# An Instructor's Guide to the Global Health Delivery Case Collection

## Introduction

There is strong evidence that improved health is an important catalyst—or even an essential precondition—for long-term economic growth. Governments, the private sector, providers and civil society share a common interest and a role in improving health for the global population. Today, increased investments in the health of the world's most vulnerable populations have expanded access to essential medications, health technologies, and health services. In many ways, the unprecedented level of new financing, along with political will and demand, catalyzed public health and clinical medicine to redesign care delivery. The relationship between these various inputs and influences on health outcomes is complex. The framework for global health delivery provides a common lexicon, and the teaching case studies in the Global Health Delivery (GHD) case collection provide concrete examples for analysis.

The GHD teaching cases examine how leaders and organizations identified and implemented new strategies and innovations in health services and products to optimize value; value, in this context, is defined as "the health outcomes achieved per dollar spent" (please see **Appendix A** for a list of cases).[1] Our goal in creating these cases is twofold: First, to document the experiences and insights of leaders and organizations. The cases and the in-class case discussion aim to simulate the reality of managerial decision making—which includes incomplete information, time constraints, and conflicting agendas—to enable "virtual experiential learning." Second, the cases examine pilot models and new interventions, highlighting the complexity of service expansion and scale up. They illuminate the critical elements of program strategy, design, and implementation, and, as noted, provide insight on distinct delivery models to further inform and illustrate the four principles of the framework for global health care delivery.[2]

Each GHD case follows a similar narrative style. Each begins with a brief vignette that introduces the main protagonists, describes the context, and frames the pressing challenge. It then provides relevant contextual information, including details of the historical, political, and economic background. A description of the health system and the health issues affecting the population follows. The majority of the case focuses on the featured health care delivery program or policy and the specific challenge it is facing.

Each case explores at least one value-based concept from our conceptual framework—the framework for global health care delivery (published in *The Lancet*, May 20, 2013 by Kim, Farmer, and Porter)—and often the cases demonstrate multiple concepts from the framework, in addition to other lessons in global health, medicine, public health, business, leadership, and management (see **Appendix B** for cases by conceptual framework element).

This instructor's guide describes the conceptual framework, including the major teaching themes across the case collection. It provides detailed descriptions of how to use GHD materials in the classroom, including a brief primer on how to facilitate discussion of the cases. It concludes with suggestions of how to organize the cases into a curriculum.
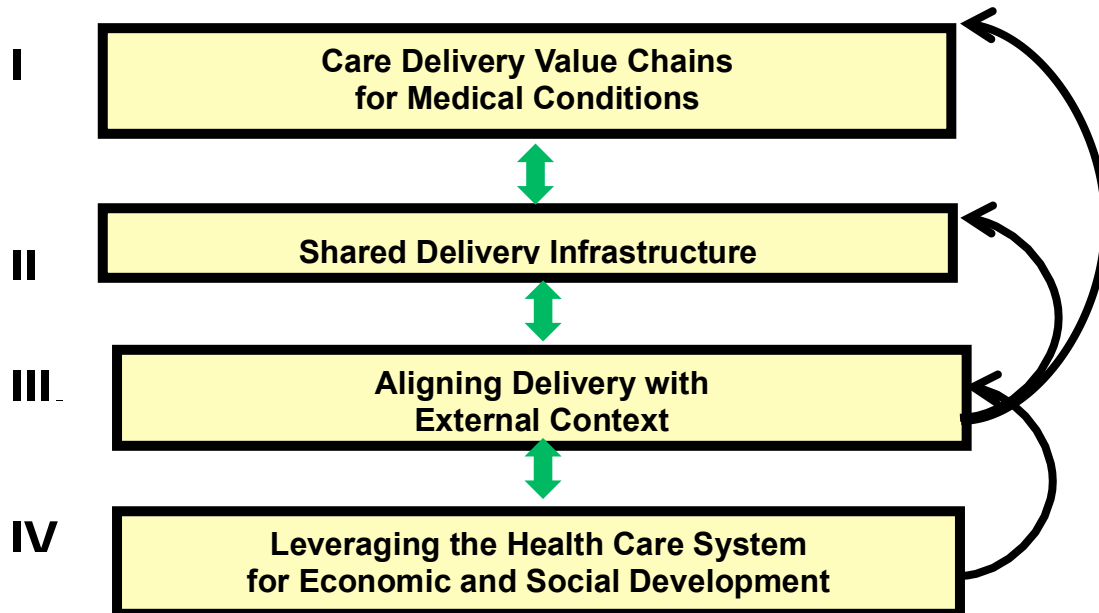
## Conceptual Framework

The framework for global health care delivery and the related cases (explained individually in teaching notes) stress the need to view global health delivery programs through a lens that elucidates how programs create value for the people and populations they serve.[3] Successful global health delivery programs do not narrowly see their objective as "offering" health services or technologies to a population that must find its own methods of accessing those services. Rather, they see their mission as ensuring that the population can realize the full value of the health services and technologies they are providing. These programs seek to maximize the overall health benefit of their activities. The framework for global health care delivery discourages setting narrowly focused programmatic process or volume measurements as goals (e.g., number of patient visits or amount of medication dispensed). It defines value per Porter and Teisberg as the outcomes achieved divided by the resources invested or money spent.[4] Although sometimes an accurate measure of outcomes is difficult to quantify (e.g., in prevention programs), the concept drives the approach.

The framework for global health care delivery provides guidance for improving the strategic design and effective management of a program's activities to maximize the impact of investments on health. The framework emphasizes that health as an outcome measure must be defined in a way that is meaningful to the persons served (e.g., improved survival). This often means that we must define health broadly. Broad outcome data are often difficult to measure in practice, however. It is the understanding that improved population health is the program's primary goal that is essential to the effective design and management of these programs.

The framework provides four principles (shown in **Figure 1)** to assess how value is being generated: first, at the level of a specific medical condition or population at risk—designing activity sets to address specific health issues over the full cycle of care using care delivery value chain analysis; second, integrating specific health care delivery activities with one another across medical conditions to capture synergies and maximize resources; third, aligning activities with and tailoring them to the local context; and fourth, designing program activities to maximally contribute to economic and community development, to improve underlying health care constraints.

We recommend all students and educators read the paper "Redefining global health care delivery" in *The Lancet*. Below we discuss key principles for analysis and discussion of the Cases in Global Health Delivery.

*Figure 1: Framework for Global Health Care Delivery*



Source: Kim JY, Farmer PE, Porter ME. Redefining global health-care delivery. *Lancet,* May 20, 2013.
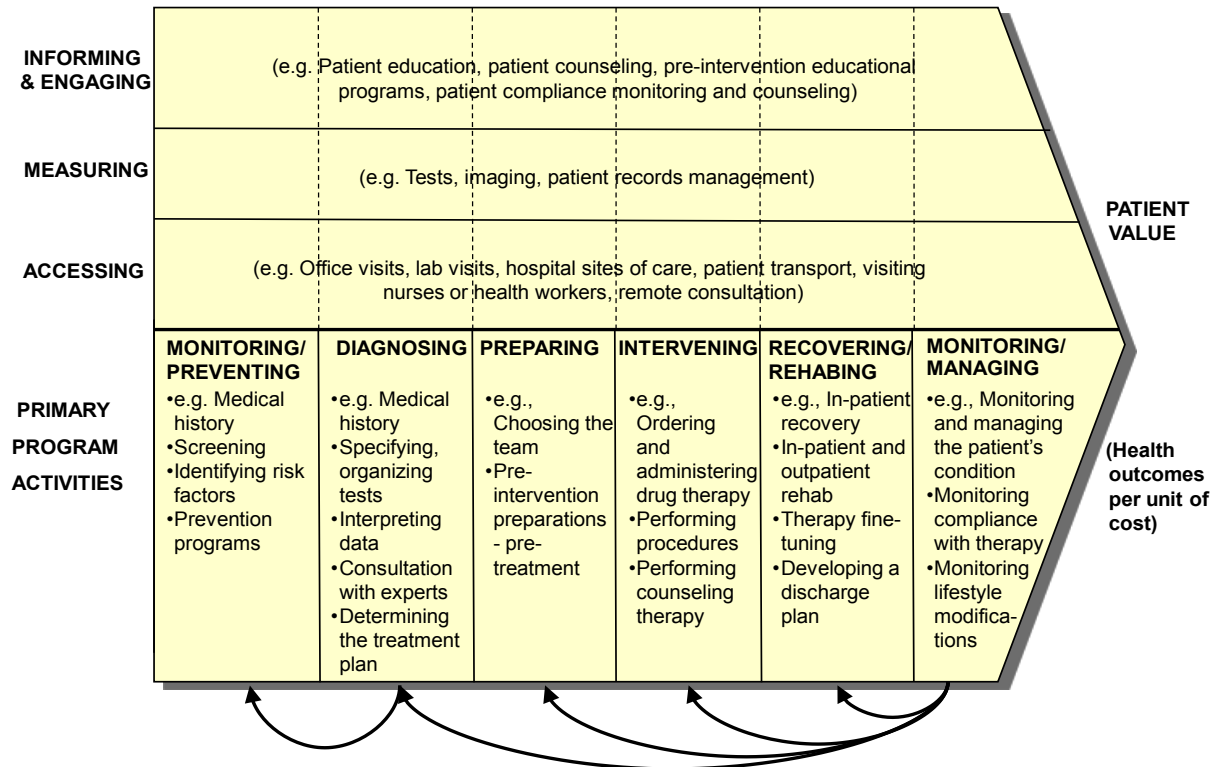
### Principle 1: Designing Prevention and Care Delivery Value Chains

