THE WHARTON SCHOOL
UNIVERSITY OF PENNSYLVANIA

THE HEALTH SERVICES SYSTEM - HCMG 841
FALL 2017

Class Meetings:	Tuesday/Thursday, 3:00-4:20 p.m. Classroom: SHDH 351
Course Instructor:	Lawton Robert Burns, Ph.D., MBA Professor - Department of Health Care Management burnsL@wharton.upenn.edu
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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. *Providers* (hospitals, physicians, service providers)
2. *Payers* (employers, government, consumers)
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. Compare the different *technology sectors* in healthcare: pharmaceuticals, biotechnology, information technology, and medical devices

4. 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
d) warm calls on students

Policy on Electronics

Use of laptops, tablets, cellphones, etc. in class is NOT permitted.
Please turn off all cell phones and stow away 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 2012)

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* (11th Ed., Springer, 2015).
3. Shi & Singh, *Delivering Health Care in America* (6th Ed., Jones & Bartlett, 2014).
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 is also covered during the first four 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. **2 Short Essays** [10 points each] Tues. September 12 (3 P.M.)
   Tues. October 3 (3 P.M.)

   To help orient you to class and some of the key issues, you will be asked to write two (2) one-page essays on specific topics. The topics deal with themes discussed in the course. The two essays are due September 12 and October 3. For each essay, address the question(s) posted in the syllabus.

2. **Mid-Term Examination** [20 points] Tues October 24 (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 10/24 by 3:00 PM. Students should not discuss the exam or work in groups.

3. **3 Case Write-ups – by Segment** [10 points each] Thurs Sep 28 (3 P.M.)
   Thurs Nov 2 (3 P.M.)
   Thurs Dec 7 (3 P.M.)

   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. Cases are due by 3:00 P.M. on the specified dates.

4. **Final Examination** [20 points] TBA

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 (12/8).

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

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

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 Thursday, October 26th immediately following class.

INTRODUCTION TO THE BIG PICTURE ISSUES IN HEALTHCARE

Tues Aug 29 **Introduction to the Healthcare System**

Moses. Matheson, Dorsey et al. "The Anatomy of Health Care in the United States," & "Supplementary Online Content." *JAMA* (Nov 2013).

Thurs Aug 31 **Rising Cost of Healthcare**

Keehan et al. "National Health Expenditure Projections, 2016-2025: Price Increases, Aging Push Sector to 20 Percent of Economy" *Health Affairs* (February 2017).

Tues Sept 5 **Quality of Care**

Gary Claxton et al. "Measuring the Quality of Healthcare in the U.S.," *Insight Brief* (Kaiser Family Foundation, September 2015).

Thurs Sept 7 **Overview of the Health Care Industry: The Big Picture**
[Jeff Goldsmith, Ph.D. - Associate Professor, Univ of Virginia]

Goldsmith and Burns. "Fail to Scale: Why Great Ideas in Health Care Don't Thrive Everywhere." *Health Affairs Blog* (2016). Available at: http://healthaffairs.org/blog/2016/09/29/fail-to-scale-why-great-ideas-in-health-care-dont-thrive-everywhere/.

Tues Sept 12 **Access to Care**
The Triple Aim vs. The Iron Triangle

Kissick. "Somebody has to Pay," Chapter 1 in *Medicine's Dilemmas* (Yale University Press 1994). [Study.Net]

Berwick et al. "The Triple Aim: Care, Health and Cost," *Health Affairs* (May/June 2008).

Background Reading You Will Find Helpful:

A Primer on Defining the Triple Aim, Institute for Healthcare Improvement.

Guide to Measuring the Triple Aim: Population Health, Experience of

Care, and Per Capita Cost, Institute for Healthcare Improvement (2012)

One-page Essay #1 due
Consider the "iron triangle" (described in the William Kissick chapter) and "triple aim" (discussed in the article by Don Berwick).
Are the iron triangle and triple aim (1) consistent, (2) contradictory, or (3) just talking about entirely different things? Select one of these positions that you think is most appropriate and defend it. You should also acknowledge whether the other views have any merit.

PART I: PROVIDERS & THE DELIVERY OF HEALTH CARE

Thurs Sept 14 **Hospitals: Business Models, Revenue Models**
[Ralph Muller – CEO, University of Pennsylvania Health System]

Garg et al. *Academic Medical Centers: Transformational Imperatives to Succeed in a New Era* (McKinsey, 2013).

Korn. "Once Cash Cows, University Hospitals Now Source of Worry for Schools" *Wall Street Journal* (April 22, 2015).

Tues Sept 19 **Introduction: Providers**

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

Thurs Sept 21 **Medical Profession and Nursing**

Field. *Mother of Invention*, Chapter 5.

