

SOC 2060:
COMPLEX ORGANIZATIONS AND HEALTH POLICY:
THE NEW TECHNOLOGICAL IMPERATIVE IN MEDICAL CARE
FALL 2007
Thursdays 9 – 12 noon

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DESCRIPTION:

We are in the midst of profound change in all areas of medical science and research, including innovation and discovery in biology, cellular biology, genomics and proteomics, pharmaceuticals, medical devices, and information technology. Some have likened the sum effect of this recent scientific avalanche to a complete “paradigm shift” in certain areas of patient treatment, such as cancer, Alzheimer’s disease, organ and limb replacement, and various auto-immune system disorders.

Profound change in medical science actually has implications for change in at least two organizational fields: the organizations where that science “happens” and the organizations where medical treatment occurs. The first field requires that we consider the linkage between research innovation and the wide variety of actors and organizations involved in translating new scientific discoveries into new products to be marketed for treatment use. This is the “bench to bedside” development chain, linking scientists, their labs and/or universities to product development, testing, and marketing. Part of this puzzle involves questions about translational research and about entrepreneurship and product innovation among the producers of new medical treatments. The other organizational field that is profoundly influenced by new medical innovation is comprised of the healthcare organizations where treatment is provided. This field includes treating physicians, their offices, groups, foundations, hospitals, diversified health systems, pharmacies, and delivery networks. Both fields are experiencing change in internal organizational arrangements and in external linkages (or inter-organizational structures and relationships, especially complex ownership arrangements, mergers and acquisitions, contract partnerships, etc.). Both fields are influenced in a substantial way by market structures, fiscal intermediaries, and government regulation.

This graduate level seminar will provide an in-depth coverage of “the new technological imperative” in health and medical care: technological change in medical care as the catalyst for change, indeed, the *engine for change* in medical organizational structures. Our goal this semester is to examine all three parts of this puzzle: the medical technology itself, the innovators/developers/producers of new treatments/devices, and the organizational structures of new treatment provision. Under what conditions do these change processes occur rapidly, and under what conditions is change stuck in the molasses of organizational inertia? What are the barriers to new medical treatment

development? What are the barriers to change that slow innovation diffusion to patient treatment?

This is a story that is unfolding NOW; there are few clear answers to any of these questions. In fact, there are far more questions than there are answers. But our job in this seminar is to lay out those questions and various attempts to both frame them theoretically, and respond to them empirically and practically. We will work with several theoretical traditions related to innovation and organizational change, and the semester's reading list should be considered a work in process.

GOALS OF THE COURSE:

This course is organized around three basic goals:

- 1) To work with an established literature (both theoretical and empirical) on these related topics, particularly examining pertinent theories from the study of healthcare organizations, and push those theories to develop the key questions. This will demand that we carefully analyze underlying concepts and theoretical assumptions within each approach, and understand what each theory is designed to explain and what is beyond its explanatory power.
- 2) To develop plausible hypotheses about the relationships between technological change and organizational change in medicine/healthcare, and to embed those hypotheses within a critical analysis paper. This goal is directly linked to the primary requirement of the course: see (4) below. Your paper will specify the linkages between a specific example of medical technological change and a specific existing organizational structure within one of the two relevant organizational fields (the field of science-related organizations, or the field of care delivery organizations).
- 3) To become fully involved participants in the process of a higher level seminar experience. This means that you will learn from each other, and I will learn from you, as much or more as you will learn from me. This also means that you will spend considerable time searching beyond the course reading list to find more sources, better approaches, and more recent ideas.

COURSE REQUIREMENTS:

Your grade in this seminar will be based on four criteria:

- 1) your participation in discussion and faithful attendance each week (10%),
- 2) your performance as discussion leader at least once during the semester, and a follow-up written five page critical review of that week's readings (20%),
- 3) your contribution to our reading list of one additional research article, for a specific week during the semester (to be assigned early in the semester), and

your oral explanation and justification to the seminar group of what your article adds and why it is important (20%), and...

- 4) a critical analysis paper (50%; structure of that paper will be described early in the semester).