The care delivery value chain[*] (CDVC), the first level of analysis in the framework for global health care delivery, provides program designers and managers with a tool for mapping program activities to determine how best to allocate resources and configure these activities. A generic form care delivery value chain is illustrated below in **Figure 2**. Programs must be able to articulate how their activities generate value for the populations they serve if they are to optimize their effectiveness. [5,6,7,8]

The CDVC assumes that all health programs undertake various activities, most often tailored to address a particular health issue or condition. Each specific activity will address different aspects of the health condition. For example, some program activities will aim to prevent the health condition from developing, others will seek to screen the population for the health condition, and others might involve treating or remediating the condition. The "cycle of care" is the complete set of program activities needed to address a particular health condition. The framework can be adapted to each specific condition.

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[*] A value chain is a tool from management science that maps out a program's primary activities in a linear fashion by function. Michael Porter's seminal work in strategy used the value chain to demonstrate the sources of value creation and competitive advantage in manufacturing industries, and he went on to apply this analysis to a host of other industries and pro-social enterprises. With Elizabeth Teisberg, he adapted this concept to health care as the care delivery value chain (CDVC), which maps the specific activities involved in the care of a medical condition across the entire cycle of care.

*Figure 2: The Care Delivery Value Chain*



Source: Porter M, Teisberg E. Redefining Health Care. Boston: Harvard Business School Press, 2006.

For conditions that involve treatment, such as HIV infection, one can readily appreciate this cycle, as depicted in **Figure 3**. "Upstream" activities in HIV treatment involve preventing the infection from spreading in the population. Other activities seek to screen the population for the infection so as to improve prevention efforts and link persons with the infection to treatment. Treatment activities involve staging and assessing disease severity, initiation of anti-retroviral therapy (ART), and ensuring adherence to ART. Ongoing activities for persons in treatment involve reproductive health care, management of long-term sequelae, and prevention of transmission to others.[9] Each activity alone has minimal value. For example, there is little impact on health if HIV testing takes place without offering access to treatment or to disease education. And, treating all cases of HIV without offering any prevention measures is quite costly given the value of preventing new cases.

Mapping program activities to the cycle of care is helpful not only in understanding disease treatment programs, but also can be applied to programs dealing with reproductive health issues, primary health care, and health product distribution. Below we will talk about how to apply value chain analysis to prevention. The value chain allows program managers to better allocate resources along the cycle of care, to ensure information flows along the chain of activities, and to realize synergies of co-location and resource sharing.
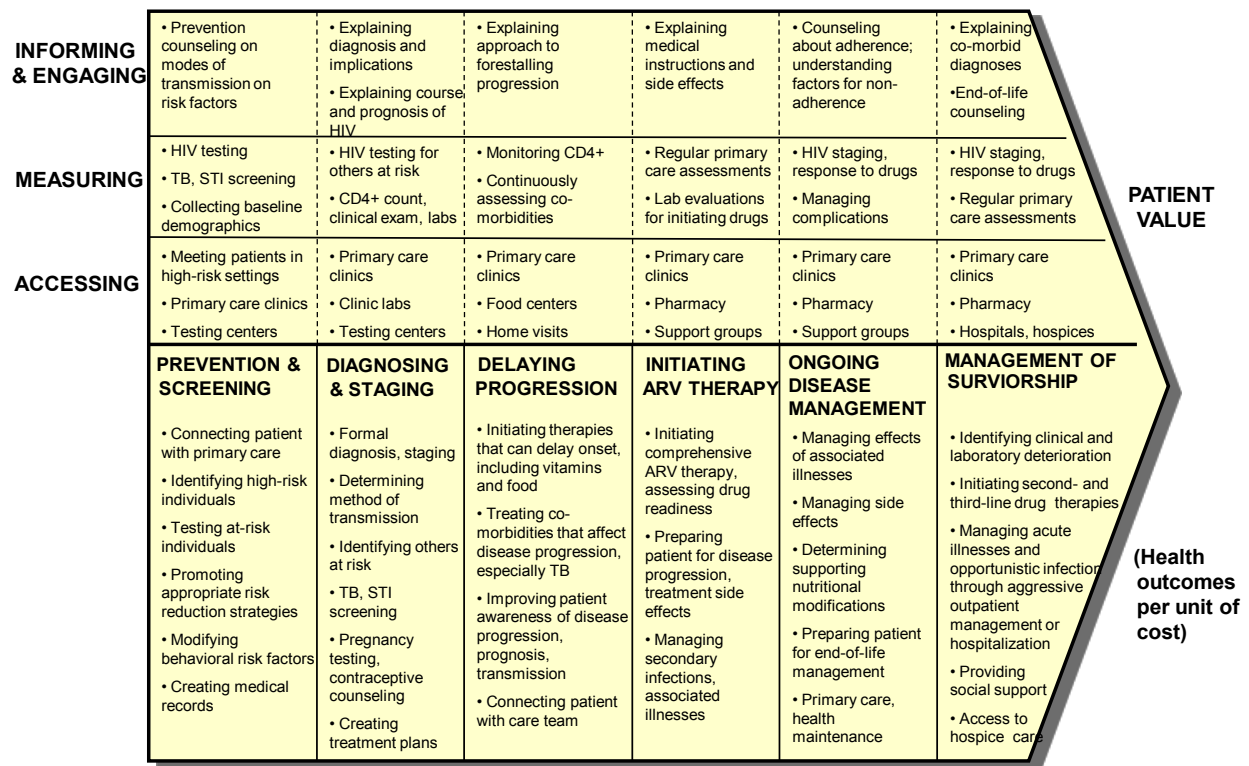
Mapping activities allows program managers to address questions such as:

•     Is this the proper set of activities, and are they optimally configured?

•     How are human resources deployed across this set of activities?

- How does the patient/client/customer experience this activity?

- How is information collected and transmitted across these activities?

- Where does each activity occur? How can activities be configured to make the best use of existing facilities?

- Where could activities link to other programs? Where are potential steps where patients/customers/clients might be lost?[10]

Through each case, students should come to see the benefits of using tools such as the CDVC in managing programs, allocating resources, and strategically assessing activities.

