

**THE WHARTON SCHOOL
UNIVERSITY OF PENNSYLVANIA**

**THE HEALTH SERVICES SYSTEM - HCMG 841
FALL 2014**

Class Meetings: Tuesday/Thursday, 3:00-4:20 p.m.
Classroom: JMHH 365

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Course Objectives

The course describes the major actors and institutions within any country's healthcare system, and the key strategic, managerial, and financial issues facing industry executives and public policy-makers. To simplify the exposition of all this material, we focus sequentially on three major segments in the healthcare value chain:

1. *Payers* (employers, government, consumers)
2. *Providers* (hospitals, physicians, service providers)
3. *Producers* (pharmaceuticals, biotechnology, medical devices, IT firms)

The course also covers some of the major intermediaries that connect these segments: insurance companies, pharmacy benefit managers (PBMs), and wholesalers.

This course has several specific aims:

- 1. Describe the major players along the healthcare “*value chain*” in the US (payers, providers, and producers), their interactions, and their divergent incentives**
- 2. Analyze the major problems confronting the US (and all other) health care systems: controlling rising costs, providing insurance coverage to all, improving quality, and balancing all three goals**
- 3. Provide *global comparisons* of the US and ROW (rest of world) in terms of: disease patterns / epidemiology, financing, delivery systems, insurance reform, and technology development**
- 4. Compare the different *technology sectors* in healthcare: pharmaceuticals, biotechnology, information technology, and medical devices**
- 5. Analyze the factors and conditions associated with *entrepreneurship* in life sciences and medical devices, including reimbursement & regulation**

Course Format

The course is divided into major sections covering each of the three industry segments. Classes involve a mix of the following:

- a) lectures by the professor**
- b) case discussions**
- c) presentations by guest speakers from industry and government**
- d) warm calls on students**

NOTE #1: As common courtesy to our speakers and fellow students, those who use computers and electronic devices in class should sit in the back row of the class.

NOTE #2: As common courtesy to our speakers and fellow students, you will please turn off all cell phones prior to the start of class.

Readings

Assigned readings for the course are found online or on Canvas (organized into folders for each class). All HBS cases and some book chapters are available from Study.Net.

Additional required readings, available at the bookstore, are found in:

- (1) Lawton Burns, *The Business of Healthcare Innovation* 2nd Edition (Cambridge University, 2012) and
- (2) Robert Field, *Mother of Invention* (Oxford University, 2014)

Those of you who have relatively little background in health care are advised to consult an introductory text on the health care system. The books are primers that do not go into detail on any particular issue but may serve as a good road map. Unfortunately, they are all US-centric.

- 1. Williams and Torrens, *Introduction to Health Services* (7th Edition, Delmar Press, 2007).
- 2. Jonas & Kovner, *Health Care Delivery in the United State* (9th Ed., Springer, 2008).
- 3. Shi & Singh, *Delivering Health Care in America* (4th Ed., Jones & Bartlett, 2007).
- 4. Beazley, *A Brief Guide to the U.S. Health Care Delivery System* (AHA, 2010)

Also of interest are three first-rate histories of the US health care system (hospitals and physicians), which are useful for understanding why our system looks and functions the way it does. This material was covered during the pre-session lectures. The books include:

- 1. Rosemary Stevens, *American Medicine and the Public Interest* (Yale University)
- 2. Rosemary Stevens, *In Sickness and In Wealth* (Basic Books, 1989)
- 3. Paul Starr, *The Social Transformation of American Medicine* (Basic Books, 1982)

Five (5) Course Requirements

- 1. Mid-Term Examination [25 points] Tues October 7th (3 P.M.)

The exam will be a *take-home* exercise. It will test your ability to interpret key industry trends (e.g., draw implications of changes in one sector for firms in another sector, draw conclusions from a set of charts/tables). It is due at the beginning of class on 10/7. Students should not discuss the exam or work in groups.

- 2. 3 Case Write-ups – by Segment [10 points each] Oct 2nd, Nov 11th, Dec 9th

Learning teams will analyze three cases - - one for each segment of the course. These assignments are designed to give students a closer look at managerial and strategic issues across segments. For each case, teams should address the questions posed in the syllabus. Case write-ups should adhere to the following guidelines: 5 page limit, 1.5 spacing, single-sided, 12 point font, maximum of two additional pages for charts, etc.