Reading and Participation (10%):

Students are expected to attend every class. A key feature of this class will be learning through interaction. Discussion and debate will help to refine our understandings of health care policy and health services research literatures on these complicated and intertwined issues. Please complete all readings prior to the start of class. We will rely heavily on a discussion-format. All seminar participants will be expected to participate in discussion.

Discussion leader and 5-page paper (20%):

Your five page review of one week's readings will be due the week following your performance as discussion leader (depending upon enrollment, students might be organized in teams to lead discussions; sign-ups will happen on day one of the semester). As discussion leader, your job will be to focus on finding the major common themes in that week's readings, crystallizing the significant contrasts in theory, approach or method across the readings, and provoking your fellow students into lively exchange on those issues. Do not give a lecture; do try to lay out key issues and unanswered questions; ask your peers questions designed to engage them in an analysis of the readings. Your five page paper (double spaced, typed, maximum length) should summarize those issues and comparisons --- BRIEFLY.

Contribute a Reading (20%):

As described above, this puzzle is not fully defined yet, and the readings organized below probably do not tell the whole story. At our second class meeting, we will have sign-ups for the week in which you will be responsible for finding an additional journal article on the topic for that week. You may choose to do this the same week as you lead discussion for the seminar, or a different week (it may be less confusing to choose a different week). You will need to present to the seminar a brief introduction of the reading and a justification for why you have chosen this article to add to the readings for that week. A good justification goes beyond the superficial "Well, it's a recent piece that wasn't assigned." The added work should contribute a perspective that is not well covered in the reading list, that represents a different argument on the topic, that uniquely extends an existing argument in an innovative fashion, or that empirically examines (with data) a theoretical idea suggested in the extant readings but not empirically tested. The journal article can be either a theoretical discussion of issues relevant that week, an analysis of data on a relevant issue, or a policy discussion. You may choose to use PowerPoint for your discussion; if so, please limit your presentation to five slides.

Independent Critical Analysis Project (50%):

This research project is your major assignment this semester. You will select a topic, conduct a literature review, develop hypotheses, and search for relevant data on your topic. This paper will select a particular new discovery or technological change in

medical science, link this to a particular organizational structure in either the scientific production process or in patient care/treatment, and analyze whether that existing structure is optimum for assuring speedy translation or delivery of that innovation to patient care. You must also propose an alternative organizational structure to overcome current sub-optimum structures. In addition, you will do a formal presentation of this analysis.

Draft Proposal (10%): The first step will be to identify a topic, narrow it down to a specific research question of appropriate scope, and write a literature review. Your statement of research and your draft literature review will be due in class on **September 27, at the beginning of class**. It should be no more than seven double-spaced pages.

Presentation (10%): The presentation of your critical analysis will be done in class on **November 29 and December 6**. Please plan for a 15 minute presentation. Student presentations will be followed by 15 minutes of discussion.

Final Paper (30%): **Final critical analysis papers are due December 13 at noon**. The final papers should be no more than 25 pages, double-spaced. Please turn in PAPER VERSION of you paper to the front office in the Sociology Department, and have Lynda Tavares, our receptionist, note time and date of your submission.

READINGS:

The following two books are required for purchase at the Brown Bookstore:

- 1) Stephen S. Mick and Mindy E. Wyttenbach (eds): Advances in Health Care Organization Theory. 2003. San Francisco, CA: Jossey-Bass.
- 2) Lawton R. Burns (ed): The Business of Healthcare Innovation. 2005. Cambridge, UK: Cambridge University Press.

A third book is recommended, but not required:

- 3) Jerry Avorn: Powerful Medicines: The Benefits, Risks and Costs of Prescription Drugs. 2005. Vintage Books.

Other readings are listed below on the day scheduled. These are available on OCRA and through our course website which you can find at mycourses.brown.edu. All readings listed under a given class meeting should be read before you come to class. Additional readings should be expected.

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FALL SEMESTER 2007

TOPICS, READINGS, DUE DATES

WEEK 1 (September 6):

BACKGROUND I: Theories of organizational change in health and medical care, and conceptualizing current structures of health care organizations and markets.

READINGS: Mick & Myttenbach: Advances in Health Care Organization Theory.

Institutional Forces in Health Care:
Chapters 1 – 4

ACTIVITIES: Sign-ups for Discussion Leading.

