THE WHARTON SCHOOL UNIVERSITY OF PENNSYLVANIA

THE HEALTH SERVICES SYSTEM - HCMG 841 FALL 2016

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

Classroom: SHDH 351

Course Instructor: Lawton Robert Burns, Ph.D., MBA

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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:

Providers (hospitals, physicians, service providers)
 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. 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
- 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 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] Thurs. September 8 (3 P.M.) Tues. September 27 (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 15th and November 3rd. For each essay, address the question(s) posted in the syllabus.

2. <u>Mid-Term Examination</u> [20 points] Tuesday October 25 (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 10/22 by 3:00 PM. Students should not discuss the exam or work in groups.

3. <u>3 Case Write-ups – by Segment</u> [10 points each] Tues October 11th (3 P.M.), Thursday Nov.10th (3 P.M.), Tues Dec 8th (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. <u>Class Participation</u> [10 points]

Students are expected to attend each class. The class participation grade will be assessed using a class sign-in sheet and your completion of speaker evaluations.

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 25th immediately following class.

INTRODUCTION TO THE BIG PICTURE ISSUES IN HEALTHCARE

Tues Aug 30 Rising Cost of Healthcare

Keehan et al. "National Health Expenditure Projections, 2015-2025: Economy, Prices, and Aging Expected to Shape Spending and Enrollment" *Health Affairs* (August 2016).

Thurs Sept 1 Quality

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

Tues Sept 6 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," & "Supplementary Online Content." *JAMA* (Nov 2013).

Thurs Sept 8 Access and PPACA; The Triple Aim vs. The Iron Triangle Flex Time / Review of Prior Class(es)

Obama. "United States Health Care Reform: Progress to Date and Next Steps," *JAMA* (July 2016). & Accompanying Editorials on Article.

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 "<u>iron triangle</u>" (described in the William Kissick chapter) and "<u>triple aim</u>" (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

Tues Sept 13 <u>Hospitals: Business Models, Revenue Models</u>

[Ralph Muller – CEO, University of Pennsylvania Health System]

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

Thurs Sept 15 <u>Hospitals: History and Current Issues</u>

Field. Mother of Invention, Chapters 2 & 4.

HBS Case: *ThedaCare: System Strategy*

Tues Sept 20 <u>Health Care Services and the Role of Venture Capital</u> [Darren Black - Managing Director, Summit Partners]

Bain and Company. Global Healthcare Private Equity and Corporate M&A Report 2016.

Jeff Woods. *Macro Forces Affecting PE Investment in U.S. Healthcare Companies* (Parthenon, 2016).

Thurs Sept 22 <u>Medical Profession: History and Current Issues</u>

Field. Mother of Invention, Chapter 5.

Tues Sept 27 <u>Flex Time / Review of Prior Classes</u> 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 <u>southwest corner</u> of this chart (fee-for-service, solo practice) to the <u>northeast corner</u> 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).

Burns and Wholey. 2000. "Responding to a Consolidating Health Care System: Options for Physician Organizations," In *Advances in Health Care Management*, Volume 1, pp. 273–335. (Elsevier 2000). https://docs.google.com/viewer?a=v&pid=sites&srcid=ZGVmYXVsdGRvbWFpbnxsYXd0b25idXJuc3BlcnNvbmFsd2Vic2l0ZXxneDo2Y2JjNWI0YmQ1NzQ3MjEx

Thurs Sept 29 Nursing: Professional & Workforce Issues [Dr. Julie Sochalski – School of Nursing]

Center for Health Workforce Studies. *Health Care Employment - Bureau of Labor Statistics Projections 2014-2024* (SUNY – Albany, 2016).

World Health Organization. *Human Resources for Health* (2013).

Tues Oct 4 <u>Medical Profession: Training & Workforce Issues</u> [Dr. Larry Jameson – Dean, School of Medicine]

Association of American Medical Colleges. *The Complexities of Physician Supply and Demand: Projections from 2013 to 2025. (March 2015).*

Thurs Oct 6 NO CLASS – Fall Break

Tues Oct 11 <u>Case Analysis: The Cleveland Clinic</u> [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)

PART II: PAYERS & FISCAL INTERMEDIARIES

Thurs Oct 13 Health Insurance: History and Current Issues

Field. Mother of Invention, Chapter 6.

