



Fall 2011

**15.S03 (previously 15.967)**  
**Intro to Healthcare Delivery in the U.S.:**  
**Market & System Challenges**  
**Course Announcement**

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**Faculty**

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**Objectives**

Over the last decade, healthcare spending in the U.S. has been continuously rising at a rate far exceeding inflation. With over 2.9 trillion dollars last year, healthcare spending currently amounts for more than 16% of the national GDP, far exceeding any other developed country. The overspending has not led to superior outcomes, and in fact the U.S. stands behind most other developed countries on providing appropriate access to care as well as many other leading quality indicators. Moreover, it is estimated that each year, 100,000 people die in U.S. hospitals due to adverse medical errors, and that 30% of the healthcare spending is in fact waste, resulting from overuse, underuse and a misuse of resources. The new healthcare bill recently approved by U.S. Congress aims to solve the access problem by mandating health insurance coverage to everyone. However, it does not discuss many implementation issues in detail, and leaves the implementation as a fundamental challenge in the coming years. Addressing this national challenge successfully, requires business and clinical innovation and the creation of new markets, systems, processes and technologies that will enable the delivery of better healthcare and control of the rising and unsustainable costs. This will create many business opportunities for new technologies, businesses and players in the healthcare industry.

The focus of this course is on the business challenges and opportunities that arise in this context. Unfortunately, the healthcare industry in the United States is highly heterogeneous, non standardized and very complex. The goal of the course is to provide the students a broad perspective of the various central system issues as well as the business opportunities in the healthcare delivery industry in the United States. In particular, the course will focus on the following aspects:

- 1) **The financial and organizational structures and incentives in the healthcare industry:** How do various players (hospitals, doctors and medical professionals, insurance companies and patients) interact? How do the resulting organizational structures and incentives drive healthcare delivery systems design and operations?

- 2) **Major system design and operational challenges:** What are the major challenges that healthcare delivery systems are facing? What alternative systems designs are being considered?
- 3) **Data and analytically driven healthcare delivery:**  
How to use data-driven, analytical and scientific business approaches to obtain better (financially and clinically) system performance and decision support tools;  
How new IT solutions could enable these approaches.

## **Format**

The course will be based on lectures, outside speakers (including many at the C level) from the healthcare industry and case studies. (Students will be able to directly interact with most speakers in organized lunches.) We will leverage material and hands on ‘field’ examples from the ongoing collaborative projects of Sloan faculty and major hospitals in the Boston area, such as MGH, Beth Israel Deaconess Medical Center (BIDMC), Children’s and Brigham and Women Hospitals.

## **Who could benefit from the course?**

- 1) Students who are interested in a healthcare related career path, either directly within the healthcare industry or with interaction to the healthcare industry (e.g., consulting, bio-medical, IT, etc).
- 2) Students who are interested in understanding the major issues in the design and operations of large scale healthcare delivery systems.
- 3) Students who are interested to do research or process improvement work in healthcare organizations.

## **Grading**

This is a 9 unit course with a final grade. There will be no final exam, and grading will be based on several assigned case studies, a final project, as well as class participation.

## **Prerequisite**

15.060 (DMD) or equivalent, 15.761 (Intro to Ops) or equivalent.

Students that do not satisfy the above requirements should seek instructor approval.

## **When/Where**

E51-145, fall 2011 - MW 10–11:30