THE ECONOMICS OF HEALTH CARE POLICY

SYLLABUS

HKS SUP-572, HSPH HPM-227cd, FAS ECONOMICS 1460

SPRING SEMESTER 2016

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Section Meetings on selected Fridays at 10:00, L332, HKS

COURSE OUTLINE

January 25 - Introduction, Costs, and Financing (Class 1)

January 27 - Health Care Financing and the Labor Market, Incidence, the Theory of the Demand for Health Care and for Health Insurance (Class 2)

February 1 - Empirical Studies of the Demand for Health Care (Class 3)

February 3, 8, and 10 - Reimbursement Policy: Traditional Medicare (TM), Parts A and B (Classes 4-6)

February 17 - The Theory and Consequences of Selection in Health Insurance Markets with Individual Choice (Class 7)

February 22 - Medicare Part C and Risk Adjustment (Class 8)

February 24 - Commercial Health Insurance Markets and the Affordable Care Act (Class 9)

February 29 - Administrative Costs, Minimum Loss Ratios, and Antitrust (Class 10)

March 2, 7 and 9 - Testimony 1 (Classes 11-13)

March 21 – Variations (Class 14)

March 23 - Quality of Care (Class 15)

March 28 - Managed Care and Tools to Improve Quality (Class 16)

March 30 - Comparative Effectiveness Analysis (Class 17)
April 4 - Malpractice (Class 18)

April 6 - Pharmaceuticals and Medicare Part D (Class 19)

April 11 - Long Term Care and Medicaid (Class 20)

April 13 - Workforce and a Wrapup (Class 21)

April 18, 20, 25 - Testimony 2 (Classes 22-24)

April 27 - In class exam (Class 25)
This course has a long reading list and a correspondingly heavy workload. The workload is heavier than the typical HKS course, but – and this may be small consolation – it is less than a graduate level course in FAS. To try to help you, I have annotated the reading list to let you know my rationale for putting the reading on the syllabus so that you can read for the main points.

If you do the required reading and work through the slides, you should be qualified for any analytic or policy job in the health care sector that does not require the research tools of a Ph.D. I have also included a considerable amount of optional reading, so although there is a lot of required reading, the syllabus appears much longer than it is. In addition to the reading, there are slides for each class session, and for some of the sessions there are many slides.

The required reading is in **bold**. You can download almost all the reading through the Harvard library system ([http://lib.harvard.edu/e-resources/index.html](http://lib.harvard.edu/e-resources/index.html)); the URLs are listed. National Bureau of Economic Research (NBER) working papers can be downloaded free if you go to the NBER website ([www.nber.org](http://www.nber.org)) through a Harvard account. I have assigned portions of four books, *Free for All?*, *Inside National Health Reform*, *Pricing the Priceless*, and *Incentives and Choice in Health Care*. They are all on reserve in the HKS library. If you prefer to purchase them, the first three are in paperback. Some modest additional material is on the course website through CANVAS. Some of the items that I have placed on the course website such as “How to Think Like an Economist” are not called out on the syllabus but are just on the website if you want to peruse them.

For each class session I will post slides on CANVAS the week prior to the class. I expect you to have gone through the slides before the class and to have done the required reading for that class. Both the reading and the slides have embedded questions, many of which we will talk about in class. I will **not** discuss each slide in class; there isn’t time to do that anyway.

A course requirement is to answer the following three questions and send them to me AND to the Course Assistants by noon of the day before the class:

1. **What in the reading or the slides did you find most interesting?** Briefly say why.
2. **What in the reading or the slides did you find most puzzling?**
3. **What policy issue did you feel most worthy of discussion in class?**

I have tried to make the slides as self-explanatory as possible. In many cases I have added explanatory material in the footer or in the notes below the slide if you use Normal View; in those cases I have put an * in the title or the body of the slide to alert you. I have tried to spell out acronyms in the footer or in the notes. Although I will try to avoid them, I will no doubt occasionally lapse into acronyms in class; if you don’t understand them, raise your hand; you will be doing your classmates a favor.

In addition to the requirement to submit answers to the three questions before each class, a second requirement of the course is to prepare “testimony” on two different occasions, one near the middle of the semester and the other at the end of the semester. You should write 1250 words or less, roughly five double-spaced pages, taking a position for or against a policy position that is relevant to the policy domains we covered in earlier class sessions. Although almost
all of the course material is about the US health care system, I encourage international students to write about analogous issues in their home countries. Similar problems to those in the US can be found in almost all the OECD countries and increasingly in middle income countries.

In addition to writing your own testimony, everyone will read ten testimonies of other students and prepare one question per testimony for each author (“the witness”), who will answer selected questions about his or her testimony in class. The Course Assistants and I will select the questions to be answered since there will not be time in class to answer all the questions. You should, however, think about all the questions you get from your classmates. There will be an opportunity in class for give and take between the persons asking and answering the questions and others as well if someone else wants to follow up, and I encourage you to follow up. Come prepared with respect to the questions you have posed to your classmates. Do NOT read your either your questions or your answers; it is fine to have a few notes with you when you come to the front of the class to summarize your testimony (one minute) and answer questions, but the time in class should be a conversation between two (or more) people, not reading from a prepared text. At an actual hearing in the US Congress, witnesses summarize their written testimony, usually in one or two minutes (Cabinet members have more leeway but they do not read their statements either), and then just respond to questions that they do not necessarily know in advance, though they certainly may have anticipated them. (Committee staff will often have suggested what the committee is interested in.) I have posted examples of previous students’ testimonies on the course website. For more professional (and longer than you are expected to write) examples of testimony, see testimony that MedPAC has prepared at http://www.medpac.gov/. At the top of the MedPAC home page is a box titled “Documents.” Click on the menu in the “Documents” box and select “Congressional Testimony.”

Most policy makers neither want nor expect testimony to be laden with footnotes or citations. You should respect their expectations, and not make your testimony look like a law review article. That said, for purposes of this class you must still respect the scholarly standards of attribution and citation. That is, any words, data, or substantial ideas you take from someone else must be credited to the original author through a standard scholarly citation. Any substantial borrowing from others that is not so credited is plagiarism, which is one of the few ways you can get yourself expelled from Harvard. This is not hypothetical; it has unfortunately happened in this class. Please resolve this tension as follows: Write your testimony along the lines of the examples, i.e., without extensive footnoting or citation. BUT… add to the back of the formal memo a page of documentation, giving the sources of key information you have used in your memo. Document your sources in sufficient detail that a reader (e.g., you, if 3 months after writing the memo you are called upon by your boss to document your data sources) could locate and recover your key sources. Treat this documentation as an annex that would not necessarily be included in the memo handed in to the decision maker, but that would be appended to the back of the “file copy.” Such documentation is required for this class. It’s also a good practice when you leave this classroom for the world outside.

Finally, there will be an in-class examination during the last class of the semester. I have posted some prior final examinations on the course website.

Your grade will depend upon:
1) Your participation in class (I expect you to be in class on time) and the questions that you submit for each class session (50%);
2) The two testimony exercises, including the quality of your questions for others and your answers to the questions on your own testimony (16+% each), and;
3) The in-class examination in the final class session (16+%).

I use the Kennedy School suggested grading curve as a guideline – around 40 percent A’s or A–’s – but this is not rigid.

The course assistants will conduct a review session on several Fridays; this is an optional session. You should submit topics or questions you would like covered to the assistants beforehand; they are not expected to prepare new material to cover in these sessions. If they don’t receive questions, they have the option to cancel the session.

This course has several objectives:

1. **To enable you to think critically about health care policy.** This is the primary aim. Note that I slipped in the word “care” between “health” and “policy;” there is a literature around health policy as well, especially around the socioeconomic determinants of health and promoting healthy behaviors, but there is not time to go into the literature surrounding those topics; most, if not all, of you will likely think the reading list is already too long. The course will also not deal with classic public health issues, such as food and water safety. Henceforth, I will just use the shorthand of health policy rather than health care policy. I put this aim first, because of a quote from Eric Hoffer that I find apt: “In times of change, learners inherit the earth, while the learned find themselves beautifully equipped to deal with a world that no longer exists.” And this is certainly a time of change.

2. **To acquaint you with past analytical efforts in health policy, primarily by economists, who, however, often are writing for non-economists (since when they write for other economists in economics journals the technical level may be too high for non-economists and it is important to reach non-economists since they play an important role in formulating health policy).** This is intended to accomplish several things:

   a) To teach you some of what is known and not known about health policy;
   b) To show you how the economic theory and econometric methods you have learned in other classes have been applied to issues of health policy; and
   c) To show you the connection between policy analysis and actual policy. Although there may not always seem to be an obvious connection, the manner in which issues appear on the policy agenda often is influenced by analysis, frequently with a substantial lag. Of course, there is also a reverse flow; what appears on the analysis agenda is certainly influenced by policy, though sadly by the time the analysis is done it is sometimes too late. A good policy analyst, like a good stock market analyst, is always trying to guess where things will be in a few years; both types of analysts are often wrong.

3. **To acquaint you with some of the relevant political and legislative history of American
health policy issues. In this course we will deal with several policy issues: the demand for medical care; pricing and reimbursement; the quality and organization of care, including tort law; and the health care workforce. These issues all have legislative and political histories, frequently long histories. Several of the optional books listed near the beginning of the syllabus (below) describe not only the history of American medical care generally but also the history of several of the policy issues that the course takes up, especially those around financing.

4. To distinguish where within the health care sector the market seems to work reasonably well and where it does not work so well and what the public policy options are for improving it in those domains where it does not work so well. For many reasons medical care does not resemble a classic textbook competitive market that is economically efficient, but incentives, including non-monetary incentives, are always important. You will have to decide where market failures are more tolerable and where government failures are more tolerable. Reasonable persons can and do differ on this issue.

5. I would also like to think you will learn something about the difference between higher and lower quality research. Toward that end I devote a few classes in the first part of the course primarily to research methods but I emphasize methods at several points in the course; the purpose of these classes is to make you a better consumer of research.

6. Finally, at least some of you at some point in your careers are likely to work on health policy in the US. This course should prepare you for jobs of an analytical nature that do not require the research tools of a Ph.D.

Rules of Classroom Conduct

I will follow the HKS rules for classroom conduct:

1. **Be on time.** Class starts at 8:40 am. At that time you should all be in your seats and ready to start class.
2. **Bring your name card.** It not only helps me learn your names but also helps your fellow students know who made a particular comment.
3. **Laptops, tablets, and smartphones are NOT to be used in class.** Since you can print off the slides in advance, there should be no need for access to them during class.
4. **No side conversations.** This is distracting to me and to your fellow students. If you have a question, please raise your hand. Although you will have asked questions in what you submit the day before, some questions will inevitably occur to you during class. Feel free to ask; if you don’t understand something, the chances are good someone else doesn’t either.
5. **Eat responsibly.** Try to minimize the impact on others. Drinks are allowed.
6. **Please leave during class for emergencies only.** If you have to leave during class, please try to create a minimal disruption. If you must arrive late or leave early for a particular class, please let me know in advance.
7. **Cell phones off.** If there is an extraordinary reason why you must keep your phone on (e.g., you are awaiting critical medical news) please silence your ringer and let me know in advance.
that you may receive a call. Leave class to conduct your conversation.

**Academic Integrity Policy:**

You should write your own testimony and your own questions on the testimony of others. The testimony is not a group exercise. And of course the examination is not a group exercise.

**A semantic note on the Syllabus and on the slides:**

I will use the acronym ACA to mean the Affordable Care Act. On December 24, 2009 and March 21, 2010 the House and Senate respectively passed the Patient Protection and Affordable Care Act of 2010. Three days after President Obama signed this Act into law, the House and Senate both passed the Health Care and Education Reconciliation Act, which amended the original legislation. By the ACA I mean the amended Act. Even though many of you will probably be familiar with key provisions of the ACA, in the slides I have tried to be self-explanatory when I refer to specific provisions. If you want a summary of the Act, you can read the second section of the McDonough book below, though the book does not deal with the 20,000+ pages of regulations to implement the Act that have been issued in the last six years, and it did not anticipate the Supreme Court decision making Medicaid expansion optional. If you are interested, you can read my early analysis of the Act, but that is certainly not required reading:

Joseph P. Newhouse, “Assessing Health Reform’s Impact on Four Key Groups of Americans,” *Health Affairs*, September 2010, 29(9):1714-24. This paper was obviously written before the 2012 Supreme Court decision (NFIB vs Sibelius) that allowed states to not expand Medicaid and not lose all their federal Medicaid dollars.

**Background Material: General**

Background material on a number of topics covered in the course, as well as other topics in health policy, is available at [www.kff.org](http://www.kff.org). Although I assume you will have some basic familiarity with US health care financing institutions, for example, you will have taken HKS SUP-500 or one of the undergraduate health policy courses, non-US students may find the descriptions of the Medicare and Medicaid programs on this website helpful. There is additionally a host of other background material on this website. Three other useful websites are [www.cbo.gov/topics/health-care](http://www.cbo.gov/topics/health-care), which has the Congressional Budget Office materials related to health (some of the CBO material, however, is under “Budget”), [www.medpac.gov](http://www.medpac.gov), the Medicare Payment Advisory Commission (MedPAC) site, which is extremely useful for Medicare issues, and [www.macpac.gov](http://www.macpac.gov), which has material on Medicaid and the Children’s Health Insurance Program (CHIP). Finally, a summary of a great many policy issues is available at [http://www.healthaffairs.org/healthpolicybriefs/archives.php?search=&x=11&y=4](http://www.healthaffairs.org/healthpolicybriefs/archives.php?search=&x=11&y=4).

**OPTIONAL:**

views on how health and health care have evolved in the past four decades. The book is focused on the US. I will *not* take up this book in class, but it is an excellent exposition of the application of several elementary economics principles to health care, especially the need for choice. Although the numbers are now very dated, the analysis is generally still relevant. Everyone making a career in health policy should read this classic book at some point, but you don’t need to read it to understand this course.

**Background: Historical (US)**

In addition to the Fuchs book, I recommend that those of you intending to work in US health care policy read at least one of the following books at some point in your health policy career for historical background. Except for a portion of the McDonough book, the course will not explicitly draw on them, but they all provide material on the political history of several issues the course considers. All are in paperback.

**OPTIONAL:**

John E. McDonough, *Inside National Health Reform;* Berkeley: University of California Press, 2011. Part I is an insider’s account of the enactment of the ACA; Part II is an analysis of the ACA, title by title. Some of Part II appears on the reading list below. Not surprisingly, parts of the book are out of date, most notably the chapter on Medicaid (Title II), which was written before the Supreme Court’s 2012 decision made Medicaid expansion effectively optional, as well as the material on the Class Act, which the Secretary decided could not be implemented.

Stuart Altman and David Shactman, *Power, Politics, and Universal Health Care;* Amherst, NY: Prometheus Books, 2011. A political history of the past century of health policy, though most of the book is focused on the past 40 years. The first author (and occasionally his mother) is a participant in many of the chapters; he is currently the chair of the Massachusetts Health Policy Commission.

David Blumenthal and James Morone, *The Heart of Power,* Berkeley: University of California Press, 2009. Each chapter is a description of health policy in each Presidential administration from Franklin Roosevelt to George W. Bush except for President Ford. The authors have rather harsh views of administration economists, although in my view they do not substantively rebut the arguments of the economists that they disparage. And they seem to ignore that many economists were (in their view) constructive contributors, e.g., Stuart Altman (in both the Nixon administration and in the Clinton transition), Gail Wilensky (George H.W. Bush), and Mark McClellan (George W. Bush).


**Background: Economics**

This is a course in the economics of health policy rather than a course in health economics, meaning the course investigates a number of health policy issues through the lens of economics rather than starting with economic theory and showing its applications to health policy as a typical health economics course might do. The difference, however, is more in emphasis than substance, and health economics textbooks cover most of the course topics in some fashion. For those who wish to see a textbook treatment, I mention three textbooks here; finding the relevant sections should not be difficult.


An indispensable reference work for more advanced students of health economics is:

- *Handbook of Health Economics*, vol. 1, eds., Anthony J. Culyer and Joseph P. Newhouse; Amsterdam: North Holland, 2000, and vol. 2, 2012, eds. Mark V. Pauly, Thomas G. McGuire, and Pedro Pita Barros. [http://www.sciencedirect.com.ezp-prod1.hul.harvard.edu/science?ob=TitleSrchURL&method=submitForm&stern=Handbook%20of%20Health%20Economics&acct=C000014438&version=1&userid=209690&md5=f46d423af8c0c93de3d0773e6328d322](http://www.sciencedirect.com.ezp-prod1.hul.harvard.edu/science?ob=TitleSrchURL&method=submitForm&stern=Handbook%20of%20Health%20Economics&acct=C000014438&version=1&userid=209690&md5=f46d423af8c0c93de3d0773e6328d322). I have put several chapters from the *Handbook* on the reading list, although only two are on the required list because many of the chapters are hard going unless you have the requisite economics background. A mathematical intermediate microeconomics course such as HKS API-101Z, FAS Economics 1011a, or HSPH HPM-206 and an undergraduate econometrics class will suffice for much of the *Handbook*, but a graduate level microeconomics course such as FAS Economics 2020 (HKS API-111, 112) and graduate level econometrics is necessary for some parts.

**Health Care Systems Other than the United States**

Although the US health care financing and delivery systems are exceptional in some respects, there is much variety in the rest of the world as well. If you wish to see sketches of 14 industrialized countries’ health care systems, including the US, see *International Profiles of Health Care Systems, 2013*, eds. Sarah Thomson, Robin Osborn, David Squires, and Miraya Jun; The Commonwealth Fund, November 2013, [http://www.commonwealthfund.org/Publications/Fund-Reports/2013/Nov/International-Profiles-of-Health-Care-Systems.aspx](http://www.commonwealthfund.org/Publications/Fund-Reports/2013/Nov/International-Profiles-of-Health-Care-Systems.aspx). In addition, there are a
few papers on this reading list that draw on experience in other countries, especially the UK and the Netherlands.


CLASS 1 - OVERVIEW OF MEDICAL COST DRIVERS AND HEALTH CARE FINANCING; FINANCING MEDICAL COSTS (January 25)

This first class session is an overview of issues around health care costs, focusing on why costs have risen historically, how they are financed, and the policy issues raised by different financing methods. Each method of financing creates economic inefficiencies. The slides for this class touch on those inefficiencies related to taxation, but they are covered much more extensively in any economics of public finance course. This session also takes up issues around the future financing of Medicare and Medicaid. I defer the issue of financing employment-based insurance to the next class. The Cutler-Zeckhauser chapter can be postponed if the reading load for this class is too great for your time, but I recommend that you do not postpone it (which of course is why it appears on the reading list for this class).

Henry J. Aaron and Paul B. Ginsburg, “Is Health Spending Excessive? If So, What Can We Do About It?” Health Affairs, September/October 2009, 28(5):1260-75. An overview of the cost issue. Note that their Table 2 is in the same spirit as the slide comparing the excess of US health care cost growth over GDP growth to some other individual countries. http://content.healthaffairs.org.ezp-prod1.hul.harvard.edu/content/28/5/1260.abstract

Alan M. Garber and Jonathan Skinner, “Is American Health Care Uniquely Inefficient?” Journal of Economic Perspectives, 22(4), Fall 2008, pp. 27-50. Suggests US health care is not on the flat-of-the-curve, as some infer from the US’ lower life expectancy and higher spending, but is instead inside the production possibility frontier (see the slides for this class). More on this point in classes 14 and 15. See also the Cutler and Ly paper in the Optional reading. http://pubs.aeaweb.org/doi/pdfplus/10.1257/jep.22.4.27


M. Gregg Bloche, “Beyond the ‘R Word’? Medicine’s New Frugality,” New England Journal of Medicine, May 24, 2012, 366(21):1951-3.  http://www.nejm.org.ezp-prod1.hul.harvard.edu/doi/full/10.1056/NEJMp1203521 In practice reducing the rate of growth of cost means not giving some medical services with positive benefits (or, more precisely, doing more of that than is done now). Some of the public still believes that cost should not be a factor in determining medical treatment, at least judging from the traction that the words “rationing health care” get in the public debate, but accounting for cost is inevitable given that the rate of growth must come down from historical levels. The issue is really the mechanism(s) that are used to ration and who gets what medical services.

David M. Cutler and Richard J. Zeckhauser, “The Anatomy of Health Insurance,” in Handbook of Health Economics, eds., Anthony J. Culyer and Joseph P. Newhouse; Amsterdam: North-Holland, 2000  http://www.sciencedirect.com.ezp-prod1.hul.harvard.edu/science/article/pii/S1574006400801705. This chapter is an excellent introduction to and summary of the economics of health care financing. It is relevant to many parts of the course, although I do not intend to work through the chapter in this or in subsequent classes. The chapter uses the calculus in some places; for those of you whose calculus is rusty, keep reading; the authors mostly explain verbally what they are doing. You do not have to have read the chapter to understand much of the material for the first few class sessions, but I have placed this chapter at this point on the reading list not only because it serves as background for many parts of the course but also because some of the early material in the course anticipates later material, and this chapter introduces some of that later material. In other words, you will understand the course as it unfolds better if you read this chapter now.

OPTIONAL:


Sheila Smith, Joseph P. Newhouse, and Mark Freeland, “Income, Insurance, and Technology,” Health Affairs, September/October 2009, 28(5):1276-84. This work
updates the Newhouse 1992 paper (below) with seventeen new years of data and an explicit accounting for the endogeneity of technological change. http://content.healthaffairs.org.ezp-prod1.hul.harvard.edu/content/28/5/1276.abstract

On the recent cost slowdown, see Amitabh Chandra, Jonathan Holmes, and Jonathan Skinner, “Is This Time Different? The Slowdown in Healthcare Spending” NBER Working Paper 19700, December 2013. http://www.nber.org/papers/w19700?utm_campaign=ntw&utm_medium=email&utm_source=ntw. Since 2010 the excess of health care spending growth over GDP has disappeared. What has caused the slow down - the recession, the ACA, more cost sharing, or something else - is highly contentious, as is the degree to which it will continue.

Katherine Baicker, Mark Shepard, and Jonathan Skinner, “Public Financing of the Medicare Program Will Make Its Uniform Structure Increasingly Costly to Sustain,” Health Affairs, May 2013, 32(5):882-90. A non-technical summary of a model that calculates the welfare loss from increased taxes to finance the higher cost of public insurance. It uses the size of this welfare loss to argue for coverage of basic medical services and redistribution in other forms. This paper builds on more technical work by the authors (see reference 19 and the immediately following publication by two of the three authors).

Katherine Baicker and Jonathan Skinner, “Health Care Spending Growth and the Future of U.S. Tax Rates,” in Tax Policy and the Economy,” ed. Jeffrey R. Brown, Chicago: University of Chicago Press, 2011. To finance CBO’s then projected federal health care spending, top marginal tax rates could rise to 70% by 2060; deadweight loss is $1.48 per dollar collected and GDP declines (relative to trend) by 11%. Importantly, however, CBO’s projected health care spending has declined markedly since 2011 and so therefore have the required tax rates and the deadweight loss. See the slides for this class. Nonetheless, many people think health care spending will at some point again start to grow faster than GDP, though at less than the historical rate. http://www.nber.org.ezp-prod1.hul.harvard.edu/papers/w16772

David M. Cutler, Your Money or Your Life: Strong Medicine for America’s Health Care System; New York: Oxford University Press, 2004. A book length version of the Cutler, et al. article that is on the required list. I recommend the entire book; it is optional because of the length of the reading list, but if you are so inclined, the book itself is short (123 pages), is written for a general audience, and is highly readable. The introduction and Chapters 1-6 are the most relevant to the material in this first class, but the remainder is the book is relevant to other parts of the course.

David M. Cutler, The Quality Cure; Berkeley: University of California Press, 2014. Another short, highly readable book by Cutler; this one makes the case that eliminating waste in the American system could buy around two decades of cost growth in line with GDP. Implicitly, however, that has been true for a long time; the issue is whether the
The share of GDP going to health care has risen to a level at which actions to reduce cost growth are likely to be implemented and if so the degree to which those actions will target waste. Much of the rest of the course bears on that issue.

The following are two papers if you want more on what might account for differences in the level of spending between the US and the rest of the world.

David M. Cutler and Dan P. Ly, “The (Paper)Work of Medicine: Understanding International Medical Costs,” Journal of Economic Perspectives, Spring 2011, 25(2):3-26. This paper focuses on the size of administrative cost in the US relative to elsewhere. We will get into administrative cost in some detail in class 10. [http://pubs.aeaweb.org/doi/pdfplus/10.1257/jep.25.2.3](http://pubs.aeaweb.org/doi/pdfplus/10.1257/jep.25.2.3)

Miriam J. Laugesen and Sherry A. Glied, “Higher Fees Paid To US Physicians Drive Higher Spending For Physician Services Compared To Other Countries,” Health Affairs, September 2011, 30(9):1647-56. The title gives the punch line. We will take up physician reimbursement in class 6. [http://content.healthaffairs.org.ezp-prod1.hul.harvard.edu/content/30/9/1647](http://content.healthaffairs.org.ezp-prod1.hul.harvard.edu/content/30/9/1647)

Victor R. Fuchs and John B. Shoven, “Funding Health Care for All Americans,” An overview of financing options for health care. The Fuchs-Emanuel plan that is referred to in the latter part of this document was a proposal to give everyone a health insurance voucher and have them buy insurance through an exchange, which anticipated the ACA’s provisions for those without employer-based insurance. This paper is on the reading list, however, because of its lucid explanation of the various financing options for health care. [http://www.fresh-thinking.org/docs/workshop_071018/FundingHealthCareForAllAmericans-AnEconomicPerspective.pdf](http://www.fresh-thinking.org/docs/workshop_071018/FundingHealthCareForAllAmericans-AnEconomicPerspective.pdf)

Martin S. Feldstein, “The Effect of Taxes on Efficiency and Growth,” Cambridge, MA: NBER Working Paper 12201, May 2006. A non-technical paper that quantifies the inefficiencies induced by the American tax system. For those of you that want to read something on this subject but have not taken a public finance course, this would be a good choice. [http://papers.nber.org.ezp-prod1.hul.harvard.edu/papers/w12201](http://papers.nber.org.ezp-prod1.hul.harvard.edu/papers/w12201)


For a contrary view to the many who believe that the US medical care system not only spends more but delivers less, with the “delivers less” part largely if not entirely based on mortality data, see Samuel Preston and Jessica Ho, “Low Life Expectancy in the United States: Is the Health Care System at Fault?” University of Pennsylvania Population Studies
Joseph P. Newhouse, “Medical Care Costs: How Much Welfare Loss?” Journal of Economic Perspectives, 6:3, Summer 1992, pp. 3-21. This paper distinguishes the margin of costs at a point in time from that of costs over time and argues that the growth in costs over time is on average justified by the growth in the benefits. That is a similar argument to the required Cutler, et al. paper and is also found in the slides. The Smith, et al. paper above updates this one.