Tues Sept 26 **Telemedicine**
[John Linkous, CEO, American Telemedicine Association]

Beck. "How Telemedicine is Transforming Health Care" *Wall Street Journal* (June, 26, 2016). Available at: https://www.wsj.com/articles/how-telemedicine-is-transforming-health-care-1466993402

Cook. "Health and Wellness: 4 Ways Telemedicine is Changing the Face of Healthcare." *Herald Extra* (August 27. 2017). Available at: Beck. "How Telemedicine is Transforming Health Care" *Wall Street Journal*

(June, 26, 2016). Available at: https://www.wsj.com/articles/how-telemedicine-is-transforming-health-care-1466993402

Optional reading

Milbank Memorial Fund. *Telehealth Private payer Laws: Impact and Issues.*

Thurs Sept 28

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:

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)

Tues Oct 3

Summary: Providers
Simultaneous Changes in Payment and Provider Organization

Lee and Berenson. "The Organization of Health Care Delivery," in *The Health Care Delivery System: A Blueprint for Reform* (October 2008). Chapter 2: pp. 32-49.

One-page Essay #2 due

Consider the chart that has been loaded onto canvas "files" for this date:

"Theorized Relationship Between Payment, Organization, and Performance." It is similar to Figure 2 in the Lee and Berenson chapter.

There is a widespread perception that our healthcare delivery system is moving from the southwest corner of this chart (fee-for-service, solo practice) to the northeast corner of this chart (global risk contracting/capitation, fully integrated delivery networks/ACOs). There is also a related perception that this movement is associated with improved provider quality and reduced provider cost (or at least improved provider ability to contain rising costs).

Using the reading resources suggested in the syllabus (and/or any other resources you choose), assess the validity of these two perceptions. You may outline your answer. You may also include a second page with any footnotes or citations that back up your conclusions.

Friedberg, et al. "Background: Scan of the Literature on Effects of Payment Models on Physician Practice," Chapter 3 in *Effects of Health Care Payment Models on Physician Practice in the United States,* pp. 9-30 (Rand 2015)

Burns, Goldsmith and Sen. "Horizontal and Vertical Integration of Physicians: A Tale of Two Tails," *Annual Review of Health Care Management* (2014).

Thurs Oct 5 **NO CLASS – Fall Break**

LDI Symposium

PART II: PAYERS & FISCAL INTERMEDIARIES

Tues Oct 10 **Introduction: Payers and Health Insurance**

Field. *Mother of Invention*, Chapter 6.

Kaiser Family Foundation & HRET. *Employer Health Benefit Survey 2015 Chartpack.*

Rapaport. *An Introduction to Health Insurance: What Should a Consumer Know?* (Congressional Research Service, 2015).

Thurs Oct 12 **NO CLASS**

Tues Oct 17 **NO CLASS**

Thurs Oct 19 **Current Payer Strategy: Provider Partnerships and Value-Based Health Care**
[Richard Montwill, OptumHealth]

Porter and Lee. "The Strategy That Will Fix Health Care,"

Gawande. "Overkill." *Annals of Health Care* (May 2015).

Midterm Exam to be distributed

Tues Oct 24 **Review of Midterm Exam (Due at 3:00 PM)**

Thurs Oct 26 **Medicare & Medicaid**

David Blumenthal, Karen Davis, and Stuart Guterman. "Medicare at 50—Origins and Evolution." *New England Journal of Medicine* January 29, 2015 372(5):479-86.

David Blumenthal, Karen Davis, and Stuart Guterman. "Medicare at 50—Moving Forward." *New England Journal of Medicine* February 12, 2015 372(7):671-77.

SKIM THE FOLLOWING:

Kaiser Family Foundation. *A Primer on Medicare* (2015).

Tues Oct 31 **Alternative Payment Methods: The Alternative Quality Contract**
[Dana Safran, Sc.D. - Mass. Blue Cross & Blue Shield]

Song et al. "Changes in Health Care Spending and Quality 4 Years into Global Payment," *NEJM* (October 30, 2014).

SKIM: Robert Mechanic. "Opportunities and Challenges for Payment Reform: Observations from Massachusetts," *Journal of Health Politics, Policy and Law* (August 2016).

Song et al. "Lower- Versus Higher-Income Populations in the Alternative Quality Contract: Improved Quality and Reduced Spending," *Health Affairs* 36(1) (2017): 74-82.

Thurs Nov 2 **<u>Insurers and Provider Networks</u>**
[Jack Lord, M.D. - former Chief Innovation Officer, Humana]

CASE: *AETNA v. Huntingdon Valley Surgery Center*. Civil Action No. 2:13 – 03101 (2013).

