

Creating Value in Health

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COURSE DESCRIPTION AND OBJECTIVES

Health care is a huge sector (10% of the global economy) which is facing many challenges and changes: rising costs, an increase in the importance of chronic diseases, demographic shifts which change both the supply and demand of care services, many innovations in clinical, information technology, and more. These challenges and changes offer numerous opportunities within the sector itself, as well as for entrepreneurs and consultants. Still, it is difficult to have a real impact without understanding the special nature of health care delivery.

Creating Value in Health is a new course which explores the complex context of health care delivery, and critical challenges with implications for the whole health care value chain (providers, pharma, medtech, entrepreneurs, payers, policy, ...) about how to improve value: health outcomes that matter to patients in a financially sustainable way.

Focus will be on how the care delivery system works, how efforts are being made to improve it, and how it might be changed for the better. We will be taking a business model innovation and process improvement perspective which will give key insights for those wishing to enter or go deeper into this sector, either via the entrepreneurial route or via more traditional organizations. We will explore how management and medicine interact in the trenches in implementing real sustainable change.

Creating Value in Health and the *Health Care Markets and Policy* courses are an excellent combination for understanding and working in the health system.

Upon completion of the course, participants will

- gain a better understanding of the complexities, tensions, and sometimes misaligned incentives associated with both treatment and health creation,
- understand current trends in focusing on value and accountability in health care delivery,
- see examples of turning around complex service organizations such as hospitals,
- understand new trends and opportunities to innovate in both public and private sector health care organizations, including in the digital space

These are core competencies for anybody who will go into health care, be it in pharmaceutical, medtech, biotech, health investment, insurance, entrepreneurial startups or consulting with a health focus; be it for incumbents or innovators. The course is also appropriate for individuals who wish to gain an understanding of how an important complex service system can be managed, improved, and innovated – there is not more complex system than health delivery.

The first part of the course takes a perspective of health care consulting and hospital system management. The second part of the course takes a perspective of an entrepreneur or innovator in health care and explores business model innovation and the role of technology in health. The third part of the course explores global health and opportunities in developing and emerging markets. The course will be case-based.

RESPONSE PAPERS

In addition to preparing for each class, a response paper is to be submitted the evening before the session for two of the sessions. You can choose the two sessions. The purpose of the response papers is to a) help you prepare for the issues that will be discussed in class, b) get you to start integrating across the readings, and c) inform me about what you are thinking about the readings before class.

A basic response paper will summarize the concepts from the readings in an organized way. A higher quality response paper will also interpret the readings and integrate concepts across the sessions. Please consider the questions listed for each session below when responding. You may also give personal perspectives and observations, and consider how the concepts may apply differently in different countries.

Responses should be no more than 2 pages double spaced. Please submit your response paper the day before the session by email to Professor Chick's Faculty Assistant with stephen.chick@insead.edu on cc.

FINAL PROJECT (TEAMS OF 4-5)

Pick a topic in health care which has a link to delivery either directly or indirectly. This can be within the healthcare delivery system itself, how consultants are working with healthcare delivery, trends of growing or changing needs in healthcare, the supplier interface by medtech or pharma or other, trends in medical science (e.g. genomics, diagnostics, etc.) or reimbursement for care, and potential benefits for patients. Regional focus or disease focus or service type, technology type focus, or other sensible relevant focus is appropriate.

Write a 6-10 page single spaced report (not counting appendices) which summarizes key issues, makes comparisons, and otherwise sheds insight into the core problems for the chosen topic. This can be an analysis of existing system, an analysis of a health startup, or If you are at a loss for potential topics to explore, please take a peek at a suggested set of references for further exploration at the end of this document and/or speak with me.

You are to also prepare a short presentation of your main findings for the final session 8.

CLASS PARTICIPATION

Class participation is also a component of the course. Class participation comes in the form of constructive contributions to the content and flow of the session.

AUDITORS

The course is open to auditors if permission is obtained.