Chapin White, “Health Care Spending Growth: How Different Is The United States From The Rest Of The OECD?,” Health Affairs, January/February 2007, 26(1):154-61, places more emphasis on the differences in the US rate of growth with other countries, while I emphasize the similarities. There are some differences in our methods: 1) White’s initial year is 1970, mine is 1960; I use 1960 for most countries just to get a longer time series; 2) I focus on the largest economies (and I somewhat discount Germany because of reunification) whereas White looks at the entire OECD; 3) White looks at health care cost growth relative to GDP growth and accounts for aging, but these two differences roughly cancel out. Even though White emphasizes US exceptionalism, he also shows that the US is nowhere near the outlier in the rate of growth that it is in levels. If you want to see how these ideas/debates in the academic literature filter in to the policy process, have a look at Congressional Budget Office, “Technological Change and the Growth of Health Care Spending,” January 2008.
Second, we take up the demand for medical care as a function of cost sharing in health insurance (i.e., how much the patient pays at the point of service), with the limiting form of cost sharing being no insurance. The purpose of insurance generally is to reduce financial risk to the individual, but in doing so it generally changes individual actions. The economics literature refers to this phenomenon as moral hazard, a term it borrowed from the actuarial literature. In the health insurance case moral hazard usually refers to the increase in demand for medical care as individuals have more complete insurance, but it sometimes refers to a decreased effort to prevent illness, such as not exercising or not eating sensibly. In this class, however, we will focus on its effect on the demand for medical care. The slides cover the theory of the demand for medical care and moral hazard. This is a review of the theory of the consumer that should be familiar from your prior economics course(s). The slides for the next class takes up the empirical work on this topic, although the Baicker and Goldman paper (assigned for this class in part to somewhat balance out the reading) summarizes much of it.

The institutional context for cost sharing differs among countries. In general, cost sharing is more important in low and middle income countries than in high income countries. Moreover, in some low and middle income countries under-the-table payments, which add to cost sharing, may be de facto necessary to receive care, but these are rarely found in the US or northern European countries. Somewhat related to under-the-table payments is balance billing, whereby the provider, usually the physician, is allowed to bill the patient for amounts in addition to the prescribed cost sharing. For “in-network” services (“networks” are specific physicians or providers that the patient pays less to use, more in class 16), balance billing plays little or no role in the US, and I will not consider it in this class, although the Class 6 Optional reading has one reading on it. Balance billing is important for out-of-network services (meaning providers who are not part of the network); we will take up issues around out-of-network services in Classes 9 and 16.

Third, this class covers the demand for insurance, which from an economic point of view is a demand for risk reduction or for the smoothing over time of resources available for consumption. The tradeoff between risk reduction on the one hand and efficiency losses from moral hazard or changing behavior on the other is sometimes referred to as Zeckhauser’s dilemma after his classic 1970 paper, which is on the supplementary reading list.

The slides also cover the important distinction between positive and normative economics and the key challenges in applying normative economics to medical care. Make sure you understand the distinction between positive and normative. In addition to the material in this class, we come back to the challenges in applying standard normative economics to medical care in classes 7 and 8 when we discuss the market for health insurance; see especially the Beshears, et al. paper for class 7.

Lawrence H. Summers, “Some Simple Economics of Mandated Benefits,” American Economic Review, 79(2): 177-183, May 1989. Covers the basic economics of the incidence of employer paid insurance premiums, whether they are mandatory, as in the ACA, or voluntary. Incidence refers to who ultimately pays a tax or pays for a mandate; it is one of the
hardest economic concepts for non-economists. Although the notion that employees ultimately bear the cost of employer-paid premiums is almost universally accepted by economists (but often not by non-economists, including the Supreme Court majority in the Sibelius vs. Hobby Lobby Case), the slides note some important caveats and draw out some implications of the theory. Those interested in more on this topic can consult Mark Pauly’s book on the subject that is on the supplementary reading list. http://www.jstor.org.ezp-prod1.hul.harvard.edu/stable/1827753?seq=1#page_scan_tab_contents

Katherine Baicker and Dana Goldman, “Patient Cost Sharing and Health Care Spending Growth,” Journal of Economic Perspectives, Spring 2011, 25(2):47-68. This paper has a misleading title, because it has little to do with the relationship between cost sharing and spending growth but a lot to do with the relationship between cost sharing and the level of spending. It is on the reading list because it is a good review of the cost sharing literature. The slides do not cover this material. http://pubs.aeaweb.org/doi/pdfplus/10.1257/jep.25.2.47

Joshua T. Cohen, Peter J. Neumann, and Milton C. Weinstein, “Does Preventive Care Save Money? Health Economics and the Presidential Candidates,” New England Journal of Medicine, February 14, 2008, 358(7):661-663. This paper presents the health policy analysts’, as opposed to the general public’s, view of how public policy should approach preventive care. The provisions of the ACA, however, show the power of the general public’s view in the ACA’s mandate that preventive care services have no cost sharing. http://content.nejm.org.ezp-prod1.hul.harvard.edu/cgi/reprint/358/7/661.pdf Related to this topic is the reaction of the public to the fall 2009 recommendations of the US Preventive Services Task Force on breast and cervical cancer screening and its fall 2011 recommendation on the Prostate Specific Antigen (PSA) test for prostate cancer. If you want something more on these latter topics, there is a short discussion of the 2009 Task Force recommendations that explains false positives at http://www.nytimes.com/2009/12/20/business/20view.html?adxnnl=1&hpw=&adxnnlx=1261314342-1p11E0YZIZtkh/Ril_mbQxg and the 2011 Task force recommendations at http://www.nytimes.com/2011/10/07/health/07prostate.html?scp=2&sq=psa%20test%20harris&st=cse, but these latter two readings are optional.

OPTIONAL:

A comprehensive review of the demand for insurance, both theoretical and empirical, is the following reading. The theory is formally derived (meaning those with weak math backgrounds will likely struggle):


The following two papers expand the usual theory of demand and moral hazard to consider multiple goods, which is the context for preventive services. The usual theory, which treats one good, can be found in any of the textbooks listed at the beginning of the syllabus, and the slides for this class go over it as well.

Randall P. Ellis and Willard G. Manning, “Optimal Health Insurance for Prevention and Treatment,” *Journal of Health Economics*, December 2007, 26(6):1128-50 is a formal treatment of the standard theory of demand with both preventive and treatment services. The main result is that preventive services should have less cost sharing than treatment services, which comes from the individual’s ignoring the savings on treatment costs accruing to others in the insurance pool when deciding on the amount of preventive care. Ellis and Manning also show that if there are uncompensated monetary losses of treatment, such as time and travel, insurance rates on insured treatment services should be lower than they otherwise would be. [http://www.sciencedirect.com.ezp-prod1.hul.harvard.edu/science/article/pii/S0167629607000598](http://www.sciencedirect.com.ezp-prod1.hul.harvard.edu/science/article/pii/S0167629607000598)

Dana Goldman and Tomas J. Philipson, “Integrated Insurance Design in the Presence of Multiple Medical Technologies,” *American Economic Review*, May 2007, 97(2): 427-432. An argument similar to that of Ellis-Manning and Chernwe, et al., showing that if two services are substitutes, say hospital care and drugs (for example, more hospitalization if I don’t take my drugs), the cost sharing on drugs should be lower than if the two services were unrelated. [http://www.ingentaconnect.com.ezp-prod1.hul.harvard.edu/content/aea/aer/2007/00000097/00000002/art00075](http://www.ingentaconnect.com.ezp-prod1.hul.harvard.edu/content/aea/aer/2007/00000097/00000002/art00075)


For those of you that have the economics background to understand it, the following work by Chetty and Szeidl explains why consumers may appear more risk averse to intermediate losses than standard theory would predict. I give the intuition in the slides (“Insurance 201”). This may partially explain consumer’s aversion to high deductible plans unless they are funded by the employer (i.e., unless the employer makes a lump sum transfer that can be used for out-of-pocket health spending and may carry over with interest to the following year). The usual concept of loss aversion, however, is another (not mutually exclusive) explanation of why consumers don’t like high deductible plans.


Some of the slides refer to prospect theory and behavioral economics to explain many consumers’ seeming aversion to moderate amounts of cost sharing. The following paper is a good exposition of prospect theory, Nicholas Barberis, “Thirty Years of Prospect

The slides discuss the normative assumptions needed to treat consumer and producer surplus as a measure of welfare. One frequently mentioned concern about applying standard welfare economics in this domain is the inability of the consumer/patient to judge the advice of the physician. This type of problem is not limited to health care, and the type of good or service where it arises is called a credence good. For more on credence goods (but this article is long and somewhat hard going), see Uwe Dulleck and Rudolf Kerschbamer, “On Doctors, Mechanics, and Computer Specialists: The Economics of Credence Goods,” *Journal of Economic Literature*, March 2006, 44(1):5-42. [http://pubs.aeaweb.org.ezp-prod1.hul.harvard.edu/doi/pdfplus/10.1257/002205106776162717](http://pubs.aeaweb.org.ezp-prod1.hul.harvard.edu/doi/pdfplus/10.1257/002205106776162717)


**Health Insurance and the Labor Market.** Almost 60 percent of non-elderly Americans obtain their health insurance through their place of employment or their spouse’s place of employment, and around 30 percent of the elderly have supplementary insurance (to Medicare) through their prior employer. Prior to the ACA, employment-based insurance had consequences not only for who pays the costs of health insurance (e.g., Summers, on the required list) but also for the efficiency with which the labor market operated, especially the phenomenon of “job lock,” which refers to workers not moving to jobs that they would otherwise move to because doing so would entail a change in their health insurance. (There was also “marriage lock” for similar reasons.) For material on job lock from employment-based health insurance, see the Gruber *Handbook of Health Economics* (volume 1) chapter on the supplementary reading list and the literature cited there. The establishment of exchanges/marketplaces has presumably diminished job lock, although it is certainly the case for any given worker that his or her employer policy may be more generous than the policy that can be bought in the exchange, so job lock is still relevant.

The slide with the Kolstad-Kowalski data on wages in Massachusetts is by far the strongest evidence I know of on the incidence of employer paid premiums, but one other paper along similar lines is:

A paper that deals with the consequences of rising health costs for median household income is:

David I. Auerbach and Arthur L. Kellerman, “A Decade of Health Care Cost Growth Has Wiped Out Real Income Gains for an Average US Family,” Health Affairs, September 2011, 30(9):1630-6. The title tells the story. [http://content.healthaffairs.org/content/30/9/1630.full.pdf+html](http://content.healthaffairs.org/content/30/9/1630.full.pdf+html)

Jeffrey Liebman and Richard J. Zeckhauser, “Simple Humans, Complex Insurance, Subtle Subsidies,” paper prepared for a Tax Policy Center conference, February 24, 2008. [http://www.taxpolicycenter.org/tpcontent/healthconference_zeckhauser.pdf](http://www.taxpolicycenter.org/tpcontent/healthconference_zeckhauser.pdf). Also in Using Taxes to Reform Health Insurance, eds. Henry J. Aaron and Leonard E. Burman, eds., Washington: Brookings, 2009. This paper is mainly about how insights from behavioral economics might affect health policy. We will see more along these lines in class 9. The concluding section, however, has positive comments on the role of the employer in structuring the market for health insurance that are relevant to the debate over replacing employment-based insurance with individually purchased policies, a debate that will continue with the implementation of exchanges/marketplaces. These comments contrast with much of the literature on the negative consequences of employment-based insurance.


Because of the many two-worker families, it is advantageous for each employer to provide less subsidy for dependent insurance, so that the family elects dependent coverage from the other employer. (Sometimes this takes the form of a bonus for not insuring dependents through one’s own employer.) For a model of dependent health insurance as a ruinous game, see:


There is a considerable debate over whether health insurance should be linked to employment. Many health policy analysts feel it should not be (e.g., Fuchs and Emanuel), a view embodied in the 2009-2010 ACA debate in the Wyden-Bennett bill. Their primary rationale is job lock and the efficiency of the labor market. There are, however, arguments that support employment-based insurance; those arguments related to selection (we will cover those
arguments in classes 7 and 9) and also to individual consumers’ ability to choose wisely (see Liebman-Zeckhauser reading).

In the ACA debate the Wyden-Bennett bill, however, did not attract a lot of political support. Although this lack of support may have partly reflected the substantive arguments, it no doubt reflects the political difficulty of changing from employment-based insurance because of the amount of redistribution it would entail and, if a public program were the alternative, the amount of money that would be shifted to the government budget and would need to be raised through taxes (see the discussion of single payer in Vermont in class 10). Furthermore, because of worker investment in firm-specific capital (meaning the worker is more productive at his or her current firm and therefore earns more than at other firms), it is not clear that workers would promptly receive in wages what firms now pay in health insurance premiums (even if the incidence is on workers in the long run), so the redistribution that a move from employment-based insurance would cause is not easy to predict, at least in the short run. Nonetheless, we could well see employment-based insurance evolve toward a defined contribution model, meaning the employer gives the employee a specified dollar amount as a voucher to purchase a health insurance plan, perhaps on a private exchange (class 9). This changes the health insurance market to an individual model as compared with the employer choosing one or a few plans to offer to employees, which has been the traditional American model.

That the incidence of employer paid premiums is on workers is nearly universally accepted by economists, as noted above, but the issue of incidence within the work group is not resolved. There is not much literature and what literature there is conflicting, as the following two papers illustrate.

Frank A. Scott, Mark C. Berger, and John E. Garen, “Do Health Insurance and Pension Costs Reduce the Job Opportunities of Older Workers?” Industrial & Labor Relations Review, July 1995, 48 (4), pp. 775-91. This is one of the few papers in the literature that bears on incidence of employer paid premiums within a firm. It shows that companies with health insurance as a fringe benefit are less likely to hire 55-64 year old workers than companies without, as are companies with more rather than less health generous plans, suggesting that the incidence within the work group is not age-specific. This result contrasts with the Bhattacharya and Bundorf paper that follows as well as Gruber papers on the Supplementary list which suggest subgroup-specific incidence. http://www.jstor.org.ezp-prod1.hul.harvard.edu/stable/2524356

A paper on the other side of incidence within the work group is Jay Bhattacharya and M. Kate Bundorf, “The Incidence of the Health Care Cost of Obesity,” Journal of Health Economics, May 2009, 28(3):649-58. Shows that the incremental health care costs of obesity appear to be passed on in the form of lower cash wages, because obese workers without health insurance do not show a wage difference, whereas obese workers with health insurance do. In effect, the cost of health insurance accounts for a non-trivial amount of the apparent wage discrimination faced by obese females. They do not distinguish self-insured firms from non-self-insured firms, however; whereas self-insured firms, who cover about half the workers, pay any health costs of obesity, non-self-insured firms do not except for any indirect effects through experience rating, which is muted for
many non-self-insured firms. http://ac.els-cdn.com.ezp-prod1.hul.harvard.edu/S0167629609000113/1-s2.0-S0167629609000113-main.pdf?_tid=5fe5d46c-a638-11e4-ba78-00000aab0f01&acdnat=1422372358_54537a184b3c89bb1fe38d36f231236d

Workers 65 years of age and older face potential discrimination in the labor market because of a Medicare requirement that Medicare is the secondary payer for workers who are eligible for Medicare but who can obtain health insurance from their employer (provided the employer has 20 or more workers). For example, Harvard is the source of insurance for professors who are 65 or older and are still active employees. This requirement means that the employer’s insurance pays health care bills first. It was adopted in 1983 to prevent crowdout, i.e., employers dropping coverage of workers age 65 and over. Although this provision means that older workers with employer based insurance pay payroll taxes on their earnings to finance Medicare with little or no offsetting benefit, most current workers over 65 are getting a very good deal from Medicare, in terms of their lifetime taxes they have paid relative to their expected lifetime benefit. Nonetheless, the implicit tax on older worker’s earnings from this treatment by Medicare is roughly 15-25% at ages 65-74 for men and is 20-30% for women, thus discouraging work at older ages. See Gopi Shah Goda, John B. Shoven, and Sita Nataraj Slavov, “Implicit Taxes on Work from Social Security and Medicare,” in Tax Policy and the Economy, ed. Jeffrey R. Brown, Chicago: University of Chicago Press, 2011. An earlier version of their paper is available as http://www.nber.org.ezp-prod1.hul.harvard.edu/papers/w13383.

What Services Are Covered? Non-coverage is the extreme form of cost sharing, which is why these papers appear in the cost-sharing section of the reading list, even though their main thrust differs from the other material in this section. The ACA now mandates “essential benefits,” but new products and procedures pose an issue as to whether they will be covered. See the supplementary list for descriptions of this issue in the UK and, in the context of drugs, Australia. We will come at this problem somewhat obliquely in Class 17 since policy issues around outcomes research and comparative effectiveness frequently arise in this context.

Muriel R. Gillick, “Medicare Coverage for Technological Innovations – Time for New Criteria?” New England Journal of Medicine, 350(21), May 20, 2004, pp. 2199-2203. http://www.nejm.org.ezp-prod1.hul.harvard.edu/doi/full/10.1056/NEJMsb032612 Describes three major Medicare coverage decisions. See also the editorial by Sean Tunis in the same issue. It has proven politically difficult for a US public insurance program to incorporate cost formally in coverage decisions (see the paper by Foote in the supplementary reading for Class 5). Note that in the Medicare context coverage and reimbursement are distinct issues and that a decision to reimburse at a low rate could effectively vitiate a decision to cover. I return to reimbursement of new technology in Class 5.

Mark B. McClellan and Sean R. Tunis, “Medicare Coverage of ICDs,” New England Journal of Medicine, 352(3), January 20, 2005, pp. 222-224. ICDs are implantable cardioverter defibrillators to prevent sudden cardiac death; they cost about $30,000 per case. Medicare liberalized its coverage criteria in 2005 at an approximate cost of $3 billion, but the quid pro quo was that data were to be collected on effectiveness in subgroups in order to
potentially sharpen the coverage decision. Medicare has followed this precedent in several subsequent coverage decisions. Keep this point in mind when we come to the discussion of randomized trials versus observational studies in Class 17. [http://www.nejm.org.ezp-prod1.hul.harvard.edu/doi/full/10.1056/NEJMp048354](http://www.nejm.org.ezp-prod1.hul.harvard.edu/doi/full/10.1056/NEJMp048354). Medicare coverage can be mandated by Congress (e.g., mammography for women between age 40 and 49), though it is more commonly left to CMS.

CLASS 3 - ESTIMATING THE DEMAND FOR HEALTH CARE (February 1)

This class starts with the various methods, both experimental and non-experimental, that have been used to study the response of demand to variation in cost sharing and the advantages and disadvantages of those methods. The intent of this class is to help your understanding of the strengths and weaknesses of the empirical studies in the literature on cost sharing. The methods used in these studies turn up in many other applied contexts. Thus, you can think of this class as part of an introduction to research methods, which bears on my goal of improving your ability to distinguish stronger and weaker methods.

The slides for this class go over various methods of estimating how demand or utilization responds to price. One way to test your methodological understanding is by critiquing the methods of the studies below.

The first four papers are observational studies, and the next two described controlled experiments. The first of those two readings describes the RAND Health Insurance Experiment. Although it ended more than three decades ago, the RAND results are still taken as the gold standard for the effects of cost sharing on utilization and health outcomes and are still frequently referred to by all sides in debates over cost sharing. The next reading describes the Oregon Health Insurance Experiment, which is of much more recent vintage and answers a different question than the RAND Experiment did. Specifically, whereas the RAND Experiment looked at the effect of varying cost sharing within an insured population, the Oregon Experiment looked at the consequences of no insurance vs Medicaid. The slides warn you to be prepared to discuss the differences in both the design and the results/conclusions of the RAND Experiment and the Oregon Experiment. This class will also cover applications of demand analysis, including the economics and politics of a catastrophic benefit in Medicare (no reading assigned) and Health Savings Accounts and Health Reimbursement Accounts (no reading assigned).


Substantively this paper finds similar effects of cost sharing as the RAND Experiment, except it finds no evidence of effects on hospitalizations or ER use in a low income population. The ER use result differs from both RAND and Oregon. (Another paper by the same three authors that has similar methods is on the Optional list.) The authors use what the economics literature calls a regression discontinuity design; one group of people had their copayments increased (those from 100-200% of the Federal Poverty Limit, or FPL). Some people in another group (those from 200-300% of the FPL) also had their copayments increased and others in that group had them increased even more. How does this design compare to Scitovsky-Snyder? Don’t get bogged down in the econometrics of Generalized Linear Models in their estimation section; that is not the main point of assigning this reading. Focus instead on the variation in cost sharing that the authors use to generate their results. This variation is called “identification” in econometrics.

Amal Trivedi, Husein Moloo, and Vincent Mor, “Increased Ambulatory Care Copayments and Hospitalizations among the Elderly,” New England Journal of Medicine, January 28, 2010, 362(4):320-8. Shows that increased copayment led to fewer ambulatory visits and more hospitalizations among the elderly, consistent with the Optional Chandra, et al. paper, but not with the preceding Chandra, et al. paper. What variation generates the results on the effects of cost sharing in this paper?

Benjamin D. Sommers, Katherine Baicker, and Arnold M. Epstein, “Mortality and Access to Care After State Medicaid Expansions,” New England Journal of Medicine, September 13, 2012, 367(11):1025-34. Shows access improved and mortality fell among states that expanded Medicaid. As with Chandra, et al., the statistical methods in this paper will probably be beyond many of you; if so, just read it for the main results. The slides cover a potential statistical issue with this study known as the ecological fallacy. There is a paper by Sommers, Long, and Baicker in the Optional reading with similar methods that looks at the insurance expansion in Massachusetts after 2006 (again using counties as the unit of observation) that gets similar results as this paper.

Joseph P. Newhouse and the Insurance Experiment Group, Free for All? Lessons from the RAND Health Insurance Experiment, Harvard University Press, 1993, ch. 2, p. 41, chapter 11. The slides cover some of the design issues, which are covered in more detail in chapter 2 of Free for All? Also, as a tie back to the theory of coinsurance in Class 2, be prepared to answer how the Participation Incentive in the RAND Experiment should be treated theoretically.

Experiment showed reduced depression and improved self-rated health from the expansion of Medicaid among childless adults, but no statistically significant change in the biomarkers it measured (blood pressure, cholesterol, Hba1c). RAND, however, did detect a main effect on blood pressure. What do you think accounts for the difference in the blood pressure results? [http://www.nejm.org.ezp-prod1.hul.harvard.edu/doi/pdf/10.1056/NEJMsa1212321](http://www.nejm.org.ezp-prod1.hul.harvard.edu/doi/pdf/10.1056/NEJMsa1212321) If you feel you want more of the design details of the Oregon Experiment, see the Finkelstein, et al. paper on the Optional list, but I have not required that paper to keep the reading burden down.

Niteesh K. Choudhry, Jerry Avorn, Robert J. Glynn, Elliott M. Antman, Sebastian Schneeweiss, Michele Toscano, Lonny Reisman, Joaquim Fernandes, Claire Spetzell, Joy L. Lee, Raiza Levin, Troyen Brennan, and William H. Shrank, “Full Coverage for Preventive Medications after Myocardial Infarction,” New England Journal of Medicine, December 1, 2011, 365(22):2088-97. [http://www.nejm.org.ezp-prod1.hul.harvard.edu/doi/full/10.1056/NEJMsa1107913](http://www.nejm.org.ezp-prod1.hul.harvard.edu/doi/full/10.1056/NEJMsa1107913) Tests “value-based” insurance design (VBID), a notion popularized by Mark Fendrick and Michael Chernew (see Chernew, et al. in the Optional reading). The basic idea of VBID is to promote adherence by lowering the price to the patient of efficacious medications for chronic disease in order to improve outcomes, reduce total medical care cost, and reduce risk to the patient. The paper reports the results of a randomized trial of the VBID concept in the context of medication following myocardial infarction (“heart attack”). For patients in the treatment group, statins, beta blockers, ACE inhibitors, and ARB’s were free. Patients were enrolled over a 33 month period and followed for at least 9 months. Adherence improved, some outcomes improved, and the increased cost of drugs roughly offset the decreased cost of hospitalization and physician treatment. Risk to the patient was reduced both because the patient did not have to pay for drugs and because the cost of other medical treatment fell. Even with free drugs, however, adherence was poor, a result that replicates the result for all preventive treatment in the RAND HIE (Free for All?, ch. 5, not required). However, a subgroup analysis showed a large effect for non-whites and no effect for whites; for the subgroup analysis see Choudhry, et al. in the Optional reading. What you should think about is how the intent of VBID fits with the concept of moral hazard? Importantly, a later trial has shown that if both patients and physicians rather than either alone receive a financial incentive, adherence improves. See Asch, et al. in the Optional reading.

Robert H. Brook, “Health Policy and Public Trust,” JAMA, July 9, 2008, 300(2):211-3. [http://jama.ama-assn.org.ezp-prod1.hul.harvard.edu/cgi/reprint/300/2/211](http://jama.ama-assn.org.ezp-prod1.hul.harvard.edu/cgi/reprint/300/2/211) This editorial could also fit at the end of the course, but I put it here because one of Brook’s three examples is the RAND Health Insurance Experiment, where he was the lead physician researcher. (The Rogers, et al. paper in the Optional reading for Class 4 is another one of his examples.) By having you read this, I hope you acquire a feel for the environment in which a policy researcher operates. If some of you manage policy research in your career, I hope you will remember this paper. If you want to read more (but not too much more) along these lines, you can get a reprise of the main theme at Robert H. Brook, “Quality, Transparency, and the US Government,” JAMA, April 1, 2009, 301:13:1377-8. [http://jama.ama-assn.org.ezp-prod1.hul.harvard.edu/content/301/13/1377.full](http://jama.ama-assn.org.ezp-prod1.hul.harvard.edu/content/301/13/1377.full)

OPTIONAL:
David A. Asch, Andrea B. Troxel, Walter F. Stewart, Thomas D. Sequist, James B. Jones, AnneMarie G. Hirsch, Karen Hofer, Jingsan Zhu, Wenli Wang, Amanda Hodlofski, Antonette B. Frasch, Mark G. Weiner, Darra D. Finnerty, Meredith B. Rosenthal, Kelsey Gangemi, and Kevin G. Volpp, “Effect of Financial Incentives to Physicians, Patients, or Both on Lipid Levels: A Randomized Clinical Trial,” JAMA, November 10, 2015, 314(18):1926-35. Shows that financial incentives to patients or physicians alone did not reduce low density lipoprotein-cholesterol (LDL) among patients with high cardiovascular risk but that financial incentives to both did. In the arm of the trial where both physicians and patients got a financial incentive, patients achieved the LDL goal about 10 percentage points more frequently.