Case write-up assignment #2:

1. The complaint suggests that Aetna is motivated by its effort to "provide affordable health care benefits to its members." Is that its goal? **(1 page)**

2. How do patients end up going (or find themselves) out-of-network? Why would they want to go? **(1 page)**

3. Does it make a difference to Aetna and its contracted providers if Aetna's enrollees are covered by fully-insured versus self-insured plans? If so, why? **(1 page)**

4. Are the HVSC physicians involved in unethical activities or activities that violate their Aetna contracts, are they merely trying to "game the system"? **(1 page)**

5. If you were a patient of the HVSC and you read this complaint, how would you feel about Aetna, your doctors and the healthcare system? What information would you have wanted before agreeing to being treated at HVSC? **(1 page)**

Tues Nov 7 **Summary: Payers and Insurance**

PART III: PRODUCERS / SUPPLIERS

Thurs Nov 9 **Introduction: Biopharma and Medtech**

Field. *Mother of Invention*, Chapter 3. [SKIM]

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 14 **Overview of the Pharmaceutical Industry**
[Ruth De Backer – Partner, McKinsey & Co.]

DeBaker, Ruby, and Saxena. *Biopharma Valuations – Onwards and Upwards?* (McKinsey, August 2017).

Thurs Nov 16 **Health Care Information Technology (HCIT)**
[John Glaser, Ph.D. - former CEO - Siemens; former CIO at Partners Healthcare]

Glaser. "The Evolution of Interoperability in Healthcare." H&HN Daily. October 10, 2016. www.hhnmag.com/articles/7689-the-evolution-of-interoperability-in-health-care.

Glaser. "All Roads Lead to Population Health Management." H&HN Daily, June 13, 2016. www.hhnmag.com/articles/7332-all-roads-lead-to-population-health-management

Glaser. "Five Reasons to Like Patient Use of Social Media." H&HN Daily, April 11, 2016. www.hhnmag.com/articles/7090-five-reasons-to-like-patients-use-of-social-media.

Glaser. "Telemedicine Hits its Stride." H&HN Daily, December 10, 2015. www.hhnmag.com/articles/6773-telemedicine-hits-its-stride.

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.

Tues Nov 21 **NO CLASS**

Thurs Nov 23 **HAPPY THANKSGIVING [no class]**

Tues Nov 28 **<u>Medical Device Sector</u>**
[Jason Weidman]

Kruger and Kruger. "The Medical Device Sector." In Burns (Ed.), *The Business of Healthcare Innovation* (Cambridge University Press, 2012). Chapter 6.

Thurs Nov 30 **Generics and BioSimilars**
[Christine Baeder – Senior Vice President for Customer and Marketing Operations, Teva Pharmaceuticals]

Reading TBA

Tues Dec 5 **<u>Market Access to Providers by Pharmaceutical Manufacturers</u>**
[Rick Hartz]

Kitamura and Torsoli. "Express Scripts Says Novo Insulin Data Not Convincing Enough,"
http://www.bloomberg.com/news/articles/2016-03-03/express-scripts-says-novo-s-insulin-data-not-convincing-enough?cmpid=yhoo.headline

IMS Consulting. *Pricing and Market Access Outlook*. 2015/2016 Edition. [SKIM]

Ed Schoonveld. "Market Access and Pricing Strategy Implementation". In *The Price of Global Health*, 2nd Edition. (pp. 277-314)

Thurs Dec 7 **<u>Strategic Issues in Pharmaceutical Sector</u>**
[Dr. Richard Evans - Founder and General Manager, SSR Health, formerly of Roche and Sanford C. Bernstein]

HBS Case: *Merck & Co.* [January 2015, MH0035]

<u>Case write-up assignment #3:</u>

1. Rather than buying SGP, what else could MRK have done with the capital – and at that point in time should MRK have viewed any of these alternative uses as superior options? (~1.5 pages)

2. Was the SGP acquisition an attempt to resolve MRK's problems, or simply the opportunistic purchase of an under-valued asset? If the former, what were the problems an SGP acquisition could have been

expected to address? If the latter, on what basis might MRK have believed SGP was undervalued? (~1 page)

3. Was it important for MRK to shift to an open innovation model, and if so why? Did SGP and/or Perlmutter aid or impair such a shift – and if so how? (~1.5 pages)

4. Setting aside the direct (e.g. legal, claims) costs of the Vioxx withdrawal, what if any effects might the Vioxx episode exert on MRK during the SGP acquisition timeframe, and how might management deal with these effects? (~1 page)

Helpful reading on this topic:

Burns et al., "Pharmaceutical Strategy and the Evolving Role of Merger and Acquisitions." in Burns (Ed.), *The Business of Healthcare Innovation* (Cambridge University Press, Cambridge UK, 2012). Chapter 3.

Final Exam Due (Take-home)

Case: to be distributed