GRADING SCHEME

Class participation	20%
2 pre-session response papers	15% each (1-2 pages each, as described above)
Final project	50% (electronic submission)

COURSE OUTLINE AND READINGS

The course will be presented in three main parts.

PART I: How Do the Existing Delivery Systems Work and How Are They Being Improved?

Sessions 1: The Health Landscape and Introduction to Care Improvement

Case: Karolinska Sjukhuset (A) (Tabet, Téoul, INSEAD Case 05/2013-4474).

Background: This session recalls trends which are stressing healthcare systems and causing public concern. We set the stage for where improvement and innovation might have a big impact, and identify some of the major stakeholders.

This session also begins a sequence of sessions with particular focus on how consulting organizations have engaged with hospitals through time, with the goal of understanding how these initiatives have been applied, where they have succeeded, and where there is more to be done. In this session, we explore one of the initial implementations of quality management and process improvement initiatives in a major European Hospital. The stresses on cost, quality, speed, and access which motivated their transformation continue even more today.

Questions: What forces were pushing Karolinska to embark on their transformation?

What is quality in health care delivery, as compared to other sectors?

How do you evaluate Karolinska's use of time based management and quality management in transforming care?

Why are health systems still worried about the issues of quality and cost even today?

Optional: Crossing the Quality Chasm: A New Health System for the 21st Century, was an influential publication of the Institute of Medicine in 2001. Its lessons have been influential but one might argue the goals have not yet been achieved. An overview is at <https://www.nationalacademies.org/hmd/~media/Files/Report%20Files/2001/Crossing-the-Quality-Chasm/Quality%20Chasm%202001%20%20report%20brief.pdf>.

Session 2: Is Health Care Creating Value?

Case: Reorganizing Health Care Delivery through a Value-Based Approach (Aggarwal, Chick, INSEAD Case 11/2015-6120).

Background: While patient safety, quality, and lean patient pathway movements still abound, there is increasing focus on so-called value based medicine and on novel risk sharing agreements. Simply put, value based medicine focuses on health value produced per money spent, but the reality of valuing health and measuring outcomes is not simple for a variety of reasons. Some of those reasons are related to: the definition of value in health care, the measurement of that value, and with coordination across organizational boundaries in a system where several service providers interact in building effective health outcomes.

This session explores the notion of value in health care, ways of measuring and valuing care, and some of the challenges of implementing value based care in practice. We use some of the value based care initiatives in the UK NHS. Along the way we speak of how health is valued, different choices for selecting which care services are provided where, and contracting in care services. The UK NHS example demonstrates the complexity of care as we shift from the previous sessions, which were hospital focused, to this session, which is system-focused (e.g. including primary care, hospital care, social services, etc.). These challenges are faced in the reform of several other care delivery systems, including in the Accountable Care Organization concept of the USA.

Questions: What are the main reasons behind adopting the value-based approach?

Suppose you were asked to develop a value-based approach for a nose reconstruction procedure. What do you think should be considered as part of the patient pathway, and what outcomes and costs would you measure?

What are the strengths and weaknesses of the value-based care implementation described in the case when considered as a change management project?

Optional: Risk sharing can drive healthcare innovation, H Doss, 2014, Forbes, <http://www.forbes.com/sites/henrydoss/2014/01/22/health-care-innovation-its-all-about-the-business-model/>

What is value in health care? 2010, Porter, *New England Journal of Medicine*,

363(26):2477-2481, www.nejm.org/doi/full/10.1056/NEJMp1011024.

Lessons for the NHS from Kaiser Permanente, 2003, *BMJ*, 327 (7426):1241-2, www.ncbi.nlm.nih.gov/pmc/articles/PMC286235/.