3. **Final Examination** [35 points] **Dec 16th (2 P.M.)**

The exam will be a *take-home* exercise. The format of the exam will include short essay questions, as well as a case to be analyzed that draws on learning from the second half of the course. The case will be distributed after the last class (12/9).

4. **Class Participation** [10 points]

Students are expected to attend each class. The class participation grade will be partly assessed using a class sign-in sheet.

In addition, small groups of students (3-4 students) will be responsible for one class session. The small group will summarize (in prose) the assigned readings and speaker presentation for that class. The class summary should be two pages in length: one page on the readings, and one page on the speaker presentation. The sessions chosen should include the three pre-session classes. The group's summary must be submitted electronically to Dr. Burns and posted on WebCafe. Teaching assistants will facilitate the formation and matching of student groups with class sessions.

Wharton MBA Grading System

Per the MBA Program requirements, grades will be based on a A,B,C,D,F system, with +/- distinctions. The Class MBA grade point average cannot exceed 3.33. The Wharton MBA Program recommends a distribution of 25-35% A's, 60% B's, and 5-15% C or below.

Quality Circle

To enhance the learning process, it is important to evaluate the course on a real time basis and to make both short-run improvements and longer-term changes as needed. To this end, each learning team will select a representative to serve with Burns and the TAs as a Quality Circle to discuss course progress and provide feedback on any and all aspects of the course. A meeting is scheduled for Tuesday October 28th immediately following class.

Drawing on Students' Backgrounds

Students who are expert on a given topic and wish to share during a given class (particularly when Professor Burns is teaching) should inform Dr. Burns ahead of time regarding the insights they wish to share.

ROLE OF PRIVATE SECTOR AND GOVERNMENT IN THE DEVELOPMENT OF THE US HEALTH CARE SYSTEM

Thur Aug 28

History of Hospitals and Current Hospital Issues

Field. *Mother of Invention*, Chapters 2 & 4.

Supplemental & Optional Reading

Lawton Burns, “The Transformation of the American Hospital: From Community Institution Toward Business Enterprise.” In *Comparative Social Research* Volume 12: 77-112. (Greenwich, CT: JAI Press, 1990). Available on Study.Net and also at:

<http://assets.wharton.upenn.edu/~burnsl/html/Burns%20TransformationoftheAmericanHospital.pdf>

Tues Sept 2

History of the Medical Profession and Current Manpower Issues

Field. *Mother of Invention*, Chapter 5.

Supplemental & Optional Reading

Burns, Goldsmith, and Muller. “History of Physician-Hospital Collaboration,” in Crosson and Tollen (Eds.), *Partners in Health* (2010).

Thur Sept 4

History of the Health Insurance Industry & Rise of Managed Care

Field. *Mother of Invention*, Chapter 6.

Supplemental & Optional Reading

Roberts. “History of Health Insurance in the US and Colorado”. Read pp. 1- 26.

Kaiser Family Foundation: *How Private Health Coverage Works: A Primer*. 2008 Update.

GLOBAL ISSUES IN HEALTHCARE

Tues Sept 9 Overview of the Health Care Industry: “The Big Picture”
[Jeff Goldsmith, Ph.D., Associate Professor, Univ of Virginia]

Moses. Matheson, Dorsey et al. “The Anatomy of Health Care in the United States,” *JAMA* (November 2013).

Moses. “Supplementary Online Content.”

Thur Sept 11 The Rising Cost of Healthcare: Causes and Solutions

Kaiser Family Foundation. *Health Care Costs: A Primer*. 2012.

Martin, Hartman, Whittle et al. “National Health Spending in 2012: Rate of Health Spending Growth Remained Low for the Fourth Consecutive Year,” *Health Affairs* (2014).

PART I : PAYERS & FISCAL INTERMEDIARIES

Tues Sept 16 Overview: Patient Protection and Affordable Care Act (PPACA)

Kaiser Family Foundation: *Summary of the Affordable Care Act*. 2013.

Kaiser Family Foundation: *Establishing Health Insurance Exchanges*. 2013.