Amitabh Chandra, Jonathan Gruber, and Robin McKnight, “Patient Cost Sharing, Hospitalization Offsets, and the Design of Optimal Health Insurance for the Elderly,” American Economic Review, March 2010, 100(1):193-213. This paper, based on a California sample, finds larger effects of cost sharing than the RAND Experiment and also large offset effects on other types of spending. http://www.aeaweb.org.ezp-prod1.hul.harvard.edu/articles.php?doi=10.1257/aer.100.1.193 The authors make no attempt to reconcile the different results of this paper with their required paper above, though one obviously involves the elderly and the other does not.


Shifting back to empirical methods, there is a debate in economics about the value of program evaluation and experimentation more generally. If you want to read more about this, you can consult any or all of the following. There is a collection of papers in the June 2010 Journal of Economic Literature, with articles by Deaton, Imbens, and Heckman (best to read these in reverse order in my view), as well as a lead article by Lee and Lemieux on regression discontinuity designs. The Summer 2011 Journal of Economic Perspectives has several articles on field experiments (the Ludwig, et al. paper explicitly refers to the RAND Health Insurance Experiment, though it wrongly says it was the most expensive such experiment). The Spring 2010 Journal of Economic Perspectives also has a relevant symposium on “taking the con out of econometrics” (if you only have time for one paper in this symposium, read the Angrist and Pischke paper). Finally the March 2012 Journal of Economic Literature has two reviews of a book by Abhijit Banerjee and Esther Duflo of MIT that advocates randomized experiments in developing countries; the reviews are by Martin Ravallion and Mark Rosenzweig and give you a flavor of the debate between those who favor reliance on controlled experiments, two of whom are Banerjee and Duflo, and...
those who favor reliance on observational data, two of whom are the reviewers.


Sarah Taubman, Heidi L. Allen, Bill J. Wright, Katherine Baicker, and Amy N. Finkelstein, “Medicaid Increases Emergency-Department Use: Evidence from Oregon's Health Insurance Experiment,” Science Express, January 2, 2014. Shows results on emergency department use similar to those from the RAND Health Insurance Experiment; see O’Grady, et al. below or chapter 5 in [Free for All?](http://www.sciencemag.org.ezp-prod1.hul.harvard.edu/content/early/2014/01/02/science.1246183.full.pdf)

Joseph P. Newhouse and Anna Sinaiko, “What We Know and Don’t Know about the Effects of Cost Sharing on Demand for Medical Care – and So What?” in Incentives and Choice in Health Care, eds. Frank A. Sloan and Hirschel Kasper; Cambridge: MIT Press, 2008, pp. 156-184. A review of the RAND Health Insurance Experiment and the subsequent literature on cost sharing up to the time of the chapter, which is now a bit dated. The review is similar to Baicker and Goldman on required list for the prior class. The book is on reserve in the HKS library.

If you want to see someone else’s take on the RAND results, see Jonathan Gruber, “The Role of Consumer Copayments for Health Care: Lessons from the RAND Health Insurance Experiment and Beyond,” Menlo Park, The Henry J. Kaiser Family Foundation, October 2006. [http://www.kff.org/insurance/7566.cfm](http://www.kff.org/insurance/7566.cfm). Still another take is Aviva Aron-Dine, Liran Einav, and Amy Finkelstein, “The RAND Health Insurance Experiment, Three Decades Later,” Journal of Economic Perspectives, Winter 2013, 27(1):197-222. Although clearly indicating RAND was a landmark study, they worry about potential bias from refusal and attrition. I include this paper for balance, though I think it reflects an excessive concern with internal validity; I value internal validity too, but the method for calculating “Lee bounds” that they use in my view will almost always yield such loose bounds as to not be useful - even bordering on silly. Note also that the RAND health status results are less vulnerable to attrition than the spending results that Aron-Dine et al. are concerned with because the RAND group obtained end-of-experiment measures on 85% of those who left prematurely and did not die (77% including those who died). The issues around refusal and attrition are covered in ch. 2 of [Free for All?](http://www.sciencemag.org.ezp-prod1.hul.harvard.edu/content/early/2014/01/02/science.1246183.full.pdf) – they are of obvious importance in assessing the results – and at greater length in a 2008 response to an earlier commentary by John Nyman that Aron-Dine, et al. cite.

Charles M. Kilo and Eric B. Larson, “Exploring the Harmful Effects of Health Care,” JAMA, July 1, 2009, 302(1):89-91. [Free for All?](http://www.sciencemag.org.ezp-prod1.hul.harvard.edu/content/early/2014/01/02/science.1246183.full.pdf) concluded that there may have been no observed effect on average health outcomes from the additional services on the free plan because among a relatively healthy group of non-elderly, the additional services may
have done as much harm as good. Three decades later this commentary in JAMA concludes that not much is known about harms. Although the authors’ comment that “the benefits that US health care currently deliver [sic] may not outweigh the aggregate health harms it imparts” seems (to me) vastly overblown, if I amend that statement to apply to health care services at the margin, the comment may well be true. Note also the US Preventive Task Force recommendation about mammography for women between 40 and 50 and its 2011 statement on PSA screening took explicit account of harms. http://jama.ama-assn.org.ezp-prod1.hul.harvard.edu/content/302/1/89.short

Robert Kaestner and Anthony T. LoSasso, “Does Seeing the Doctor More Often Keep You Out of the Hospital?” Journal of Health Economics, January 2015, 39:259-72. Exploits an exogenous change in the outpatient price to find that, similar to the RAND results (but not the California Chandra, et al. results or the Trivedi results), a lower price of outpatient care increases both outpatient and inpatient utilization. http://ac.els-cdn.com.ezp-prod1.hul.harvard.edu/S016762961400099X/1-s2.0-S016762961400099X-main.pdf?_tid=a4462858-bba2-11e4-a99c-00000aacb35d&acdnat=1424726974_9b87394ead1e8ca70494e6978f2e56b

Exploits a sharp discontinuity in cost sharing at age 70 in Japan; cost sharing falls 60-80 percent at age 70. Effects on utilization are consistent with the RAND HIE; Shigeoka does not find effects on health outcomes. May differ from Card, et al., below because Japanese patients were insured at age 69; insurance in Japan at age 70 simply became more generous, whereas in Card, et al. some of those becoming eligible for Medicare were uninsured before becoming eligible. Thus, this finding is consistent with the speculation in chapter 11 of Free for All? that making insurance more generous may not much affect health on average.


Niteesh K. Choudhry, Katsiaryna Bykov, William H. Shrank, Michele Toscano, Wayne S. Rawlins, Lonny Reisman, Troyen A. Brennan, and Jessica J. Franklin, “Eliminating Medication Copayments Reduces Disparities in Cardiovascular Care,” Health Affairs, May 2014, 33(5):863-70. A subgroup analysis of whites and non-whites in the Choudhry, et al. paper in the required reading finds no effects for whites but a 55% decrease in adverse events and a 70% (!) decrease in total spending for nonwhites. Although it is not completely clear from the paper, it sounds as if this subgroup analysis was not pre-specified; in particular, there was no randomization within racial group. [http://content.healthaffairs.org.ezp-prod1.hul.harvard.edu/content/33/5/863.full.pdf+html](http://content.healthaffairs.org.ezp-prod1.hul.harvard.edu/content/33/5/863.full.pdf+html)

J. Michael McWilliams, Alan M. Zaslavsky, Ellen Meara, and John Z. Ayanian, “Impact of Medicare Coverage on Basic Clinical Services for Previously Uninsured Adults,” JAMA, August 13, 2003, 290(6), pp. 757-64. When uninsured individuals turned 65 and became eligible for Medicare, they used more services compared with those who were insured when they turned 65. If you compare the increases for cholesterol, mammography, and prostate, they are pretty close the Oregon Experiment values. [http://jama.ama-assn.org.ezp-prod1.hul.harvard.edu/cgi/reprint/290/6/757](http://jama.ama-assn.org.ezp-prod1.hul.harvard.edu/cgi/reprint/290/6/757). Note the subsequent study by these authors in the Optional Class 9 reading.

David Card, Carlos Dobkin, and Nicole Maestas, “Does Medicare Save Lives?” Quarterly Journal of Economics, May 2009, Vol. 124, No. 2: 597–636. A paper with the same basic design as the McWilliams, et al. study, but showing that for those admitted to the hospital through the emergency room, those over 65 receive somewhat more services and have somewhat lower mortality rates that persist for at least 9 months. Their results appear on the slides. [http://qje.oxfordjournals.org.ezp-prod1.hul.harvard.edu/content/124/2/597.short](http://qje.oxfordjournals.org.ezp-prod1.hul.harvard.edu/content/124/2/597.short)

Thomas DeLeire, Laura Dague, Lindsey Leininger, Kristen Voskuil, and Donna Friedsam, “Wisconsin Experience Indicates That Expanding Public Insurance to Low-Income
Childless Adults Has Health Care Impacts,” Health Affairs, June 2013, 32(6):1037-44. Results more dramatic that Oregon from insuring a previously uninsured adult population, but just a simple before-after design. http://content.healthaffairs.org.ezp-prod1.hul.harvard.edu/content/32/6/1037.full.pdf+html

Nicole Lurie, Nancy B. Ward, Martin F. Shapiro, and Robert H. Brook., “Termination from Medi-Cal: Does It Affect Health?” New England Journal of Medicine, August 16, 1984, 311(7):480-4. Shows large effects from terminating a group on Medicaid. Thus, this is consistent with the conclusion that the move from no insurance to some insurance may be more important than the move from some insurance to full insurance, which was what the RAND Experiment tested. The Oregon Experiment results, however, did test the move from no insurance to some insurance and are much less dramatic than Lurie, et al’s. Why might Lurie’s effects be overstated as an estimate of what would happen to health status if all the uninsured were given Medicaid coverage? For the purpose of answering this question ignore the shift of the Medicaid population into managed care, which occurred subsequent to the Lurie, et al. article; I am after a methodological issue. http://www.nejm.org.ezp-prod1.hul.harvard.edu/doi/pdf/10.1056/NEJM198408163110735


Karoline Mortensen, “Copayments Did Not Reduce Medicaid Enrollees’ Nonemergency Use of Emergency Departments,” Health Affairs, September 2010, 29(9), 1643-50. If you read these papers on ED use, ask yourself why Mortensen got different results than Taubman, et al., O’Grady, et al., and Hsu, et al?  http://content.healthaffairs.org/content/29/9/1643.abstract

The first of the following three items takes up cost sharing in Medicare Parts A and B and the next two deal with cost sharing in the Medicare prescription drug benefit. I put them here because cost sharing for Medicare remains a policy issue.

Medicare Payment Advisory Commission, Report to the Congress: Aligning Incentives in Medicare; June 2010, ch. 2 and ch. 1, June 2012. Can be skimmed. Main idea is that cost sharing in Medicare is wrong headed; the lack of a catastrophic cap induces demand for supplementary coverage, which in turn leads to greater on budget cost.  http://www.medpac.gov/documents/reports/Jun10_Ch02.pdf?sfvrsn=0 and http://www.medpac.gov/documents/reports/jun12_ch01.pdf?sfvrsn=0

Congressional Budget Office, Issues in Designing a Prescription Drug Benefit for Medicare; Washington: CBO, October 2002, chapter 2. A review of several issues that had to be resolved as part of a Medicare drug benefit. The monograph discusses the how cost sharing might be structured at the beginning of chapter 2 and the assumption on demand elasticity relevant to the CBO cost estimates is at the beginning of chapter 4. Other parts of this document are relevant to later sections of the course; in particular, chapter 3 is relevant to the discussion of selection (class 7), and the discussion of the possibility of price setting on page 29 is relevant to the next few classes on administered prices. Available on the web at http://www.cbo.gov/sites/default/files/cbofiles/ftpdocs/39xx/doc3960/10-30-prescriptiondrug.pdf

The change in insurance in the RAND Experiment did not stress the supply system in any local market; i.e., it estimated a partial equilibrium outcome. In the following paper Amy Finkelstein estimates that the long-run effects of insurance changes are much larger. On what is her identification of these effects based? Note also that the effects she observes are conditional on the Medicare method of cost reimbursement of hospitals; with a different reimbursement system (e.g., the prospective payment system now in effect that is described in class 4) the effects would likely have differed.

Amy Finkelstein, “The Aggregate Effects of Health Insurance: Evidence from the
Introduction of Medicare,” Quarterly Journal of Economics, February 2007, 122(1):1-37. Would you say the estimated effects (granting the validity of her identification for the sake of argument) reflect induced new technology or greater investment in existing technology?  
http://qje.oxfordjournals.org.ezp-prod1.hul.harvard.edu/content/122/1/1.short

A related issue is whether physicians facing a variety of insurance policies in their practices tend toward uniformity in how they treat their patients. Some evidence that this is the case is in:


Note the Glied-Graff Zivin data are consistent with the RAND Experiment’s finding that most of the effect of varying patient payment was on the patient’s propensity to seek care; how physicians treated the patients once in the system seemed relatively little influenced by patient payment. On this point see also Richard G. Frank and Richard J. Zeckhauser, “Custom Made Versus Ready to Wear Treatments: Behavioral Propensities in Physicians Choices,” Journal of Health Economics December 2007, 26(6): 1101-27.  

CLASSES 4 AND 5 – MEDICARE PAYMENT TO INSTITUTIONAL PROVIDERS (MEDICARE PART A)

The prior two classes focused on the demand for care and especially how demand changes as a function of the demand price or the price paid by the consumer/patient at the time of use. We now turn to the supply prices, meaning prices received by providers. Supply prices differ from the demand prices by the amount of any insurance reimbursement. In many higher income countries in the world supply prices are administered, meaning they are set by a public entity. Examples include hospital prices in the UK National Health Service after 2006 and the system we will spend the next three classes studying, US Traditional Medicare (TM). In the case of TM the Congress and the Centers for Medicare and Medicaid Services (CMS) set take-it-or-leave-it prices for hospitals, physicians, and other medical care providers. If a provider accepts that price for one Medicare patient, the provider must accept it for all Medicare patients. Because Medicare insures so many people, virtually all hospitals and the vast majority of physicians (though fewer psychiatrists) accept the Medicare price for Medicare patients.

Traditional Medicare (TM) consists of two parts, unimaginatively called Part A and Part B. Part A covers institutional providers and Part B covers outpatient services; originally Parts A and B constituted the entire public Medicare program, i.e., ignoring private supplementary insurance, sometimes called Medigap. (TM is sometimes called Original Medicare.) In the 1980s Medicare established Part C, in which an organization accepts a capitated payment to provide all medical services, and in the 2000’s it established Part D to cover drugs (orally administered). We will deal with Part C in classes 8 and 16 and Part D in class 19.
Some of you, especially international students, may feel that these next three sessions are too much “in the weeds” about Medicare, especially since several years from now many of the details we go over here will surely have changed. My rationale for including this level of detail is to have you appreciate the policy issues that arise when operating a large administered price system – and of course a single payer or all-payer system would be an even larger administered price system. One large picture comment: In my view if costs again start to rise at closer to historical rates, the United States is likely to face a choice between a single-payer or all-payer rate control scheme and a voucher scheme. Both methods have drawbacks, but I have chosen to illustrate the drawbacks of the rate control scheme by working through some of the reimbursement issues that TM faces. Later in the course we come to the drawbacks of a voucher scheme.

General Background on the Medicare Administered Pricing Systems

The place to start is with the Medicare Payment Advisory Commission’s “Payment System Basics,” which are available on the web at [http://www.medpac.gov/-documents/payment-basics](http://www.medpac.gov/-documents/payment-basics). When you go to this web site, links to primers on Medicare’s various methods of reimbursement will appear. You certainly don’t need to read all of these primers (although the sheer quantity suggests the complexity of administering prices), but those payment systems primers that you definitely should read include the hospital acute inpatient services system, the outpatient hospital services system, the four post-acute payment systems (home health, skilled nursing facility, inpatient rehabilitation facility, long-term care hospital), and the physician system, since those are the ones we take up over the next three classes. We will take up Part C, or the Medicare Advantage system, in class 8 and the Part D system for drugs in class 19, so you will ultimately need to read those primers as well, but they can be put off for now.

CLASS 4 - THE INPATIENT HOSPITAL PROSPECTIVE PAYMENT SYSTEM (IPPS) AND THE POST-ACUTE PAYMENT SYSTEMS (February 3)

Before we get into the minutiae of Medicare’s administered pricing systems, it is important to set a standard against which to compare their performance. As a general principle almost all economists favor competitively set prices over administered prices. A standard method for eliciting competitive prices is bidding or auctions, but strategic behavior in auctions can undermine the beneficial properties of auctions. Medicare has made some use of bidding, but its use has been quite limited for both political and substantive reasons. In particular, as the slides explain, it is difficult for Medicare to exclude suppliers who are not low bidders. In fact, it is difficult for Medicare to exclude any suppliers. Beneficiaries do not want “their doctor” excluded, and in smaller markets all or almost all doctors in certain specialties would have to be included to have sufficient capacity. If providers know they are not likely to be excluded, they have little incentive to bid low. That is the reason Medicare mainly relies on administered prices.

The political difficulties of using bidding in Medicare are illustrated by Medicare’s efforts to introduce bidding for the retail side of durable medical equipment, which would
seem to be one of the easiest cases for using bidding. Medicare finally succeeded in introducing bidding after nearly a decade of trying; see the material in the slides and on the course website. But it did so in a very strange way, which is described by Ian Ayres and Peter Crampton, “Fix Medicare’s Bizarre Auction Program,” New York Times, September 30, 2010, which is available on one of the authors’ websites. A technical and much lengthier description of the problem, which is Optional, is Brian Merlob, Charles R. Plott, and Yuanjun Zhang, “The CMS Auction: Experimental Studies of a Median-Bid Procurement Auction with Nonbinding Bids,” Quarterly Journal of Economics, May 2012, 127(2):793-827.

Now on to the main Medicare payment systems. The slides for this class assume that you have read the MedPAC primers on the inpatient prospective payment system, as well as those on the four post-acute systems, Skilled Nursing Facilities, Home Health, Inpatient Rehabilitation Facilities, and Long-Term Care Hospitals.

Joseph P. Newhouse, Pricing the Priceless: A Health Care Conundrum; Cambridge: MIT Press, 2002, chapter 1. Sets out examples of the issues around administered prices in the context of Traditional Medicare (TM). Since the time the book was written, the IPPS system has introduced more categories (i.e., it shifted from the DRG to the MS-DRG system); the slides cover the newer MS-DRG system, but the economic principles underlying the two systems are the same. Note that the MS-DRG system that the Inpatient Prospective Payment System (IPPS) now uses is, in effect, “risk adjustment” for hospital admissions where diagnoses and severity levels are the main adjusters.

Jeroen N. Struijs and Caroline A. Baan, “Integrating Care through Bundled Payments – Lessons from the Netherlands,” New England Journal of Medicine, March 17, 2011, 364(11):990-1. The slides for this class discuss the concept of the power of a payment system. Deciding on the appropriate power of a payment systems involves tradeoffs. Although it does not use this jargon, this short paper illustrates some of those tradeoffs, as well as raising concerns about market power from organizations capable of providing more integrated care (more on that in classes 10 and 16).

OPTIONAL:

Section I of Jean Tirole’s 2014 Nobel Prize acceptance speech contains an accessible exposition of power in contracting, but you may want to read the remainder of the speech also since it is relevant to the antitrust issues of Class 10. Jean Tirole, “Market Failures and Public Policy,” American Economic Review, June 2015, 105(6):1665-82. The slides for this class discuss the concept of the power of a payment system. Deciding on the appropriate power of a payment systems involves tradeoffs. Although it does not use this jargon, this short paper illustrates some of those tradeoffs, as well as raising concerns about market power from organizations capable of providing more integrated care (more on that in classes 10 and 16).

For those who have a strong economics background with a taste for theory, a classic article on regulating prices or quantities when the regulator only has a prior distribution on the true cost function and relies on the firm to report it – essentially the conditions Medicare faces –
is David Baron and Roger Myerson, “Regulating a Monopolist with Unknown Costs,” Econometrica, July 1982, 50(4):911-30. http://www.jstor.org.ezp-prod1.hul.harvard.edu/stable/pdfplus/1912769.pdf?acceptTC=true. Myerson shared the 2007 Nobel Prize in economics for his work on mechanism design, which is the domain of this article. The article shows that to induce the firm to report its costs truthfully, a regulator must pay it a surplus, the amount of which depends on a regulator’s prior distribution about the firm’s true cost function and the weight the regulator places on consumer surplus relative to producer surplus. Although the hospital’s accounting costs are auditable, the cost function, which determines the economically optimal price, is not.

One of the ongoing debates in the literature is the how much, if at all, hospital prices for private insurers increase if Medicare cuts its reimbursement, which is termed cost shifting. Some literature believes the markets are separable and that hospitals maximize in the private market so there is no cost shift. For an example see Chapin White, “Contrary to Cost Shift Theory, Lower Medicare Hospital Payment Rates for Inpatient Care Lead to Lower Private Payment Rates,” Health Affairs, May 2013, 32(5):935-43. http://content.healthaffairs.org.ezp-prod1.hul.harvard.edu/content/32/5/935.full.pdf+html. A second paper in this vein is by Chapin White and Vivian Wu, “How Do Hospitals Cope with Sustained Slow Growth in Medicare Prices?” Health Services Research, 2013, published on line at http://onlinelibrary.wiley.com.ezp-prod1.hul.harvard.edu/doi/10.1111/1475-6773.12101/pdf. Both White and White and Wu look at actual private prices, which is better than looking at the accounting margins as I did in Pricing the Priceless in finding suggestive evidence of cost shifting. (In his sole authored paper White instruments for Medicare prices, but you have to read the appendix to really understand what he did.) On the other hand, the argument made in Pricing the Priceless is that in competitive hospital markets (so that hospitals are not making rents) hospitals have to recover their joint costs, so that if Medicare cuts reimbursement hospitals will drive different bargains with private payers. And there is evidence in addition to that in Pricing the Priceless for this view as well. Vivian Wu, “Hospital Cost Shifting Revisited: New Evidence from the Balanced Budget Act of 1997,” International Journal of Health Care Finance and Economics, March 2010, 10(1):61-83 http://link.springer.com.ezp-prod1.hul.harvard.edu/article/10.1007/s10754-009-9071-5#page-1. Wu uses the cuts in Medicare reimbursement from the 1997 Balanced Budget Act and finds that hospitals prices to private payers in urban markets, which are more competitive than rural markets, rose about $0.20 for each $1 cut in Medicare reimbursement.


Effects of the Hospital PPS on Quality of Care
OPTIONAL:

Julian Pettengill and James Vertrees, “Reliability and Validity in Hospital Case Mix Measurement,” *Health Care Financing Review*, December 1982, pp. 101-128. Only an abstract is available online. [http://ukpmc.ac.uk/abstract/MED/10309909](http://ukpmc.ac.uk/abstract/MED/10309909). I have posted a pdf of this paper on the course website for those who are interested. The paper describes how the initial DRG system was built, which is broadly similar to the method used for the MS-DRG system. It provides a description of the original DRG system, but at a price in terms of more detail than you probably wanted to read.


Paul B. Ginsburg, “Recalibrating Medicare Payments for Inpatient Care,” *New England Journal of Medicine*, November 16, 2006, 355(20), pp. 2061-2064. [http://content.nejm.org.ezp-prod1.hul.harvard.edu/cgi/reprint/355/20/2061.pdf](http://content.nejm.org.ezp-prod1.hul.harvard.edu/cgi/reprint/355/20/2061.pdf) Covers much of the same ground as the MedPAC Payment Basics document. After more than 20 years, Medicare refined its relative payments in an effort to reduce the number of overpriced DRGs. Even though this was done on a budget neutral basis, the industry (or parts of it) successfully lobbied for a 3 year transition (a change from the initial proposed rule of no transition).

**Specialty Hospitals**

One could treat the emergence of specialty hospitals in some areas of medicine such as cardiac care as either technological change or as a response to flaws in the payment system or both. Specialty hospitals have been highly contentious, leading to a moratorium on new construction in the Medicare Modernization Act of 2003 that was continued in the ACA. I have included one Optional reading on this subject, but have left most of the material to the slides. There is more material on the Bibliographic list, and I give you an example of the (to date) unsuccessful pushback against the ACA ban in the slides.

**Specialty Hospitals**

OPTIONAL:


Upcoding

OPTIONAL:

Medicare Payment Advisory Commission, Report to the Congress: Medicare Payment Policy, March 2012, pp. 55-56. Shows the coding response to MS-DRGs that the slides for this class show. For earlier material on coding effects see the supplementary reading list. This issue will come up again in classes 8 and 18 with respect to Medicare Advantage.

CLASS 5 - SELECTED ISSUES IN MANAGING AN ADMINISTERED PRICE REIMBURSEMENT SYSTEM: REIMBURSEMENT OF POST-ACUTE CARE; GEOGRAPHIC ADJUSTMENT; OUTLIERS; REIMBURSEMENT OF TEACHING HOSPITALS; TECHNOLOGICAL CHANGE (February 8)

The Medicare Part A payment systems illustrate many of the issues that administered price systems face, as the last class pointed out. In this class I have assigned additional reading on some of these issues and given Optional reading on others. Any of you proposing to write testimony on Medicare reimbursement – or reimbursement generally - would do well to look into the Optional reading and to dip into relevant chapters of the various March and June MedPAC reports.


Bundling or Global Payments

Moving to more aggregated or global payment and away from disaggregated fee-for-service payments is another theme MedPAC has sounded and one that has become popular of late. The Hackbarth, et al. reading (Optional) describes the rationale for bundling payment, but how much of the variation in case mix across hospitals that Hackbarth, et al. describe is random? Presumably we don’t want penalize providers who randomly get a bad case mix draw, meaning sicker patients (or conversely reward those who randomly get a good one). The following paper takes up that issue. Robert Mechanic and Christopher Tompkins, “Lessons Learned Preparing for Medicare Bundled Payments,” New England Journal of Medicine, November 15, 2012, 367(20):1873-5. This paper points out that post-acute is a large component of spending for one major disease and that bundling post-acute spending with inpatient spending will pose issues at smaller hospitals because of randomness. http://www.nejm.org.ezp-
CMS has now moved to a mandatory bundled payment method for total hip and knee replacements that the following paper describes, but the paper also makes the point that CMS has probably set the bar too high with respect to quality (hospitals have to hit 3 metrics on quality to receive any savings) and that hospitals need more stop-loss protection. It also raises the issue of how far a strategy of bundling can proceed given that hips and knees are the most common procedure and are relatively homogeneous so there is less of a burden on risk adjustment; in other words, hips and knees are the lowest hanging fruit, so it certainly made sense to start there, but to how many other procedures can bundling be extended? Robert Mechanic, “Mandatory Medicare Bundled Payment – Is It Ready for Prime Time?” New England Journal of Medicine, October 1, 2015, 373(14):1291-3.  

