

**THE WHARTON SCHOOL  
UNIVERSITY OF PENNSYLVANIA**

**THE HEALTH SERVICES SYSTEM - HCMG 841  
FALL 2009**

<b>Class Meetings:</b>	<b>Tuesday/Thursday, 3:00-4:20 p.m. Huntsman Hall G60</b>	
<b>Course Instructor:</b>	<b>Lawton R. Burns, Ph.D., MBA Chair, Department of Health Care Management 203 CPC</b>	
<b>Office:</b>	<b>898-3711   burnsL@wharton.upenn.edu</b>	
<b>Telephone:</b>	<b>898-3711   burnsL@wharton.upenn.edu</b>	
<b>Office Hours:</b>	<b>Tuesday and Thursday, 12:00-2:00 PM</b>	
<b>Teaching Assistants:</b>	<b>Vikas Goyal</b>	<a href="mailto:vikasg@wharton.upenn.edu">vikasg@wharton.upenn.edu</a>
	<b>Patrick Lee</b>	<a href="mailto:leepc@wharton.upenn.edu">leepc@wharton.upenn.edu</a>
	<b>Neil Parikh</b>	<a href="mailto:npar@wharton.upenn.edu">npar@wharton.upenn.edu</a>
	<b>Sharon Warren</b>	<a href="mailto:shwarren@wharton.upenn.edu">shwarren@wharton.upenn.edu</a>
<b>Grading Assistant:</b>	<b>Rocky Lee, MBA</b>	<a href="mailto:rockylee@wharton.upenn.edu">rockylee@wharton.upenn.edu</a>

**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, individual consumers)
2.     *Providers*       (hospitals, physicians)
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 objectives:

1. Describe the major players along the healthcare “*value chain*” (payers, providers, and producers), their interactions, and their divergent incentives
2. Provide *global comparisons* of the US and ROW (rest of world) in terms of:
  - a) Disease patterns / epidemiology
  - b) Financing systems
  - c) Delivery systems
  - d) Insurance reform
  - e) Technology development
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 and government
- d) warm calls on students responsible for summarizing the class readings for that date

**NOTE #1:** As common courtesy to our speakers and fellow students, you will please refrain from using all computers and electronic devices in 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.

**NOTE #3:** The majority of the speakers have graciously agreed to have lunch with small groups of students the day of class from 12 – 1:30 PM. This is a great opportunity for networking (and recruiting). Class TAs will post sign-up sheets for each lunch on WebCafe for student registration. Please sign up for only one lunch (at least initially) to give all students the same opportunity.

### Readings

Assigned readings for the course are found online or on WebCafe (organized into folders for each class). All HBS cases are in the course bulk-pack which is available from Study.Net / Wharton Reprographics.

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* (6<sup>th</sup> Edition, Delmar Press, 2001).
2. Anthony Kovner, *Health Care Delivery in the United States* (8<sup>th</sup> Ed., Springer, 2005).
3. Shi & Singh, *Delivering Health Care in America* (Jones & Bartlett, 2004).

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                             [20 points]                             Tues October 20th

The exam will be a take-home exercise. It will test your ability to interpret key industry trends (e.g., critique an article, draw conclusions from a set of charts/tables). It is due at the beginning of class on 10/20. Students should not discuss the exam or work in groups.

2.     Payer Industry Segment Paper             [20 points]                             Tues November 5th

At the beginning of the semester, each learning team will develop a research topic on the payer segment of the industry. Teams will be required to submit a written analysis on the critical issue(s) facing incumbents in the payer segment. The critical issue(s) should include, but not necessarily be limited to, that segment's transactions with the other two segments (providers, suppliers). Teams must submit their paper topic to Dr. Burns in writing (one paragraph) for his approval by Thursday Oct 1st 25th, and then submit a detailed 1-2 page outline of their paper's thesis, argument, and bibliographic sources for approval by Thursday, October 15th. The required format for the paper is discussed at the end of the syllabus, along with sample payer topics. A penalty of two points will be assessed for each deadline missed. No late papers will be accepted after 11/5.

3. **Provider/Supplier Industry Paper** [20 points] **Thur Dec 10th**

Same format as before - - focus here is on the provider or supplier segment. Papers are to be done in learning teams. Paper topics must be submitted for approval by Tuesday Nov 12th; detailed paper outlines must be submitted for approval by Tuesday Nov 19th. All papers are due 12/10. No late papers will be accepted.