Thur Sept 18 Medicare & CMS (Centers for Medicare and Medicaid Services)

SKIM THE FOLLOWING:

Kaiser Family Foundation. *Medicare: A Primer*. 2010.

Kaiser Family Foundation. *Medicaid: A Primer*. 2013.

Kaiser Family Foundation: *Medicare Spending and Financing: A Primer* 2011.

Kaiser Family Foundation: *Overview of the Medicare Program*. 2013.

Tues Sept 23 Medicaid & State Healthcare Reform Initiatives: Massachusetts & Vermont
[Nancy Turnbull, Senior Lecturer on Health Policy - Harvard School of Public Health; Former First Deputy Commissioner, Mass. Division of Insurance]

Sanzenbacher. “What We Know About Health Reform in Massachusetts,”
(Center for Retirement Research, Boston College, 2014).

Kaiser Family Foundation. *Massachusetts Health Care Reform: Six Years Later.* (2012).

Supplemental & Optional Reading

Blue Cross of Massachusetts Foundation. *Massachusetts Health Reform: A Five-Year Progress Report.* (2011).

Thur Sept 25 Private Insurer Efforts to Manage the Chronically-III
[Chad Peel, MBA - - V.P. for International Business Development, Optum Health - United Healthcare]

Weaver, “Managed Care Enters the Exam Room as Insurers Buy Doctor Groups,” *Washington Post* (July 1, 2011). Available at:
http://www.washingtonpost.com/insurers-quietly-gaining-control-of-doctors-covered-by-companies-plans/2011/06/29/AG5DNftH_story.html.

Phillips et al., “Case Study of a Primary Care-Based Accountable Care System Approach to Medical Home Transformation,” *Journal of Ambulatory Care Management* (2011).

Tues Sept 30 Wellness Initiatives, Prevention, & Behavioral Economics
[Kevin Volpp, M.D., Professor Medicine, Univ of Pennsylvania; Director of Center for Health Incentives and Behavioral Economics]

Lowenstein, Asch, Volpp. “Behavioral Economics Holds Potential to Deliver Better Results for Patients, Insurers, and Employers,” *Health Affairs* (2013).

Volpp, Asch, Galvin et al. “Redesigning Employee Health Incentives – Lessons from Behavioral Economics,” *NEJM* (2011).

Asch, Muller, and Volpp. “Automated Hovering in Health Care – Watching Over the 5,000 Hours,” *NEJM* (2012).

Thur Oct 2 Consumer-Directed Health Plans (CDHPs)
[Jack Lord, M.D., former Chief Innovation Officer for Humana]

CASE: *Humana, Inc.: Turnaround of a Health Insurer*. IBS-CDC Case # RTS0020. [Study.Net]

You will need to do some outside reading to prepare this case. Some suggestions for CDHP readings are:

[http://www.healthaffairs.org/healthpolicybriefs/brief.php?brief_id=86;](http://www.healthaffairs.org/healthpolicybriefs/brief.php?brief_id=86)
http://en.wikipedia.org/wiki/Consumer-driven_health_care
<http://www.kaiseredu.org/Issue-Modules/Consumer-Directed-Health-Arrangements/Background-Brief.aspx>
<http://www.heritage.org/research/reports/2012/07/promise-of-consumer-directed-health-plans-studies-show-success-reducing-costs-maintaining-quality>

Case write-up assignment:

- 1. What problems has Humana been facing at the end of the 1990s? Is Humana's approach a good strategy to reverse the situation? What do you think of SmartSuite as a product differentiation approach? (2 pages)**
- 2. What are the barriers that Humana faces here? How realistic is it to think of people as real "consumers/purchasers" in the marketplace? Answer from the vantage point of 2000-2004. (~1.5 pages)**
- 3. How do insurers compete and win in the marketplace in general, and how will Humana fare with its approach? (~1.5 pages)**

In answering these questions, do not be too general or broad. Analyze the information in the case carefully and be specific in your observations and insights that address the case questions.

Tues Oct 7 Integrative Session: Review of Mid-Term Exam

Mid-Term Exams Due by Start of Class

Email exam to grader before 3 P.M.