If a policy maker is going to pay for a bundle of services, there obviously has to be some definition of what is in the bundle. For example, the bundle for the MS-DRG system is all non-physician services provided during the hospital stay. This paper shows how critical the choice of the definition of the bundle is, both for cost purposes, which is the context of much of the current debate, but also clinically, since the Medicare payment policy for End Stage Renal Disease (ESRD) – in particular the exclusion for decades of most drugs from the bundle of ESRD services that Medicare paid for - arguably induced poor clinical care. Bundling introduces a potential incentive for underservice; note CMS’ efforts to monitor this in ESRD. In short, this aspect of the ESRD program illustrates one of the problems of administered pricing. More generally, for those of you interested in single payer, the US has for practical purposes an approximation to a single-payer system for those with ESRD, which gives a test case for how it could work in the US. (My qualification of “for practical purposes” accounts for ESRD patients with employment-based insurance having that insurance pay for the first 33 months of their care; after that, Medicare takes over for the remainder of the person’s life. This provision is to reduce the budgetary cost of Medicare.)

OPTIONAL:


This is a precursor to the Mechanic readings that are required. Following a stream of academic literature that advocated bundling post-acute payments with the hospital payment, including the MedPAC report referenced in this paper, the ACA authorized a demonstration of bundled inpatient and post-acute payments for the period starting 3 days before and extending to 30 days after an admission for up to 8 conditions that the Secretary may choose. The demonstration has now started. The demonstration includes some models that also bundle physician services together with inpatient and post-acute services, a much larger task than simply bundling post-acute
providers with hospital services.

Neeraj Sood, Peter J. Huckfeldt, José J. Escarce, David C. Grabowski, and Joseph P. Newhouse, “Medicare’s Bundled Payment Pilot for Acute and Postacute Care: Analysis and Recommendations on Where to Begin,” Health Affairs, September 2011, 30(9):1708-17. [http://content.healthaffairs.org/content/30/9/1708.abstract#search=%22Medicare%E2%80%99s%20Bundled%20Payment%20Pilot%20Acute%20Postacute%20Care%3A%20Analysis%20Recommendations%20Where%20Begin%22](http://content.healthaffairs.org/content/30/9/1708.abstract#search=%22Medicare%E2%80%99s%20Bundled%20Payment%20Pilot%20Acute%20Postacute%20Care%3A%20Analysis%20Recommendations%20Where%20Begin%22) Analyzes two issues with respect to the bundling demonstration referred to above and in the slides: which conditions to include in the demonstration and how many days after discharge the episode should end.


**Geographic Adjustment and the Wage Index**

Margaret Edmonds and Frank A. Sloan, “Geographic Adjustment in Medicare Payment: Phase I: Improving Accuracy,” Washington: NAP, 2011, chapter 1, pages 1-6 to 1-16 and page 1-21, chapter 2 (all). This report is copyrighted, but you can download a pdf for your personal use for free by registering at [www.nam.edu](http://www.nam.edu). (The IOM changed its name in 2015 from the Institute of Medicine to the National Academy of Medicine.) Registering will also give you free web access to other Institute of Medicine/National Academy of Medicine reports.) This report covers geographic adjustment for both the IPPS and the physician payment systems (Class 6) and recommends changes, mainly in the physician system. Those changes seem well justified to me on a policy basis; to date, however, the Congress has not adopted the recommendations reflecting their political sensitivity (and more generally the current dysfunctionality of the Congress). At the individual provider level quite a lot of money turns on the hospital wage index and the Geographic Practice Cost Index (GPCI), the name for the analogous geographic adjuster in the physician system; see the values on the map on page 1-10 of the report. The wage index differs across the country by more than a factor of 2, meaning a hospital in a high wage area gets much more for treating the same patient as an otherwise identical hospital in a low wage area. The wage index, however, is only applied to the labor portion of factor costs plus certain non-labor costs that are assumed to vary geographically. As a result, only around 70% of the cost is adjusted by the wage index, so the payment does not change by the full factor of two difference. The Congress has, however, tinkered with the weight on labor costs so as to favor rural areas and certain states and localities (see the slides).

**OPTIONAL:**

Setting wages according to varying labor market conditions is not only an issue in the US. This is a study of wages in the UK National Health Service, which, like some other countries, including Canada, imposes the same nominal wage throughout the system despite cost of living differences. (London is a much more expensive place to live relative to much of the rest of England.) They find that a 10% increase in the outside wage (outside the hospital) is associated with a 7% increase in the hospital death rate, suggesting that a hospital in a high outside wage area (e.g., London) attracts lower quality workers to hospitals.

Payment to Teaching Hospitals

Teaching hospitals throughout the world have higher costs than non-teaching hospitals. How to reimburse teaching hospitals has therefore been a policy concern from the outset of the PPS, since there was obviously going to be a problem if teaching and non-teaching hospitals were paid the same amount for the same observable patient characteristics. This issue is covered in Pricing the Priceless, ch. 1 and in the slides, so there is no required reading. I will return to the workforce issue in class 21.

OPTIONAL:

Gail R. Wilensky and Donald M. Berwick, “Reforming the Financing and Governance of GME,” New England Journal of Medicine, August 28, 2014, 371(9):792-3. Summarizes a major Institute of Medicine report on Graduate Medical Education (GME). In my view it reflected the political difficulties of reforming GME although it did make some recommendations for change. If you are planning to write testimony on Medicare’s payments for Graduate Medical Education, you can download the full report, “Graduate Medical Education that Meets the Nation’s Health Needs,” at www.nap.edu.


Alan Benson, “Firm-Sponsored General Education and Mobility Frictions: Evidence from Hospital Sponsorship of Nursing Schools and Faculty,” Journal of Health Economics, January 2013, 32(1):149-59. Uses the same model of general training vs specific training as in Pricing the Priceless and the slides and applies it to hospital provided nursing education. Although nursing education is general, he applies an earlier hypothesis of Acemoglu and Pischke to argue that it may be analytically more similar to specific because of low geographic mobility of nurses. http://ac.els-cdn.com.ezp-prod1.hul.harvard.edu/S016762961200118X/1-s2.0-S016762961200118X-main.pdf?_tid=ccaf2b56-467f-11e5-b513-00000aacb35d&acdnat=1439995221_a83de00a94c705053f9a89b17866adfb
**Technological Change**

Managing technological change in an administered price system is a critical issue, but there are many aspects of the topic of that I do not cover in the slides. One of the most important is the overarching issue that the amount of technological change we observe is almost certainly related to the incentives of the financing system. On this point see the Weisbrod paper on the supplemental reading list. One issue in dealing with technological change in the context of administered pricing is deciding what change or innovation justifies its cost (assuming the change is cost increasing) and is therefore worth paying for. This is partly a coverage decision and partly a decision on how much to pay conditional on a decision to cover. The issue of whether the benefits exceed the costs is in the realm of willingness-to-pay studies, as well as studies employing QALYs, DALYs, etc. An important complication is that something that is actually used to treat patients may be (and usually is) worth it for some patients and not for others, so a decision to cover likely means some receive the service who don’t benefit (sometimes who will benefit is unknown and so this can generate knowledge about who benefits; see class 17 on CER) and a decision not to cover likely means some who would have benefitted won’t get the service.

With respect to reimbursement technological change should generally lead to some payment adjustment, since the existing reimbursement system is calibrated for the earlier technology. There are two related issues: how much to update budgets in administered price systems in order to pay for cost-increasing change; and how to update reimbursement when costs fall as something new scales up and learning-by-doing takes place. More concretely, these issues all have to do with how to incorporate new procedures, drugs, and devices into administered price systems, and the following reading deals with that issue.


OPTIONAL:

If you want a short piece on QALYs that analyzes some of their shortcomings for judging health benefit as well as the opposition to using them, see Peter J. Neumann, “What Next for QALYs?”, *JAMA*, May 4, 2011, 305(17):1806-7. http://jama.ama-assn.org.ezp-prod1.hul.harvard.edu/content/305/17/1806.short

**Outpatient Facility Payment**

You should have read the MedPAC tutorial on the outpatient hospital payment system. Outpatient payment is another dilemma in Medicare payment policy, but it is
covered in the slides, and other than the MedPAC tutorial, I have not assigned any further readings. Outpatient department payment needs to be considered in conjunction with both inpatient payment and physician office payment because of substitution possibilities between providing services in these various settings. The non-neutrality in the Medicare payment system between facility and office payment is now a major policy issue as described in the next optional reading.

OPTIONAL:

Medicare Payment Advisory Commission, “Medicare Payment Differences Across Ambulatory Settings,” Report to the Congress, June 2013, chapter 2. Proposes equalizing some fees between the office-based setting and the outpatient department but not others.

OTHER OPTIONAL READING ON THESE TOPICS:

Post-Acute Care


Severity or Within-DRG Heterogeneity, Outliers


Technological Change


chapter 1 of Pricing the Priceless, namely that hospitals substituted capital for labor with the introduction of the PPS because the PPS capped operating costs but not capital costs initially. Capital costs are now included in the DRG rate.

**Care at the End of Life and the Hospice Benefit**

This topic should perhaps be somewhere else in the course because it is certainly about more than reimbursement, but, given the course outline, it seems to fit best in the Medicare section, partly because over 75 percent of the deaths each year are among Medicare beneficiaries and partly because over a quarter of Medicare dollars in a year are spent on the 5-6 percent of beneficiaries who die (11 percent of annual Medicare dollars are spent on persons in their last month of life). Over 20 percent of these deaths occur in a hospice (60 percent of the cancer deaths do), and hospice by 2012 was a $15 billion a year benefit, increasing from just under $3 billion in the year 2000 (over 2 percent of the Medicare program). I have put the topic on the reading list, but because of the length of the required reading, I have made the entire subject optional. Some of you may wish to pursue it for your testimony.

The entire issue of the January 19, 2016 JAMA is devoted to the topic of care at the end of life. [http://jama.jamanetwork.com.ezp-prod1.hul.harvard.edu/issue.aspx?journalid=67&issueid=934869&direction=P](http://jama.jamanetwork.com.ezp-prod1.hul.harvard.edu/issue.aspx?journalid=67&issueid=934869&direction=P) Note especially the cross-national study of Bekelman, et al., which shows the US does reasonably well on deaths outside the hospital as a result does not even have the highest hospital spending per decedent over 65 in the last 180 days of life.


Amy S. Kelley, Partha Deb, Qingling Du, Melissa D. Aldridge Carlson, and R. Sean Morrison, “Hospice Enrollment Saves Money For Medicare And Improves Care Quality


Haiden A. Huskamp, David G. Stevenson, Michael E. Chernew, and Joseph P. Newhouse, “A New Medicare End-of-Life Benefit for Nursing Home Residents,” Health Affairs, January/February 2010, 29(1):130-5. Takes up the issues around paying for hospice services for nursing home residents; the current hospice benefit doesn’t work very well in the nursing home context. [http://content.healthaffairs.org.ezp-prod1.hul.harvard.edu/content/29/1/130.full.pdf+html]


Medicare Payment Advisory Commission, Report to the Congress: Medicare Beneficiaries’ Access to Hospice, Washington: The Commission, May 2002. [http://www.medpac.gov/documents/contractor-reports/report-to-the-congress-medicare-beneficiaries'-access-to-hospice-(may-2002).pdf] A short report to the Congress, which is concerned about the rapidly rising costs of the hospice benefit in 2002 (when of course costs were much less than today) and reports of late entry by beneficiaries into hospice. The question of whether rural residents are getting a fair shake from Medicare also surfaces.


CLASS 6 – PHYSICIAN PAYMENT (MEDICARE PART B) (February 10)

An important point to take away from the readings for this class is that how and how much physicians are paid alters the services they deliver to their patients, although there are conflicting results about how it alters them. In any event, both in instances of administered pricing, such as Traditional Medicare, as well as with negotiated prices, the details of
physician prices matter for how patients are treated.

To provide a concrete context for this class, review (or read) the MedPAC Payment Basics on physician payment. [http://www.medpac.gov/documents/payment-basics/physician-and-other-health-professional-payment-system-15.pdf?sfvrsn=0](http://www.medpac.gov/documents/payment-basics/physician-and-other-health-professional-payment-system-15.pdf?sfvrsn=0) Also read:

Paul B. Ginsburg, “Fee-for-Service Will Remain a Feature of Major Payment Reforms, Requiring More Changes in Medicare Physician Payment,” *Health Affairs*, September 2012, 31(9): 1977-83. [http://content.healthaffairs.org.ezp-prod1.hul.harvard.edu/content/31/9/1977.full.pdf+html](http://content.healthaffairs.org.ezp-prod1.hul.harvard.edu/content/31/9/1977.full.pdf+html) Ginsburg gives some of the history of Medicare physician payment policy. He also points out that although many seem to believe that the shift to global or bundled payment eliminates the concern about fee schedules and relative value scales, this is not the case. Not only are Medicare relative value scales likely to remain, at least for now, the basis for pricing bundles, but they are also likely to retain a considerable role in physician reimbursement within most larger entities that share risk with insurers or take full risk. We will take up that topic in Class 16.


*The Theory of Physician Payment and Supplier Induced Demand*

Thomas G. McGuire, “Physician Fees and Behavior,” in *Incentives and Choice in Health Care*, eds. Frank A. Sloan and Hirschel Kasper, pp. 263-288; Cambridge: MIT Press, 2008. The economics of fee-based payment. Concludes that optimal payment is a base payment plus a fee at marginal cost. We will encounter this idea again with respect to drugs (Class 19). The patient-centered medical home (class 16) is a step toward this arrangement. One of the policy applications of the economic theory in this chapter in the Medicare context is the so-called offset effect, or how much the budgetary cost of a general change in fees will be “offset” by changes in the quantity of services delivered by physicians. I cover this point in the slides, but if you want more, see the work CMS relies upon to estimate the offset effect, which is available on the CMS website [http://www.cms.gov/actuarialstudies/downloads/physicianresponse.pdf](http://www.cms.gov/actuarialstudies/downloads/physicianresponse.pdf). The CMS website material is optional.

OPTIONAL:

For those of you who want a more technical and more extensive treatment of physician payment than McGuire’s chapter in the Sloan and Kasper book, read the following chapter:

background to absorb it, this is an excellent synthesis.


One issue that ties to the P4P issues that we cover in Class 15 is the power of demand-side versus supply-side incentives with respect to quality. A paper that bears on this – and finds a demand response, albeit a socially undesirable one – is a study of demand for Ontario physicians after the province introduced a $36.25 payment for physicians who provided a medical warning to patients that they were unfit to drive. Although total physician visits did not much change, visits by the patients to the physicians who warned them that they were unfit to drive decreased 23 percent. This is not the main point of the paper; the main point is a 45 percent reduction in road crashes and an increase in emergency department visits for depression, but some patients clearly did not want to return to physicians who gave them bad news and sought care elsewhere. The paper is Donald A. Redelmeier, Christopher J. Yarnell, Deva Thiruchelvam, and Robert J. Tibshirani, “Physicians’ Warnings for Unfit Drivers and the Risk of Trauma from Road Crashes,” *New England Journal of Medicine*, September 27, 2012, 376(13):1228-36. [http://www.nejm.org.ezp-prod1.hul.harvard.edu/doi/pdf/10.1056/NEJMsa1114310](http://www.nejm.org.ezp-prod1.hul.harvard.edu/doi/pdf/10.1056/NEJMsa1114310)


**Empirical Literature on the Effect of Fee Changes on Physician Behavior**

An empirical application of the theory McGuire outlines in the chapter above is the following:

Mireille Jacobson, Craig C. Earle, Mary Price, and Joseph P. Newhouse, “How
Medicare’s Payment Cuts for Cancer Chemotherapy Drugs Changed Patterns of Treatment,” Health Affairs, July 2010, 29(7):1391-9. http://content.healthaffairs.org.ezp-prod1.hul.harvard.edu/content/29/7/1391.short In 2005 Medicare drastically cut how much it paid oncologists for the chemotherapeutic agents they administered to their cancer patients. This paper examines how the treatment of lung cancer patients changed as a result. Oncologists responded to the cut by increasing the proportion of patients receiving chemotherapy (the income effect) and substituted toward those drugs whose profitability had fallen least (the substitution effect). Furthermore, this effect was concentrated among oncologists in community practice, whose incomes were directly affected as opposed to those working in clinics or at hospitals, whose income was not directly affected by these cuts (because the payment went to the clinic or hospital). There is a much longer NBER working paper on this subject in the Optional reading, and the slides cover some material from the paper.

OPTIONAL READING:

Mireille Jacobson, Craig C. Earle, and Joseph P. Newhouse, “Geographic Variation in Physicians’ Responses to a Reimbursement Change,” New England Journal of Medicine, December 1, 2011, 365(22):2049-52. http://www.nejm.org.ezp-prod1.hul.harvard.edu/doi/full/10.1056/NEJMp1110117. A follow on study to the article above by Jacobson, et al. showing a great deal of variability across states in the response to the payment change; while oncologists on balance increased the rate of chemotherapy, in a quarter of the states they decreased it. The number of patients is large, so the variation is real. Jacobson, et al. have no explanation for the variation; it is one more example of the geographic variation in physician behavior that we take up in class 14.

Mireille Jacobson, Tom Y. Chang, Joseph P. Newhouse, and Craig C. Earle, “Physician Agency and Competition: Evidence from a Major Change to Medicare Chemotherapy Reimbursement Policy,” NBER Working Paper #19247, July 2013, http://papers.nber.org/papers/W19247?utm_campaign=ntw&utm_medium=email&utm_source=ntw. Shows that oncologists not only increased chemotherapy in response to Medicare’s fee cut, but that the mortality rate fell as a result! Moreover, the rate fell more in the states that increased chemotherapy the most, and it fell more among the oldest old. Whether this was because oncologists had earlier underestimated the beneficial effects of chemotherapy before being induced to give more by the change in reimbursement or whether it was because they (and possibly the patients) preferred not to put their patients through the rigors of chemotherapy despite the gain in life expectancy is unknowable.

An analogous effect to that found by Jacobson, et al. is found for Chinese physicians; if they share in profits in proportion to drug spending, spending is 43% higher for insured patients. Americans generally buy orally administered drugs (pills) from a pharmacy, and American physicians have no financial stake in which (orally administered) drug they prescribe (assuming they have not taken global risk, which is still atypical, and even then it is unlikely there would be more than minimal financial risk on the individual physician as opposed to the organization they worked within). In contrast, East Asian patients, including Chinese, like American cancer patients, generally buy drugs from their physician or hospital, who
until 2009 charged a markup on those drugs. See Fangwen Lu, “Insurance Coverage and Agency Problems in Doctor Prescriptions: Evidence from a Field Experiment in China,” which is posted on the course web site.

A somewhat similar paper to Jacobson, et al. but in a different country and a different clinical context is Irene Papanicolas and Alistair McGuire, “Do Financial Incentives Trump Clinical Guidance? Hip Replacement in England and Scotland,” Journal of Health Economics, December 2015, 44:25-36. There are two types of hip replacement, cemented and uncemented, with roughly equivalent clinical success rates, although the uncemented is more costly because of longer operating time. Prior to 2003-2004 both England and Scottish hospitals had global budgets, but in 2003-2004 England introduced a case-based reimbursement with cemented replacements reimbursed at a lower rate than uncemented given the shorter operating time. Using a diff-in-diff method with Scotland as a control, the paper shows this led to an increase in uncemented replacements. http://ac.els-cdn.com.ezp-prod1.hul.harvard.edu/S0167629615000843/1-s2.0-S0167629615000843-main.pdf?_tid=06016f0c-c04e-11e5-87fd-00000aab0f01&acdnat=1453387884_501a8d02e5d7b8bc2ed2b5f1191e34a5

An additional paper related to this subject in a Chinese setting is Janet Currie, Wenchuan Lu, and Wei Zhang, “Patient Knowledge and Antibiotic Abuse: Evidence from an Audit Study in China,” Journal of Health Economics, September 2011, 30(5):933-49. http://www.sciencedirect.com.ezp-prod1.hul.harvard.edu/science/article/pii/S0167629611000622 China, relative to many countries, exhibits a high rate of antibiotic use, which increases resistance to antibiotics (a worldwide externality) and may adversely affect the microbiome. This paper, like the Lu paper (and the Jacobson, et al. paper on chemotherapy), builds off the incentives Chinese physicians had to prescribe because they dispense the antibiotic. Currie, et al. had simulated patients visit physicians and describe symptoms that should not have led to antibiotic use. Nonetheless, the rate of antibiotic prescribing was high (around 60%), and expensive (not first-line) antibiotics were frequently prescribed, exacerbating the resistance problem and burdening the patient with greater out-of-pocket cost. A subset of the simulated patients indicated to the physician that they had learned from the internet that antibiotics should not be prescribed for flu or cold-like symptoms. This intervention markedly reduced antibiotic use.

There are conflicting studies in the literature on the direction of how changes in Medicare fees affect physician behavior. An often cited, early study that agrees with the Physician Payment Review Commission (PPRC) study shown in the slides is Thomas Rice, “The Impact of Changing Medicare Reimbursement Rates on Physician-Induced Demand,” Medical Care, August 1983, 21(8):803-15. http://www.jstor.org.ezp-prod1.hul.harvard.edu/stable/3764772?seq=1#page_scan_tab_contents Rice finds that an exogenous change in Medicare fees in Colorado in the late 1970’s had a negative relationship with services delivered.

On the other hand (and covered in the slides), Jeffrey Clemens and Joshua Gottlieb find the opposite. They analyzes a change in Medicare fees that resulted from a change in the
definition of market areas and finds that an increase in fees was associated with an *increase* in services (the substitution effect dominated the income effect). Jeffrey Clemens and Joshua Gottlieb, “Do Physicians' Financial Incentives Affect Medical Treatment and Patient Health?” *American Economic Review*, April 2014, 104(4):1320-49.  
http://pubs.aeaweb.org.ezp-prod1.hul.harvard.edu/doi/pdfplus/10.1257/aer.104.4.1320

Rudy Douven, Minke Remmerswaal, and Ilaria Mosca, “Unintended Effects of Reimbursement Schedules in Mental Health Care,” *Journal of Health Economics*, July 2015, 42:139-50.  Self-employed Dutch mental health providers are reimbursed on a fee schedule that is a function of minutes of therapy delivered to a given patient annually, but the schedule is a step function in the number of minutes. This paper shows that there are spikes in the distribution of the number of minutes just above the discontinuity at the step; in other words, providers will deliver a few more minutes of therapy to get the substantially higher payment, behavior similar to that of the LTCH’s in class 5. Non-self-employed Dutch mental health providers are not reimbursed with this schedule, and their minutes of therapy do not show such spikes. In subsequent unpublished work Douven has shown that there is considerably heterogeneity in psychiatrists’ and psychologists’ willingness to engage in this behavior. In terms of the classic Ellis and McGuire 1986 paper (Optional reading above) there is great variation in the value placed on patient benefit relative to income.  
http://ac.els-cdn.com.ezp-prod1.hul.harvard.edu/S0167629615000363/1-s2.0-S0167629615000363-main.pdf?_tid=091bf45e-8e68-11e5-b363-00000aacb35f&acdnat=1447901498_b0cb4467a86c660aaf7a00892e3ab123

**Empirical Literature on the Basis of Payment**

Relative to the literature on fee-for service pricing, there is less literature on the effect of the *basis* of payment (why do you think this is?), an issue that has come to the fore with the advent of greater bundling and various forms of risk-based payment to providers (but see *Pricing the Priceless* and remember that the payment to the individual physician may be primarily or completely fee-for-service). Krasnik, et al. show the effect of changing from full to partial capitation, which can also be interpreted as a (partially) income-compensated fee change. Hickson, et al. show positive effects of fee-for-service relative to salary; that paper is unusual in this literature because the data come from a randomized trial, albeit a very small one.

Some delivery organizations, both in the US and outside it, employ salaried physicians. Physician incentives in salaried systems relate to the criteria for promotion and merit increases, which are typically difficult for an external analyst to observe directly or even infer, but that does not mean the incentives aren’t there. Also the salary may be tied to “productivity,” which is a variant of fee-for-service. Don’t spend a lot of time with these two papers; read for the main result.

Shows the effects of a change from full to partial capitation for the Danish General Practitioner (GP) results in increased provision of services per visit, fewer referrals, and less hospitalization. Uses the concept of supplier-induced demand, but without the usual normative connotation. See also Jensen in the Optional reading below.


A study in which 18 pediatric residents were randomly assigned to be paid by salary or fee-for-service. Those paid fee-for-service did more of things that were deemed good (e.g., continuity, fewer missed recommended visits).

OPTIONAL:


Mark Dusheiko, Hugh Gravelle, Rowena Jacobs, and Peter Smith, “The Effect of Financial Incentives on Gatekeeping Doctors: Evidence from a Natural Experiment,” Journal of Health Economics, 25(3), May 2006, pp. 449-478. In the 1990s the Conservative government introduced higher powered physician reimbursement for General Practitioners in the British National Health Service. GPs had long been capitated for their own services, but did not bear any financial consequences for decisions to hospitalize. In the new arrangement the government gave larger groups of GPs the option to receive a larger capitation and bear risk for (pay for) elective admissions (“fundholding”) from the capitation. (This has some similarities with Accountable Care Organizations.) This method was abolished in 1999 by the Labor government, and GPs were no longer at risk (but then was reintroduced by Labor in 2005 and now there is yet another variant under the Conservative government). This study shows that when fundholding was abolished, elective admissions increased 3.5 to 5.1 percent among GPs who had been fundholders.
relative to the increase among those who had not, suggesting that the financial risk associated with fundholding had kept down elective admissions. I have made this Optional because it will be harder going for those with weaker economics backgrounds. See also a followup article by Dusheiko, et al. on the supplementary list that deals with patient satisfaction and process measures of care.

Jason Barro and Nancy Beaulieu, “Selection and Improvement: Physician Responses to Financial Incentives,” NBER Working paper 10017, October 2003 (http://www.nber.org.ezp-prod1.hul.harvard.edu/papers/w10017.pdf). Shows that Florida physicians who were switched from a salaried basis of payment to a fee-for-service like payment increased the profitability of their practices (i.e., increased their number of billable services).


finding but possibly an artifact of the econometrics employed (the authors note that one of their estimators is highly sensitive to specification).

A survey of the literature on credence goods (goods with an information asymmetry between producer and consumer), with a theoretical model that ties together a rather diverse literature in economics; as the title indicates, the literature considered goes beyond physicians (also noted in the Optional reading for class 2).