## *Figure 3: HIV/AIDS Care Delivery Value Chain*

| | PREVENTION & SCREENING | DIAGNOSING & STAGING | DELAYING PROGRESSION | INITIATING ARV THERAPY | ONGOING DISEASE MANAGEMENT | MANAGEMENT OF SURVIORSHIP | |
|---|---|---|---|---|---|---|---|
| **INFORMING & ENGAGING** | • Prevention counseling on modes of transmission on risk factors | • Explaining diagnosis and implications<br>• Explaining course and prognosis of HIV | • Explaining approach to forestalling progression | • Explaining medical instructions and side effects | • Counseling about adherence; understanding factors for non-adherence | • Explaining co-morbid diagnoses<br>•End-of-life counseling | **PATIENT VALUE** |
| **MEASURING** | • HIV testing<br>• TB, STI screening<br>• Collecting baseline demographics | • HIV testing for others at risk<br>• CD4+ count, clinical exam, labs | • Monitoring CD4+<br>• Continuously assessing co-morbidities | • Regular primary care assessments<br>• Lab evaluations for initiating drugs | • HIV staging, response to drugs<br>• Managing complications | • HIV staging, response to drugs<br>• Regular primary care assessments | |
| **ACCESSING** | • Meeting patients in high-risk settings<br>• Primary care clinics<br>• Testing centers | • Primary care clinics<br>• Clinic labs<br>• Testing centers | • Primary care clinics<br>• Food centers<br>• Home visits | • Primary care clinics<br>• Pharmacy<br>• Support groups | • Primary care clinics<br>• Pharmacy<br>• Support groups | • Primary care clinics<br>• Pharmacy<br>• Hospitals, hospices | |
| | **PREVENTION & SCREENING**<br><br>• Connecting patient with primary care<br>• Identifying high-risk individuals<br>• Testing at-risk individuals<br>• Promoting appropriate risk reduction strategies<br>• Modifying behavioral risk factors<br>• Creating medical records | **DIAGNOSING & STAGING**<br><br>• Formal diagnosis, staging<br>• Determining method of transmission<br>• Identifying others at risk<br>• TB, STI screening<br>• Pregnancy testing, contraceptive counseling<br>• Creating treatment plans | **DELAYING PROGRESSION**<br><br>• Initiating therapies that can delay onset, including vitamins and food<br>• Treating co-morbidities that affect disease progression, especially TB<br>• Improving patient awareness of disease progression, prognosis, transmission<br>• Connecting patient with care team | **INITIATING ARV THERAPY**<br><br>• Initiating comprehensive ARV therapy, assessing drug readiness<br>• Preparing patient for disease progression, treatment side effects<br>• Managing secondary infections, associated illnesses | **ONGOING DISEASE MANAGEMENT**<br><br>• Managing effects of associated illnesses<br>• Managing side effects<br>• Determining supporting nutritional modifications<br>• Preparing patient for end-of-life management<br>• Primary care, health maintenance | **MANAGEMENT OF SURVIORSHIP**<br><br>• Identifying clinical and laboratory deterioration<br>• Initiating second- and third-line drug therapies<br>• Managing acute illnesses and opportunistic infection through aggressive outpatient management or hospitalization<br>• Providing social support<br>• Access to hospice care | **(Health outcomes per unit of cost)** |

Source: Rhatigan J, Jain SH, Mukherjee JS, Porter ME. Applying the Care Delivery Value Chain: HIV / AIDS Care in Resource-Poor Settings. HBS Working Paper 09-093, Boston: Harvard Business School Press. 2009.
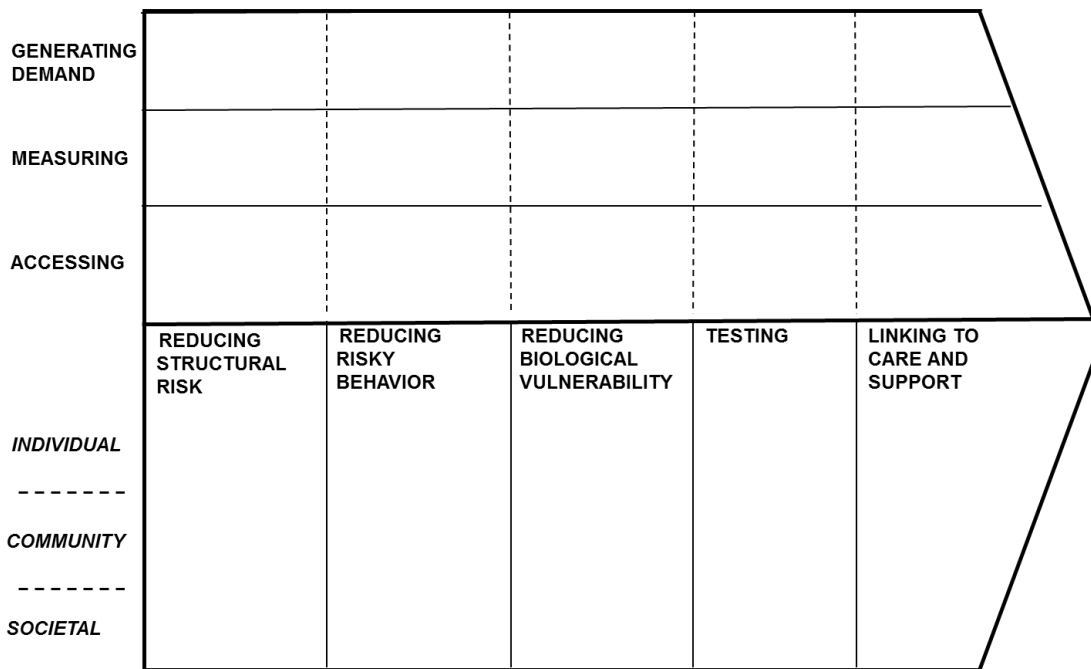
## Adapting the Value Chain for Prevention Activities

While the care delivery value chain is created to address the full cycle of care for a certain medical condition, the prevention delivery value chain (PDVC) maps activities as they relate to all the risk factors for a specific medical condition. The prevention delivery value chain helps ensure that activities are tailored to the risk profile of a specific population. Addressing all the risks for that population creates a high-value prevention program and better health outcomes. Assessing risks for a population requires understanding disease transmission dynamics and epidemiological trends.

For any medical condition to be prevented, the first step is identifying a specific target population from those at risk. It requires identifying people that share a similar risk environment—be it due to socio-economic factors, societal marginalization, or specific behaviors—that will benefit from similar sets of interventions. We refer to selecting the target population as segmenting or "drawing boundaries around" a population. In the case of HIV prevention, for example, intravenous drug users will benefit from a different set of activities than female sex workers. Each at-risk population may be mapped to a separate PDVC to align with project goals.

Each PDVC specifies risk factors for the given condition, so that planners can tailor a set of activities to mitigate each risk. For example, the PDVC for HIV/AIDS identifies five risk categories: reducing structural risk; reducing behavioral risk; reducing biological vulnerability; testing; and linking to care, support, and treatment. Addressing each category for each population at risk prevents HIV.

## *Figure 4: The Prevention Delivery Value Chain for HIV/AIDS*



### PDVC Supporting Activities

While core activities address risk factors, increasing access to the activities and measuring program performance are also important for maximizing value. The PDVC, like the CDVC, encourages these supporting activities. It also goes beyond the confined space of the health program or system, and suggests that programs must address risk at the individual, the community, and the societal levels.

Instructors teaching the use of the PDVC with the cases can push students to consider:

- Who is the target population(s) and why?

- What are the risk factors for this targeted population?

- Where does this population access services, and what is currently offered to reduce the risk of the targeted population?

- How could activities be tailored to address the major drivers of risk and issues of access?

Where gaps exist on the map of activities, programs can consider ways to address them to improve value. This may include engaging in partnerships, looking for synergies, or shifting funding from one area to another.

## *Principle 2: Leveraging Shared Delivery Infrastructure*

In addition to optimizing the program's value by strategic design and informed alignment with the local context, program designers and managers also need to understand the larger health system and economy within which they are working. No program exists in a vacuum, and all will interact with the larger health system in some way. The most value-generating programs will leverage any existing health resources while supporting other programs as possible. For example, actions that the program might take to secure human and financial resources could potentially have the untoward effect of diverting these from other areas of the health system. Conversely, thoughtfully designed programs that increase local human capacity can increase the supply of skilled health care workers available to the entire health system. Community health workers already working to address one health concern with in-depth understanding of a local culture may be able to easily add on duties or disease concerns to generate additional value, greater impact for minimal cost. The term we apply to this concept is "leveraging shared delivery infrastructure."