UK NHS staff: stressed, exhausted, burnt out, 2015. Wilkinson, *Lancet*, 385 (9971): 841–2. www.sciencedirect.com/science/article/pii/S0140673615604706

PART II: Disruptions to the Care Model Enabled by Digital Technology

Session 3: Entrepreneurship and Business Model Innovation in Primary Care

Case: Laastari: Building a Retail Health Clinic Chain (Aggarwal, Chick, INSEAD Case 04/2014-5941).

Background: This is the first session in the second main portion of the course on the topic of innovative models to health care and to wellness. Laastari is a focused chain of acute primary care clinics that combines the retail clinic and the telemedicine concepts in Finland and Sweden. We use this to discuss the process of business model innovation in health care delivery, and discuss some important implications for both providers and patients. We will use the business model canvas tool to describe the evolution of the model, and will discuss implications of information technology on care delivery, and the role of the patient-provider interaction in care. See also www.laastari.fi/en, and an analog <http://www.cvshealth.com/our-businesses/minuteclinic> in the USA.

Questions: Watch the 2-3 minute video about the business model canvas tool at <http://www.businessmodelgeneration.com/canvas/bmc>. What is the business model canvas of Laastari for Finland? Reflecting on the 9 dimensions of the canvas, in what ways does Laastari's differ from the 'usual' primary care model in the public sector?

Design a market entry plan for Laastari for a country you are familiar with (assume that a response of "It won't work here" is not acceptable: if an adaptation involving integration into local context is required, explain why and how).

Optional: Retail Clinics, Primary Care Physicians, and Emergency Departments: A Comparison Of Patients' Visits, 2008, Mehrotra, Wang, Lave, Adams, and McGlynn, *Health Affairs*, 27(5): 1272-1282, <http://content.healthaffairs.org/content/27/5/1272.full.pdf+html> .

Session 4: Mobile Health and Patient Engagement

Case: Mobile Health in Diabetes: mySugr's Monster Approach (Rose, Chick, INSEAD Case 04/2016-6204)

Background: mySugr is a mobile health startup which is being adopted rapidly and which allows us to explore several interlinked trends. One trend is the proliferation of health related applications, and an understanding of factors which seem to be related to success in the digital health space. Another trend is the role of patients in managing their own health, an issue of increasing importance as chronic diseases touch the lives of a growing number of individuals and consume an increasing part of the health budget. A third related concept is that of asset based approaches for health, a concept which seems to be linked to the success of a number of health apps.

Questions: What strikes you as particularly relevant to the success and growth of mySugr's apps? What lessons do you learn for patient-focused innovation in health care and disease management?

If you were asked to design the next great mobile health app, what would it be? What key features would you include and why? What would be the driving philosophy of your design and interface?

Optional: See also <https://mysugr.com/>.

Uber's Message for Health Care, Detsky and Garber, New England Journal of Medicine, March 3, 2016, 374(9): 806—809.

Trailblazer WellDoc To Sell First Mobile Prescription Therapy (Forbes, June 2013), Zina Moukheiber, <http://www.forbes.com/sites/zinamoukheiber/2013/06/14/trailblazer-welldoc-to-sell-first-mobile-prescription-therapy/#be017e36b694>, accessed Mar 15, 2016.

Is Medtronic's MiniMed 640G an Artificial Pancreas?, Insulin Nation, Craig Idlebrook, Jan 22, 2015, <http://insulinnation.com/treatment/artificial-pancreas/is-medtronics-minimed-640g-an-artificial-pancreas/>, accessed Mar 15, 2016.

Citizen Hackers Tinker with Medical Devices – Diabetes patients, Family Members try to Make Glucose Monitors More Useful, Kate Linebaugh, Wall Street Journal, September 2014, <http://www.wsj.com/articles/citizen-hackers-concoct-upgrades-for-medical-devices-1411762843>, accessed 15 Mar 2016.

Asset based approaches for health improvement: redressing the balance. 2011, Glasgow Centre for Population Health, http://www.gcph.co.uk/assets/0000/2627/GCPH_Briefing_Paper_CS9web.pdf

Session 5: Health Analytics and the Development of Evidence of Value

Case: PatientsLikeMe: Patient-generated Health Data and Evidence-based Decision

Making (Aggarwal, Chick, Simon, INSEAD HMI Case 09/2016-6248-U).