**The Medicare Fee Schedule (the Resource-Based Relative Value Scale or RBRVS)**

OPTIONAL:

http://jama.ama-assn.org.ezp-prod1.hul.harvard.edu/content/260/16/2347.short  
An overview and basic description of the initial RBRVS. There are numerous other articles that go into detail on the RBRVS in the same issue of the JAMA as this article; they are on the supplementary list.

**Practice Costs**

Medicare Payment Advisory Commission, Report to the Congress: Medicare Payment Policy, June 2006, chapter 4  
(http://www.medpac.gov/documents/reports/Jun06_Ch04.pdf?sfvrsn=0).  Should be read by anyone contemplating writing testimony on this topic.

**Balance Billing**


**Supplier Induced Demand**

There is a huge, old, and in my view unhappy, literature that discusses supplier-induced demand (SID) that I have relegated to the supplementary reading list. It is to some degree covered by the McGuire chapter in the Handbook of Health Economics.

**CLASSES 7-10 – SELECTION AND INDIVIDUAL AND SMALL GROUP INSURANCE MARKETS; AMERICAN HEALTH CARE REFORM AND THE AFFORDABLE CARE ACT (ACA); MEDICARE PART C AND RISK ADJUSTMENT, ADMINISTRATIVE COST AND MINIMUM LOSS RATIOS**
The next four classes are about Medicare Part C, which is (mostly) an individual market and individual and small group insurance markets and the ACA’s reforms to those markets. Class 7 begins by laying some theoretical groundwork on selection, because selection is a defining feature of unregulated as well as imperfectly regulated individual and small group insurance markets. It also touches on behavioral economics and health care. Classes 8 and 9 describe Medicare Part C and the ACA’s reforms to commercial individual and small group markets, respectively. Class 10 takes up administrative cost, which is mainly an issue in individual and small group insurance markets, and the ACA’s reform of Minimum Loss Ratios.

CLASS 7 – SELECTION AND THE ECONOMICS OF INDIVIDUAL AND SMALL GROUP INSURANCE MARKETS; BEHAVIORAL ECONOMICS AND HEALTH CARE – (February 17)

The Rothschild-Stiglitz paper below is a classic paper on selection, but may be slow going for those of you with a weaker economics background. As a result, the slides go over the paper. If you understand the paper, those slides should be quick work. Note that Rothschild and Stiglitz make some key assumptions in deriving their results. First, they assume there is no regulator of the insurance market; insurers are free to offer any policy, and there is free entry and exit. As a corollary of there being no regulator, there is no risk adjustment (transfers from firms with better risks to those with worse risks), which I take up in classes 8 and 9. Second, they assume the only thing that matters in the choice of insurance is the person’s risk type (and there are only two types), but in reality other factors may matter as well. In particular, if risk aversion is greater among better risks, there could be favorable rather than adverse selection, meaning it is disproportionately better risks who choose the more complete insurance. Third, consumers differ only in their probability of a loss, not the amount of the loss. Fourth, insurers do not anticipate how other insurers will react to the policies and premiums that they offer consumers. In other words, there is no strategic behavior among insurers. Their striking result that there may be no equilibrium is sensitive to this last assumption.

You may wonder why you are being asked to read a paper with such an abstract and unrealistic model; the answer is that it is a classic paper that demonstrates the importance of asymmetric information in how markets of all kinds function, not just health insurance markets. Asymmetric information, however, seems particularly important in unregulated, competitive individual and small group insurance markets because it leads directly to selection.

A few notes on the other required reading: Although employment based insurance mostly solves the selection problem for larger employment groups, Cutler and Reber show how actions by a large employer can induce selection within the employment group if employees have a choice of plans. In effect, there is an individual market within the employment group. Zick, et al. is a nice, short example of selection behavior, albeit on a small scale.

The last two required readings, Beshears, et al. and Loewenstein, et al., emphasize
behavioral economics applications to consumer choice. Two findings of behavioral economics (at least) are relevant to selection of insurance plans. The first is that because of the complexity of health insurance plans, consumers often do not make optimal choices for themselves and their families. Ironically, however, this non-optimizing behavior may improve the functioning of the market by reducing selection (see the Handel Optional reading). Second, once having made a choice of plan, consumers tend not to revisit that choice in subsequent years when they are to renew. Like the finding with respect to complexity, inertia can reduce selection, but it also can increase plan markups, since existing consumers tend to be relatively price inelastic. (This inertia is also found in the employer market; employers, at least larger employers, like stability in their plan choice.) Behavioral economics has numerous other applications in health care; the two papers listed here are just a sampler.

Finally, I put on the class website a short excerpt from TheHill.com from March 2007 that illustrates selection behavior well. The gist of the story is as follows. In 2006 Humana, a private insurer, offered an enhanced Medicare Part D drug plan (Part D is mostly an individual market) that covered brand name drugs in the donut hole, a region of spending on drugs that in the basic public plan had no coverage. (More on Part D and the donut hole in Class 19. It is called the donut hole because one had to spend a substantial amount on drugs to reach it and once one spends substantially more out of pocket, Part D coverage kicked in again.) No other insurer offered such a plan, although several insurers offered plans that covered generic drugs in the donut hole. This Humana plan was selected against by those who used a lot of brand name drugs and spent enough on drugs to reach the donut hole. Since those spending enough to reach the donut hole were by definition large spenders, Humana suffered substantial losses, so much so that Humana’s stock price fell about 25% from January to May 2006 as it became apparent that it would lose an appreciable amount of money from this one Part D plan. (The stock price then rose for the rest of the year because Humana told investors it did not intend to offer the plan in 2007.) Inexplicably (to me), given Humana’s experience, Sierra Health Plan, another insurer (subsequently acquired by United Health Care) decided it would offer a similar plan in 2007. (It had no such plan in 2006.) Sierra’s experience in 2007 repeated that of Humana’s in 2006. The excerpt on the web describes a complaint that Sierra filed with CMS in March 2007, essentially alleging that Humana was dumping high cost enrollees on them.

If you didn’t read the Cutler-Zeckhauser chapter in the Handbook of Health Economics for Class 1, read it now.

A classic paper on asymmetric information and the insurance market, and one of the papers for which Stiglitz won the Nobel Prize in economics. Try to understand it on your own, but don’t bog down if you are having trouble. Maybe the slides can help.

Theory and empirical evidence on a death spiral with imperfect risk adjustment. Note that in this paper the insurance plans (or “contracts” in Rothschild-Stiglitz jargon) that consumers buy are fixed, whereas they are not fixed in the Rothschild-Stiglitz model.


OPTIONAL:

Liran Einav and Amy Finkelstein, “Selection in Insurance Markets: Theory and Empirics in Pictures,” Journal of Economic Perspectives, Winter 2011, 25(1):115-38. http://pubs.aeaweb.org.ezp-prod1.hul.harvard.edu/doi/pdfplus/10.1257/jep.25.1.115 Primarily of theoretical interest for how to measure welfare loss from adverse selection, but the authors do apply the framework to selection in an employer group plan and find adverse selection with small welfare consequences. In order to keep the required reading down, I cover the main idea of these two Einav, et al. papers in the slides, but the paper is accessible with intermediate microeconomics. The Einav-Finkelstein result, however, requires that consumers’ demand for health insurance be perfectly (rank) correlated with their spending risk; in other words, the person with the highest willingness to pay for insurance has the highest expected spending, the person with the second highest willingness to pay has the second highest expected spending, and so forth. A longer and somewhat more technical version of this paper is Liran Einav, Amy Finkelstein, and Mark R. Cullen, “Estimating Welfare in Insurance Markets Using Variation in Prices,” Quarterly Journal of Economics, August 2010, 125(3):877-922. http://qje.oxfordjournals.org.ezp-prod1.hul.harvard.edu/content/125/3/877.full.pdf
M. Kate Bundorf, Jonathan Levin, and Neale Mahoney, “Pricing and Welfare in Health Plan Choice,” American Economic Review, December 2012, 102(7):3214-48. They use a data set from small employers to estimate a 2-11% welfare loss from non-optimal premium subsidies that employers in the small group market set for their employees. About a quarter of this loss is from a suboptimal level of premiums that employers set; the remainder is from a uniform premium within the firm despite heterogeneous preferences. The Glazer and McGuire paper on Medicare Advantage in class 8 makes the same analytical point in the context of welfare losses from a “single premium” policy. http://pubs.aeaweb.org.ezp-prod1.hul.harvard.edu/doi/pdfplus/10.1257/aer.102.7.3214


Mark Pauly and Yuhui Zeng, “Adverse Selection and Challenges to Stand-Alone Prescription Drug Insurance,” August 2003, NBER Working Paper 9919 (http://www.nber.org.ezp-prod1.hul.harvard.edu/chapters/c9869.pdf). Shows that drug spending is more persistent than other medical spending. In a simulation if unsubsidized drug insurance that renews annually is offered by itself, this persistence of spending potentially results in a death spiral, but this is not necessarily the case if it is offered as part of insurance for all medical services. I will return to this paper in Class 19.


paper estimates the welfare cost of asymmetric information in the annuity market at about 2\% of premiums (but about 25\% of the relevant cost, which is the money at stake from varying the guarantee period), and notes that mandates to deal with the selection could either improve or decrease welfare.


Mark Shepard, “Hospital Network Competition and Adverse Selection: Evidence from the Massachusetts Health Insurance Exchange,” working paper.  [http://scholar.harvard.edu/files/mshepard/files/mshepard_jmp_hospital_networks_adverse_selection.pdf](http://scholar.harvard.edu/files/mshepard/files/mshepard_jmp_hospital_networks_adverse_selection.pdf) Shows that health insurance plans that include “star hospitals” (think Massachusetts General or the Brigham and Women’s) are selected against. The intuition is that sicker persons want to use providers at these hospitals in ways that risk adjustment (class 8) does not fully compensate for.


Gerry Oster and A. Mark Fendrick, “Is All ‘Skin in the Game’ Fair Game? The Problem with Non-Preferred Generics,” *American Journal of Managed Care*, published on line September 17, 2014. Shows some insurers are imposing higher copays on generic drugs for certain classes of diseases, another response to selection behavior.  [http://www.ajmc.com/publications/issue/2014/2014-vol20-n9/Is-All-Skin-in-the-Game-Fair-Game-The-Problem-With-Non-Preferred-Generics](http://www.ajmc.com/publications/issue/2014/2014-vol20-n9/Is-All-Skin-in-the-Game-Fair-Game-The-Problem-With-Non-Preferred-Generics) You can get to this journal through the Harvard library system or by registering with the journal, which is free.

observables, especially self-assessed health, in the Seguro Popular Experiment in Mexico. Interestingly there was not selection on Hba1C, blood pressure, BMI, or cholesterol levels.


If you want more on behavioral economics, you can consult any or all of the following:


CLASS 8 - MEDICARE PAYMENT OF HEALTH PLANS, RISK ADJUSTMENT, AND A WRAPUP ON MEDICARE PARTS A, B, AND C (February 22)
A reminder: Testimony 1 is due before the February 24 class!

Class 7 went over why selection can lead to poor performance or even market failure in unregulated individual and small group insurance markets, as well as in large group markets that offer a choice of insurers. One large but regulated individual insurance market is Medicare Part C or Medicare Advantage. (There is also a group Medicare Advantage product for retirees of larger firms, but it is a relatively small and declining part of the market, although it does come up in the slides.) A key policy issue in Medicare Advantage therefore is how well Medicare’s regulations mitigate selection. In addition to that issue, the slides also take up the issue of geographic variation that we encountered in TM and end with a summary of issues around Medicare payment policy from this class and classes 4-6. We will come back to Medicare Advantage and its effects on quality of care and outcomes in Class 16; this class is concerned with describing Medicare Advantage and its reimbursement policies.

**Medicare Reimbursement of Health Plans and Risk Adjustment**

A note at the outset: This class has a large number of slides, but several of them just go over material in the reading below. If you do the reading and understand it, these slides will be a review and you should be able to move through them quickly. The last several slides try to summarize the material on Medicare in this class and classes 4-6 and put that material in the context of the course overall. These are important slides.


Starting in 2006 Medicare reimbursement of health plans moved from a take-it-or-leave-it per-member-per-month (PMPM) price toward something that more closely resembles a defined contribution or voucher approach, which had the effect of freeing up health plan prices (i.e., not setting a take-it-or-leave-it price). Nonetheless, important elements of the earlier administered pricing system remain. One is in the method for setting the “benchmark,” which somewhat approximates a defined contribution or voucher. A second is in the method of risk adjustment (risk adjustment is part of the “managed” in the term “managed competition”).

Importantly, Traditional Medicare (TM) is not part of the defined contribution approach that Part C utilizes. The Republican alternative to the administered pricing issues we studied in Parts A and B is to go to a full-blown defined contribution plan (“premium support”), one version of which would include TM. In effect, this would make TM the “public option” in an exchange like world. For many Republicans, however, I suspect advocacy of “premium support” is more of an attempt to limit the growth in federal spending rather than an effort to move further away from administered pricing in TM. There are numerous questions to be addressed in any premium support or defined contribution proposal, including what the amount of the voucher would be and at what rate it would increase over time. If you are interested in premium support, you can find a discussion of those particular
issues and others relevant to premium support in the CBO and Fuchs and Potetz papers in the Optional reading.

One of the key issues in the debate over including Traditional Medicare in a defined contribution arrangement is the degree of possible selection and whether, if it were included as an option, Traditional Medicare would go into a death spiral from adverse selection or whether risk adjustment and other anti-selection tools are now good enough to preclude that. The degree to which risk adjustment can mitigate selection incentives, of course, is also a key issue in the exchanges for the under 65 as we come to in class 9. The reading and slides cover risk adjustment and selection in the context of Medicare, but risk adjustment is also important in a number of non-US medical care systems, especially the Dutch system.

After you have mastered the MedPAC material on how Medicare pays plans, read an overview of Part C, Joseph P. Newhouse and Thomas G. McGuire, “How Successful Is Medicare Advantage?” The Milbank Quarterly, June 2014, 92(2):351-94. The material on selection that is relevant for this class is on pages 360-375. I will not cover the rest of the paper until class 16, but it will probably be helpful to you to read the entire paper through now. http://onlinelibrary.wiley.com.ezp-prod1.hul.harvard.edu/doi/10.1111/1468-0009.12061/pdf

The next readings consider issues around reimbursement of health plans in the context of the Netherlands. The van de Ven and Schut paper below is about implementing managed competition in the Netherlands starting in 2006. The paper lays out the issues around managed competition. Reflecting its EU provenance, it uses slightly different jargon like “risk equalization” instead of “risk adjustment,” but you should have no difficulty understanding the paper. I recommend that you read the full paper because I think it is an excellent exposition of the issues and because it may help American students by seeing similar issues outside the American context. You will, however, likely want to skim some of the details about the Dutch system, which I would characterize for Americans as something like Medicare Advantage for everyone. But for those of you who absolutely, positively can’t afford the time for the full paper, there is an abridged version: Wynand P.M.M. van de Ven and Frederik T. Schut, “Universal Mandatory Health Insurance in the Netherlands: A Model for the United States?” Health Affairs, May/June 2008; 27(3): 771-781. http://content.healthaffairs.org.ezp-prod1.hul.harvard.edu/content/27/3/771.short. The full version is Wynand P.M.M. van de Ven and Frederik T. Schut, “Risk Equalization in an Individual Health Insurance Market: The Only Escape from the Tradeoff between Affordability, Efficiency and Selection, the Netherlands as a Case Study,” http://www.policypage.org/handle/10207/21921 (click on the View Publication link)

have for many years advocated a highly regulated financing system. Be prepared in class to
discuss what you think van de Ven and Schut would have said about Ohkma, et al.

Two key issues in the debate over Part C are:

1) How to structure the market for Part C so that it functions efficiently,
which this class covers, and

2) How Medicare Advantage affects patient care relative to TM, which we
cover in class 16.

An important feature of market structure is how well risk adjustment functions. As
the Newhouse and McGuire paper, the slides, and the McGuire, et al. 2011 paper in the
Optional reading show, risk adjustment in the early days of Part C, which just used
demographic variables, was weak, and as a result there was favorable selection (after risk
adjustment) into Part C. This had the effect of increasing government outlays. The
Newhouse and McGuire paper, the Optional Newhouse, et al. 2015 paper, and the slides
discuss newer research showing that the introduction of health-status-based risk adjustment
into Medicare in the mid 2000’s, along with a lock-in, substantially reduced, but probably did
not completely eliminate, favorable selection.

The introduction of health-status-based risk adjustment in Medicare Advantage raised
two related issues around coding. One was similar to that raised by the introduction of the
MS-DRG’s in the Inpatient Prospective Payment System (Class 4): Did tying payment to
diagnosis increase the intensity with which diagnoses were coded? Kronick and Welch in the
Optional reading show that it did. One interpretation is that MA plans pushed physicians
and use home visits by nurses to be more complete in their coding in order to increase
reimbursement; an alternative, not mutually exclusive interpretation is that more active
disease management by plans (Class 16) uncovered more disease and that doing so is desirable
for managing chronic diseases. The Song, et al. paper in the Optional reading deals with a
second issue; the intensity of coding varies by region. This paper is required in the class 14
reading on geographic variation and the degree to which it is explained by variation in health
status, so you may want to read it now. It is, however, not essential for this class.

OPTIONAL:

Adverse Selection in Health Plan Payment Systems,” Cambridge, NBER working paper
21531. The slides assess risk-adjustment systems using $R^2$, but this paper gives a full
economic treatment of how to assess risk adjustment; $R^2$ is too

Medicare Payment Advisory Commission, “Improving Risk Adjustment in the Medicare
Program,” in Medicare and the Health Care Delivery System: Report to the Congress, June
2014, ch. 2. This chapter takes you into the weeds of risk adjustment, but if you are writing
your testimony on that topic you should read
I have made this Optional, since it largely covers ground that other readings cover, but it does point up the importance of regulations other than risk adjustment to hold down selection.

Vilsa Curto, Liran Einav, Jonathan Levin, and Jay Bhattacharya, “Can Health Insurance Competition Work: Evidence from the Medicare Advantage Program,” Cambridge: NBER, Working Paper 20818, January 2015.  [http://www.nber.org/papers/w20818](http://www.nber.org/papers/w20818) Similar to the MedPAC table in the slides, they find that MA generates cost savings, but they put this in an economic welfare context. They estimate that Medicare Advantage generates a substantial surplus (around $600 per enrollee year) after accounting for restricted provider choice, but insurers capture much of the gain. Their estimates, however, comes from a structural model that makes a strong assumption of equilibrium bids by plans at each point in time. They also ignore retiree health insurance and the price of individual Medigap, which varies across counties. Finally, their simulations of cuts in the benchmark and the rebate percentage are close to the changes ACA actually made, but, contrary to their predictions, enrollment did not fall. This implies their model no longer holds.

The next several papers are covered in the slides and the Newhouse-McGuire Milbank paper, but if you want more detail, here are the papers.


J. Michael McWilliams, John Hsu, and Joseph P. Newhouse “New Risk-Adjustment System Was Associated With Reduced Favorable Selection In Medicare Advantage,” Health Affairs, December 2012, 31(12), 2630-40. One of the slides is from this study. The results are similar to the immediately preceding paper, although the methods are entirely different. http://content.healthaffairs.org.ezp-prod1.hul.harvard.edu/content/31/12/2630.full.pdf+html

Jason Brown, Mark Duggan, Ilyana Kuziemko, and William Woolston, “How Does Risk Selection Respond to Risk Adjustment? New Evidence from the Medicare Advantage Program,” American Economic Review, October 2014, 104(10):3333-64. https://www-aeaweb-org.ezp-prod1.hul.harvard.edu/articles.php?doi=10.1257/aer.104.10.3335 Uses the Medicare Current Beneficiary Survey (the same data as McWilliams, et al. above) and finds that after the implementation of the CMS-HCC risk adjuster, favorable selection net of risk adjustment increased. Unlike McWilliams, et al., they focus on reimbursement for those who switched from Traditional Medicare (TM) to Medicare Advantage (MA) relative to spending in the prior year when the beneficiary was in TM. They show that the difference between these two values increased with the introduction of the CMS-HCC system (see Table 4, col. 6, row two) and they conclude that the introduction of the CMS-HCCs worsened selection. Using a much larger sample and adding additional years, the Newhouse, et al. 2015 paper above gets the opposite result as does the McWilliams, et al. paper above. One lesson I would take from the Brown, et al. paper for the aspiring analyst: If you have a result that is a priori improbable, which I personally consider their finding of increased selection after the introduction of CMS-HCC’s to be (though they seemingly did not), you need to be very sure about the result.


J. Michael McWilliams, Christopher C. Afendulis, Thomas G. McGuire, and Bruce E. Landon, “Complex Medicare Advantage Choices May Overwhelm Seniors -- Especially Those With Impaired Decision Making,” Health Affairs, September 2011, 30(9), 1786-94. http://content.healthaffairs.org.ezp-prod1.hul.harvard.edu/content/30/9/1786.short This paper uses Health and Retirement Survey data to look at those enrolling in Medicare Advantage (MA). There are three findings of note, two of which the authors discuss: a) More choices can deter enrollment in MA (there is an analogous finding about enrollment in 401(k) plans); and b) More generous benefits (because of higher reimbursement in a county) lead to greater enrollment, but this enrollment is disproportionately among beneficiaries with higher cognitive functioning (there is also an analogous result for 401(k) plans); c) There is finally the dog that did not bark; self-reported general health
and self-reported specific conditions showed little difference between the Traditional Medicare (TM) group and the MA group, suggesting selection on observable health measures is modest, a finding that comes to the fore in the McWilliams, et al. reading above. This paper’s findings on a dominated health plan are similar to those of Handel on the Optional list for Class 7.

Jacob Glazer and Thomas G. McGuire, “Making Medicare Advantage a Middle-Class Program,” Journal of Health Economics, March 2013, 32(2):463-73. Raises the question of who belongs in managed care and concludes that Medicare should use premium policy to influence that choice, meaning different types of people should be charged different premiums. http://ac.els-cdn.com.ezp-prod1_hul.harvard.edu/S016762961200183X/1-s2.0-S016762961200183X-main.pdf?_tid=e80024fe-d395-11e2-8793-00000aab0f6b&acdnat=1371065285_c6602a189ae8199dc8d0d812957fe3f9


Richard Kronick and W. Pete Welch, “Measuring Coding Intensity in the Medicare Advantage Program,” Medicare and Medicaid Research Review, 2014, 4(2):E1-E19. They calculate the increase in risk scores for continuous enrollees (as well as for decedents, new enrollees, and switchers) in MA between 2004 and 2011 and compare them with mortality and MCBS data; their analysis of MCBS data, although from a different period, conflicts somewhat with the McWilliams, et al. analysis of MCBS data above. Kronick and Welch conclude that increased coding increased MA payment 15-20% and that the coding “adjustments” to date have been inadequate; in short, MA reimbursement should be further reduced. CMS has, however, reduced risk scores 3.41% each year from 2010-2013, or a total of 14%. PPACA specified minimum reductions starting in 2014, although CMS has the discretion to reduce reimbursement further. Much of Kronick and Welch’s inference is from a sample enrolled in two successive years in either MA or TM and the change in risk score for each sample. Their inference from their continuous enrollee sample is odd, however, since any differential incentive to code in MA should apply in both years and should difference out unless there was not a full adjustment to the incentive in the initial year and a more complete adjustment in the second year. They do not find a similar increase in mortality in MA, but that could be because sicker persons died. http://www.cms.gov/mmrr/Downloads/MMRR2014_004_02_a06.pdf

This paper shows that Medicare beneficiaries who moved to higher spending regions and who had similar baseline health status risk adjustment scores had risk scores that grew more than beneficiaries who moved to lower or similar spending regions and so resulted in greater reimbursement. In other words, these results imply that health status as measured by diagnoses coded on claims forms is endogenous. Although Song, et al. do not directly suggest this, an implication is that the HCCs should not be used in risk adjustment as they are now (i.e., in the language of Stam, et al., Optional reading. they have elements of an N-type adjuster). Ultimately whether one acts on this implication depends on how much of the observed variation in CMS-HCC scores reflects real health status variation versus differences in coding; the more it reflects coding, the weaker the case for using CMS-HCCs. Unfortunately Song, et al.’s work cannot shed light on this, and it remains an unresolved issue.

The following reading summarizes the Cameron government’s efforts to move toward more bundling in the UK.


The next two readings are on premium support.


The next several articles are from an earlier time when Medicare used a take-it-or-leave-it price for health plans, though that does not really affect the risk adjustment issue.

Gregory Pope, John Kautter, Randall P. Ellis, et al., “Risk Adjustment of Medicare Capitation Payments Using the CMS-HCC Model,” Health Care Financing Review, 25:4, Summer, 2004, pp. 119-141. This paper lays out the derivation of the CMS-HCCs. If you are interested in writing testimony about risk adjustment, you should read this paper. http://escholarship.umassmed.edu/cgi/viewcontent.cgi?article=1723&context=qhs_pp


For a skeptical view that risk adjustment can ever function satisfactorily, at least outside a highly regulated market framework, see:


A Wrap Up of Medicare, Parts A, B, and C

OPTIONAL:

Some of both the support and the political opposition to the defined contribution proposals in Medicare revolve around the idea that it may well be a device for shifting more of the cost of financing the elderly’s medical care from the non-elderly to the elderly. The following reading makes the important point that the division of burden between these groups should be seen in the larger context of financing pensions and long-term care, as well as the cost of medical care services.


CLASS 9 – THE AFFORDABLE CARE ACT AND REFORM OF COMMERCIAL HEALTH INSURANCE MARKETS, PART 1 (February 24)

This class has a very large number of slides, but that is because there is not yet a lot of literature on the effects of the ACA nor even its regulations; hence, I have chosen to cover that in the slides.

The ACA has ten titles; two of its key titles are:

i) A mandate that individuals have a suitable insurance policy, as defined in the law and in regulation, or pay a financial penalty, along with income-related subsidies for those without employer provided insurance and incomes below 400% of the Federal Poverty Limit – and, to encourage larger employers to provide subsidized insurance, financial penalties for such employers if they do not insure a sufficiently high proportion of their employees; and

ii) Reforms in the market for individual and non-self-insured (see the slides for the definition of this term) employer plans. The reforms, several of which were alluded to in the prior class, include prohibiting pre-existing condition clauses (meaning that insurers must cover all medical conditions from the effective date of coverage), guaranteed issue (insurers must cover all applicants who pay their premiums and cannot refuse any applicant), guaranteed renewal (anyone with an existing policy can renew the policy provided the insurer continues to offer it, although the insurer can increase the premium on the policy for everyone and can make certain other changes as long as they apply uniformly), and constraints on the amount of the premium insurers can retain (Minimum Loss Ratios, which we take up in class 10).

