track co-directors’ time to revise current programming and develop new courses required for the track completion. In addition, the track co-directors will serve as the main mentors for the program, recruiting others in the future as the program grows. A faculty committee with appropriate expertise will review capstone proposals and final papers to provide timely, critical feedback and confirm track requirements are met.

**Expected Product**

At the end of the pilot year, we will have the blueprint for Geisel’s first concentrated study program upon which others can modeled. From discussions with senior leadership and the Dean of Geisel, there is interest in having not just one, but a menu of tracks for students and residents/fellows to differentiate themselves and provide opportunities for advanced study.

This global health delivery science coursework will impart a specific skillset to learners who have a particular interest in the intersection of global health, health equity and HCDS. Content in the four classroom modules described above will include the social determinants of health, shared decision making, and psychological principles of being a physician, as well as a patient, across varying contexts. These domains will have a heavy lean towards reflective writing, to help students articulate their thoughts in a way that will shape their identity as a clinician equipped to confidently address health contexts beyond their training environment.

The HCDS curriculum is built on the premise that one needs to develop a lens to scrutinize a system of health care, appreciating differences and similarities to their prior knowledge. With guidance in using different frames, applicable to both local and global contexts, learners are given analytical starting points that help them develop relevant questions to reflect
their own voice. This course will be followed by the global health case studies course and will build on the lens and skillset started in the principles course. The course objectives include understanding the concept of health equity and the various manifestations of healthcare from that perspective. [see Figure 1]

These two courses are currently established individually and it will require coordination to couple them in a way that is more complementary. The intent in this redesign process is to build-in ample opportunity for students to understand the value and power of shared decision making. Students will get step-wise teaching on how to recognize clinical scenarios that are preference sensitive and learn how to elicit patient preferences. This becomes particularly salient when clinicians leave a context where knowledge and attitudes are not culturally intuitive.

The third class will be an advanced principles class that continues to build upon the first year of this track. This course will look to bring students into a personal space where they can test their understanding of global health, HCDS and health equity. Like the case studies, students will be given real clinical questions from around the globe and think about what considerations are involved in approaching resolutions. Unlike the case studies course, they will then be able to interact with people across the world via videoconference or in person as class guests when appropriate. After receiving a global health equity scenario, thinking through the psychology of the citizens’ experience, and examining their own psychological tendencies – the track participants will be able to engage with a representative of that community and test their understanding and assumptions. Following this high touch, global health exploration, the hope is that our learners will be poised to know what they would like to pursue in more depth – leading to the supervised reading course.
This foundational work will prepare our track participants to continue pushing their understanding of delivery science and equity in their future years of training and practice. The capstone project will reflect their developed, deeper interest in health equity. An end product would be to prepare their work in a fashion that would honor their commitment to this multi-year exploration.

**Evaluation of the Program**

We will first develop overall track learning objectives to guide our assessment. We will expand our current written evaluations of our existing elective courses to assess not only the individual courses but how the track components build towards the overall objectives. We will also meet regularly with the students for mentoring and feedback. They will complete a final evaluation of the overall track effectiveness prior to graduation. Furthermore, we will follow up with participants after they leave Dartmouth to capture their career trajectories.

Figure 1.

HCDS – Health Care Delivery Science  
GHCS – Global Health and Equity Case Studies  
Adv HCDS – Advanced Health Care Delivery Science