Managing Global Health: Applying Behavioral Economics to Create Impact

Course Overview

This course is designed for students who seek entrepreneurial or management roles in global development, particularly in global health. Managing Global Health (MGH) trains and enables prospective managers and entrepreneurs to approach global health strategy with awareness of the end-user. Health is co-produced between the customer (the patient) and the provider (the supplier), interacting together within the global health system. The ultimate goal of this course is to improve health practices through an intimate understanding of the perspectives of these three factors in production. Each module of the course is designed to examine in depth how to approach each facet of this co-production to achieve the most impact. Within the modules, students will learn tools that can be leveraged to change health practices. The three modules address the following questions:

1. How do we understand the needs of the customer (patient)? How do we design and deliver products to meet those needs?
2. How do we motivate the providers and ensure they are providing the best care possible?
3. How can the larger health system, including private sector actors, enable the production of health? How do we change practices on a system-level?

Through exposure to major practitioner challenges, protagonists from the field, expert guest faculty from across Harvard, and engagement with cutting edge research in public health and economics, students will learn to bridge the worlds of research and action to creatively and skillfully make an impact in global health.

Content and Organization

MGH begins with an overview of the major managerial challenges in global health. The themes of the course are introduced through a caselet examining the puzzling under-utilization of Oral Rehydration Salts (ORS) to treat diarrhea. ORS was considered one of the major technological breakthroughs of the last century for its ability to effectively and cheaply treat diarrhea – yet, millions of children each year die from diarrhea despite the existence of this technology. The ORS caselet thus motivates and highlights some of the major challenges in global health: how can uptake and compliance be increased? What are the various barriers to improved health behavior for both individuals and health providers? What are the various levers that can be accessed to change practices?
A major component of the course is to engage across disciplines and with research to create evidence-based change. Thus, every module includes a class on how to design and implement rigorous impact evaluation. Evaluation is thus seen not as the separate purview of researchers or M&E experts, but rather a vital part of designing programs and strategy for maximum impact: integrated evaluation generates a feedback loop to know what’s working and why.

There will be a heavy emphasis on applications in global health. However, the concepts will be applicable to other service and product delivery in both emerging markets and in domestic health practices. Materials and cases are largely, but not exclusively, focused on public health.

The course consists of the following three Modules, each asking pressing questions in the field and drawing on cutting edge research to help us answer them. The choice of modules is informed by taking a critical business perspective to a domain that has traditionally been hesitant to adopt the strategies of business. The three modules are:

1. Understanding the Consumer
2. Motivating the Provider
3. Influencing the System

**Module 1: Understanding the customer**

The module begins by placing the customer – not the donor – at the center of public health services. At one level, this means thinking of the patient as a customer, who consumes health within a broader framework of tradeoffs. We ask how services and products look differently when designed from a private sector approach, with the customer at its core. We begin understanding the feedback loop that runs through the course:
Customer orientation allows you to see past blinders of “one approach fits all”: to know who your decision makers are, what they looking for, and from whom they seek advice. This type of orientation provides insight into how to promote positive behavior changes among patients, which is the focus of this Module.

Many of the remaining barriers to improving health outcomes lie within the patient. For example, condoms can prevent the transmission of HIV/AIDS and other STIs, but are not routinely used. How do we encourage individuals to adopt such health products that essentially guarantee a positive health outcome, are cheap, and are easy to use? Similarly, adding simple water purification solution daily to dirty water makes it potable and can prevent diarrhea. Why don’t we see regular use of this effective technology to prevent water-borne illness? In these situations, simple actions could prevent unnecessary disease and death, but individuals choose not to do them. We examine innovative product design mechanisms to increase positive health behavior, using different levers to overcome barriers to behavior change. Levers examined include social marketing, commitment devices, and other insights from behavioral economics.

These same levers can be applied to areas of expressed customer demand, but low adoption. How can we design products and services to help customers to do what they say they want to do? (i.e. quit smoking, save more, etc.).

Finally, we explore evaluation and feedback as essential to good design, promotion, and delivery of health products; evaluation and feedback are not a last-step, but a requirement for step-changes in scale and impact. Our management cycle begins with listening to customers, seeking feedback at each stage, and begins again with rigorous evaluation once delivery is established.