Except for Minimum Loss Ratios, these reforms are directed at the problems caused by selection. They have dramatically changed individual and small group insurance markets. A description of the ACA’s reforms in these two areas in terms of what is in statute is in:
John E. McDonough, *Inside National Health Reform*, Berkeley, University of California Press, pp. 109-139. McDonough’s chapter is mainly descriptive, and is written from the point of view of a Democratic Senate staffer who was a key participant in the legislative process that led to the ACA. To promote these reforms politically, then Speaker of the House Nancy Pelosi labeled insurers “immoral villains.” Do you agree with her? Why or why not? In this context you might note McDonough’s discussion of the politics of this issue on page 78 of his book. McDonough’s book was written in the year after the passage of the ACA and hence does not consider the regulations the Administration has written to implement the law nor does it consider the subsequent Supreme Court decisions on the constitutionality of the law.

Although the required reading for this class is relatively modest, there are a great many slides. Many of them simply describe the American health insurance and various provisions of the ACA. Others describe issues the executive branch faced in rulemaking to implement the ACA; the ACA is an excellent case study of issues in implementing a law, and some of them describe the emerging data on how well the law is working.

The slides begin with some detail on the various insurance submarkets. As class 7 brought out, selection is mostly an issue in the individual and small group markets. Mid-size and larger employers, roughly speaking those with more than 50-100 employees, usually do not assess the medical risk of the potential employee or his or her dependents when hiring other than, of course, the physical and mental ability to do the job for which the person is being hired. Moreover, because of the law of large numbers, the mean risk at larger employers is less variable than at smaller firms. Furthermore, larger firms tend to self-insure, whereas smaller firms tend to shift the risk to an insurer (because of their size they are more vulnerable to a random large event although firms that self-insure generally purchase reinsurance on losses above a certain amount). For all these reasons the small group market is more vulnerable to selection.

The Uninsured

Because of the ACA the earlier academic literature on the uninsured is obsolete and the implementation of the mandate and subsidies in 2014 is too new to have generated much academic literature, so I have not required any reading. (The Oregon Experiment from Class 4, however, is obviously relevant to Medicaid expansion.) The United States certainly still has uninsured, but they are now mainly non-citizens or persons who have chosen not to take up insurance despite the mandate, especially persons with incomes under 100% of the Federal Poverty Limit in states that have not expanded Medicaid. These latter persons, however, are exempt from penalties.

OPTIONAL:


Using an Einav-Finkelstein setup (class 7), they show that the Massachusetts mandate succeeded in reducing selection by bringing healthier individuals into the individual market. They estimate a 4.1% gain in welfare.

J. Michael McWilliams, Ellen Meara, Alan M. Zaslavsky, and John Z. Ayanian, “Use of Health Services by Previously Uninsured Medicare Beneficiaries,” *New England Journal of Medicine*, July 12, 2007, 357(2):143-53. A followup to their study on the class 4 Optional list. This study shows that those with hypertension, stroke, diabetes, and heart disease who were uninsured before age 65 had a larger increase in physician and hospital use after age 65 than those who were insured, suggesting there may be downstream cost offsets (and potentially improved outcomes) from covering persons before age 65. [http://www.nejm.org.ezp-prod1.hul.harvard.edu/doi/pdf/10.1056/NEJMsa067712](http://www.nejm.org.ezp-prod1.hul.harvard.edu/doi/pdf/10.1056/NEJMsa067712)

**The Individual and Small Group Market**

This is the part of the insurance market that prior to the ACA functioned least well, primarily because of selection (but also because of the role of brokers, about which there is more about in class 10), and it arguably remains the part of the market that functions least well, though without question it is now functioning much better than before the ACA. As the slides describe, the ACA made numerous reforms to this market, most notably the public exchanges or marketplaces and associated subsidies. The subsidies are designed to draw good risks into the market and thereby reduce selection. They are initially limited to persons in the individual and small group markets who are not covered by employer-provided insurance; states at their option can expand them to the large group market starting in 2017 (though I wouldn’t be shocked if this option were delayed). To a degree that was not anticipated by the framers of the ACA, however, private exchanges have also been established, and some employers are using that device to change their insurance arrangements to a defined contribution plan, especially for their retirees. Defined contribution means the employer contributes a lump sum to the employee who can top it up to purchase insurance on the individual exchange from one of many possible insurers – or, in the case of retirees, enroll in TM or an MA plan. This class also takes up several other policy issues the ACA addressed with respect to commercial insurance markets.

To keep the amount of required reading down and because the pre-ACA literature on the individual and small group market, like the literature on the uninsured, is out of date, no reading is assigned for this topic, but the optional Baicker and Dow article below, written before the ACA, provides an economic analysis of the pre-ACA market.

OPTIONAL:


The ACA was modeled on 2006 Massachusetts legislation, sometimes called “Romneycare.” Some of the course readings such as Kolstad and Kowalski have been based on the Massachusetts experience. Because it has been superseded by the ACA, the original Massachusetts reform is now receding into history. If you want to know more about Massachusetts, you can look at the following Optional readings; the Steinbrook article describes the Massachusetts 2012 cost control legislation.

OPTIONAL:

Douglas Holtz-Eakin and Jonathan Gruber, “What Can Massachusetts Teach Us About National Health Insurance Reform?” Journal of Policy Analysis and Management, Winter 2011, 30(1):177-95. http://onlinelibrary.wiley.com.ezp-prod1.hul.harvard.edu/doi/10.1002/pam.20555/pdf If you read this exchange, I suggest starting with the Gruber essay rather than Holtz-Eakin’s, because Gruber lays out the anatomy of the Massachusetts reform. Holtz-Eakin, a former CBO Director and Republican health analyst, focuses on the difficulties of cost control. Massachusetts deliberately started with an expand-insurance-first-and-worry-about-cost-second strategy (see the Kingsdale reading immediately following), as did the Obama Administration with the ACA. Gruber, who advised then Governor Romney during the formative period of the Massachusetts reform and subsequently advised the Obama Administration about the ACA and was a member of the Connector board in Massachusetts until 2015, focuses on the expansion of coverage/access. Do you think this debate over cost control foreshadows future debate on the ACA? Cost growth has fallen precipitously (see class 1), but how much this fall is attributable to the ACA, as well as how long it will continue, are hotly contested questions. Nonetheless, few expect the rate of cost growth to remain at its current low level indefinitely.

Jon Kingsdale, “Implementing Health Care Reform in Massachusetts: Strategic Lessons Learned,” Health Affairs, published online 28 May 2009. http://content.healthaffairs.org.ezp-prod1.hul.harvard.edu/content/28/4/w588.short Why both Massachusetts and the Obama Administration started with an expand-insurance-first strategy and implicitly why cost control is so hard. In July 2012 Massachusetts passed legislation aimed at reducing the rate of cost increase, but in my view the enforcement tools
are weak, reflecting the political difficulty of cost control.


**Affordability**

An important driver of cost in the ACA is the cost of subsidies to make insurance premiums “affordable” and hence attract the entire risk distribution into the market. A corollary is that if insurance is not “affordable” the ACA does not impose penalties. How to think about affordability and exemptions is the subject of the next reading; its author was the Assistant Secretary for Planning and Evaluation in DHHS from 2010-2012. More generally, given the pressure on federal spending or perhaps I should say resistance to tax increases, the debate over subsidy levels and who can afford to pay what for health insurance is likely to continue.

The slides also touch on a specific affordability issue that arose in implementing the ACA, namely that the determination of whether employment-based insurance is affordable is based on the employee’s premium for an individual policy - not the premium for a family policy if the employee has a family. Thus, even though in a common sense meaning of “affordable,” insurance for a worker’s dependents may be unaffordable, the mandate and its penalties continue to apply.

Sherry A. Glied, “Mandates and the Affordability of Health Care,” Inquiry, Summer 2009, 46(2):203-14.  http://www.inquiryjournalonline.org.ezp-prod1.hul.harvard.edu/doi/pdf/10.5034/inquiryjrnl_46.02.203 Glied takes up the issue of what is affordable and how large subsidies need to be by looking at policy toward subsidies in other policy domains. In particular, the US subsidizes food (e.g., food stamps, WIC) and housing (e.g., vouchers). Food and housing are also like health care in that there are safety net providers, for food soup kitchens and for housing homeless shelters. How does health care differ from food and housing? What implications do those differences have for determining subsidy levels?

A larger issue that is a companion of affordability is how much inequality in health care the US is willing to tolerate. Solidarity is a frequently used term in the EU; it is much less
in evidence in the US literature. Think about that in the context of this reading and in the context of the map of

Thomas H. Lee and Ezekiel Emanuel, “Tier 4 Drugs and the Fraying of the Social Compact,” New England Journal of Medicine, July 24, 2008, 359(4), pp. 333-5. http://content.nejm.org.ezp-prod1.hul.harvard.edu/cgi/reprint/359/4/333.pdf We will come to tiered formularies for drugs in class 19 (though Lee and Emanuel explain the meaning), but the authors’ general thrust leads to a somewhat dark view of the possibilities for reducing differences in health care use by income group in the US. There were also some slides on this point in Class 1.

The Tax Treatment of Employer-Paid Premiums

The tax treatment of employer-paid health insurance premiums is a long-standing policy issue, one that surfaced in a major way in the debate over the ACA with its “Cadillac tax” of 40% on health insurance premiums that is to take effect in 2018. The current exclusion of employer-paid premiums from taxable income, which was the major spur to the development of the employment-based insurance system in the US, is the largest “tax expenditure” in the US tax code. (Tax expenditure means the foregone revenue from the exemption.) In addition to the foregone revenue, the current exemption is regressive. The slides cover some material on this subject, but I have not required any reading on this subject, partly because I haven’t seen much that is new. There are two papers in the supplementary list. The Bowles-Simpson Deficit Reduction Commission recommended capping the exclusion at the 75th percentile of premiums in 2014 and phasing it out by 2038. What effect would phasing it out have? It also recommended reducing the 40 percent “Cadillac” tax rate to 12 percent. If you want to see their proposal, you can find it at http://www.fiscalcommission.gov/sites/fiscalcommission.gov/files/documents/TheMomentofTruth12_1_2010.pdf, page 31, but that is not required.

CLASS 10 - THE AFFORDABLE CARE ACT AND REFORM OF COMMERCIAL HEALTH INSURANCE MARKETS, PART 2: MINIMUM LOSS RATIO REGULATION AND ADMINISTRATIVE COST; COMPETITION IN HEALTH CARE MARKETS (February 29)

Minimum Loss Ratio Regulation, Administrative Costs, and Fraud

The ACA put in place Minimum Loss Ratios (MLR’s) of 80 percent for individual and small group insurance and 85 percent for large group insurance. This means insurers must pay out at least that percentage in benefits or give policyholders refunds to the degree they fall short of those percentages. These minimums, however, apply only when insurers take financial risk; they do not apply to the self-insured market, that is when the employer takes the financial risk. You should think about why the MLR provision was in the ACA and whether you would have supported it.

The following paper by Robinson is not only relevant to the MLR issue but also raises a number of points about the relationship between measures of accounting cost and economic
cost (MLR’s are based on accounting cost). This relationship is important for you to understand both because the issue surfaces in other contexts and because of its relevance to the argument that there is a great deal of administrative waste in the American health care financing system. One policy proposal that flows from the argument of administrative waste is to limit insurers’ administrative cost, a main motivation for the MLR provisions. Similar accounting issues also arise around the profitability of pharmaceutical companies, especially the allocation of joint costs to product lines (i.e., different drugs in the case of pharma); we touch on this point in the context of pharma in class 19. The slides also take up the issue of economic cost versus accounting cost.

James C. Robinson, “Use and Abuse of the Medical Loss Ratio to Measure Health Plan Performance,” Health Affairs, 16(4), July/August 1997, pp. 176-187. http://content.healthaffairs.org/cgi/reprint/16/4/176 The MLR is often taken as a measure of administrative costs (the higher the loss ratio, the less the administrative costs as a percentage of premium). Robinson gives several reasons why the loss ratios of insurance companies and health plans don’t provide useful information for policy (though stock market analysts take them seriously as a measure of the “quality” of a company’s earnings), and hence why policy proposals to regulate that rate do not seem desirable. Why do we not see such regulations in other industries given that every firm in every industry has administrative costs and (at least for profit) insurers presumably have the same incentive to reach an efficient level of administrative cost as firms in other industries?

The ACA also contains a provision for the Secretary to review rates or premiums, although she has no enforcement powers; those remain at the state level with state insurance commissioners. The first reading gives you some pre-ACA background on premium setting. The paragraphs on medical underwriting are no longer relevant, but the issues of solvency and the material on premium review, which is part of the ACA, remain relevant.


OPTIONAL:

Some of the debate around the ACA, including the debate on the MLR, seemed motivated by a view that insurer profits are excessive. Insurance company (accounting) profit margins, however, are not abnormal among American industries. Nor are they a large portion of total health care costs. One slide makes this point, but you can also see Uwe E. Reinhardt, “The Baucus Plan: A Winner’s Curse for Insurance Companies,” http://economix.blogs.nytimes.com/2009/09/18/the-baucus-plan-a-winners-curse-for-insurance-companies/. If you want to pursue this topic further, see Reinhardt’s subsequent post, “How Much Money Do Insurance Companies Make? A Primer,” http://economix.blogs.nytimes.com/2009/09/25/how-much-money-do-insurance-companies-make-a-primer/. His post “What Portion of Premiums Should Insurers Pay Out in Benefits?” has a more positive view of minimum loss ratio regulation than the slides do, although in my view his post is more a comment on the failings of the individual and small group markets.
American Academy of Actuaries, “Minimum Loss Ratios,” web publication available at http://www.actuary.org/pdf/health/loss_feb10.pdf. The issues mentioned in this brief have now been settled by regulation, although they may at some point be reconsidered.


A paper on the extent of market power in the insurance industry that looks to the public option as market perfecting. They focus on the issue of the insurer-consumer transaction, however, and do not deal with how a public insurer would contract with providers and the issues we dealt with in classes 4-6 around administered prices. Those issue means the public option might not be market perfecting.

Administrative costs are part of the debate over the desirability of a single-payer system since single-payer proponents emphasize savings in administrative cost. The next readings deal with issues around administrative cost in the US system. The debate around the level of administrative cost properly goes beyond administrative costs at insurers and also takes up administrative costs of hospitals, physicians, and other providers. After reading these papers, ask yourself: What is the question at issue? Is it the right question? If not, what is the right question and do these papers help you get the answer to that question?

Steffie Woolhandler, Terry Campbell, and David U. Himmelstein, “Costs of Health Care Administration in the United States and Canada,” New England Journal of Medicine, 349(8), August 21, 2003, pp. 768-775. http://content.nejm.org.ezp1.harvard.edu/cgi/reprint/349/8/768.pdf. A paper that is frequently cited by single payer advocates, prominent among whom are Woolhandler and Himmelstein. They show higher administrative costs in the US system than in the Canadian and argue that the difference could cover the medical costs of the (at that time) uninsured.

Henry J. Aaron, “The Costs of Health Care Administration in the United States and Canada,” New England Journal of Medicine, 349(8), August 21, 2003, pp. 801-803. http://content.nejm.org.ezp1.harvard.edu/cgi/reprint/349/8/801.pdf  This is an editorial that accompanied the Woolhandler, et al. paper. Aaron argues that there are methodological issues with Woolhandler, et al.’s conclusion of higher administrative costs in the US. What are these methodological issues? How do you come out? How would you treat taxes that for-profit insurer’s pay for this purpose? (The slides note that the treatment of taxes was an issue with the ACO’s MLR regulations.)

exploration of a single-payer plan, but then proceed to read http://www.leg.state.vt.us/jfo/healthcare/FINAL%20REPORT%20Hsiao%20Final%20Report%20-%202017%20February%202011_3.pdf pp. 46-48. It is in the latter document that Hsiao gives the basis for his estimate of administrative saving from less fraud under a single payer. How much confidence do you have in his estimate of 5% savings from less fraud? In addition to his estimate of savings from less fraud, Hsiao estimates additional savings in administrative cost at insurers, hospitals, and physicians if the state of Vermont were to adopt a single payer system. Pages 34-46 of the final report show the derivation of savings in those domains. The administrative savings estimate relies on several studies, including a forerunner of the Morra, et al. in the Optional reading, but to keep the amount of required reading down, pp. 34-46 are Optional.

As many of you may know, in 2011 the Vermont legislature enacted legislation for a single payer plan that was to have gone into effect in 2017. The legislation, however, did not specify how the plan would be financed. In December 2014, however, the Democratic Governor of Vermont, who had run for office on a single-payer platform, announced that the state would no longer pursue such a plan. The plan that was envisioned would have added $2.5 billion to the state’s budget; that number may sound small in the context of national spending, but Vermont is a small state and the state’s entire revenue from taxes was only $2.7 billion (these figures are from Sarah Kliff, http://www.vox.com/2014/12/22/7427117/single-payer-vermont-shumlin). Another way to say this is that financing the plan would have required an 11.5 percentage point increase in the payroll tax and up to a 9 percentage point increase in the income tax, a tax increase that was considered politically undoable. This saga can also be construed as an example of the American political system - or more precisely the Vermont political system - resisting redistribution.

OPTIONAL:


Stuart H. Altman and David Shactman, “Should We Worry About Hospitals’ High

In this context you should also note the Cutler and Ly paper in the Optional reading for Class 1.

**Antitrust (Competition Policy in EU nomenclature)**

Although the 2009-2010 debate on the ACA emphasized insurer concentration, and the first reading below is supportive of that view, concentration on the provider side may be a larger problem, especially given the MLR regulation which means 80 or 85% of any premium increase must be paid out in medical benefits. The second reading by Kocher and Emanuel takes up provider concentration.

Because of the technical nature of antitrust, there is little required reading, but this area of health policy is important. For example, we will see in class 14 that most of the variation in spending across geographic areas by the commercially insured is attributable to differences in provider markups. Although it has not been shown, it seems likely that these varying markups are related to varying degrees of provider market power.

United States of America and the State of Michigan vs. Blue Cross Blue Shield of Michigan, which is posted on the course website. Read the first four pages of the complaint as an example of market power in the insurance industry.


OPTIONAL:

For those of you who want more - but not a lot more - on this important topic, especially if you do not have a background in the economics of industrial organization, you can browse among the following:

Paul B. Ginsburg and L. Gregory Pawlson, “Seeking Lower Prices Where Providers Are Concentrated: An Examination of Market and Policy Strategies,” Health Affairs, June 2014, 33(6):1067-75. Describes a variety of methods that could be used to address increased provider market power from consolidation. [http://content.healthaffairs.org/ezp-prod1.hul.harvard.edu/content/33/6/1067.full.pdf]

William M. Sage, “Getting the Product Right: How Competition Policy Can Improve Health Care Markets,” Health Affairs, June 2014, 33(6):1076-82. As a predicate for meaningful competition, this paper advocates pricing the treatment for the patient’s
problem, potentially with a warranty. [http://content.healthaffairs.org.ezp-prod1.hul.harvard.edu/content/33/6/1076.full.pdf]


On the other hand, for those of you who want a lot more on this topic and who have some background in the economics of industrial organization, there is a burgeoning literature. The following two chapters in the 2012 Handbook of Health Economics are excellent reviews. But the Gaynor and Town chapter in particular is extremely long.


Leemore Dafny, “Estimation and Identification of Merger Effects: An Application to Hospital Mergers,” Journal of Law and Economics, August 2009, 52(3):523-50. Shows that competitor hospitals in areas where two hospitals merge can raise prices because of greater market concentration. For unknown reasons, this journal is not in the electronic Harvard library system, so there is no URL.

The following three papers have conflicting findings on the effect of increased insurer concentration on medical prices. The first two find lower spending from increased insurer concentration using primarily a cross-section design; the third finds an increase in spending using what is effectively a difference-in-difference model.

Glenn A. Melnick, Yu-Chu Shen, and Vivian Yaling Wu, “The Increased Concentration of Health Plan Markets Can Benefit Consumers Through Lower Hospital Prices,” Health Affairs, September 2011, 30(9):1728-33. Finds 64 percent of hospitals (revenue weighted) operate in health plan markets that are not concentrated (HHI ≤ 1800) and only 7 percent operate in markets that are (HHI > 3200). Also finds hospital prices in the most
insurer concentrated markets are 12 percent lower than in the most insurer competitive markets. Emphasizes reducing hospital concentration.  

http://content.healthaffairs.org.ezp-prod1.hul.harvard.edu/content/30/9/1728.full.pdf+html


https://www-aeaweb-org.ezp-prod1.hul.harvard.edu/articles.php?doi=10.1257/aer.102.2.1161

The literature in this domain is not confined to the US:


Summarizes a small number of studies of the effects of attempting to introduce a modicum of price competition into the British National Health Service. My take is that effects of modest interventions are modest.


http://ac.els-cdn.com.ezp-prod1.hul.harvard.edu/S0167629613001677/1-s2.0-S0167629613001677-main.pdf?_tid=08e5a3e8-928f-11e4-94ab-00000aab0f6b&acdnat=1420210555_e351a6d1175b49ff237124244505bacc

A related issue to antitrust, suggested by Kocher and Emanuel in the required reading, is whether there should be a mandate for price transparency to consumers. Although frequently advocated and not strongly partisan, at least relative to many health policy issues, the evidence on the whole is not very supportive of its efficacy. If you are interested in this issue, here are two short papers to get you started:


CLASSES 14-18 - QUALITY OF CARE

I start with an overall view of the next five classes. Historically, the public debate in the US over health policy focused much more on cost and access than on quality. “Access” is a term with several meanings, including financial, geographic, racial/ethnic, and cultural, but in the American context it probably most often refers to financial access, meaning in principle the uninsured and underinsured, although uninsured is the most common use. In other countries, such as the UK, access often refers to shorter waiting times for elective procedures, a meaning that is almost wholly absent in the American context.

In contrast to cost and access, the American health policy debate did not highlight quality as a problem until relatively recently. In recent years, however, the view among experts - but probably less among the general public - is that there are important problems with the quality of care in the US (and in other countries as well). At the same time, expert opinion is now somewhat more nuanced about cost (see class 1). Behind the change of expert opinion on quality lies a vast literature that both documents problems with quality of care and proposes remedies.

Class 14 covers geographic variation in the use and cost of services. The fact of variation suggests quality issues. Class 15 covers a potpourri of subjects related to quality: a) the Institute of Medicine’s definition of quality (see slides); b) the entities that affect quality (no reading assigned on this topic; see slides); c) the RAND definition of appropriateness of care and its application; d) the findings of the literature on the effects of public reporting of provider quality; e) the business case for quality or lack of it; f) the role of information technology (IT) and the electronic medical record; its rate of adoption has a lot to do with economics; and g) reimbursement based on quality measures or so called pay for performance (P4P). Class 16 goes over the change in reimbursement to “value-based care” and its effect on quality. Value-based care seems to have several meanings, but I focus on capitation or partial capitation with some payment based on quality measures. Class 17 covers comparative effectiveness research or improved knowledge of “what works among whom,” and class 18 deals with malpractice and its effects – for good or ill – on quality.

CLASS 14 – GEOGRAPHIC VARIATION (March 21)

In keeping with the spirit of teaching you something about methods and distinguishing better from poorer research, I begin the set of classes on quality with the debate over geographic variation in the use of services. Although this class is primarily focused on methods, the variation in use and quality likely implies that all areas of the US do not have optimal quality. I put “likely” in the prior sentence because some believe most of the variation can be explained by health status differences. How much can be explained by health status is a topic in the literature below, but the bulk of the literature shows considerable variation even accounting for health status. (The Sheiner Optional reading is something of an exception.)
As you will see, however, there is controversy about both methods and substance in this domain; I will ask you in class where you come out in the debates between the Dartmouth researchers who started the variations literature and their critics. Note that to keep this introductory discussion coherent, there are a number of readings included in it that are NOT required. So you are clear on what I expect you to read, I have left the optional reading in ordinary (not bold) font.

The vast literature about geographic variation within the United States began with studies of variation in use and cost (quality variation was only implicit), much of it coming from John (Jack) Wennberg, Elliott Fisher, and others at Dartmouth over the past four decades. Much of the Dartmouth work can be found in the Dartmouth Atlas in the Optional reading; the slide from Class 1 on variation in Medicare spending, which is repeated in the slides for this class, is from the Atlas. In explaining variation the Dartmouth group has emphasized the role of the physician and the physician’s discretion in gray areas of medicine, although why physician decision making should cluster geographically was (and I would say remains) somewhat murky.

As noted above, geographic variation relates to quality because if areas that are otherwise homogeneous, or, more realistically, vary only modestly in factors that affect use such as the age distribution, many of the areas must not have the optimal rate of use. Many of the writings of the Dartmouth group go further, however, and interpret the data as saying that the high spending areas buy very little if anything of value for their incremental spending (see, for example, the Fisher, et al. Part 2 paper in the Optional reading). This leads the Dartmouth group to the conclusion that the US could save a lot of money if all of the US looked like the low spending areas. Atul Gawande, in a well-known 2009 New Yorker article that was picked up by the New York Times and featured on page 1 in the Sunday paper, furthered this line of thinking. (Neither the New Yorker article nor the Times article is required, but if you want to read the Gawande article it is at http://www.newyorker.com/reporting/2009/06/01/090601fa_fact_gawande. If you have access to the Times, you can get the Times article at http://www.nytimes.com/2009/06/09/us/politics/09health.html?scp=37&sq=medicare&st=nyt.) I have excerpted the beginning of the Times article about Gawande on a slide.

[[Note: If you are an HKS student, you can get access to the Times using the following instructions: New Subscription to New York Times website for HKS Community: Due to strong interest from the HKS community, the HKS Library & Knowledge Services purchased access to the nytimes.com website for the entire Harvard Kennedy School community including HKS faculty, staff, fellows and students. To get your academic pass:
1. Watch this video with instructions.
2. Go to http://nytimes.com/passes and register with your HKS e-mail address (@hks.harvard.edu, @hks16.harvard.edu, or @hks17.harvard.edu). Please note that if you cannot use a harvard.edu alias but must use your hks.harvard.edu email account.
Academic passes are active for one year from the date of registration with the exception of HKS students graduating in 2016. Access to the New York Times site will cease in June 2016 for]

The Dartmouth work on geographic variation, which started in the early 1970’s, precipitated a very delayed counter reaction that I will want to discuss in class, as much for its methodological interest as for its substantive interest. I have relegated some of the challenges to the Dartmouth view of the world to the Optional reading list, not because I think they are unimportant but because the reading for this class is already long! If you delve into the Optional reading, I suggest especially Romley, et al. (the slides for this class have one chart from this paper), Doyle on Florida, and Franzini, et al. on McAllen and El Paso. The first two both challenge the Dartmouth view that the additional spending doesn’t buy much of value. Franzini, et al. showed that commercial data for McAllen and El Paso, the two Texas cities that Gawande had described, looked very different than the Medicare data Gawande had used. The IOM report and the Newhouse and Garber papers below showed why this was.