## *Principle 3: Context in the GHD Cases*

Many of the GHD cases concern populations that have difficulty accessing the health system, including rural populations that have geographic barriers or urban populations that face social marginalization. In addition, for people living at the subsistence level, the opportunity costs of accessing a health system are prohibitively high. In many of the featured settings, an adult family member commonly loses a day of labor in taking a sick child to the nearest health clinic that might be hours of travel away, that has a long waiting time with many inefficiencies, and that might require the payment of a user fee to access. Similarly, in urban settings, although distance might be less of an issue, lost wages, inefficient delivery systems, and user fees can make access costly.

The programs featured in the GHD case collection address these barriers to health in a variety of ways. Many engage low-skilled community members and train them to effectively deliver health care close to patients' homes. These community health workers also serve as crucial links between the population and the health system. Some programs that work in settings of significant food insecurity have undertaken activities to remediate this for the population they serve. Others have undertaken micro-enterprise and job-creation strategies. Programs dealing with marginalized persons have worked to link people together and to create communities and organizations where none existed.

### Teaching Points Related to Context

In terms of teaching, it is important that students understand context to understand each case and each program's design. Successful programs address or account for the unique social, economic, and geographic barriers to delivery—the contextual constraints—facing their populations. However, programs that are effective in one context are not necessarily equally effective in others. Understanding the specific ways each program accounts for local context in its design and operations allows for the transfer and adaptation of successful elements of that program to different contexts.

The importance of understanding local context can be seen throughout program development and growth, starting with planning and design. In their implementation, successful programs must adapt to

contextual changes and barriers or work to modify the environment (e.g., through advocacy efforts). Over time, managers must encourage organizational behaviors and habits that encourage operational effectiveness while facilitating evaluations that provide meaningful information or data within the local context.

## *Principle 4: The Relationship between Health Investments and Economic Development*

High-value health programs have effects beyond the health system. They harness opportunities to catalyze economic development. Maximizing impact on development helps improve returns on investments in health as well as investments being made in other sectors such as education.[11,12] The links between improved economic conditions and health have been well established: healthier people can be more productive in the short and long term; investments in health systems mean more jobs for those in the health sector as well as those who support the infrastructure with supplies and goods; and healthier, more stable populations draw more investments from elsewhere through mechanisms such as tourism. The interactions between economic development and health systems are complex and multifaceted, and thinking carefully about where and how to invest in health can enhance the relationships and health outcomes.

## *Additional Themes for Consideration*

### **Measurement and Improvement**

For any individual or organization to improve its performance, it needs to be able to see the results of its actions and modify them to obtain its desired outcomes. Across the majority of cases in the GHD case collection, we encounter organizations and programs that measure their results, analyze these, and then modify their activities to improve performance. Often funders require global health programs to collect and report numerous measures regularly. Unfortunately, in many cases, reporting mechanisms simply become more "work" for the program, and the data collected is not reflected or acted upon. This is not due to negligence, but oftentimes due to perverse incentives that encourage the reporting of data that the program itself may not value and in formats that the program cannot readily analyze.[13] Programs rarely collect data that is useful for measuring their value or impact.

The successful programs we have written about all share the "habits" of measuring aspects of their performance that they find meaningful, deliberately analyzing this data, and adjusting their programs based on this analysis.

This process yields not only improvements in performance, but also allows programs to continually examine their activity set and value chain. By doing this, they develop the capacity to adapt to changing circumstances and to effectively advocate for resources. They also develop the capability to consider program scale-up, spread, or dissemination as they increasingly understand the drivers of their success and the barriers to increased impact.

### **Care Anywhere**

Aided by technology and pressured by rising costs, the concept of "care anywhere" has emerged. Facility-based health care is often the most expensive way to deliver health services, and transportation to such facilities can be one of the greatest hurdles for patients in trying to access care. Smartphones and other diagnostic devices allow some patients to supply information to providers without having to physically appear at a hospital or clinic. Community health workers are key innovators in implementing and iterating on our care delivery models and essential for providing "care anywhere."

**Scaling Health Care Delivery**

Many of the Cases in Global Health Delivery describe the local, national, and international pressures to address the burden of disease and scale their service models. Several of the cases also display the pathways to scale as described by Peter Uvin and David Miller (in Paths to scaling up: Alternative strategies for local nongovernmental organizations, *Human Organization* 1996 55(3): 344-354).

The cases acknowledge that scaling up can be more than expanding the volume of services or number of beneficiaries (quantitative scale-up); scaling up may include an increase in the depth of programmatic offerings (functional scale-up), a programs' expanded policy impact or community engagement (political scale-up), or an increase in operational effectiveness (organizational scale-up). Such dimensions are likely to be critical in allowing a program to adapt effectively to internal and external changes to continue to generate maximum health value for the population.

The Cases in Global Health Delivery display the complexity of preparing to scale and the importance of balancing planning, monitoring progress, and adapting to accommodate findings.

# Using the Case Method to Teach Global Health Delivery

Within our university, we use the Cases in Global Health Delivery in courses for college undergraduates and graduate students, continuing medical education, as well as others offerings of executive education. The cases are most effective when they are taught in courses that use the case method of teaching over multiple class sessions. This allows students the time to learn how to most effectively participate in and benefit from the case method of teaching and also allows students to compare and contrast the experiences they read about in different cases. The cases can be integrated into non-case-based courses as well. For faculty members we offer guidance and support in our private Faculty Network virtual community on our platform GHDonline.org.

## *The Case Method*

The case method of teaching involves the active participation of the class in analyzing a "case" and articulating key lessons learned.  A "case" for our purposes is a text that captures the actual experience of individuals and organizations that deliver health care. Our cases do not aim to be historical accounts, nor journalistic ones. Everything that is presented in the cases is true; however, the cases might omit events or information not relevant to the educational objectives of the case. Cases are designed to present experiences in a value-neutral voice so that students can draw their own conclusions about the experience; they are specifically framed to inspire productive classroom discussion of important issues in global health care delivery.

This educational method is often called "virtual-experiential learning" or "participant-centered learning," reflecting both the method's process and goals (see **Appendix D** for additional resources for teaching with the case method). Cases are written to allow students to experience the challenges facing the featured organizations and programs through the eyes of those involved in the actual events.  The goal is to encourage students to "walk in the shoes" of the protagonist and gain experience addressing challenges. This type of learning supports greater retention while developing analytical, decision-making, and communication skills, and the cultivation of self-awareness, judgment, and the capacity to lead as well as "the courage to act under uncertainty."[14] Instead of the instructor presenting information and analysis to the class that they need to learn in the form of a lecture, the students generate the "lessons" through their participation in facilitated classroom discussion. The students' comments become the material that the

instructor uses to guide the class in achieving the educational objectives. There is no "correct" way to teach a case. Instructors should find approaches that are best suited to their educational objectives, personal teaching style, and classroom situation, that enable them to manage the content and the process. It will likely take a number of sessions before novice case-method teachers find a teaching style that suits their personalities and is effective with their students.

## *Suggestions for Leading a Case Discussion*

We have found the following suggestions helpful in leading a case discussion.

### 1) Establish Clear Expectations with the Class

It is critical that students understand the ground rules for class discussion. The instructor should explicitly explain that classroom discussion needs to take place within an orderly, safe, and respectful environment. Students should be required to raise their hands and be acknowledged by the instructor before making comments. They should also understand that is unacceptable to make disparaging remarks about another student's comments or the views that he/she holds. The instructor should be self-conscious about his/her own behavior and impulses in this domain as well.

As classroom discussion is the essential feature of how students learn, all students must come to class prepared. The instructor should reserve the right to "cold-call" students who are not participating to discourage unprepared students from attending class, as well as to engage well-prepared, "shy" students in the discussion.

Students should also be encouraged to direct their remarks to their classmates and relate their remarks to other students' comments instead of narrowly directing them to the instructor. We have found that positive reinforcement of this behavior by the instructor is very effective in increasing its frequency.

### 2) Be Well-Prepared

The instructor should be the most well-prepared person in the classroom. He/she should have read the case numerous times, reviewed the teaching note (see below), generated a clear discussion and board plan, and done additional background reading if there is any material in the case that is unfamiliar. We have found that it takes six to eight hours of preparation to teach a case for the first time.

Because it is difficult to remember all the statistics presented in the cases, the instructor should prepare one sheet documenting the case's important facts that he/she can refer to during class discussion. Also helpful is a second sheet with four to six key questions to ask the class during the discussion.