The customer-centric model of thinking extends beyond patients: Providers are also users of the broader health system. Applying the same listen, design, deliver, and evaluate cycle to providers and administrators allows the creation of a health system that sustainably meets the needs of its end-users by ensuring that incentives at every step are aligned with customer needs. The next module addresses aligning these incentives for the providers specifically.

**Module 2: Motivating the Provider**

Health is an outcome that relies as much on the consumer to use as on the supplier to deliver. Some portion of baseline health may be randomly distributed, but the rest is a product of patient and provider inputs. The patient’s own decisions, the interaction with the provider, and the provider’s care produce health outcomes.

In this module we shift our attention from the customer to the provider to understand how to enable providers to deliver the best health care possible. In particular, we examine how
providers can be encouraged to adopt key technologies, such as rapid diagnostic tests for malaria or quality control measures, and how providers can leverage innovative health product delivery mechanisms to improve distribution of important health products. Providers are customers themselves, who face tradeoffs in deciding how to deliver care. Things like acquiring information to make clinical decisions, following up with patients, and adopting new technologies are costly to the provider—and may be de-prioritized in the absence of optimal incentives. Many of the lessons learned in the module on understanding customer behavior will be relevant for understanding how to best motivate the provider.

We will examine various schemes to incentivize agents, with a significant focus on community health workers who are often the first line of delivery in global health. Creating an aligned incentive system for agents continues to challenge even the best health care providers. And global health institutions (foundations, NGOs, suppliers, and governments) often have greatly misaligned interests. One of the most challenging decisions to be made in the delivery of care is whether and how much to charge for vitally needed health products and services; the module closes with an examination of pricing decisions.

**Module 3: Influencing the health system**

Traditionally, the health system has been identified as the main constraint to improving health. This course shifts that focus to patient and provider barriers. However, we also acknowledge that the health system is critical to determining an individual’s decisions and health outcomes. Thus, we explore the role of various actors within the global health system and how the system can provide an environment in which individuals can pursue positive health outcomes.

Influencing the system requires thinking creatively about organizational change. A particular emphasis is made on examining the potential for public-private partnerships and the role for private sector contribution to public goods. We’ll look at the specific obstacles to using private sector methods in public health. We’ll ask what determines whether public sector, non-governmental, or private sector organizations can successfully adapt a markets-based, incentives-based approach for the delivery of global health. An emphasis will be placed on how to incorporate rigorous impact evaluation findings into the policies and agendas of actors at all levels.

**Grading**

Grades will be based 40% on class participation, 10% on timely completion of assignments, and 50% on the paper or project (see Addendum B). Unexcused absences will weigh heavily on your participation grade, but I recognize life does happen. Please alert me before class if you will be absent using the HBS intranet class absence notification system.
Class participation is judged based on the quality, timing, and insight of comments and questions to guests and to your fellow students. The quantity of comments is only a factor insofar as I require a minimum number of your comments to be in a position to judge the quality of your contribution. As a general rule, you should be contributing slightly more often than once every three classes.

I recognize the number of guests and guest professors may give our class a different rhythm than is usual at HBS. If at any point during the course you feel unable to get into the discussion, please do not hesitate to email me before the following class.

Cross-registrants who are not familiar with the HBS case discussion method must commit to a training session on the HBS case study method and participation. They are also strongly encouraged to meet with me and avail themselves of HBS resources on how to participate strongly in a case discussion.

**Assignments**

In addition to the paper, there will be a few small assignments including carrying out a focus group discussion (see Addendum A), signing up for Stickk.com, and filling out 2-3 very short polls. You will not be graded on these and will get full credit if you complete them on time. Details on these additional assignments will be posted on the Course Platform.