On the political front, the variation in Medicare spending so amply documented by Dartmouth arguably led to the floors in Medicare hospital wage adjusters and in Medicare Advantage reimbursement (recall classes 5 and 9). This, however, may simply have come from members of Congress in low spending districts becoming aware of more supplementary benefits in Medicare Advantage plans in high spending districts rather than from the Dartmouth work (class 5). In any event, as part of the debate over the ACA, the geographic variation in Medicare spending led the Congress to support two Institute of Medicine (IOM) studies of the issue, one of which I chaired; the following are two short papers that summarize that IOM committee’s report; the full report is in the Optional reading. (The IOM has subsequently been renamed the National Academy of Medicine.) IOM reports are copyrighted, but you can download a pdf for your personal use for free by registering at www.iom.edu. Some of the slides are taken from the committee’s report. What do the IOM committee’s findings say about the Dartmouth view of the world?


Dartmouth always focused on geographic variation in spending in Medicare Parts A and B because Medicare data allowed estimation of spending at a fairly granular level of geographic detail. The IOM work attempted to go beyond Medicare data to get an all-in or total measure of spending in a geographic area; the following paper summarizes their
conclusions.


Turning to some of the methods issues that have arisen in the literature and that are taken up in the reading below, the Zuckerman, et al. paper below as well as the MedPAC report in the Optional reading argue that the map you saw in Class 1 looks considerably different after making adjustments for various covariates; Dartmouth has fired back at MedPAC.  Bach challenges Dartmouth’s methods for dealing with endogeneity and Dartmouth has responded.  Cooper has gotten into a debate with Baicker and Chandra, who at one time were both at Dartmouth; that debate also bears on the issue of workforce which we come to in Class 21.

The Dartmouth map you saw in Class 1 (and that is repeated in the slides for this class) shows variation in input-price adjusted Parts A and B Medicare spending across the Dartmouth defined 306 market areas.  (Input-price adjustment, sometimes called factor-price adjustment, means adjustment for the wage index and the GPCI, see classes 4-6.  Sometimes in Dartmouth publications the data are input-price adjusted; sometimes not.  The map you saw on the slide is adjusted.)  After adjusting for factor prices and taking out Graduate Medical Education and Disproportionate Share payments (class 5), the remaining variation in Parts A and B is essentially a quantity index because Medicare sets prices that are uniform nationally except for these factors.  Note that since the Dartmouth data are just Parts A and B, they exclude spending on Medicare Advantage (Part C, class 8) and on drugs (Part D, class 19).

The Fisher, et al. article above (as well as the companion Fisher, et al. article in the Optional reading) carried the Dartmouth group past many of their earlier studies that simply documented geographic variation in use.  Fisher, et al. try to show that the high use areas do not buy much for their additional spending, i.e., their findings are consistent with “flat-of-the-curve” medicine (class 1).  In particular, Fisher, et al. relate variation in Medicare spending on end-of-life care across regions to variation in five-year mortality rates, functional outcomes, and satisfaction for Medicare patients with hip fracture, AMI, or colorectal cancer.  They find no relationship.  Much of this material is in the companion article that is Optional, although there are also two slides from Elliott Fisher on this point.  Bach (below), however, challenges them on whether their method yields interpretable findings, as does Cooper (also below).

The next five readings starting with Cooper can all be found at http://content.healthaffairs.org.ezp-prod1.hul.harvard.edu/webexclusives/index.dtl?year=2008.  Go to the December 4 date when you get to the web site, http://content.healthaffairs.org.ezp-prod1.hul.harvard.edu/content/early/2004/04/07/hlthaff.w4.184.full.pdf+html.  The sixth reading (Sutherland, et al.) continues the exchange between Dartmouth and Cooper.  Focus
on the methodological questions at issue; I will ask you about them in class. In order to keep the amount of reading for this class down, I have not assigned the original Baicker-Chandra paper that set off the exchange with Cooper, but if you want to see it, it is Katherine Baicker and Amitabh Chandra, “Medicare Spending, The Physician Workforce, And Beneficiaries’ Quality Of Care,” Health Affairs, 2004, Web Exclusive: W4-184-197.  http://content.healthaffairs.org.ezp-prod1.hul.harvard.edu/content/early/2004/04/07/hlthaff.w4.184.full.pdf+html.


Jason M. Sutherland, Elliott S. Fisher, and Jonathan S. Skinner, “Getting Past Denial – The High Cost of Health Care in the United States,” New England Journal of Medicine, September 24, 2009, 361(13):1227-30. Sutherland, et al. (“Dartmouth”) take up Cooper’s objection that some of the variation across regions is due to variation in factor prices (Dartmouth: true, but only some of it), health status (Dartmouth asserts very little is due to health status, but this is disputed; see Zuckerman, et al. below as well as the MedPAC reading, both of which take a different view), and poverty (Dartmouth: very little). Dartmouth believes the latter two factors mostly balance out across Hospital Referral Regions (though I would add that they do not mostly balance out across the smaller Dartmouth defined Hospital Service Areas, which are nested within Hospital Referral Regions and are about 10 times as numerous). The two Fisher, et al. Annals of Internal Medicine papers, one of which is required, are representative in this respect. The Sutherland, et al. paper is at http://content.nejm.org.ezp-prod1.hul.harvard.edu/cgi/reprint/361/13/1227.pdf

As a side note, two New York Times reporters also decided to take on Dartmouth in articles that were run on the front page of the newspaper. If you have access to the Times, you can...
download these articles for free at http://www.nytimes.com/2010/06/03/business/03dartmouth.html. This reading, however, is optional.

Others besides Cooper and the New York Times have climbed into the ring with Dartmouth:


Dartmouth, however, argues that adjusting for health status in the manner that Zuckerman and MedPAC do (and also Zhang, et al. in the slides) is illegitimate because the health status adjustment is based on diagnoses on claims forms and the intensity of coding diagnoses varies by region. In particular, they show the likelihood of recording diagnoses on claims forms varies by region. Given the Dartmouth result, can one adjust the observed amount of variation for the differential coding propensity from the data they present? That is, can one get a figure that reflects the amount of variation net of any differences in coding intensity across region? The following reading was Optional for class 8, but if you didn’t read it, you should do so now since it is a key article in the argument about whether the data should be adjusted for health status when health status is defined as diagnoses on claims forms. Yunjie Song, Jonathan Skinner, Julie Bynum, Jason Sutherland, John E. Wennberg, and Elliott S. Fisher, “Regional Variations in Diagnostic Practices,” New England Journal of Medicine, July 1, 2010, 363(1):45-53. http://www.nejm.org.ezp-prod1.hul.harvard.edu/doi/full/10.1056/nejmsa0910881

OPTIONAL:

The Dartmouth Atlas of Health Care. This justly famous publication presents all sorts of variation in care in great and colorful detail. You can see it for free at [http://www.dartmouthatlas.org/](http://www.dartmouthatlas.org/)


Institute of Medicine, “Pursuing Value in Health Care: Target Decision Making, Not Geography,” eds. Joseph P. Newhouse, Alan M. Garber, Robin P. Graham, Margaret A. McCoy, Michelle Mancher, Ashna Kibria, July 2013, [www.iom.edu](http://www.iom.edu). In case you want to dip into the report that the two Newhouse and Garber papers above are based on.


Joseph J. Doyle, Jr., “Returns to Local-Area Healthcare Spending: Using Health Shocks to Patients far from Home,” American Economic Journal: Applied Economics, July 2011, 3(3):221-243. Shows, contrary to the Fisher papers above, that areas of high spending may have some positive returns. Despite Doyle’s example, however, there is a lot of evidence behind the conventional Dartmouth conclusion that the high Medicare spending areas get little for their extra spending; much of it is in the [Dartmouth Atlas](http://www.nber.org/papers/w13301).

Dartmouth seems to agree with the IOM and with Chernew, et al. that variation in commercial insurance looks different. In the following paper, which is co-authored by Jonathan Skinner, they find the (in)famous difference between McAllen and El Paso, Texas that Atul Gawande highlighted in his New Yorker article does not hold up in commercial data. Luisa Franzini, Osama I. Mikhail, and Jonathan S. Skinner “McAllen and El Paso Revisited: Medicare Variations Not Always Reflected in the Under-Sixty-Five Population,” Health Affairs, December 2010, 29(12): 2302-9. [http://content.healthaffairs.org.ezp-prod1.hul.harvard.edu/content/29/12/2302.short](http://content.healthaffairs.org.ezp-prod1.hul.harvard.edu/content/29/12/2302.short)

Given the role of post-acute care in the Medicare differences (see the IOM report) and that post-acute care is not that important in the under 65, this lack of a relationship is perhaps not surprising, but I think at the time the result surprised many people because there had been so little done with data from commercial insurance and because the usual Dartmouth interpretation had been that the variation came from doctor discretion, which most assumed carried over to the treatment of the under 65.

Louise Sheiner, “Why the Geographic Variation in Health Care Spending Can’t Tell Us Much About the Efficiency or Quality of Our Health Care System,” Brookings Papers on Economic Activity, Fall 2014. Takes on the Dartmouth view that geographic differences in Medicare spending can be mostly accounted for by individual physician practice style and suggests that state-level socioeconomic differences are important rather than the conclusion of the Sutherland, et al. paper in the required reading that individual level health variation is unimportant when trying to explain variation across large areas. [http://www.brookings.edu/~media/projects/bpea/fall-2014/fall2014bpea_sheiner.pdf](http://www.brookings.edu/~media/projects/bpea/fall-2014/fall2014bpea_sheiner.pdf)

Amy Finkelstein, Matthew Gentzkow, and Heidi Williams, “Sources of Geographic Variation in Health Care: Evidence from Patient Migration,” mimeo, [http://economics.mit.edu/files/9782](http://economics.mit.edu/files/9782). Uses Medicare data on those who move to show that 40-50% of the geographic variation in Medicare is attributable to demand factors rather than supply factors, whereas the Dartmouth view of the world has focused on supply factors rather than demand factors.

Amitabh Chandra and Douglas Staiger, “Productivity Spillovers in Health Care: Evidence from the Treatment of Heart Attacks,” Journal of Political Economy, February 2007, 115(2):103–40. Argues that regions may specialize in one type of treatment and therefore may not be able to obtain the same results as another region if spending were to change. Thus, contrary to what some of the Dartmouth group have written, if high spending regions were to have their Medicare reimbursement cut, outcomes could suffer.
CLASS 15 – QUALITY, ITS MEASUREMENT AND IMPROVEMENT:
APPROPRIATENESS, GUIDELINES, PUBLIC REPORTING AND
PAYING/PENALIZING USING MEASURES OF QUALITY (March 23)

This class has a lot of reading and slides, but some of the material is descriptive and you should be able to get through that material relatively quickly.

OPTIONAL:

Overviews

Institute of Medicine, Crossing the Quality Chasm; Washington: National Academy Press, 2001, Executive Summary, pp. 1-22. This call-to-action report, though now well over a decade old, is still often cited and is a good starting point for this topic. It is such a good starting point that I used to have it on the required list, but have taken it off to lighten the required load. Although much of the monograph does not deal with the economics of quality directly, note the text about payment policies around recommendations 10 and 11. The push for financial incentives for quality performance subsequently went forward under the banner of pay for performance (P4P); more on that below. http://www.nap.edu/catalog.php?record_id=10027

Institute of Medicine, To Err Is Human; Washington, DC: National Academy Press, 1999, Executive Summary. This IOM report put the issue of patient safety and error in medicine on the public agenda. It made the point, which is made even more strongly in the Quality Chasm report, that improving quality is a systems problem. The report makes a dubious (in my view) extrapolation to the entire US of studies of deaths from error in New York, Colorado, and Utah, but this extrapolation now seems to have made it into urban legend (see the Supplementary reading list for Class 17). Nonetheless, whatever the number of deaths medical error actually causes is, there can be little doubt that it is a large number. This IOM report was the subject of a Presidential news conference when it was released, and it sufficiently impressed President Clinton that he returned to the subject in his general press conference the following day. http://iom.nationalacademies.org/Reports/1999/To-Err-is-Human-Building-A-Safer-Health-System.aspx

Especially if you are an MD or a medical student, I suggest you read Atul Gawande’s 2011 Harvard Medical School commencement address, which emphasizes the need for physicians to change the traditional views they have had of themselves in order to make delivery system reform successful in terms of both improving quality and lowering cost. You can find this at http://www.newyorker.com/online/blogs/newsdesk/2011/05/atul-gawande-harvard-medical-school-commencement-address.html. If you are a Gawande fan (I am), another Gawande New Yorker article whose theme is related to the Cowboys and Pit Bulls article is http://www.newyorker.com/reporting/2012/08/13/120813fa_fact_gawande
**Quality of Care Measurement**

As per the slides, the traditional measures of quality are classified into structure, process, and outcome. The first reading gives a now dated assessment of the state of quality in the US using process measures, and the next reading takes up the relationship or the lack of it between process and outcome measures.

Elizabeth A. McGlynn, Steven M. Asch, John Adams, et al., “The Quality of Health Care Delivered to Adults in the United States,” New England Journal of Medicine, 348(26), June 26, 2003, pp. 2635-2645. [http://www.nejm.org.ezp-prod1.hul.harvard.edu/doi/full/10.1056/NEJMsa022615](http://www.nejm.org.ezp-prod1.hul.harvard.edu/doi/full/10.1056/NEJMsa022615) This classic paper gave a rather dismal overall assessment of the quality of care in the US at the time. Only 55 percent of patients whose charts were sampled received guideline level care, although if the medical record were incomplete, the results would understate the quality actually being delivered (but failure to document is itself a quality problem). You may also want to read the editorial on this subject by Earl Steinberg in the same issue, but that is Optional. Two follow-on papers from this study are in the Optional reading; one shows little variation across demographic groups, the other shows little variation across geographic regions. In short, the poor performance seemed to extend across the board. The slides document improvement in several of the measures since the time of these data, but there still appears to be scope for substantial improvement.

Although process measures are widely used to assess quality, outcome measures are almost universally conceded to be what is desired if only they were more feasible. The following paper is about the weak relationship between process and outcome measures.

Ashish Jha, “Measuring Hospital Quality,” JAMA, July 5, 2006, 296(1):95-97. A short, clear exposition of the relationship - or the lack of it - between process and outcome measures. To keep the amount of required reading down, I have not assigned the two articles that Jha is discussing in this editorial, but of course you are welcome to pursue those. [http://jama.ama-assn.org.ezp-prod1.hul.harvard.edu/content/296/1/95.short](http://jama.ama-assn.org.ezp-prod1.hul.harvard.edu/content/296/1/95.short)

**OPTIONAL:**

Each year the federal government issues a National Health Quality and Disparities Report, with data over time on many measures of quality. The 2014 version can be found at [http://www.ahrq.gov/sites/default/files/wysiwyg/research/findings/nhqdr/nhqdr14/2014nhqdr.pdf](http://www.ahrq.gov/sites/default/files/wysiwyg/research/findings/nhqdr/nhqdr14/2014nhqdr.pdf)


Eve A. Kerr, Elizabeth A. McGlynn, John Adams, Joan Keesey, and Steven M. Asch, “Profiling the Quality of Care in Twelve Communities: Results from the CQI


Peter S. Hussey, et al., “How Does the Quality of Care Compare in Five Countries?” Health Affairs, May/June 2004, 23(3), pp. 89-99. http://content.healthaffairs.org.ezp-prod1.hul.harvard.edu/content/23/3/89.full Quality of care is variable across countries and there is relatively little correlation among measures. That is, if a country looks good on one measure, it does not necessarily look good on another.

And if you want to read an anecdotal account around quality that brings to mind Ralph Nader’s famous title, Unsafe at any Speed, see Ashish Jha’s blog post at http://cognoscenti.wbur.org/2013/04/05/medical-errors-ashish-jha.

(In)Appropriateness and Guidelines

Mark R. Chassin, Jacqueline Kosecoff, R.E. Park, Constance M. Winslow, Katherine L. Kahn, Nancy J. Merrick, Joan Keesey, Arleen Fink, David H. Solomon, and Robert H. Brook, “Does Inappropriate Use Explain Geographic Variations in the Use of Health Care Services? A Study of Three Procedures,” JAMA, 258(18): November 13, 1987, 2533-2537. This paper follows from their 1986 paper, the results from which are in the slides. This classic study formulated a definition of appropriateness that was a main contributor to the guidelines movement of the 1990s, which is now termed evidence-based medicine. That is, guidelines were formulated that could support efforts to increase the proportion of appropriate procedures. How does the RAND group’s definition of appropriateness compare with an economist’s definition? Notice that the results of this paper conflict with the general view of the Dartmouth group (class 14) that the low-rate regions have the optimal rate. http://jama.ama-assn.org.ezp-prod1.hul.harvard.edu/cgi/reprint/258/18/2533.

OPTIONAL

Mary Beth Landrum, Ellen R. Meara, Amitabh Chandra, Edward Guadagnoli, and Nancy L. Keating, “Is Spending More Always Wasteful? The Appropriateness of Care and Outcomes among Colorectal Cancer Patients,” Health Affairs, January 2008, 27(1):159-68. Shows that high Medicare spending regions for colorectal cancer patients do more of both appropriate and inappropriate care, similar to Chassin, et al.’s findings. Outcomes across regions are similar, suggesting the negative effects of the inappropriate care diluted the
beneficial effects of the appropriate care, similar to my interpretation of the RAND Experiment results in class 3. [http://content.healthaffairs.org.ezp-prod1.hul.harvard.edu/content/27/1/159.full.pdf+html](http://content.healthaffairs.org.ezp-prod1.hul.harvard.edu/content/27/1/159.full.pdf+html)


Many American specialty societies have established guidelines for avoiding low value services, which they have named Choosing Wisely. This paper looks at the national prevalence and regional variation in 11 of those services. The range of prevalence is from 1% for upper urinary tract imaging in men with benign prostatic hyperplasia to 46.5% for preoperative cardiac testing for low-risk, non-cardiac procedures. The estimated waste from these 11 procedures is around $1.2 billion using 2006-2011 data. $1.2 billion is obviously a tiny fraction of the Institute of Medicine’s estimated 30% waste in American health care spending and of the $2+ trillion in total spending. How much that difference is attributable to specialty societies’ choosing services that did not account for a lot of their members’ revenue and how much it is attributable to the IOM’s 30% being too large a number is an open question.

Harlan M. Krumholz and Thomas H. Lee, “Redefining Quality – Implications of Recent Clinical Trials,” *New England Journal of Medicine*, June 12, 2008, 358(24): 2537-9. Discusses two well-known trials, the results of which imply that the simple targets of many guidelines such as Hba1c < 7 for Type 2 diabetics – and the associated public reporting, pay-for-performance, and network tiering efforts that have been built around these guidelines – are not sufficient, and that the existing guidelines specifying a target such as Hba1c < 7 also need to account for how the target was reached. Right now they do not do so. [http://content.nejm.org.ezp-prod1.hul.harvard.edu/cgi/reprint/358/24/2537.pdf](http://content.nejm.org.ezp-prod1.hul.harvard.edu/cgi/reprint/358/24/2537.pdf)


You may also want to refer back to the Garber and Skinner paper assigned for Class 1.

If you would like to read a journalistic account of why additional services at the margin may

Coordination Failures

Thomas Bodenheimer, “Coordinating Care — A Perilous Journey through the Health Care System,” New England Journal of Medicine, March 6, 2008, 358(10):1064-71. http://www.nejm.org.ezp-prod1.hul.harvard.edu/doi/full/10.1056/NEJMhpr0706165. The American delivery system, when compared with other industrialized countries, has a high proportion of specialists treating the same patient, which raises the problem of coordination among the physicians. This is especially true among the elderly, who more frequently have multiple comorbidities and are therefore being treated by different specialists. The coordination issue will also surface in Class 21 when we take up the health care workforce. This article describes the coordination issue and some possible remedies.


OPTIONAL:


There are a number of not mutually exclusive policy instruments that a policy maker can use to improve quality. The remainder of this class is given over to three of them, public reporting, paying on quality measures, and greater use of health IT.

Public Reporting

Giving consumers better information about the quality of care delivered by various providers (think Yelp or Trip Advisor for health care providers) is one often proposed instrument to improve quality. Lee shows the upside of quality reporting, but Dranové, et al. show that public reporting may induce selection, which is analytically similar to selection
from greater transparency in insurance plans (class 7). Hofer, et al. show that we may never have good quality measures at the level of the individual primary care physician, though this is a contested view.

Thomas H. Lee, “Eulogy for a Quality Measure,” New England Journal of Medicine, September 20, 2007, 357(12): 1175-7. A short piece demonstrating (in my view) the upside of measurement and public reporting. Administration of beta blockading drugs, a treatment that should have been routine following heart attacks but was far from routine in the early 1990s, was one of the first measures of process quality developed by the National Committee for Quality Assurance (NCQA). The original measure was whether the patient got the drug within 7 days of discharge, but use got so close to 100% after several years of measurement that the NCQA changed the measure to whether the patient was on a beta-blocker 6 months after the heart attack; see the notes to the slides on improvement. [http://content.nejm.org.ezp-prod1.hul.harvard.edu/cgi/reprint/357/12/1175.pdf](http://content.nejm.org.ezp-prod1.hul.harvard.edu/cgi/reprint/357/12/1175.pdf)

David Dranove, Daniel P. Kessler, Mark McClellan, and Mark Satterthwaite, “Is More Information Better? The Effects of ‘Report Cards’ on Health Care Providers,” Journal of Political Economy, June 2003, 111(3), pp. 555-588. This paper, which provides evidence of discrimination against severely ill patients after NY and PA established reporting systems on mortality rates of individual cardiac surgeons, shows (what to me is) convincing evidence that the New York and Pennsylvania public reporting schemes induced selection against higher risk patients and possibly raised mortality among AMI (heart attack) patients. The selection described in this paper is a discouraging result for reporting outcome-based measures, let alone paying on them, because risk adjustment for cardiac surgery was, and probably still is, the most advanced system of risk adjustment for health outcomes that we have, and the results here suggest to me that the cardiac surgeons did not believe it was good enough. Nonetheless, the welfare gains from the provider actions in New York described in Marshall, et al. in the Optional reading may still have outweighed the welfare losses from the selection that Dranove, et al. describe, so the net effect on welfare is ambiguous. Several more recent studies of public reporting in this domain are in the Optional reading; they generally accord with the Dranove, et al. findings. [http://www.journals.uchicago.edu.ezp-prod1.hul.harvard.edu/doi/pdf/10.1086/374180](http://www.journals.uchicago.edu.ezp-prod1.hul.harvard.edu/doi/pdf/10.1086/374180)

Timothy P. Hofer, Rodney A. Hayward, Sheldon Greenfield, Edward H. Wagner, Sherrie H. Kaplan, and Willard G. Manning, “The Unreliability of Individual Physician ‘Report Cards’ for Assessing the Costs and Quality of Care of a Chronic Disease,” JAMA, 281(22), June 9, 1999, pp. 2098-2105. This paper shows the difficulty of assessing the quality of care at the individual physician level even for a common disease (diabetes). Although there is a division of opinion on whether individual providers can be meaningfully profiled, this paper is rather discouraging about the prospects. See Dimick, et al. and Nyweide, et al. in the Optional reading for more on the issue of sample size at the individual provider level. There is some material from Dimick, et al. in the slides. [http://jama.ama-assn.org.ezp1.harvard.edu/cgi/content/abstract/281/22/2098](http://jama.ama-assn.org.ezp1.harvard.edu/cgi/content/abstract/281/22/2098)
Stephen W. Waldo, James M. McCabe, Cashel O’Brien, Kevin F. Kennedy, Karen E. Joynt, Robert W. Yeh, “Association Between Public Reporting of Outcomes With Procedural Management and Mortality for Patients With Acute Myocardial Infarction,” Journal of the American College of Cardiology, 2015, 65(11):1119-26. A later study with similar findings to Dranove, et al., although interestingly the authors seem unaware of the Dranove, et al. study. Primary percutaneous coronary intervention (PCI) is now the standard treatment for acute myocardial infarction (AMI). This study compares rates of PCI in two public reporting states (New York and Massachusetts) with six control states (Connecticut, Rhode Island, Maine, New Hampshire, Vermont, Maryland). The authors not only find less PCI among sicker patients but also higher in-hospital mortality. [http://ac.els-cdn.com.ezp-prod1.hul.harvard.edu/S0735109715001412/1-s2.0-S0735109715001412-main.pdf?_tid=336add8c-8a0e-11e5-891b-00000aab0f01&acdnat=1447423110_cb185496599af7eb5f811bae4fe49e9d]

Karen E. Joynt, Daniel M. Blumenthal, E. John Orav, Frederic S. Resnic, and Ashish K. Jha, “Association of Public Reporting for Percutaneous Coronary Intervention With Utilization and Outcomes Among Medicare Beneficiaries With Acute Myocardial Infarction,” JAMA, October 10, 2012, 308(14):1460-8. Another study with similar findings to Dranove, et al. This study compares the rate of Percutaneous Coronary Intervention (PCI) and mortality among heart attack patients in three public reporting states, New York, Pennsylvania, and Massachusetts, with seven control states. (Waldo, et al. above excluded data from Pennsylvania because of potential inconsistent data reporting.) As in the Dranove, et al. and Waldo, et al. studies there is less PCI in the public reporting states and the reduction occurs among the sickest patients, although in this study the authors find no effect either way on 30-day mortality rates. [http://jama.jamanetwork.com.ezp-prod1.hul.harvard.edu/Issue.aspx?journalid=67&issueID=25308&direction=P]


Martin N. Marshall, Paul G. Shekelle, Sheila Leatherman, and Robert H. Brook, “The Public Release of Performance Data: What Do We Expect to Gain? A Review of the Evidence,” JAMA, 283(14), April 12, 2000, pp. 1866-1874, http://jama.ama-assn.org/cgi/reprint/281/22/2098 and the editorial “Public Release of Performance Data” by Arnold M. Epstein in the same issue, pp. 1884-1886. Consumers do not appear to respond to information, although providers do; note especially the results on page 1872 with respect to the exodus of low-volume surgeons in NY. See also supportive results in the Cutler, et al. reading on the supplementary reading list. The literature reviewed in this paper is now quite dated, but the conclusions still mostly hold.

Rachel M. Werner and Eric T. Bradlow, “Relationship Between Medicare’s Hospital Compare Performance Measures and Mortality Rates,” JAMA, December 13, 2006, 296(22):2694-2702. Shows that hospitals that rank higher on the CMS Hospital Compare process measures have marginally lower risk-adjusted mortality rates for AMI, CHF, and pneumonia, another demonstration of the weak association between process and outcome measures.