Thur Oct 9 NO CLASS – Fall Break

Tues Oct 14 NO CLASS – Q1 Core Exams

PART II : PROVIDERS & THE DELIVERY OF HEALTH CARE

Thur Oct 16 Coordinating Care for the Chronically-Ill
[Katherine Schneider, M.D. – CMO, Medecision]

Gawande. “The Hot Spotters,” *The New Yorker* (Jan 24, 2011)

Porter and Lee, “The Strategy That Will Fix Health Care,” *Harvard Business Review* (October 2013)

Tues Oct 21 Overview: Health Care Information Technology (HCIT)
[John Glaser, Ph.D., CEO - Siemens; former CIO at Partners Healthcare]

Skim the following:

Kellermann et al. “What Will it Take to Achieve the As-Yet Unfulfilled Promises of Health Information Technology?” *Health Affairs* 32(1) (2013).

Adler-Milstein et al. “More Than Half of UD Hospitals have At Least a Basic HER, But Stage 2 Criteria Remain Challenging for Most,” *Health Affairs* 33(9) (2014).

Furukawa et al. “Despite Substantial Progress in HER Adoption, Health Information Exchange and Patient Engagement Remain Low in Office Settings”, *Health Affairs* 33(9) (2014).

Supplemental & Optional Reading

FOR THOSE WITH NO HCIT BACKGROUND - - PLEASE SKIM:
Powell and Goldsmith. “The Healthcare Information Technology Sector” In Burns (Ed.), *The Business of Healthcare Innovation* (Cambridge University Press, Cambridge UK, 2012). Chapter 7.

Thur Oct 23 Quality of Care, Hospital Process Improvement and the Toyota Production System (TPS)

Spear. “Fixing Health Care from the Inside, Today.” *Harvard Business Review*. 2005.

Andersen, Rovik, and Ingebrigtsen, “Lean Thinking in Hospitals: Is There a Cure for the Absence of Evidence? A Systematic Review of Reviews,” *BMJ* (2014).

HBS Case: *Virginia Mason Medical Center*. Case # 9-606-044.

Tues Oct 28 International Comparisons of Health Care Systems; Medical Tourism

Squires, *The U.S. Health System in Perspective: A Comparison of Twelve Industrialized Nations* (Commonwealth Fund, July 2011).

HBS Case: "MedVal Ventures." Case # 9-308-087, February 2008. (Revised August 2014.)

Supplemental & Optional Reading

Commonwealth Fund. *International Profiles of Health Care Systems, 2013.*

HBS Case: "Note on Medical Travel," Case # 9-308-084. (Revised August 2012).

Thur Oct 30 Pharmacy Benefit Managers & Pharmacy Chains

[Troyen Brennan, M.D. – Executive Vice-President and CMO, CVS Caremark]

Global Data. *CVS Caremark Corporation – Financial and Strategic Analysis Review.* (July 2014). [SKIM]

Tues Nov 4 IDNs, ACOs, and OWAs with TLAs

Burns and Pauly, "Integrated Delivery Networks (IDNs): A Detour on the Road to Integrated Health Care?" *Health Affairs* (2012).

Burns and Pauly, "Accountable Care Organizations May Have Difficulty Avoiding the Failures of the Integrated Delivery Networks of the 1990s," [and online appendix], *Health Affairs* (November 2012).

Thur Nov 6 Health Care Services and the Role of Venture Capital
[Darren Black, Managing Director – Summit Partners]

RBC Capital Markets. *2012 Healthcare Services: Full-Year-in-Review.*

Tues Nov 11 Case Analysis: The Cleveland Clinic
[Martin Harris, M.D. – CIO and Strategy, The Cleveland Clinic]

Porter & Teisberg, *Redefining Health Care*, Pp. 149-169, 202-218.