4. **Final Examination** [25 points] **Wed Dec 16th**

The exam will be in-class. 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 prior to the exam date.

5. **Class Participation** [15 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 have two tasks: prepare a set of 2-3 questions to ask the speaker, and summarize (in prose) the assigned readings and speaker presentation for that class. The questions should be emailed to Dr. Burns at least one hour prior to class. The student group will then initiate the class discussion with the speaker following the class presentation. The class summary should be two pages in length: one page on the readings, and one page on the speaker presentation. The sessions chosen may include any of the four pre-session classes. The group's summary must be submitted electronically to Dr. Burns and posted on WebCafe. Teaching Assistants Goyal, Lee, Parikh, and Warren 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, Goyal, Lee, Parikh, and Warren 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 November 5th immediately following class.

## PRE-SESSION

**Mon Aug 10**

### **History of Hospitals and Current Hospital Issues**

#### **In-Class Powerpoint Slide Handout**

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 at:

<http://hcmg.wharton.upenn.edu/burnsl/html/chapters.htm>

#### **Video on WebCafe:**

[http://spike.wharton.upenn.edu/media/index.cfm?method=read&video\\_id=20978&play=true](http://spike.wharton.upenn.edu/media/index.cfm?method=read&video_id=20978&play=true)

**Tues Aug 11**

### **History of the Medical Profession and Current Manpower Issues**

#### **In-Class Powerpoint Slide Handout**

Burns & Wholey. "Responding to a Consolidating Healthcare System: Options for Physician Organizations." In *Advances in Health Care Management* Volume 1: 273-335. (New York: Elsevier, 2000).

<http://hcmg.wharton.upenn.edu/burnsl/html/chapters.htm>

#### **Video on WebCafe:**

[http://spike.wharton.upenn.edu/media/index.cfm?method=read&video\\_id=20979&play=true](http://spike.wharton.upenn.edu/media/index.cfm?method=read&video_id=20979&play=true)

**Wed Aug 12**

### **History of the Health Insurance Industry & Rise of Managed Care**

#### **In-Class Powerpoint Slide Handout**

CMS. *Managed Care*. March 24, 2003. [WebCafe]

#### **Video on WebCafe:**

[http://spike.wharton.upenn.edu/media/index.cfm?method=read&video\\_id=20984&play=true](http://spike.wharton.upenn.edu/media/index.cfm?method=read&video_id=20984&play=true)

## INTRODUCTION: GLOBAL ISSUES IN HEALTHCARE

### Thur Sept 10 Introduction to the Course & Global Issues in Healthcare

Burns, D'Aunno, and Kimberly: "Globalization in Healthcare." In *The INSEAD-Wharton Alliance on Globalizing* (2003): 395-421. [WebCafe]

## PART I : PAYERS & FISCAL INTERMEDIARIES

### Tues Sept 15 Activist Employers & The Struggle to Manage Cost and Quality [Michael Critelli - Executive Chairman, and Jack Mahoney, MD – Corporate Medical Director, Pitney Bowes]

HBS Case: *Pitney Bowes: Employer Health Strategy* [Bulkpack]

### Thur Sept 17 The Rising Cost of Healthcare: Causes and Solutions

Kaiser Family Foundation. *Health Care Costs: A Primer* (2009) [Webcafe]

Sisko et al.: "Health Spending Projections Through 2018." *Health Affairs* (February 24, 2009). [WebCafe]

*OPTIONAL:* Senate Finance Committee. *Transforming the Health Care Delivery System: Proposals to Improve Patient Care and Reduce Health Care Costs* (April 29, 2009) [Webcafe]

### Tues Sept 22 Overview of the Health Care Market and Its Issues: The Big Picture [Jeff Goldsmith, President, Health Futures]

HBS Case: *The Challenge Facing the US Healthcare System* [Bulkpack]

### Thur Sept 24 Insurance and Medicare

Kaiser Family Foundation. *Medicare: A Primer* (2009) [Webcafe]

*SKIM:* HBS Case: *Note on Health Insurance Coverage, Coding, and Payment* [Bulkpack]

Paper #1 topic due (one paragraph description & team members)

**Tues Sept 29    The Role of CMS: The Centers for Medicare and Medicaid Services**  
**[Lambert van der Walde, Capital Markets Advisor – CMS]**