### 3) Use the Board to Capture Classroom Discussion

The use of a chalkboard or white board greatly enhances the classroom discussion. The boards should not be used simply as a "notepad" to record everything students say, but rather as a space to organize comments into meaningful relationships. Capturing students' comments in this fashion allows the instructor to align the classroom comments with his/her educational objectives. It also provides documentation of the discussion that can be referred to later in the class and during the instructor's summative concluding comments. Each teaching note contains suggestions for organizing the boards according to the lesson plan.

**4) Conclude the Class Discussion with Summative Comments**

The instructor should reserve approximately 10 minutes at the conclusion of each case discussion to offer summative comments about the classroom discussion and to link the session's discussion to both previous and future cases. We also occasionally give short topic lectures at the end of the class discussion that further elaborate on the day's subject with an explanation of the current literature on the topic and future directions in the field.

### *The Teaching Note*

Each case is accompanied by a teaching note for instructors that gives an analysis of the case and highlights one or more themes. For an educator considering using a particular case, we suggest he/she begins by reading the teaching note, as this is the most concise source of information about the case's educational aims. Students should not have access to the teaching notes.

Notes begin with a brief summary of the case followed by a description of the educational objectives of the case. A case analysis highlights many of the themes described above. The bulk of the teaching note contains detailed instructions on how to facilitate a classroom discussion that will attain the educational objectives, including suggested questions to pose to the class. We have used these cases numerous times, and all the suggested plans have been fine-tuned after classroom discussions. The notes end with suggested summative comments for the instructor and suggestions on how to use chalk/white boards to capture the discussion.

## Creating Course Curriculum Using the GHD Case Collection

We encourage instructors to use the GHD cases in ways that meet their educational objectives and needs. **Appendix C** contains suggested groupings of cases based on common themes. For courses that deal extensively with one of these topic areas, discussing multiple cases on the same topic provides an opportunity to delve into the nuances of the material. For courses that seek to provide an overview of global health care delivery, reading multiple cases across topic areas is an effective strategy. Depending on the level and experience of the students, background readings in basic concepts in global and public health can be incorporated into the curriculum. Regardless of how the cases are organized in a syllabus, it is essential that the discussion leaders help students see the connections between issues raised in different cases. When students are able to articulate these connections, they become the authors of the lessons they learn.

## Appendix A          *Case Studies and Teaching Notes*

1. **HIV in Thailand: The 100% Condom Program** (and **Part B**)
Focus: HIV prevention, harm reduction, stakeholder alignment

2. **The Peruvian National Tuberculosis Control Program**
Focus: tuberculosis control, program management, vertical programming, public health, leadership

3. **Multi-Drug Resistant Tuberculosis Treatment in Peru**
Focus: multi-drug resistant tuberculosis treatment, advocacy, policy change, community health workers

4. **HIV Voluntary Counseling and Testing in Hinche, Haiti** (and **Two Years in Hinche**)
Focus: HIV prevention, government-NGO partnerships, community-based organizations

5. **Polio Elimination in Uttar Pradesh**
Focus: global collaboration, polio elimination and immunization campaigns, supply chain management

6. **Iran's Triangular Clinic** (and **Scaling up Iran's Triangular Clinic**)
Focus: comprehensive HIV prevention, harm reduction, marginalized populations

7. **Botswana's Program for Preventing Mother-to-Child HIV Transmission**
Focus: HIV prevention, health care policy, horizontal programming, translation of research into practice

8. **The AIDS Support Organization (TASO) of Uganda**
Focus: HIV prevention and treatment, home- and clinic-based care, service expansion

9. **Building Local Capacity for Health Commodity Manufacturing: A to Z Textile Mills Ltd.**
Focus: malaria prevention, public-private partnerships, incentive-based supply chain, global health commodity manufacturing

10. **BRAC's Tuberculosis Program: Pioneering DOT Treatment for TB in Rural Bangladesh**
Focus: tuberculosis control, community health workers, rural nongovernmental organizations, social enterprise

11. **Tuberculosis in Dhaka: BRAC's Urban TB Program**
Focus: tuberculosis control, urban nongovernmental organizations, service delivery innovation

12. **Tobacco Control in South Africa** (and **Tobacco Control in South Africa: Next Steps**)
Focus: tobacco control, health policy, advocacy, chronic disease prevention

13. **The Academic Model for the Prevention and Treatment of HIV/AIDS (AMPATH)**
Focus: HIV treatment and prevention, the role of academic medical centers, service expansion, home-based counseling and treatment

14. **Treating Malnutrition in Haiti with Ready-to-Use Therapeutic Foods in Haiti**
Focus: childhood malnutrition, health policy implementation

15. **The Measles Initiative**
Focus: measles vaccination campaigns, international partnerships, coordination of multilateral global health initiatives and national governments, strategy

16. **Investing in Global Health: Botanical Extracts Ltd.**
Focus: malaria eradication and control, pharmaceutical supply chains, public-private partnerships, health commodity manufacturing

17. **loveLife: Preventing HIV Among South African Youth** (and **Part B**)
Focus: HIV prevention among youth, stigma, demand generation, strategy, scale up, sustaining delivery at scale

18. **HIV/AIDS in Brazil: Delivering Prevention in a Decentralized Health System**
Focus: HIV prevention, strategy, sustainability, role of civil society, human rights

19. **HIV Prevention in Maharashtra, India**
Focus: HIV prevention, targeted interventions, strategy, marginalized populations

20. **The Avahan India AIDS Initiative: Managing Targeted HIV Prevention at Scale**
Focus: HIV prevention, scaling up, strategy, management and operations, sustainability, transferring large-scale programs to government ownership

21. **HIV/AIDS in Indonesia: Building a Coordinated National Response**
Focus: HIV prevention, flexible donor financing, national strategy, sustainability

22. **loveLife: Transitions After 2005**
Focus:  HIV prevention, leadership, national strategy, sustainability, impact of financing

23. **The Indus Hospital: Delivering Free Health Care in Pakistan (and Condensed Version)**
Focus: workforce management, sustainability, role of civil society, human rights, information systems, organizational culture

24. **Malaria Control in Zambia** (and **Condensed Version**)
Focus: malaria eradication and control, supply chain management, leadership, national strategy

25. **Roll-Out of Rapid Diagnostic Tests for Malaria in Swaziland**
Focus: malaria eradication and control, supply chain management, diagnostic testing strategies, national strategy

26. **Electronic Medical Records at ISS Clinic Mbarara, Uganda**
Focus: health information systems, HIV treatment, management and operations, health research

27. **Voluntary Medical Male Circumcision in Nyanza Province, Kenya (and Condensed Version)**
Focus: project management, AIDS, policy, supply and demand, partnerships, strategy, innovation

28. **Surgery at AIC Kijabe Hospital in Rural Kenya** (and **Condensed Version**)
Focus: surgical disease, mission-based hospitals, global health care delivery, rural surgery services

29. **Partners In Health in Neno District, Malawi**
Focus: project management, business and government relations, partnerships, strategy, economic development, public health, human resource management, developing countries, innovation

30. **"Sin Taxes" and Health Financing in the Philippines**
Focus: health insurance, health financing, tobacco control, political leadership

31. **Reducing Child Malnutrition in Maharashtra, India**
Focus: maternal and child health, nutrition, community health workers, intergenerational disease

32. **Political Leadership in South Africa: National Health Insurance**
Focus: universal health coverage, health care financing, insurance, political strategy, health communications

33. **Political Leadership in South Africa: HIV**
Focus: political leadership, data and health policy, HIV treatment, counseling and testing

34. **The Tanzania Training Center for International Health**
Focus: human resources for health, education, public-private partnerships, organizational effectiveness

35. **The Global Trachoma Mapping Project**
Focus: health information systems, trachoma, disease mapping, electronic data capture

36. **Project ECHO: Expanding the Capacity of Primary Care Providers to Address Complex Conditions**
Focus: public health, health care delivery, resource-limited settings, information technology

37. **Improving Mental Health Services for Survivors of Sexual Violence in the DRC**
Focus: health care delivery, mental health, gender-based violence, health research

38. **Chagas Disease Vector Control in Honduras**
Focus: information management, scale-up, health care policy, public administration