“Health Care and Social Networks: Creating an Online Patient Community”, 2012, interview of Jaime Heywood, former CEO of PatientsLikeMe, (<http://knowledge.insead.edu/responsibility/health-care-and-social-networks-creating-an-online-patient-community-2341>).

“How Real World Evidence Will Create Better Trials”, 2015, Jeremy Gilbert, <http://www.clinicalleader.com/doc/how-real-world-evidence-will-create-better-trials-0001>.

Background: PatientsLikeMe is arguably the leading patient network, where patients with similar conditions can share experiences. PatientsLikeMe facilitates sharing of health data in the ‘real world’ to support researchers, pharmaceutical companies, regulators, providers and nonprofits.

Questions: What value does a model like PatientsLikeMe give to patients? Can you see other ways to generate value with such data sharing communities?

What are the strengths of PatientsLikeMe in terms of generating real world evidence for measuring the effects of health interventions? What are the potential weaknesses that this approach can bring?

Optional: See also <https://www.patientslikeme.com/>.

Why Most Published Research Findings Are False, 2005, JPA Ioannidis, *PLOS Medicine*, 2(8,e124): 696-701, <http://dx.doi.org/10.1371/journal.pmed.0020124>.

PART III: Global Health and Opportunities in Developing and Emerging Markets

Session 6: Globalization of Health Care Delivery

Case: Double Vision: Making Eye Care Accessible through Cross-Subsidization (Aggarwal, Chick, INSEAD Case 04/2015-6124).

Background: This session explores several concepts related to the globalization of health care, and opportunities in developing and emerging markets. The context of the case is the growth of a philanthropically subsidized chain of focused clinics in India. Sankara can be viewed as a private sector (NGO) solution to a public sector problem in an emerging market context. A vast majority of the Indian population has specific needs that remain unaddressed creating a void with significant opportunity for NGOs. Sankara specializes in eye care, is in a growth spurt to go from 13 to 20 hospitals, and is facing challenges as it shifts at the same time from a largely human mission to also bring in business concepts of

efficiency and scale up. It also allows for the discussion of trends in developing care systems around the world by both for-profits and philanthropic organizations.

Questions: Develop a business model canvas for Sankara given its current state. What does this suggest moving forward with Sankara's growth plan, as you consider both the internal activities (how it delivers and with who) and its customer base (who it delivers for)?

The globalization of health care raises ethical issues regarding medical tourism, organ trafficking, private health centers in underserved countries, brain drain of clinicians, and others. What major ethical issues of care do you see?

What opportunities are there for health innovation in emerging markets?

Optional: Delivering World-Class Health Care, Affordably, 2013, Govindarajan and Ramamurti, *Harvard Business Review* 91(11):117-122.

Session 7: Global Public Health and Opportunities in Developing Markets

Case: Disrupting Dengue with an Emerging Markets Launch Strategy (Aggarwal, Chick, INSEAD HMI Case 05/2016-6212-Ed).

Background: This session focuses on how for-profit organizations are developing business models in developing and emerging markets. Topics of particular relevance are (a) global public health, especially as it relates to infectious diseases, (b) challenges of for-profit firms in entering developing and emerging countries with a 'flipped model' (that is, focusing on developing and emerging countries for main project profitability rather than focusing on highly developed countries), and (c) the context of vaccines and the landscape for public and private partnerships in this important space. The context of the discussion will be Sanofi's 20-year commitment and US\$1.7 billion investment to research, develop, produce, and delivery dengue fever vaccine in a context of very high risk (uncertainty about medical efficacy, uncertainty about market adoption, uncertainty about other firms and technologies, and other uncertainties).

Questions: How is the process of developing a health product (such as for devices or vaccines or pharmaceuticals) for developing and emerging countries different from that of doing so for developed countries?