**Rosenthal: “Nonpayment for Performance: Medicare’s New Reimbursement Rule.”** *New England Journal of Medicine* (October 18, 2007). [WebCafe]

**Bach: “Medicare: Start the Bidding.”** *The New York Times* (June 4, 2009). [WebCafe]

**Leonhardt: “Health Care Rationing Rhetoric Overlooks Reality.”** *The New York Times* (June 17, 2009). [WebCafe]

**Thur Oct 1    Two Reforms: Pay-for-Performance (P4P) and Episode-Based Payment**  
**[Francois deBrantes, CEO - Bridges to Excellence]**

**Lee and Ferris: “Pay for Performance: A Work in Progress.”** *Circulation* (June 1, 2009). [WebCafe]

**deBrantes: “Building a Bridge from Fragmentation to Accountability – The Prometheus Payment Model.”** *New England Journal of Medicine* ...

**deBrantes, D’Andrea, and Rosenthal: “Should Health Care Come With a Warranty?”** *Health Affairs* (June 16, 2009). [WebCafe]

**Paper #1 topic due (one paragraph description & team members)**

**Tues Oct 6    The Patients: Health Status of Global Populations**  
**[Robert Bollinger, M.D., Professor of Infectious Diseases, Johns Hopkins University School of Medicine]**

**McCoy, Kembhavi, Patel, and Luintel. “The Bill and Melinda Gates Foundation’s Grant Making Programme for Global Health.”** *Lancet* 373: 1645-1653. (2009). [WebCafe]

**Feldbaum: *U.S. Global Health and National Security Policy*.** CSIS Global Health Policy Center (April 2009). [WebCafe]

**Wallis: “Is Aid Working?”** *ft.com/arena* (June 1, 2009). [WebCafe]

**OPTIONAL: Jeffrey Sachs, World Health Organization, *Macroeconomics and Health: Investing in Health for Economic Development*.** [WebCafe]

**Thur Oct 8    State Healthcare Reform Initiatives: California and Beyond**  
**[Mark Smith, M.D., MBA, President & CEO – California HealthCare Foundation]**

**Mulkey and Smith: “The Long and Winding Road: Reflections on California’s ‘Year of Health Reform’.” *Health Affairs* (March 24, 2009). [WebCafe]**

**Smith and Laws: “Invited Commentary.” *Archives of Internal Medicine* (May 25, 2009). [WebCafe]**

**Altman: “This Could Be the Next Big Thing in Health Reform.” Kaiser Family Foundation Blog [WebCafe]**

## **PART II : PROVIDERS & THE DELIVERY OF HEALTH CARE**

**Tues Oct 13    Academic Medical Centers**  
**[Ralph Muller, CEO, University Pennsylvania Health System]**

**Brookings Institution: *The Path Forward for Academic Medical Centers: Innovation, Economics, and Better Health* [Webcafe]**

**Thur Oct 15    Pharmacy Benefit Managers (PBMs) & Pharmaceutical Wholesalers**  
**[Karl Kellner, Vice-President and Partner, Booz-Allen]**

**Aitken, Berndt, and Cutler: “Prescription Drug Spending Trends in the United States: Looking Beyond the Turning Point.” *Health Affairs* Web Exclusive (December 16, 2008. [WebCafe]**

**AIS: *PBM Contracting and Transparency Issues and Models* (2008) [WebCafe]**

**Booz-Allen: *Pharma Distributor Market Overview* (2009) [WebCafe]**

***OPTIONAL: Kaiser Foundation: Understanding the US Commercial Pharmaceutical Supply Chain.* [WebCafe]**

**Paper #1 outline due (thesis, argument, bibliography)**



**Tues Oct 20    Global Health & Delivery Models**

**HBS Case: *Global Health Partner: Obesity Care* [Bulkpack]**

**Mid-Term Exams Due & Review of Mid-Term Exam**

**Thur Oct 22    NO CLASS**

**Tues Oct 27    NO CLASS**

**Thur Oct 29    Recent Hospital Trends & Issues: “How Do They Do That?”**

**Iglehart: “Low-Cost High-Quality Care.” [WebCafe]**

**Spear. “Fixing Health Care from the Inside, Today.” *Harvard Business Review* (2005). [Webcafe]**

**HBS Case: *Virginia Mason Medical Center* [Bulkpack]**

**Tues Nov 3    The Medical Device Industry**

**[Dr. Stephen Oesterle, SVP for Medicine and Technology, Medtronic]**

**Osterle. “From Bed to Bench: An Interview with Stephen Oesterle.” *In Vivo* (June 2007). [Webcafe]**

**Kruger. “The Medical Device Sector.” In Burns (Ed.), *The Business of Healthcare Innovation* (Cambridge University Press, 2005). Chapter 6.**