WEEK 2 (September 13):

BACKGROUND II: Markets, Networks and Strategy in Health Care

READINGS: Mick & Myttenbach: Chapters 5 through 8, plus Chapter 11.

ACTIVITIES: Sign-ups for Paper Contribution week.

WEEK 3 (September 20):

BACKGROUND III: The Producers of Healthcare: Understanding Innovation in healthcare technology: pharmaceuticals, biotech, genomics/proteomics, medical devices, IT.

READINGS: L. R. Burns: The Business of Health Care Innovation. (entire book). Return to the chapters in this book as a starting point for our discussions later in the semester of each healthcare technology area.

WEEK 4 (September 27):

The Changing Structure of Science:

READINGS:

- 1) Stuart, Toby E., Ding, Waverly W., “*When Do Scientists Become Entrepreneurs? The Social Structural Antecedents of Commercial Activity in the Academic Life Sciences*” American Journal of Sociology, Vol. 112, No. 1, July 2006, pp. 97-144.
- 2) Sung, N., et. al., “*Central Challenges Facing the National Clinical Research Enterprise,*” JAMA, March 12, 2003, 289, 10.
- 3) Wuchty, Stefan; Jones, Benjamin, F.; Uzzi, Brian, “*The Increasing Dominance of Teams in Production of Knowledge,*” Science, Vol. 316, May 18, 2007, pp. 1036-1039.

ACTIVITIES: FIRST DRAFT OF TOPIC/RESEARCH QUESTION/LIT REVIEW DUE TODAY AT BEGINNING OF CLASS!

WEEK 5 (October 4):

New Drugs: Pricing and Coverage Issues.

READINGS:

- 1) Schweitzer, Stuart O., Comanor, Willam S., “*Controlling Pharmaceutical Prices and Expenditures*” in Changing the U.S. Health Care System, Key Issues in Health Services Policy and Management, eds. Ronald M. Andersen, Thomas H. Rice, and Gerald F. Kominski, 2007, John Wiley and Sons, Ch. 7, pp. 157-182.
- 2) Goldman, Dana P., Joyce, Geoffrey, F., Lawless, Grant, Crown, William H., and Willey, Vincent., “*Benefit Design and Specialty Drug Use,*” Health Affairs, Vol. 25, No. 5 September/October 2006, pp. 1319-1331.
- 3) Pollack, Andrew, “*Pricing Pills by the Results,*” The New York Times, Saturday, July 14, 2007, p C 1.
- 4) Pollack, Andrew, “*Old Drugs In, New Ones Out,*” The New York Times, Business Day, Saturday, June 30, 2007, C 1.
- 5) Saul, Stephanie, *Taking On Alzheimer’s: Can Big Pharma Reverse the Tides of Time?*”, The New York Times, Sunday Business, Sunday, June 10, 2007, P 3.1.

ALSO RECOMMENDED: Jerry Avorn: Powerful Medicines. 2005. Vintage Books.

WEEK 6 (October 11):

Biopharmaceuticals: Coverage Policies at Odds with Innovation.

READINGS:

- 1) Calfee, John E, DuPre, Elizabeth., “*The Emerging Market Dynamics of Targeted Therapeutics*,” Health Affairs, Vol. 25, No. 5 September/October 2006, pp. 1302-1308.
- 2) Phillips, Kathryn A., “*The Intersection of Biotechnology and Pharmacogenomics: Health Policy Implications*,” Health Affairs, Vol. 25, No. 5 September/October 2006, pp. 1271-1280.
- 3) Robinson, James C., “*Insurers’ Strategies for Managing the Use and Cost of Biopharmaceuticals*,” Health Affairs, Vol. 25, No. 5 September/October 2006, pp. 1205-1217.
- 4) Tunis, Sean R., Pearson, Steven D., “*Coverage Options for Promising Technologies: Medicare’s Coverage with Evidence Development*,” Health Affairs, Vol. 25, No. 5, September/October 2006, pp. 1218-1230.

WEEK 7 (October 18):

Genetics and Proteomics.