In what ways are infectious diseases different from non-communicable diseases or health conditions? What does that imply for the planning of health products/services for infectious diseases as compared to other conditions?

What are the big opportunities in emerging markets you see which might be addressed which western multinational firms are not yet addressing?

Optional: Dengue info (by Sanofi Pasteur): <http://www.dengue.info/>

Information on smallpox eradication

(<http://www.pbs.org/wgbh/aso/databank/entries/dm79sp.html>), polio eradication initiative (<http://www.polioeradication.org/>) and river blindness elimination initiative (<http://www.cartercenter.org/news/pr/river-blindness-070913.html>).

Session 8: Group Project Presentations

Please email your group's report (DOC or PDF) and presentation (PPT or PDF) by noon the day preceding the session, as described above in the section about the final group project. Please also bring a memory stick with your report and presentation to class as a backup.

READING MATERIALS FOR FURTHER REFERENCE:

- Background on the history of American health system and insurance can be found in the following audio broadcasts: http://thisamericanlife.org/Radio_Episode.aspx?episode=392 and http://thisamericanlife.org/Radio_Episode.aspx?episode=391 and <http://www.npr.org/blogs/money/2013/02/26/172996963/episode-439-the-mysterious-power-of-a-hospital-bill>.
- *Ben Goldacre*: See his TED talks "Battling bad science" and "What doctor's don't know about the drugs they prescribe" and his other works, on the topics of bias in evidence and implications for the choice of care which is made available.
- *The Francis Report* assesses "appalling and unnecessary suffering of hundreds of people" who "were failed by a system which ignored the warning signs and put corporate self-interest and cost control ahead of patients and their safety" (quotes from Chairman's statement, <http://www.midstaffspublicinquiry.com/report>, on a public inquiry into Mid Staffordshire NHS foundation trust).
- *Explore the open data movement*. See TED talks Wilbanks' "Let's pool our medical data" or the work of Tim Berners-Lee on the topic of open data, to get started.
- *The Healing of America*, T.R. Reid, 2010, Penguin books. Explore 2010 health care reform bill in US and comparison of care systems in France, Germany, Japan, UK, Canada and India.
- *Designing Care*, Richard M.J. Bohmer, 2009, Harvard Business Press. Explores problems aligning the nature of healthcare and its management and execution.
- *Better*, Atul Gawande, 2007, Henry Holt and Company, exploration of the cutting edge in care process improvement and the learning health care organization.

- *How Doctors Think*, Jerome E. Groopman, 2008, Houghton Mifflin Company, A discussion of the special mind set of clinical decision making by doctors, and its implications for marketing, money, medical outcomes, and the design of the patient-provider interface.
- *The Truth About the Drug Companies*, Marcia Angell, 2005, Random house. Critical assessment of the pharmaceutical industry's R&D model and pipeline, and the amount of value it ultimately brings to patients.
- *Lean Hospitals*, Mark Graban, 2009, Taylor & Francis. Toyota production system and lean principles brought to life for health care delivery.
- *On the Mend: Revolutionizing Healthcare to Save Lives and Transform the Industry*, John Toussaint, Roger Gerar, 2010, Lean Enterprises Inst Inc. Transformation of practice with lean and continuous at ThedaCare.
- *Ensuring Value for Money in Health Care*, Corinna Sorenson, Michael Drummond, Panos Kanavos, 2008, World Health Organization, on behalf of European Observatory on Health Systems and Policies. Health technology assessment and decision making in Europe, with case studies from Sweden, The Netherlands, Finland, France, Germany and the UK.
- *India's Healthcare Industry: Innovation in Delivery, Financing, and Manufacturing*, Lawton R Burns, 2014, Cambridge University Press. Proposes some frameworks for looking at India's healthcare system, as well as innovations in care delivery models, how care is paid for, as well as advances in the pharmaceutical, biotech and device sectors in India.