**Thur Nov 5    Structure and Financing of Healthcare Globally**

**[Patricia Danzon, Ph.D., Professor of Health Care Mgmnt, Wharton School]**

**Anderson and Frogner, “Health Spending in OECD Countries: Obtaining Value Per Dollar.” *Health Affairs* 2008 [WebCafe]**

**Busse: *The German Health Care System*. The Commonwealth Fund. [WebCafe]**

**McKinsey: *Why Americans Pay More for Health Care* (2008) [WebCafe]**

**Paper #1 Due: Payer Segment**

**Quality Circle Meeting (directly following class)**

**Tues Nov 10 The Role of Venture Capital in Health Services**  
**[Darren Black, Partner - SV Life Sciences Advisers]**

**Jefferies. *This Month in Healthcare Services*. (July 2009). [WebCafe]**

**Morgan Stanley. *Healthcare Services: Healthcare Spending Looks Far More Cyclical This Time*. (June 18, 2008). [WebCafe]**

**Thur Nov 12 Ethics: The Topic of Health Care Reform**  
**[Art Caplan, M.D. – Director, Center for Bioethics, Univ of Penn]**

**Ruger: “Ethics in American Health 1 & 2: Ethical Approaches to Health Policy.” *American Journal of Public Health* (Oct 2008): 1751-1756, 1756-1763.**

**Fuchs and Emanuel: “Health Care Reform: Why? What? When?” *Health Affairs* 24(6): 2005. [WebCafe]**

**Caplan: “The Art of Medicine: Is Disease Eradication Ethical?” *Lancet* (June 27, 2009). [WebCafe]**

**Paper #2 topic due (one paragraph description & team members)**

### **PART III: PRODUCERS / SUPPLIERS**

**Tues Nov 17 Strategy & Structure of the Biotechnology Industry**  
**[Scott Cannizzaro, Ph.D., MBA – Senior Director, Johnson & Johnson]**

**Deloitte: *The Future of Life Sciences Industries: Transformation Amid Risk*. [WebCafe]**

**The Pink Sheet: “Lilly Hopes to Score Novel Compounds Early by Offering to Screen Discoveries.” (June 15, 2009). [WebCafe]**

**Li and Vederas.: “Drug Discovery and Natural Products: End of an Era or an Endless Frontier?” *Science* (2009). [WebCafe]**

**Additional/Optional Reading:**

**Pfeffer. “The Biotechnology Sector – Therapeutics.” In Burns (Ed.), *The Business of Healthcare Innovation* (Cambridge University Press, Cambridge UK, 2005). Chapter 3. MAY WANT TO READ if you know little or nothing of the biotech sector.**

**Thur Nov 19 New Startups in the Medical Device Industry**  
**[David Cassak, Managing Partner, Windhover Information]**

Cassak, Selection of *In Vivo* articles - TBA [WebCafe]

Paper #2 outline due (thesis, argument, bibliography)

**Tues Nov 24 Overview of the Pharmaceutical Industry**  
**[Ad Rawcliffe – Senior Vice President, Worldwide Business Development and Finance, Glaxo SmithKline]**

FDC–Windhover. “Biopharma in 2008: What a Difference an Economic Crisis Makes.” *In Vivo* (January 2009). [WebCafe]

Henske and van Biesen. “Collaborating for Better R&D Productivity.” *In Vivo* (February 2009). [WebCafe]

**Additional/Optional Reading:**

Northrup. “The Pharmaceutical Sector.” In Burns (Ed.), *The Business of Healthcare Innovation* (Cambridge University Press, Cambridge UK, 2005). Chapter 2. **MAY WANT TO READ** if you know little or nothing of the pharma sector.