**Syllabus: Managing Global Health**

**Module I: Understanding the Customer**

**Tuesday, January 29**

**Session 1: Oral Rehydration Therapy and Promoting Global Health**

**Readings:**

Thursday, January 31

Session 2: PSI: The Social Marketing Project in Bangladesh

Readings:

Wednesday, February 6

Session 3: Boston Fights Drugs

Readings:
- Focus Group Research – Primer

Thursday, February 7

Session 4: Evaluating Microsavings Programs: Green Bank of the Philippines

Readings:
Friday, February 8

Session 5: Stickk.com and Behavioral Economics

http://www.stickk.com/

Readings:

Module II: Motivating the Provider

Wednesday, February 13

Session 6: PSI: Social Marketing Clean Water

Guest Speaker: Sally Cowal, Senior Vice President and Chief Liaison Officer, Population Services International

Readings:

Thursday, February 14

Session 7: Pricing

Readings:
- (optional)“Should Clean Water Have a Price?” (Forbes.com article)
Thursday, February 21

Session 8: 100,000 Lives

Readings:

Friday, February 22

Session 9: Adoption of Innovation and Rapid Diagnostic Tests for Malaria

Readings:

Wednesday, February 27

Session 10: Partners in Health

Guest Speakers: Partners in Health

Readings:
Thursday, February 28

Session 11: Paul Farmer

Guest Speaker: Dr. Paul Farmer, MD and Professor of Social Medicine in the Department of Global Health and Social Medicine at Harvard Medical School, and a founding director of Partners in Health

Readings:

- "Introduction: The Right to Claim Rights" by Haun Saussy, from Partner to the Poor: The Paul Farmer Reader by Paul Farmer, Haun Saussy.

Friday, March 1

Session 12: BRAC: TB in Bangladesh

Readings:

- May, Maria, Joseph Rhatigan, and Richard Cash. 2010. "BRAC’s Tuberculosis Program: Pioneering DOTS Treatment for TB in Rural Bangladesh."


- Ashraf, Nava. 2009. “Community Health Workers at the Bangladesh Rural Advancement Committee (BRAC)."

Thursday, March 7

Session 13: Community Health Worker Incentives in Zambia: Incentive Design and Management

Guest speaker: Dr. Victor Mukonka, Director of Public Policy and Research, Ministry of Health, Government of Zambia.

Readings:


Module III: Influencing the Health System

Wednesday, March 13

Session 14: De-Worm the World

Guest speaker: Affiliate from The Abdul Latif Jameel Poverty Action Lab (J-PAL)

Readings:

• Shotland, Marc. Cost-Benefit/Effectiveness/Comparison Analyses.

Thursday, March 14

Session 15: Paper / Methods Workshop

Meet in Paper Subgroups to exchange relevant literature and ideas. Technical workshop on randomization.

Friday, March 15

Session 16: Hard to Measure Indicators

Discussion of hard to measure indicators in research.

Meet in Paper Subgroups.

Spring Break: March 16-24
**Thursday, March 28**

Session 17: BCG and Roll Back Malaria

*Guest Speaker: Wendy Woods, Partner & Managing Director, BCG*

**Readings:**


**Friday, March 29**

Session 18: The Coartem Challenge

**Readings:**


**Wednesday, April 3**

Session 19: Negotiation Workshop

**Friday, April 19**

Session 20: Last Class: Wrap-up and Course Review
**Addendum A: Focus Group Guidelines**

Running your own focus group will help you learn how to ask probing questions that will generate insight into behavior change. You should choose a topic that is a puzzle to you in terms of health behavior (based on your poll). You are welcome to work with each other—one of you could facilitate, one of you could transcribe, and one of you could code. (Coder should be external to the focus group, though you can all talk about it afterwards). After the coding process is done, you can debrief together and talk through findings. Of these different roles, you can assess which skills you most want to learn and can help each other to develop those skills, given that the class is composed of individuals with varying levels of expertise in qualitative/market research. This should similarly guide your choice of sample: if you’re at the point where you’re generally uncomfortable asking any probing questions, but it might be easier with familiar people—feel free to choose your friends or those who you know well first (although sometimes it can be easier with people you don’t know!). Think about what you’re comfortable with, and push that boundary out a bit to make the most of this exercise for building your qualitative research skills.