39. **Working as an ASHA to Improve Maternal and Child Health in Uttar Pradesh, India (and Mother's Story)** Focus: health care delivery, human resources, decision making, community health workers

40. **Improving Maternal and Child Health Outcomes in Uttar Pradesh, India**
Focus: public health, program management, data-informed decision making

41. **Positive Outlier: Sri Lanka's Health Outcomes over Time**
Focus: health care delivery, public policy, resource-limited settings,

42. **Positive Outlier: Health Outcomes in Kerala, India over Time**
Focus: health care delivery, public policy,

43. **Chasing Polio Eradication: Vaccine Development** (*in press*)

**Concept Notes**

1.  **The Global Health Supply Chain**

2.  **The Global Fund to Fight AIDS, Tuberculosis and Malaria**

3.  **HIV Prevention**

4.  **GHD Glossary**

5.  **The Development of Tuberculosis Treatments and Policy**

6.  **Global Surgery Care Delivery**

7.  **Universal Health Care: The experience in Ghana, Rwanda, Thailand, and Vietnam**

8.  **Malnutrition**

9.  **HIV, Tuberculosis, and Malaria**

## Appendix B        *Cases by Content and Topic*

| Case Title | Country | Medical Condition | GHD Framework Component Addressed[†] | | | |
|---|---|---|---|---|---|---|
| | | | I | II | III | IV |
| The Academic Model for the Prevention and Treatment of HIV/AIDS | Kenya | HIV/AIDS | x | | | |
| The AIDS Support Organization (TASO) of Uganda | Uganda | HIV/AIDS | x | | x | |
| The Avahan India AIDS Initiative: Managing Targeted HIV Prevention at Scale | India | HIV/AIDS | | x | x | x |
| Botswana's Program in Preventing Mother-to-Child HIV Transmission | Botswana | HIV/AIDS | | x | x | |
| BRAC's Tuberculosis Program: Pioneering DOTS Treatment for TB in Rural Bangladesh | Bangladesh | TB | x | | x | x |
| Building Local Capacity for Health Commodity Manufacturing: A to Z Textile Mills Ltd. | Tanzania | Malaria | | | | x |
| Chagas Disease Vector Control in Honduras | Honduras | Chagas | x | x | x | |
| Electronic Medical Records at the ISS Clinic in Mbarara, Uganda | Uganda | HIV/AIDS | | x | | |
| The Global Trachoma Mapping Project | Global | Trachoma | x | x | | |
| HIV/AIDS in Brazil: Delivering prevention in a decentralized health system | Brazil | HIV/AIDS | x | x | x | |
| HIV/AIDS in Indonesia: Building a Coordinated National Response | Indonesia | HIV/AIDS | | x | x | |
| HIV Prevention in Maharashtra, India | India | HIV/AIDS | x | x | x | x |
| HIV in Thailand: The 100% Condom Program | Thailand | HIV/AIDS | | x | | |
| The 100% Condom Program: Part B | Thailand | HIV/AIDS | | x | | |
| HIV Voluntary Counseling and Testing in Hinche, Haiti | Haiti | HIV/AIDS | x | x | x | x |
| Two Years in Hinche | Haiti | HIV/AIDS | | | x | x |
| Improving Maternal and Child Health Outcomes in Uttar Pradesh, India [Case set] | India | RMNCH | x | x | x | x |

[†] I –care delivery value chain for a medical condition; II—leveraging shared delivery infrastructure; III—aligning delivery with external constraints; IV—Driving social and economic development

| | | | | | | |
|---|---|---|---|---|---|---|
| Improving Mental Health Services for Survivors of Sexual Violence in the DRC | Democratic Republic of the Congo | Mental Health | x | x | x | x |
| The Indus Hospital: Delivering Free Health Care in Pakistan | Pakistan | Surgical Care | | x | x | x |
| Investing in Global Health: Botanical Extracts Ltd. | Kenya | Malaria | | | x | x |
| Iran's Triangular Clinic | Iran | HIV/AIDS | x | x | | |
| loveLife: Preventing HIV Among South African Youth | South Africa | HIV/AIDS | x | | | |
| loveLife: Preventing HIV Among South African Youth (Part B) | South Africa | HIV/AIDS | x | | | |
| loveLife: Transitions After 2005 | South Africa | HIV/AIDS | x | | | |
| Malaria Control in Zambia | Zambia | Malaria | x | | x | |
| The Measles Initiative | Global | Measles | | x | x | |
| Multidrug-Resistant Tuberculosis Treatment in Peru | Peru | TB | x | x | x | |
| Partners in Health in Neno District, Malawi | Malawi | Multiple | | x | | x |
| Political leadership: HIV in South Africa | South Africa | HIV/AIDS | x | x | | |
| Political leadership: NHI in South Africa | South Africa | Multiple | | | x | |
| Polio Elimination in Uttar Pradesh | India | Polio | | x | x | |
| The Peruvian National Tuberculosis Control Program | Peru | TB | x | x | x | |
| Project ECHO: Expanding the Capacity of Primary Care Providers to Address Complex Conditions | United States | HCV, Multiple | x | x | x | x |
| Reducing Child Malnutrition in Maharashtra, India | India | Malnutrition | x | x | x | |
| Roll-Out of Rapid Diagnostic Tests for Malaria in Swaziland | Swaziland | Malaria | | x | x | |
| Surgical Care Delivery at AIC Kijabe Hospital in Rural Kenya | Kenya | Surgical Care | | | x | x |
| The Tanzanian Training Centre for International Health | Tanzania | Multiple | | | x | x |
| Tobacco Policy in the Philippines | Philippines | Tobacco addiction | | | x | x |
| Tobacco Control in South Africa | South Africa | Tobacco addiction | | | | x |
| Tobacco Control in South Africa: Next Steps | South Africa | Tobacco addiction | | | | x |
| Treating Malnutrition in Haiti with Ready-to-Use Therapeutic Foods | Haiti | Malnutrition | | x | x | x |
| Tuberculosis in Dhaka: BRAC's Urban TB Program | Bangladesh | TB | x | | x | x |
| Voluntary Medical Male Circumcision in Nyanza Province, Kenya | Kenya | HIV/AIDS | x | x | x | |

## Appendix C          *Suggested Topic Modules*

## Understanding Local Context

Organizations must understand the complexities of local cultures, epidemiology, politics, economics, and history in order to design and manage effective health care delivery programs. The importance of local context in global health delivery is a key theme across all the cases and is a major focus in the following cases:

♦  HIV Voluntary Counseling and Testing in Hinche, Haiti

♦  HIV in Thailand: The 100% Condom Program

♦  Iran's Triangular Clinic and Scaling Up Iran's Triangular Clinic

♦  Polio Elimination in Uttar Pradesh

♦  HIV Care Delivery in Uganda: The AIDS Support Organization (TASO)

♦  Tobacco Control in South Africa

♦  loveLife: Preventing HIV among South African Youth

♦  HIV Prevention in Maharashtra, India

♦  The Indus Hospital: Delivering Free Care in Pakistan

♦  Partners in Health: HIV Care in Rwanda (available at main HBP website)

♦  Voluntary Medical Male Circumcision in Nyanza Province, Kenya

♦  The Global Trachoma Mapping Project

♦  Improving Mental Health Services for Survivors of Sexual Violence in the DRC

♦  Improving Maternal and Child Health Outcomes in Uttar Pradesh, India

♦  Chasing Polio Eradication: Vaccine Development

## Optimizing the Value Chain: Treatment of Health Conditions

### *HIV Treatment*

HIV remains the leading infectious cause of death for young and middle-aged adults worldwide, and 34 million persons are currently living with HIV. With the strong commitment of donors and the reduction in cost of providing antiretroviral therapy, HIV treatment programs have been able to reach millions of people in limited-resource settings. Understanding how these programs effectively deliver HIV/AIDS treatment provides insights into many aspects of global health care delivery including patient recruitment, managing co-occurring conditions (such as tuberculosis or pregnancy), retaining patients in treatment, ensuring adherence, and addressing socio-economic barriers to care. The following cases provide descriptions of programs that have taken different approaches to HIV treatment and allow students the opportunity to see different trade-offs each program has made:

♦  The Academic Model for the Prevention and Treatment of HIV/AIDS (AMPATH)