Diller. “Emerging Pharma Markets: Adapt, Diversify, and Persist.” *In Vivo* (June 2009). [WebCafe]

**Thur Nov 26 HAPPY THANKSGIVING [no class]**

**Tues Dec 1 Global Comparison with People’s Republic of China: Insurance Reform and Impact on the Pharmaceutical Industry**  
**[Jonathan Wang – Boston Consulting Group, 2<sup>nd</sup> Year HCMG, Dr. Burns]**

Hu, Tang, Liu et al.: “Reform of how health Care is Paid for in China: Challenges and Opportunities.” *The Lancet* (October 20, 2008) [WebCafe]

**SKIM: World Health Organization: *China: Health, Poverty, and Economic Development* [WebCafe]**

**Thur Dec 3    Regulation of the Pharmaceutical Industry: Role of the FDA**  
**[Gerald Faich, SVP Epidemiology and Risk Management, United BioSource Corporation, Former Official of the Food & Drug Administration]**

**Faich. “PMS Lessons Learned.” *Drug Information Journal*, 1991.**

**Edwards, Faich, and Tilson. “Points to Consider: The Roles of Surveillance and Epidemiology in Advancing Drug Safety.” *Pharmacoepidemiology and Drug Safety*, 2005.**

***For Reference: Browse the Introductory Comments in the following documents***

**Guidance for Industry Premarketing Risk Assessment [WebCafe]**

**Guidance for Industry Pharmacovigilance [WebCafe]**

**Tues Dec 8    Information Technology and The Future of Health Care**  
**[Jeff Goldsmith, President, Health Futures]**

**Goldsmith. “The Healthcare Information Technology Sector.” In Lawton Burns (Ed.), *The Business of Healthcare Innovation* (Cambridge University Press, Cambridge UK, 2005). Chapter 7.**

**Thur Dec 10    Global Health: Diagnostics**  
**[Kristian Olson, M.D. - Global Health Initiative, Center for Integration of Medicine and Innovative Technology (CIMIT)]**

**Specter: “What Money Can Buy.” *The New Yorker* (October 24, 2005). [Webcafe]**

**Malkin: “Design of Health Care Technologies for the Developing World.” *Annual Review of Biomedical Engineering* 9: 567-587 (2007). [WebCafe]**

**Frost and Reich: *Access*. Harvard Center for Population and Development Studies (2008). Chapter 2 (pp. 16-38). [WebCafe]**

**Paper #2 Due: Provider/Supplier Topic**

**Wed Dec 16    FINAL EXAMINATION (12:00 PM – 2:00 PM)**

## **Format for Two Industry Segment Papers**

- 1. Payer Segment Paper (#1)**
- 2. Provider or Supplier Segment Paper (#2)**

Each paper should consist of (at least) three sections: a beginning, middle, and an end. The beginning section should explain what the issue/development is, why it is important, and what the paper's content, organization, and thrust is. The middle of the paper should present the analysis/argument. The end section should summarize what has been learned from the analysis and point to the future (future changes needed, likely trajectory of change, need for further research, etc).

In sum, the paper should develop a thesis and an argument in support of that thesis that answers some key issues/questions or critically assesses some key developments. It should not merely describe what is happening in the healthcare industry. One way to tell whether you are developing an argument is to ask yourself at the end of the paper, "So What? Who Cares?" The paper will be graded on the basis of how well the key issue/development is framed up front, how well it is analyzed in the middle, and what conclusions and/or implications it draws. The paper will also be graded on its ability to portray the relationships between sectors (e.g., payer & provider, payer & supplier, provider & supplier). A portion of the paper's grade will be based on composition (e.g., syntax, spelling, organization, etc.).

There are no specific formatting requirements, but based on past experience papers are usually 12-15 pages in length, and include references. We strongly recommend that your team begin work as early as possible. Teams are welcome to meet with the instructor to refine the topic and develop research sources. Topics must be approved by the instructor beforehand.

### **Some Examples of Payer Segment Topic Areas:**

- 1. disease management**
- 2. national health insurance**
- 3. payer-provider contracting and negotiations**
- 4. pay-for-performance programs (P4P)**
- 5. consumer directed health plans (CDHP)**
- 6. technology assessment**
- 7. pharmacy benefit management programs (PBMs)**
- 8. innovations in State Medicaid programs**
- 9. cost-effectiveness of health promotion and prevention programs**
- 10. merger & acquisition strategies of insurers**
- 11. diversification strategies of insurers**