READINGS:

- 1) Caruso, Denise, “*A Challenge to Gene Theory, A Tougher Look at Biotech*,” The New York Times, Bright Ideas, Sunday, July 1, 2007, front page.
- 2) Review: Calfee, John E, DuPre, Elizabeth., “*The Emerging Market Dynamics of Targeted Therapeutics*,” Health Affairs, Vol. 25, No. 5 September/October 2006, pp. 1302-1308.

WEEK 8 (October 25):

Information Technology and the Electronic Health Record.

READINGS:

- 1) Luck, Jeff, Fu, Paul Jr., “*Health Care Information Systems*” in Changing the U.S. Health Care System, Key Issues in Health Services Policy and Management, eds. Ronald M. Andersen, Thomas H. Rice, and Gerald F. Kominski, 2007, John Wiley and Sons, Ch. 11, pp. 273-308.
- 2) Jha, Ashish K., Ferris, Timothy G., Donelan, Karen, DesRoches, Catherine, Shields, Alexandra, Rosenbaum, Sara and Blumenthal, David, “*How Common are Electronic Health Records in the United States? A Summary of the Evidence*” Health Affairs Web Exclusives, Vol. 25, July-November 2006, w496-w507.
- 3) Clancy, Carolyn M., “*Getting to ‘Smart’ Health Care*” Health Affairs Web Exclusives, Vol. 25, July-November 2006, published on line November 7, 2006, w589-w592.

WEEK 9 (November 1):

Medical Devices.

READINGS:

- 1) Burns, Lawton R., “*Dealing with Innovation and Costs in Orthopedics: A Conversation with Dane Miller*”, Health Affairs—web exclusive, Vol. 25, published online May 18, 2006; w241-w251.
- 2) Burns, Lawton, R., “*Growth and Innovation in Medical Devices: A Conversation with Stryker Chairman John Brown*,” Health Affairs – web exclusive, Vol. 26, No. 3, May 1, 2007, w436-w444.

WEEK 10 (November 8):

Organizational Structures from the 1990’s: How do we address issues of cost, access, equity and quality of care?

READINGS:

- 1) Barnsley, Jan, Hynes, Denise H., Warnecke, Richard B., “*Ensuring Access to Quality Care*,” in Managing a Health Care Alliance: Improving Community Cancer Care (edited by A. Kaluzny and R. Warnecke), Jossey-Bass Publishers, 1996, Part 2, pp. 59-128.
- 2) Dowling, William L., “*Strategic Alliances as a Structure for Integrated Delivery Systems*,” in Partners for the Dance: Forming Strategic Alliances in Health Care, eds. Arnold P. Kaluzny, Howard S. Zuckerman, Thomas C.

Ricketts III, Health Administration Press, 1995, Ch. 5 with commentaries, pp. 139-198.

- 3) Warnecke, Richard B., Kaluzny, Arnold D., *“The Challenge of Improving Cancer Care,”* in Managing a Health Care Alliance: Improving Community Cancer Care, Jossey-Bass Publishers, 1996, Part 1, pp. 3-55.
- 4) Lohr, Steve, *“Who Pays for Efficiency?: The Price for Lowering the Costs of Care is More Spending”*, The New York Times, The Business of Health, Monday, June 11, 2007, p H 1.

WEEK 11 (November 15):

Where are the new ideas? The new structures?

READINGS:

- 1) Greenhalgh, Trisha, Robert, Glenn, MacFarlane, Fraser, Bate, Paul and Kyriakidou, Olivia, *“Diffusion of Innovations in Service Organizations: Systematic Review and Recommendations”* The Milbank Quarterly, Vol. 82, No. 4, 2004, pp. 581-629.
- 2) Helfich, Christian D., Weiner, Bryan J., McKinney, Martha M., Minasian, Lori, *“Determinants of Implementation Effectiveness: Adapting a Framework for Complex Innovations,”* Medical Care Research and Review, Vol. XX, No. X, 2007, Sage Publications, pp. 1-25.

WEEK 12 (November 22): NO CLASS --- THANKSGIVING HOLIDAY

WEEK 13 (November 29): CLASS PRESENTATIONS

WEEK 14 (December 6): CLASS PRESENTATIONS

WEEK 15 (December 13): FINAL PAPERS DUE AT NOON.