♦  Botswana's Program in Preventing Mother-to-Child HIV Transmission

♦ HIV Care Delivery in Uganda: The AIDS Support Organization (TASO)

♦ HIV Voluntary Counseling and Testing in Hinche, Haiti

♦ Iran's Triangular Clinic

♦ Partners in Health: HIV Care in Rwanda (available at main HBP website)

♦ Electronic Medical Records at ISS Clinic Mbarara, Uganda

♦ Partners In Health in Neno District, Malawi

## *HIV Prevention*

HIV prevention presents unique delivery challenges, such as demand creation, engaging marginalized populations, tailoring activities to local modes of transmission (PEPFAR's "know your epidemic"), and providing services at scale to maximize value. Such themes are highlighted in the following cases:

♦ Botswana's Program in Preventing Mother-to-Child HIV Transmission

♦ loveLife: Preventing HIV among South African Youth

♦ loveLife: Transitions After 2005

♦ HIV/AIDS in Brazil: Delivering Prevention in a Decentralized Health System

♦ HIV Prevention in Maharashtra, India

♦ The Avahan India AIDS Initiative: Managing Targeted HIV Prevention at Scale

♦ HIV/AIDS in Indonesia: Building a Coordinated National Response

♦ Voluntary Medical Male Circumcision in Nyanza Province, Kenya

♦ Political Leadership in South Africa: HIV

## *Tuberculosis Control*

Tuberculosis remains a leading infectious cause of adult deaths in many parts of the world, despite 40 years of effective, affordable treatment and 20 years of proven public health approaches to its control. Understanding how both national and local tuberculosis control programs function is critical and can inform public health approaches to other conditions. Students can gain an understanding through:

♦ BRAC's Tuberculosis Program: Pioneering DOT Treatment for TB in Rural Bangladesh

♦ Tuberculosis in Dhaka: BRAC's Urban TB Program

♦ The Peruvian National Tuberculosis Control Program

♦ Multi-Drug Resistant Tuberculosis Treatment in Peru

## *Malaria and Vector-Borne Disease Control*

Malaria is a readily-treated infection that is responsible for over 850,000 deaths yearly, the majority of these in children under five. It also is responsible for lost economic productivity in endemic areas. Current malaria control efforts involve treatment of infection with artemisinin-based combination therapy (ACT)

and vector control with long-lasting insecticide-treated bednets (LLIN's) among other measures. Issues in the development, production, and distribution of ACT's and LLIN's, their integration into a national control program, and the use of diagnostics as part of a national elimination strategy are examined in the following cases:

- The Anti-Malarial Supply Chain: Botanical Extracts Ltd.
- Building Local Capacity for Health Commodity Manufacturing: A to Z Textile Mills Ltd
- The Coartem Challenge (Available at main HBP website)
- Malaria Control in Zambia
- Roll-Out of Rapid Diagnostic Tests for Malaria in Swaziland
- Chagas Disease Vector Control in Honduras

## Maternal and Child Health

In 2015, an estimated 303,000 women died during pregnancy and childbirth, 99% of them in developing countries.[1] In the same year, an estimated 5.9 million infants and children under age five died, including more than 2.6 million newborns.[2] Most of these maternal and neonatal (newborn) deaths occurred during pregnancy and could have been prevented with access to skilled routine and emergency care.[3]

The field of **Reproductive**, **maternal, newborn, and child health (RMNCH)** encompasses the events that take place from pre-pregnancy through the first five years of a child's life. Many of the obstacles to improving RMNCH exist outside the health system, including changing individuals' risk perceptions and approaches to decision making, cultural practices, such as a preference for delivering at home and aversions to modern contraception modes or vaccinations, and legal barriers, such as restrictive laws surrounding access to safe abortion services. These issues and more are explored in the following cases:

- Botswana's Program in Preventing Mother-to-Child HIV Transmission
- Treating Malnutrition in Haiti with Ready-to-Use Therapeutic Food
- Reducing Child Malnutrition in Maharashtra, India
- Improving Maternal and Child Health Outcomes in Uttar Pradesh, India
- Working as an ASHA to Improve Maternal and Child Health in Uttar Pradesh, India
- Maternal and Child Health in Uttar Pradesh, India: A Mother's Story
- Polio Elimination in Uttar Pradesh
- Positive Outlier: Health Outcomes in Kerala, India Over Time
- Positive Outlier: Sri Lanka's Surprising Health Outcomes

## Vaccine Preventable Illnesses

The eradication of smallpox remains one of the greatest success stories in global health. Recent campaigns have made great progress toward the eradication of polio and the control of measles. Two GHD cases examine the delivery challenges and opportunities in mounting mass-vaccination campaigns, including one (polio) at the national and local level and one (measles) on the international level:

- ♦ Polio Elimination in Uttar Pradesh

- ♦ The Measles Initiative

- ♦ Chasing Polio Eradication: Vaccine Development


## Community-Based Delivery Solutions

In many global health settings, geographic, social, and economic barriers prevent people from accessing health care facilities. Community-based delivery platforms that utilize "community health workers" and other community resources are often able to effectively surmount these barriers and deliver high-value services to the populations they serve if they are well integrated into the overall health system. The following cases will allow students to appreciate how this strategy is implemented in various contexts and across various health programs:

- ♦ BRAC's Tuberculosis Program: Pioneering DOT Treatment for TB in Rural Bangladesh

- ♦ Tuberculosis in Dhaka: BRAC's Urban TB Program

- ♦ Multi-Drug Resistant Tuberculosis Treatment in Peru

- ♦ HIV Prevention in Maharashtra, India

- ♦ The Academic Model for the Prevention and Treatment of HIV/AIDS (AMPATH)

- ♦ HIV Care Delivery in Uganda: The AIDS Support Organization (TASO)

- ♦ HIV Voluntary Counseling and Testing in Hinche, Haiti

- ♦ Partners in Health: HIV Care in Rwanda (available at main HBP website)

- ♦ Partners In Health in Neno District, Malawi

- ♦ The Global Trachoma Mapping Project

- ♦ Improving Mental Health Services for Survivors of Sexual Violence in the DRC

- ♦ Working as an ASHA to Improve Maternal and Child Health in Uttar Pradesh, India

- ♦ Maternal and Child Health in Uttar Pradesh, India: A Mother's Story

- ♦ Improving Maternal and Child Health Outcomes in Uttar Pradesh, India


## Issues in Program Expansion and Scale-Up

Successful programs often are confronted with the need to reach more people or to deliver a more extensive array of services. The scale-up of effective interventions is a fundamental issue in global health. This theme is evident across most of the GHD cases, but is a central concern in the following:

- ♦ The Academic Model for the Prevention and Treatment of HIV/AIDS (AMPATH)

- ♦ HIV Care Delivery in Uganda: The AIDS Support Organization (TASO)

- ♦ Partners in Health: HIV Care in Rwanda (available at main HBP website)

- ♦ BRAC's Tuberculosis Program: Pioneering DOT Treatment for TB in Rural Bangladesh

♦ Tuberculosis in Dhaka: BRAC's Urban TB Program

♦ loveLife: Preventing HIV among South African Youth

♦ loveLife Transitions After 2005

♦ The Avahan India AIDS Initiative: Managing Targeted HIV Prevention at Scale

♦ HIV/AIDS in Indonesia: Building a Coordinated National Response

♦ Malaria Control in Zambia

♦ Voluntary Medical Male Circumcision in Nyanza Province, Kenya

♦ Reducing Child Malnutrition in Maharashtra, India

♦ The Tanzanian Training Center for International Health

♦ Chagas Disease Vector Control in Honduras

♦ Project ECHO: Expanding the Capacity of Primary Care Providers to Address Complex Conditions

♦ Improving Maternal and Child Health Outcomes in Uttar Pradesh, India

## Delivering Effective Global Health Technologies and Products

As more vaccines, medications, and other technologies are developed that address global health issues, improvements in the effective delivery of these products to the populations who need them most are essential. Issues related to the development, distribution, and funding of global health products are discussed in the following cases:

♦ The Anti-Malarial Supply Chain: Botanical Extracts Ltd.