This is just an exercise to learn skills, because I’ll warn you: at a 1 focus group level, what you’ll find are much more like “impressions” than findings, and it can be really frustrating because it’s hard to see patterns with just one focus group. It usually takes me 3 focus groups at least until the patterns start to emerge and start to repeat themselves. However, this process can be accelerated when:

1) You test out the questions first through a couple in-depth interviews. The way you introduce and ask a question can be so critical to the kind of answer you get. Try different versions and see for yourself. Be particularly careful of asking leading questions, or giving any indication of the kind of answer you expect/would like to see. You’d be surprised how many subtle ways this arises. Iterate a couple of times with the questions through interviews (even if just with each other), and then run the focus group.

2) Clustering and then refining the focus group questions before the next focus group can also be very helpful. For the purposes of sample size when you’re doing a study, at some point, you have to settle on the exact questions and their order, and then repeat until you get a sufficient sample, but at the beginning you should be refining as you go.

There are entire graduate curricula devoted to qualitative research methods, with rigorous and technical training far beyond what we’re able to go through in one class. For many of you, though, these types of qualitative methods can simply help you to build intuition about what is going on in the environment you want to design programs for. My hope for you is to be able to experience some forms of deep listening to a group, and to face some challenges in refining
your own intuition about basic health behaviors. I encourage you to draw on the supplementary reading for great clues for question design.

**Addendum B: Paper Guidelines**

For the class paper, you will want to identify a practical problem that exists in the global health world (it can be outside of global health as well, subject to the following themes). The problem can be a problem of adoption, of compliance, of behavior change, of access, of effectiveness - but a specific, relatively narrow problem whose context you can delve very deeply into in the paper. The more you have access to learning about this problem through raw data that you can analyze, medical/field trials that have been done, sociology/anthropology work that has been done on it, field collaborators/individuals you know in the field who can give you more insight on it, the better. You want to clearly define the problem, summarize all the existing literature about it, and develop one or two strong hypotheses about why that problem exists, building on both the existing research and, as mentioned above, any additional data you can gather and analyze. Then, you should think about designing a program/intervention that is directly linked to your hypothesis about the underlying reason for the problem you’ve identified. Ideally, you should also include an evaluation plan for how to test whether the intervention worked and what hypotheses it proved/disproved.

It may happen that you choose a challenge among a population for which there is very little existing data (for example, trying to understand the high rate of HIV prevalence among a particularly marginalized group in India, and the lack of compliance with safe sex practices). There, the best output of the paper would actually be the design of a survey and focus group questions, to gather the data that’s needed to really refine hypotheses. Others of you may study a challenge on which there’s a growing body of research (for example, micro-health insurance) but few effective interventions to improve abysmal take-up rates- so there the best output would be a synthesis of existing work, leading hypotheses for why take-up is low, and one or two interventions designed to increase take-up and test the hypotheses. Many of you may study important delivery challenges, particularly with respect to the human resource crisis in the health sector—it is best in this case to delve into one aspect (for example, trying to determine optimal compensation in one part of the sector, or what drives patient demand for particular types of providers or informal practitioners, etc.).

**The Proposal**

The proposals are due on Wednesday, March 13th. Please send Professor Ashraf (cc Michelle Bavester, mbavester@hbs.edu) one page defining the problem you have chosen to study in as much detail as possible. You will want to include a basic outline of how you plan to tackle
learning about the problem (data and general research sources) and what you hope the output will be. A few paragraphs are sufficient- the important thing is to put something on paper so that it’s clear what you’ll be grappling with in the weeks ahead. If you’re totally off base, don’t worry, I’ll let you know. Once we get all the paper proposals in, we will actually link up people who are working on different aspects of similar problems, or in similar sub-fields, so that you can exchange ideas and literature. I recognize that there are times that a topic could use the help of someone from a field different from yours- an MD or an MBA etc- or is much too large to tackle on your own, and therefore you may have reason for wanting to partner up; that will be allowed and has different requirements, below. In any case, I will group you so that you can still learn from others who are working on similar areas and share insights, even if you are submitting your own paper.