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

Midterm Exam to be distributed

Tues Oct 18 NO CLASS

Thurs Oct 20 NO CLASS

Tues Oct 25 Review of Midterm Exam (Due at 3:00 PM)

Employer-Sponsored Health Insurance

EBRI. Self-Insured Health Plans: Recent Trends by Firm Size, 1996–2015 (July 2016).

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

Quality Circle Meeting (after class)

Thurs Oct 27

<u>Medicare & CMS (Centers for Medicare and Medicaid Services)</u> [Stuart Guterman - Senior Scholar in Residence, AcademyHealth]

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 Nov 1

<u>Health Care Information Technology (HCIT)</u> [John Glaser, Ph.D., former CEO - Siemens; former CIO at Partners Healthcare]

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

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

Glaser. "Interoperability: A Promise Unfulfilled." <u>H&HN Daily</u>, April 14, 2015. <u>www.hhnmag.com/articles/3554-interoperability-a-promise-unfulfilled</u>

Glaser. "Solving Big Problems with Big Data." <u>H&HN Daily</u>, Dec 9 2014. www.hhnmag.com/articles/3809-solving-big-problems-with-big-data

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.

Thurs Nov 3 <u>Alternative Payment Methods:</u> The <u>Alternative Quality Contract</u> [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).

Tues Nov 8 Pharmacy Benefit Managers & Pharmacy Chains [Karl Kellner – Senior Partner, McKinsey]

Eickelberg. *The Prescription Drug Supply Chain "Black Box": How it Works and Why You Should Care* ((American Health Policy Institute, 2015).

Jayne O'Donnell. "Do Drug Benefit Managers Reduce Health Costs?" http://www.usatoday.com/story/money/personalfinance/2014/03/03/pharm acy-benefit-managers-healthcare-costs-savings/5495317/

Max Nisen. "CVS Amps Up the Drug-Price Wars," https://www.bloomberg.com/gadfly/articles/2016-08-03/cvs-excludes-new-drugs-amps-up-big-pharma-price-wars

Thurs Nov 10 <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)

PART III: PRODUCERS / SUPPLIERS

Tues Nov 15 Market Access to Providers by Pharmaceutical Manufacturers [Jesper Hoiland – President, Novo Nordisk USA]

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 Nov 17 Specialty Pharma: Issues in Biotech and Biosimilars

[Kevin Schulman, M.D., MBA, Professor of Medicine, Professor of Business Administration – Duke University; Visiting Scholar – Harvard Business School]

HBS Case: *AbbVie* (N-316-095).

Hirsch, Balu, and Schulman: "The Impact of Specialty Pharmaceuticals as Drivers of health Care Costs," *Health Affairs* (2014): 1714-1720.

Tues Nov 22 NO CLASS

Thurs Nov 24 HAPPY THANKSGIVING [no class]

Tues Nov 29 Overview of the Pharmaceutical Industry [Ruth De Backer – Partner, McKinsey & Co.]

"Novartis on Digitizing Medicine in an Aging World," (McKinsey, June 2015). Interview with CEO Joseph Jimenez. http://www.mckinsey.com/global-themes/leadership/novartis-on-digitizing-medicine-in-an-aging-world

"Organizing for Breakthrouh Innovation," (McKinsey, January 2016). Interview with CEO Severin Schwan. http://www.mckinsey.com/business-functions/strategy-and-corporate-

finance/our-insights/organizing-for-breakthrough-innovation

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.

Thurs Dec 1 Medical Device Sector

[Mike Coyle – Executive Vice President, Group President - Cardiac and Vascular Group, Medtronic]

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

Tues Dec 6 Generics and Biosimilars

[Sanjay Bhanushali – International Business, Cipla Ltd.]

Cipla. "Hatch Waxman Act". Powerpoint slide show.

Thurs Dec 8 Strategic Issues in Pharmaceutical Sector

[Dr. Richard Evans, Founder and General Manager, SSR Health, formerly of Roche and Sanford C. Bernstein]

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

Case write-up assignment #3:

- 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