♦ Building Local Capacity for Health Commodity Manufacturing: A to Z Textile Mills Ltd

♦ The Coartem Challenge (Available at main HBP website)

♦ Polio Elimination in Uttar Pradesh

♦ The Measles Initiative

♦ Treating Malnutrition in Haiti with Ready-to-Use Therapeutic Food

♦ Roll Out of Rapid Diagnostic Tests for Malaria in Swaziland

♦ Voluntary Medical Male Circumcision in Nyanza Province, Kenya

♦ Electronic Medical Records at ISS Clinic Mbarara, Uganda

♦ The Global Trachoma Mapping Project

♦ Project ECHO: Expanding the Capacity of Primary Care Providers to Address Complex Conditions

♦ Chagas Disease Vector Control in Honduras

♦ Chasing Polio Eradication: Vaccine Development

## Health Systems Strengthening

Programs with the greatest long-term impact are those that are able to strengthen the overall health system within which they work. Programs that rely on disease-targeted funding can often find innovative ways to use this funding to maximize their synergies with other sectors of the health system. All the cases in the GHD collection examine interactions with the health system to some degree, but it is a central concern in the following:

♦ The Academic Model for the Prevention and Treatment of HIV/AIDS (AMPATH)

♦ Building Local Capacity for Health Commodity Manufacturing: A to Z Textile Mills Ltd

♦ Botswana's Program in Preventing Mother-to-Child HIV Transmission

♦ The Measles Initiative

♦ BRAC's Tuberculosis Program: Pioneering DOT Treatment for TB in Rural Bangladesh

♦ HIV Voluntary Counseling and Testing in Hinche, Haiti

♦ Partners in Health: HIV Care in Rwanda (available at main HBP website)

♦ The Avahan India AIDS Initiative: Managing Targeted HIV Prevention at Scale

♦ HIV/AIDS in Indonesia: Building a Coordinated National Response

♦ Malaria Control in Zambia

♦ Roll Out of Rapid Diagnostic Tests for Malaria in Swaziland

♦ The Indus Hospital: Delivering Free Care in Pakistan

♦ Voluntary Medical Male Circumcision in Nyanza Province, Kenya

♦ Political Leadership in South Africa: National Health Insurance

♦ Positive Outlier: Health Outcomes in Kerala, India Over Time

♦ Positive Outlier: Sri Lanka's Surprising Health Outcomes

♦ "Sin Taxes" and Health Financing in the Philippines

♦ Sri Lanka's Surprising Health Outcomes: a Positive Exemplar (*in press*)

♦ The Challenge of Sustaining Positive Health Outcomes: The Experience of Kerala, India (*in press*)

## Global Health Policy

Policy, at the local, national, and international level, greatly influences the delivery of health services and technologies in resource-limited settings. Policy issues are salient in many of the GHD cases, but are particularly evident in the following cases:

♦ Tobacco Control in South Africa

♦ Building Local Capacity for Health Commodity Manufacturing: A to Z Textile Mills Ltd

♦ The Measles Initiative

♦ HIV in Thailand: The 100% Condom Program

♦ Treating Malnutrition in Haiti with Ready-to-Use Therapeutic Food

♦ HIV/AIDS in Brazil: Delivering Prevention in a Decentralized Health System

♦ HIV/AIDS in Indonesia: Building a Coordinated National Response

♦ Multi-Drug Resistant Tuberculosis Treatment in Peru

♦ Political Leadership in South Africa: HIV

♦ Positive Outlier: Health Outcomes in Kerala, India Over Time

♦ Positive Outlier: Sri Lanka's Surprising Health Outcomes

♦ "Sin Taxes" and Health Financing in the Philippines

♦ Reducing Child Malnutrition in Maharashtra, India

♦ The Global Trachoma Mapping Project

♦ Improving Mental Health Services for Survivors of Sexual Violence in the DRC

♦  Sri Lanka's Surprising Health Outcomes: a Positive Exemplar (*in press*)

♦ The Challenge of Sustaining Positive Health Outcomes: The Experience of Kerala, India *(in press)*

♦ Chasing Polio Eradication: Vaccine Development


## Hospital Design

Hospital design, management and infrastructure greatly influence the delivery of health services in resource-limited settings. Many GHD cases examine care delivery and health systems infrastructure, but these issues are a central theme in the following cases:

♦ The Indus Hospital: Delivering Free Care in Pakistan

♦ Partners In Health in Neno District, Malawi

♦ Surgery at AIC Kijabe Hospital in Rural Kenya


## Global Surgery

Over 5 billion people lack access to safe, affordable surgical and anesthetic care when medically necessary. Given the growing burden of non-communicable diseases and injuries in the developing world, integration of surgery and anesthetic care in global health programming and health system strengthening is crucial. Issues such as strengthening surgical capacity, increasing access to surgical and anesthetic services, and investing in surgery as a poverty alleviation tool are explored in the following cases:

♦ The Indus Hospital: Delivering Free Care in Pakistan

♦ Voluntary Medical Male Circumcision in Nyanza Province, Kenya

♦ Surgery at AIC Kijabe Hospital in Rural Kenya

## Appendix D          *Additional Resources on Teaching with the Case Method*[‡]

**The Case Centre. (2012). An introduction to the case method.** *The Case Method.*
http://www.thecasecentre.org/educators/casemethod/introduction/whatis
Provides an overview to case studies, how to teach using the case method, and writing case studies. It notes what skills students can learn via discussion and analysis spawned by case-based teaching. The Case Centre also explains teaching notes' value for class planning.

**Harvard Business School's Christiansen Center. (2011). Case Method in Practice.**
http://www.hbs.edu/teaching/case-method-in-practice/
Harvard Business School's *Christensen Center for Teaching and Learning's website* describes the elements of the case method and offers an example of a course, along with other tools, that help educators prepare to teach and lead case-based discussions. The site explores the classroom and real-world benefits that emerge from use of the case method and the reasons as to why this is the most effective mode of teaching.

**Barnes, L., Christensen, C., and Hansen, A. (1994).** *Teaching and the case method: text, cases, and readings.* **United States of America: Harvard Business School Press.**
This book teaches educators how to apply the case method for their given audience; the book addresses a range of questions and complexities faced by those teaching and those learning with cases. It also presents a new angle for application of the method in the liberal arts setting and explores the dynamics and mutually-beneficial aspects of the student-teacher relationship.

**Center for Teaching and Learning. (1994). Teaching with Case Studies.** *Stanford University Newsletter on Teaching: Speaking of Teaching*, **5: 2.** http://www.stanford.edu/dept/CTL/cgi-bin/docs/newsletter/case_studies.pdf
Stanford University's article in the quarterly *Newsletter on Teaching* defines a case study, reviews the goals of the teaching method, and explains how to write or find, prepare, and teach and reflect on a case. It offers tips for instructors on how to facilitate interactive discussion by addressing the challenges associated with case-based teaching.

**Foran, J. The Case Method and the Interactive Classroom. In** *The NEA Higher Education Journal*, **41-50.**
http://www.nea.org/assets/img/PubThoughtAndAction/TAA_01Sum_05.pdf
This article explains the rationale for using case studies through a professor's first-hand account of his practice and the value he and his students have gained from engaging in the method.

**The University of Tennessee at Chattanooga. (1998). Why Use Cases?** http://www.utc.edu/walker-center-teaching-learning/teaching-resources/cases.php
The University of Tennessee's Grayson H. Walker Teaching Resource Center explores the benefits of classroom-based teaching by defining what the case-based method entails and the process for identifying and using a good case (and associated materials). It also offers an activity for educators to try, along with references for using cases in the classroom.

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[‡] Julie Rosenberg and Amy Scheffler prepared this Appendix.

## End Notes

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2   Kim JY, Farmer PE, Porter ME. Redefining Global Health. *Lancet*. May 20, 2013.

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10  See Porter and Teisberg pages 203–216 and 397–411.

11  Chaudhury N, Hammer J, Kremer M, Muralidharan K, Rogers F. Missing in Action: Teacher and Health Worker Absence in Developing Countries. Journal of Economic Perspectives(2006) 20(1): 91–116.

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14  Christensen Center for Teaching and Learning at Harvard Business School. Case method in practice: core principles. http://www.hbs.edu/teaching/case-method-in-practice/core-principles.html. Accessed June 23, 2015.