**Paper Logistics**

A 200-word abstract AND your paper will be due to Professor Ashraf ([nashraf@hbs.edu](mailto:nashraf@hbs.edu)), cc Michelle Bavester ([mbavester@hbs.edu](mailto:mbavester@hbs.edu)), on Monday, April 15th. The abstracts will be posted on the Learning Hub so that you can learn about each other’s work and prepare to discuss it on the last day of class (April 19th). Individual papers should be 5-8 pages and group papers 8-15 pages. That’s with 12 point font, and 1.5 spacing -- I won’t hold it against you if you have either double or single spacing, but just remember that a part of how I am evaluating the papers is how succinctly and effectively you are able to make your argument and address the challenge you chose. Your bibliography and exhibits (e.g. survey instruments, focus groups or interview questions), can be additional to the paper limit and included as an appendix.

For a humorous take on getting your paper to the right length, see: [http://www.phdcomics.com/comics/archive.php?comicid=926](http://www.phdcomics.com/comics/archive.php?comicid=926)

Please do not try any of these at home.

**Grading Criteria**

1. Description of Problem / Motivation for Study (10 points)

2. Analysis of Issues Involved: How well you have learnt from the concepts in the course (10 points)

3. Innovative Solutions (10 points)

4. Methodology: Rigor, Causal inference, Survey/Focus group questions when applicable (10 points)

5. Overall Contribution (10 points)
The paper will be graded as a check minus, check, or check plus.

**Resources**

*Research Support at HBS:*

Reference Librarians at Baker Library are available to assist you in locating and using resources for your research. You can contact them for customized assistance by email: refquest@hbs.edu, by phone at 617-495-6040 or just by walking in and asking for assistance [See hours at the Baker website - http://www.library.hbs.edu/info/hours.html]. The Librarians at Baker are an excellent resource, underutilized by students, and you should not hesitate to take advantage of their expertise, which is available to all MGH students (MBA candidates and cross-registrants).

*Resources via Baker Library Services:*

**World Development Indicators**

Statistics from the World Bank for almost 600 development indicators, dating as far back as 1960

[http://www.library.hbs.edu/go/wdi.html](http://www.library.hbs.edu/go/wdi.html)

**CountryData.com**

Political risk data from the PRS Group is drawn from two risk methodologies: Political Risk Services and the International Country Risk Guide

[http://www.library.hbs.edu/go/countrydata.html](http://www.library.hbs.edu/go/countrydata.html)

**ISI Emerging Market**

Current country and company information from more than 500 sources for emerging markets in Africa, Asia, Australia, Europe, and the Middle East

[http://www.library.hbs.edu/go/ISI.html](http://www.library.hbs.edu/go/ISI.html)

**EIU Data Service: Country Data**

Economic indicators and forecasts on economic structure, foreign payments, external debt stock, external debt service, external trade, trends in foreign trade, and quarterly indicators

[http://www.library.hbs.edu/go/EIUcountrydata.html](http://www.library.hbs.edu/go/EIUcountrydata.html)

**EIU Data Service: City Data**

Contains pricing information on more than 160 products and services in 140 cities worldwide

[http://www.library.hbs.edu/go/eiucitydata.html](http://www.library.hbs.edu/go/eiucitydata.html)
Factiva.com
News and information on industries, companies, and business and management topics
http://www.library.hbs.edu/go/factiva.html

Resources at HU:

Data sets by HU Department of Economics
http://www.economics.harvard.edu/faculty/kremer/data_sets_kremer

HBS Working Knowledge latest HBS faculty research
http://hbswk.hbs.edu/industries/healthcare.html

Health Care HBS health care initiative site
http://www.hbs.edu/healthcare/

Resources via Internet:

WHO medicines price information
Drug price indicator guide
http://www.who.int/medicines/areas/access/ecofin/en/

WHO Countries
Country profiles & health systems including physicians statistics
http://www.who.int/countries/en/

WHO Health Reports
http://www.who.int/whr/en/

United Nations Statistics Division
Try UN statistical databases
http://unstats.un.org/unsd/default.htm

International Statistical Agency
List of agencies by U.S. Census Bureau
http://www.census.gov/aboutus/stat_int.html

International Health Economics Association
Provides list of affiliates
http://www.healtheconomics.org/

Global Health Delivery Online Discussion Boards

http://www.ghdonline.org/

*Important Note:*

The above sources are commonly used for projects at HBS. However they may not target to your very specific information needs. Please contact Poping Lin, plin@hbs.edu for topic specific information research assistance.