HBS Case: *The Cleveland Clinic: Growth Strategy 2012*. Case # 9-709-473.
[Study.Net]

Case write-up assignment:

- 1. Discuss the impact of PPACA (health reform) on the Cleveland Clinic's current business model. What aspects of PPACA pose the greatest opportunity? What represents the biggest threats? (~ 1 page)**
- 2. You are the CEO of the Cleveland Clinic. Of the growth strategies discussed in the case (starting on p. 12), which ONE would be the most promising avenue for growth and why? What problems do you see with the other strategies? What internal factors may constrain the Clinic's growth? (~ 3 pages)**
- 3. What is the Cleveland Clinic's core capability, and why? How did they develop it? How does information technology support & develop it? (~1 page)**

PART III: PRODUCERS / SUPPLIERS

Thur Nov 13 Overview of the Pharmaceutical Industry
[Martin Reeves, Senior Partner & Managing Director, Boston Consulting Group]

Field. *Mother of Invention*, Chapter 3.

Supplemental & Optional Reading

FOR THOSE WITH NO PHARMA BACKGROUND - - PLEASE SKIM:
Northrup et al. "The Pharmaceutical Sector: Rebooted and Reinvigorated."
In Burns (Ed.), *The Business of Healthcare Innovation* (Cambridge
University Press, 2012). Chapter 2.

Tues Nov 18 Medical Device Sector

[Steven Oesterle, M.D. – Senior Vice-President for Medicine & Technology, Medtronic]

Hartford. “What Does the Future Hold for Medtech – Parts I, II, III, IV”

Laskow. “The Bleeding Edge,” *Foreign Policy Magazine* (2014).

Supplemental & Optional Reading

FOR THOSE WITH NO MEDTECH BACKGROUND - - PLEASE SKIM:
 Kruger. “The Medical Device Sector.” In Burns (Ed.), *The Business of Healthcare Innovation* (Cambridge University Press, 2005). Chapter 6.

Thur Nov 20 Overview of the Biotechnology Industry

[Eric Schmidt, Ph.D. – Managing Director, Cowen]

Schmidt. *Ultragenyx. Initiating: In Rare Company* (Cowen, 2014).

Ernst & Young, *Beyond Borders: Matters of Evidence* (2013).

Supplemental & Optional Reading

FOR THOSE WITH NO BIOTECH BACKGROUND - - PLEASE SKIM:
 Pfeffer. “The Biotechnology Sector – Therapeutics.” In Burns (Ed.), *The Business of Healthcare Innovation* (Cambridge University Press, Cambridge UK, 2012). Chapter 4.

Tues Nov 25 No Class

Thur Nov 27 HAPPY THANKSGIVING [no class]

Tues Dec 2 Pharmaceutical Industry – View From Wall Street

[David Risinger – Managing Director, Morgan Stanley Research]

Risinger. *Specialty Pharmaceuticals*. Morgan Stanley. 2014.

Risinger. *Major Pharmaceuticals*. Morgan Stanley. 2014.

KPMG. *Future Pharma*.

Thur Dec 4 Pharmaceutical vs. Device Therapy for Diabetes
[Jesper Hoiland, CEO – Novo Nordisk]

HBS Case: The Race to Develop Human Insulin (# 9-191-121)

**Design Management Institute. Novo Nordisk A/S: Designing for Diabetics
 (# 9-993-021)**

**Press Release: Sanofi and MannKind Announce Global Licensing Agreement
 for Afrezza® (insulin human) Rapid-Acting Inhaled Insulin.**

Tues Dec 9 Innovation and R&D Creativity in the Life Sciences Industry

HBS Case: *Wyeth Pharmaceuticals: Spurring Scientific Creativity with Metrics*. Case # 9-607-008.

Munos, “Lessons from 60 Years of Pharmaceutical Innovation,” *Nature Reviews / Drug Discovery* (2009).

Burns, *Business of Healthcare Innovation*: Chapter 3.

Case write-up assignment #3:

- 1. Does “Big Pharma” have a pipeline productivity problem? Has there been an increase, decrease, or steady state in pharma productivity? You are encouraged to read broadly to address this question. (1 page)**
- 2. What are some of the barriers to R&D productivity posed by mergers and acquisitions and large corporate size in the pharma sector? (2 pages)**
- 3. Can scientific creativity be managed? What are the conditions needed for pharma R&D success? (1 page)**
- 4. Evaluate Robert Ruffalo’s approach to managing the scientists at Wyeth? Will this yield success? (1 page)**

Tues Dec 16 Final Exam Due (Take-home)

Case: to be distributed