Matthew P. Muller and Allan S. Detsky, “Public Reporting of Hospital Hand Hygiene Compliance – Helpful or Harmful?” JAMA, September 8, 2010, 304(10): 1116-7. The authors believe the reported improvement was not real but an artifact of measurement.

Shin-Yi Chou, Mary E. Deily, Suhui Li, Yi Lu, “Competition and the Impact of Online Hospital Report Cards,” Journal of Health Economics, March 2014, 34:42-58. After report cards went online, hospitals in more competitive local markets used more resources per
patient and achieved lower in-hospital mortality rates for patients undergoing CABG. Similar result to Romley, et al., class 14 Optional reading, with respect to resources used and inpatient mortality, though Romley, et al. do not study CABG. http://ac.els-cdn.com.ezp-prod1.hul.harvard.edu/S0167629613001719/1-s2.0-S0167629613001719-main.pdf?_tid=7761d44a-8fa1-11e4-8a99-00000aacb35e&acdnat=1419888618_07ad9bb5929d23c6933afcd9876e243a


John L. Adams, Ateev Mehrotra, J. William Thomas, and Elizabeth A. McGlynn, “Physician Cost Profiling — Reliability and Risk of Misclassification, New England Journal of Medicine, March 18, 2010, 362(11):1014-21. A paper similar to the Hofer, et al. and Dimick, et al. papers showing varying reliability in the measurement of a physician’s costliness (using allowed charges) across physicians (and also across specialties). The authors used two years of data from four Massachusetts insurers on the 1.1 million persons who had been continuously enrolled for the two years. Their summary number is that 22% of physicians would be misclassified if, arbitrarily, the lowest 25% of physicians on cost for the two years were classified into a lower cost or preferred tier by the insurers. http://www.nejm.org.ezp-prod1.hul.harvard.edu/doi/pdf/10.1056/NEJMsa0906323


Paying/Penalizing for Quality/Performance

Whereas public reporting or the provision of information about providers is a demand-side intervention to improve quality, “pay for performance” or “P4P” is a supply-side intervention. Many, especially non-economists, believe demand-side interventions to improve quality are ineffectual because patients cannot judge quality, but see Redelmeier, et al. in the Optional reading for Class 6 for evidence that there is a demand response (though in that particular case almost certainly not a socially optimal one). The UK has put much more P4P money on the table than the US and has seen what perhaps was a once-and-for-all improvement; see the Roland and Campbell paper and the slides. For more on the UK see
Kristensen, et al., Doran and Roland, and Campbell, et al. in the Optional Reading. The Optional Norton 1992 paper in Class 20 treats this topic in the nursing home context.

One concern about existing P4P measures is that they reward being above or below a given cutpoint, for example systolic blood pressure should be below 140 mmHg, whereas patient welfare may be improved to a much greater degree by changes in therapy that leave the patient still above the cutpoint and so go unrewarded in the cutpoint method; see Eddy, et al. in the Optional reading if you want to pursue this. Unfortunately, almost all P4P schemes including Medicare’s use the cutpoint method.


OPTIONAL:

Following on the VanLare, et al. papers above, Secretary Burwell in 2015 announced a goal of 50% of Medicare reimbursement being value-based by the end of 2018. [http://www.hhs.gov/news/press/2015pres/01/20150126a.html]

The next paper describes where Medicare is going with respect to value based payment after the Medicare and CHIP Reauthorization Act of 2015 (MACRA) – but it isn’t going there until 2019, which is why this reading is Optional. The short answer is to more P4P; although details remain to be worked out, by law four performance domains are included: quality of care; resource use; meaningful use of electronic health records; and participation
in clinical practice improvement activities. This short paper describes some of the challenges, especially in the measurement of the first two of the four domains.


The following three papers discuss the Medicare penalties for readmissions, which the slides also discuss.

Michael L. Barnett, John Hsu, and J. Michael McWilliams, “Patient Characteristics and Differences in Hospital Readmission Rates,” JAMA Internal Medicine, November, 2015, 175(11)1803-12.  Patient related characteristics that are omitted from the risk adjustment model explain much of the difference in the readmission rate across hospitals. From the abstract: “Participants admitted to hospitals in the highest quintile had higher HCC scores, more chronic conditions, less education, fewer assets, worse self-reported health status, more depressive symptoms, worse cognition, worse physical functioning, and more difficulties with ADLs and IADLs than participants admitted to hospitals in the lowest quintile.” http://archinte.jamanetwork.com/ezp-prod1.hul.harvard.edu/solr/searchresults.aspx?q=barnett&fd_JournalID=71&f_JournalDisplayName=JAMA%20Internal%20Medicine&SearchSourceType=3


The slides also cover the next two papers on the Premier demonstration:

mandated Value Based Purchasing for Medicare. The Jha, et al. results are consistent with
the tenuous connection between process and outcome measures.

Peter K. Lindenauer, Denise Remus, Sheila Roman, Michael Rothberg, Evan M. Benjamin,
Allen Ma, and Dale W. Bratzler, “Public Reporting and Pay for Performance in Hospital
486-496. Gains in quality at a set of hospitals with pay for performance and public
reporting relative to a set with only public reporting. The P4P scheme was a 1 or 2 percent
bonus for hospitals in the top two deciles of hospitals that applied; note that the group of
applicants were not randomly selected. Underperforming hospitals, however, were subject

David M Eddy, Joshua Adler, and Macdonald Morris, “The ‘Global Outcomes Score’: A
Quality Measure, Based on Health Outcomes, That Compares Current Care to a Target
Level of Care,” Health Affairs, November 2012, 31(11):2441-50. Describes an
improvement in how to administer P4P that uses a continuous and well validated measure of
outcome rather than being above or below a cut point on a given measure, as in the
Medicare Advantage Star system (class 8) and also in commercial insurance P4P programs.

Meredith B. Rosenthal, Richard G. Frank, Zhonghe Li, and Arnold M. Epstein, “Early
Experience with Pay-for-Performance: From Concept to Practice,” JAMA, 294(14), October
physicians who met targets on cervical cancer screening, mammography, and hemoglobin
A1c testing. Finds little effect on quality; the rewards went to those who were already doing
well. This paper was very influential in dampening some of the early enthusiasm for P4P.
What does this paper tell you about the most appropriate design of a P4P program? If you
would rather read an economics journal article that uses more complete data from the same
P4P program (but reaches the conclusion that there is a positive but quite modest effect),
You Pay For? Pay-for-Performance and the Quality of Healthcare Providers,” RAND

Meredith B. Rosenthal and R. Adams Dudley, “Pay-for-Performance: Will the Latest
assn.org.ezp-prod1.hul.harvard.edu/content/297/7/740 Their table gives a concise summary
of key dimensions of a P4P plan and points to literature on evidence.

For a summary of a large scale US effort to pay for performance in California, go to
http://www.iha.org/pdfs_documents/p4p_california/P4PWhitePaper2_June2009_FullRep
ort.pdf

If you want more on the UK, several readings follow.


Stephen Campbell, David Reeves, Evangelos Kontopantelis, Bonnie Sibbald, and Martin Roland, “Effects of Pay for Performance on the Quality of Primary Care in England,” New England Journal of Medicine, July 23, 2009, 361(4):368-78 http://www.nejm.org.ezp-prod1.hul.harvard.edu/doi/full/10.1056/NEJMsa0807651 This article shows modest gains in two of three quality indicators (with the third indicator trending in the right direction) used to compensate British GPs, albeit there was a prior favorable trend so it is not clear the P4P was causal. The improvement, however, came at considerable cost to Her Majesty’s Treasury, and the improvement appeared to be a one-off event.


Institute of Medicine, Rewarding Provider Performance: Aligning Incentives in Medicare,


Paying health care providers on quality measures is analytically similar to paying on performance measurement in elementary and secondary education, a domain where there is considerably more literature than in health care services. I list both a theoretical and empirical paper from this literature in the supplementary reading if any of you want to pursue this further.

*Health Information Technology (Health IT or HIT)*

One of the hopes for increasing the quality of health care is greater use of IT. I have not required any reading on this topic, although there is some material in the slides. For those of you interested in this subject, I have included some readings below and of course you can follow the cites if you are interested in more. I personally think one of the more likely places to look for gains from more widespread HIT is greater use of clinical decision support software, but the meaningful use regulations do not (as yet) require it. The reason I think that clinical decision support will help is summarized in the title of a 2010 paper in *PLoS Medicine* entitled “Seventy-five Trials and Eleven Systematic Reviews a Day: How Will We Ever Keep Up” (Hilda Bastian, Paul Glasziou, and Iain Chalmers, September 2010, 7(9):e1000326). (This paper is not on the Optional list; I just list the title here as a “factoid.”) Interestingly, however, the author’s conclusion is that the number of clinical trials and systematic reviews need to be reduced, which is not the conclusion I would draw. See also Hussey, et al., below.


The following three articles from the August 2013 issue of *Health Affairs* give the state of play as of a few years ago.

http://content.healthaffairs.org.ezp-prod1.hul.harvard.edu/content/32/8/1470.full.pdf+html

http://content.healthaffairs.org.ezp-prod1.hul.harvard.edu/content/32/8/1346.full.pdf+html

http://content.healthaffairs.org.ezp-prod1.hul.harvard.edu/content/32/8/1355.full.pdf+html


Leila Agha, “The Effects of Health Information Technology on the Cost and Quality of Medicare Care,” *Journal of Health Economics*, March 2014, 34:19-30. Finds no relationship between hospital adoption of IT and cost savings (even 5 years after introduction), although there is an effect on billed charges (coding). She also finds no effect on one year mortality, adverse drug events, or readmissions.  
http://ac.els-cdn.com.ezp-prod1.hul.harvard.edu/S0167629613001720/1-s2.0-S0167629613001720-main.pdf?_tid=3ec315d8-c407-11e3-904d-00000aabc361&acdnat=1397502294_ae5520d559547a37c2ad2d19a5d4cb3b

contrast with the conclusions of the papers above. In my view this difference could reflect at least two weaknesses of the earlier literature that they review, namely that results are often either confined to one institution or that the data used are cross-sectional.  http://content.healthaffairs.org.ezp-prod1.hul.harvard.edu/content/30/3/464.full.pdf+html


Guideline Development and Antitrust


A Speculative and Somewhat Pessimistic Overview of Some Causes of Poor Quality:


CLASS 16—PAYMENT AND DELIVERY SYSTEM REFORM: MANAGED CARE AND ACCOUNTABLE CARE ORGANIZATIONS (March 28)

Historically the organization of the American delivery system was predominantly around independent physicians, practicing alone, i.e., solo practice, or in small groups, with admitting privileges at one or sometimes more hospitals. The physicians operated largely autonomously, essentially ordering for their commercially and Medicare insured patients any covered service they thought was likely to benefit their patients. As we saw in the last class, however, the resulting quality left a lot to be desired, in part because physicians often did not coordinate with each other. In addition, seeking preventive care was largely left to an individual patient’s initiative. Hospitals recognized that physicians brought patients, which is to say revenue, and therefore generally catered to what physicians wanted in decisions on capital spending, especially to those physicians in more lucrative specialties, such as the surgical specialties, radiology, and cardiology (classes 6 and 21). Historically the financing of care, that is to say insurance, and the delivery of care were two distinct industries with little integration. Insurers were largely passive, essentially reimbursing any service a physician ordered as long as the insurance contract or policy covered the service and subject to any cost sharing in the insurance policy (“indemnity insurance”).

Although some of you may think the foregoing description of the delivery system is just history and irrelevant to the present day, there are still parts of the US, especially in smaller towns and rural areas, where this traditional organization is dominant. Furthermore, Parts A and B of Medicare (TM) were designed for this type of financing and delivery system. When Medicare was enacted in 1965, commercially insured patients essentially had free choice of physician, meaning a patient paid about the same amount out-of-pocket for a given
service irrespective of which physician or hospital he or she chose. TM largely continued in that vein for decades; a hospitalized patient, for example, pays a fixed deductible that is independent of the hospital the patient uses, and TM has for the most part reimbursed any covered service a physician orders. This description of the historical US delivery system also applies to delivery systems of some other countries such as Canada, where public insurance, like Parts A and B of Medicare, functions largely as a passive reimbursers of services and there are numerous small scale physician practices. Only in the past few years has TM taken steps toward moving away from its historical passivity; as we saw in class 15, it now pays marginally more for better quality (“Value Based Purchasing”) and marginally less for worse (readmission penalties), and, as we take up in the class, it is starting to seek ways to shift financial risk away from it and toward providers by encouraging Accountable Care Organizations (ACO’s).

In contrast to insurance that passively reimburses whatever services a physician orders or delivers, managed care, which is now the dominant model in American commercial insurance, in Medicaid, and in Medicare Advantage, tries to integrate, at least partially, insurance/financing with the delivery of care. In other words, managed care insurers now actively attempt to affect the quantity and quality of services relative to a passive indemnity insurer. In a favorable interpretation such integration or care management would reduce moral hazard and improve quality, but whether it does so is an empirical question. Supporters think the effect is positive; many single-payer advocates, who often have a Traditional-Medicare-for-all scheme in mind, think it is negative. Many physicians are also negative, feeling that managed care challenges their professional autonomy, though my sense is that the opposition has somewhat faded as managed care has become more established and more sophisticated in how it operates – and also as more physicians are employees and/or in medical groups that are taking financial risk.

Most patients tend to like the passive insurer, at least until they are faced with the cost that it generates. (Of course, the bulk of TM’s cost falls on the taxpayer.) Physicians and hospitals have more mixed views about TM; although most like the autonomy it offers relative to a managed care insurer, they are less enamored of its lower rates compared to those of commercial insurance.

Although managed care has evolved in some settings into a semi-cooperative relationship between insurers and physicians or delivery systems, especially in commercial Accountable Care Organizations, bargaining between providers and managed care plans over prices in a fee-for-service context is zero sum and thus frequently contentious. The distortions in fee-for-service reimbursement (Classes 4-6) also affect the delivery of services in Medicare Part C and in Accountable Care Organizations, since even if a delivery system is taking financial risk, individual physicians at the point of care are still likely to be reimbursed in some fashion on a fee-for-service basis (see the Ginsburg reading in class 6). Also remember that a physician group’s reservation price for taking some risk in a Medicare Advantage plan is likely to be at least what it can earn in TM. The SGR “fix” of 2015, however, starts to push physicians away from TM’s pure-FFS-no-financial-risk world (see the slides from class 6), albeit slowly and gingerly.
This class takes up the effect of the active or non-passive insurer on quality and cost and Medicare’s recent efforts to encourage Accountable Care Organizations (ACO’s). It builds on class 8, which covered the reimbursement of managed care plans in Medicare Part C or Medicare Advantage. Class 8, however, focused on selection and risk adjustment, whereas this class focuses on how shifting financial risk toward providers affects cost, use, and the quality of care. The class also takes up implementation issues around shifting risk toward providers.

Empirically, efforts to ascertain how managed care, or an active insurer, affects quality and cost face many methodological difficulties, starting with the dominance of active insurers other than in Traditional Medicare, which makes it impossible to find a credible contemporaneous comparison group among the under 65. For that reason almost all the reading for this class compares Medicare Advantage and TM. Furthermore, the effects of managed care presumably depend upon the specific techniques the insurer uses to manage care or affect utilization. Those techniques have changed over time, in particular the early command-and-control techniques have diminished in their intensity, and now tend to be less intrusive at the point of service. For a review of the older literature on these issues, see the Glied Handbook chapter in the Optional reading.

What about outside the US? Other developed countries have developed methods to deal with moral hazard, though those arrangements are not generally termed managed care. For example, certain drugs may not be on the formulary, or the MD may ration because certain facilities are not available or are fully booked for the relevant time frame.

My impression is that efforts at quality improvement are more spotty. Much of the American quality improvement literature (e.g., the IOM Quality Chasm book, Optional reading for class 15) argues that there must be an organized system of care to improve quality. Is an organized system possible in the US context without “managed care” and/or without a group of medical providers taking at least some financial risk? Note the rest of the world varies in the degree of “organization” of its system, from national health services on one hand (e.g., the UK) to decentralized, small scale office practices on the other (e.g., Canada, Australia).

When managed care enrollment started to grow rapidly in the US in the 1990s there was a backlash. On the policy front it took the form of legislators introducing “Patient Protection Acts,” the intent of which was to gut managed care and preserve the traditional financing and delivery systems, meaning passive reimbursement of whatever a physician ordered. The McDonough reading assigned for Class 9 has a flavor of that; see his discussion on pages 29 and 30, which notes that some of the patient protections that failed legislatively in the 1990’s are part of Title I of the ACA. Recall that although most people, including me, either use the shorthand of the ACA or call it Obamacare, the legislation passed by the House and Senate in 2009 and 2010 was entitled the Patient Protection and Affordable Care Act (italics added). Title I of the ACA contains its patient protection language, which included the provisions on guaranteed issue and guaranteed renewal that ended medical underwriting. These were major changes and very important. My judgment at this point, however, is that the remainder of the patient protection provisions in Title I around approvals of coverage,
coverage denials for uncovered services, and appeals have had little real effect either way, but I have not seen systematic data. The number of appeals has grown, but the absolute number of appeals is still not large (those data are not public).

As noted above, managed care and active insurers are now dominant in both commercial insurance and Medicaid. The majority of the American commercially insured, however, are in Preferred Provider Organizations (PPO’s), where the insurer has a lighter touch than in Health Maintenance Organizations (HMO’s); for example, PPO patients can generally self-refer to specialists and HMO patients cannot. The broad provider choice that PPO’s and many HMO’s offer, however, is starting to change with the advent of narrow network plans in the exchanges. Relative to managed care in commercial insurance, Medicaid managed care tends to be “high touch” (more on Medicaid in Class 20). A potentially important and relatively recent change in the US delivery system is the increasing number of employed rather than self-employed physicians (classes 6 and 21), meaning presumably less physician autonomy than historically was the case. The site-of-service differentials that we talked about in class 5 are an important reason for the shift toward employment, but so are the scale demands of IT.

The key innovation in shifting from the passive insurer toward managed care, as the slides say, was ending freedom-of-choice of provider provisions, although a variant of freedom-of-choice lives on in the debate over any-willing-provider legislation and to some degree in the advocacy of Medicare-for-all. The formation of a network can be viewed as an insurer’s acting as a purchasing agent for the consumer. But consumers are heterogeneous in their preferences for providers, and some consumers will have high valuations for out-of-network providers. The tensions created around this are implicit in the letter to Ronald Williams that I posted on the course website. What the letter does not say - and I am guessing that the signatories did not know - was that the hospital in question was seeking a 40% increase in rates. Shortly after the letter was sent, the 40% figure was negotiated downward, and the hospital became an in-network provider, so the issue the signatories raised became moot. Nonetheless, the tension about out-of-network providers - or for that matter providers in a non-preferred tier - is inherent in the role of the insurer as purchasing agent for a heterogeneous group of consumers since the network is a local public good. In the current debate this tension has surfaced in controversy over narrow network plans and network adequacy regulation, the subject of the first two readings, which emphasize that pro-provider is not necessarily pro-consumer.


**Network Formation and Tiering**

The slides refer to tiering physicians based on cost and quality. If you want to see how Aetna does this, go to [http://www.aetna.com/plansandproducts/health/medical/Aexcel_Methodology_v3_2010.pdf](http://www.aetna.com/plansandproducts/health/medical/Aexcel_Methodology_v3_2010.pdf)

What follows are three papers in economics journals about the economics of network formation. See also the Gaynor, et al. *Journal of Economic Literature* paper and/or *Handbook* chapter in the class 10 Optional reading.


Katherine Ho, “Insurer-Provider Networks in the Medical Care Market,” *American Economic Review*, March 2009, 99(1): 393-430. Presents a model of insurer-hospital bargaining over price in the context of whether the hospital will be preferred. Hospitals in systems can command higher prices (more market power) and hospitals that are more attractive to patients get higher prices. Note this latter finding is somewhat discordant with Mark Shepard’s results (class 7) unless risk adjustment functions well, because Shepard finds attractive hospitals may be differentially attractive to sick patients. [http://pubs.aeaweb.org.ezp-prod1.hul.harvard.edu/doi/pdfplus/10.1257/aer.99.1.393](http://pubs.aeaweb.org.ezp-prod1.hul.harvard.edu/doi/pdfplus/10.1257/aer.99.1.393)


**Managed Care and Spending**

Sherry Glied, “Managed Care,” in *Handbook of Health Economics*; eds. Anthony J. Culyer and Joseph P. Newhouse; North-Holland, 2000. A review of all the literature on managed care as of the late 1990’s. [http://www.sciencedirect.com.ezp1.harvard.edu/science?_ob=PublicationURL&_tockey=%23TOC%23234609%23232000%23399989999%7998%233584858%23FLP%23&cdi=24609&pubType=HS&auth=y&acct=C000014438&version=1&urlVersion=0&userid=209690&md5=a27d303a142408c7e6fe06be6b99ca](http://www.sciencedirect.com.ezp1.harvard.edu/science?_ob=PublicationURL&_tockey=%23TOC%23234609%23232000%23399989999%7998%233584858%23FLP%23&cdi=24609&pubType=HS&auth=y&acct=C000014438&version=1&urlVersion=0&userid=209690&md5=a27d303a142408c7e6fe06be6b99ca).

Katherine Baicker, Michael E. Chernew, and Jacob Robbins, “The Spillover Effects of Medicare Managed Care: Medicare Advantage and Hospital Utilization,” Journal of Health Economics, December 2013, 32:1289-1300. Like Baker, increases in Medicare Advantage share are associated with shorter hospital stays in TM (“spillover”). http://ac.els-cdn.com.ezp-prod1.hul.harvard.edu/S0167629613001124/1-s2.0-S0167629613001124-main.pdf?_tid=dbb2998a-49ea-11e5-a43d-00000aaacb35f&acdnat=1440371056_c55f7926f2c7c15e86bda30bc8e06478


Managed Care and Quality, Disease Management


Those pages summarize recent results on use and quality of care in Medicare Advantage, which I define as Part C excluding the Private Fee-for-Service option, compared with “unmanaged” Traditional Medicare (Parts A and B). (The Private Fee-for-Service option is touched on in the slides, but you can essentially ignore it both because it was not managed care at all and because it is now a trivial part of the program, though that was not the case in the 2003-2010 period.) On the whole, Part C comes out looking relatively good, although the number of comparisons of quality that one can make are limited.

One claim of managed care organizations is that their disease management programs can reduce health care costs. This claim is supported in the first paper below but not the second. The third paper contains a critique of the design of the trial reported by McCall and Cromwell; I am interested in what you make of the difference in results between the first two studies. In assigning these articles I am interested in both substance and in methods.


OPTIONAL:

In case you want to go deeper, the following are three of the papers that are summarized in the Newhouse and McGuire paper showing gains from managed care:


John Z. Ayanian, Bruce E. Landon, Alan M. Zaslavsky, Robert Saunders, L. Gregory Pawlson, and Joseph P. Newhouse, “Quality of Care in Medicare Advantage and Traditional Medicare,” Health Affairs, July 2013, 32(7):1228-35. Like the Landon, et al. study, Medicare Advantage on the whole looks as good or better than Traditional Medicare, although the ability to compare is perhaps surprisingly limited to a few dimensions. [http://content.healthaffairs.org.ezp-prod1.hul.harvard.edu/content/32/7/1228.full.pdf+html]

David Stevenson, John Z. Ayanian, Alan M. Zaslavsky, Joseph P. Newhouse, and Bruce E. Landon, “Service Use at the End of Life in Medicare Advantage versus Traditional Medicare,” Medical Care, 2013, 931-7. Shows greater use of hospice, lesser use of the hospital, and markedly less use of the Emergency Department among decedents in MA compared with matched decedents in TM. [http://ovidsp.tx.ovid.com.ezp-prod1.hul.harvard.edu/sp-3.12.0b/ovidweb.cgi?QS2=434f4e1a73d37e8c1d085c12c2e0a0e4dd9f69663859b31fe073de d8f22700f3be968c8ec16862825c9c256a6cbe10493960c4bd744cb902b1443e12f388086b b53ed133a755933b18eb2e0db8042e2027d6d7bd9944e2ddcb5b0b988c8e5e9f6428d31a93a b5aa4b96f09741869646b001e2ec1be0e3e103cdd7dd582cfeeac8100a053cc2aedf13bcb31e2c 5da614aa3ee3545077a4e5f8318ad21e0656260ea7ba3f82c992bc5337bec20593c4d87ff b76ed453e606834e393f484c618dda753d96334a7b48923bb2a2eb73b3bb09fca4a40d62b43 4b39086b3c2878f482e1d35953cf4e5f2f289b9abf164989e5a9d20e03a64163e985d36d16e 108
And there is one additional paper from our group that came out after the Newhouse and McGuire summary:


Jayasree Basu and Lee Mobley, “Do HMOs Reduce Preventable Hospital Admissions for Medicare Beneficiaries?” *Medical Care Research and Review*, October 2007, 64:544-67. [http://mcr.sagepub.com.ezp-prod1.hul.harvard.edu/content/64/5/544.full.pdf+html](http://mcr.sagepub.com.ezp-prod1.hul.harvard.edu/content/64/5/544.full.pdf+html) The answer to the question in the title is yes for the sickest. The slides have two figures from this paper.


Dana B. Mukamel, David L. Weimer, Jack Zwanziger, and Alvin I. Mushlin, “Quality of Cardiac Surgeons and Managed Care Contracting Processes,” *Health Services Research*, October 2002, 37(5):1129-43. Shows some tendency for managed care plans in New York State to contract with higher quality cardiac surgeons. This is one of the few papers in the literature on how or even whether managed care plans weigh quality in their network contracting decisions. Most of this small literature finds favorable or no effects for managed care contracting decisions with respect to quality, but the next study finds a negative effect. [http://onlinelibrary.wiley.com.ezp-prod1.hul.harvard.edu/doi/10.1111/1475-6773.10212/pdf](http://onlinelibrary.wiley.com.ezp-prod1.hul.harvard.edu/doi/10.1111/1475-6773.10212/pdf)

that those insured with managed care plans use hospitals with higher mortality for CABG surgery than those with unmanaged plans, the opposite of Mukamel, et al. above, though this study concerns hospitals rather than surgeons. Both Mukamel, et al. and this study, as well as other studies in the literature, use data that are now rather old. http://jama.jamanetwork.com.ezp-prod1.hul.harvard.edu/article.aspx?articleid=192605


The following two papers are on the patient centered medical home, which I regard as a first step toward active management of care:


Global Payment

There is currently much discussion/buzz of moving away from fee-for-service payment to more bundled or global payment. The next reading describes an influential demonstration in Massachusetts along those lines. I have put this material here rather than in class 8, which dealt with capitation in the Medicare program, because of its link to the reorganization of the delivery system and because it is in the commercial insurance context.

Zirui Song, Sherri Rose, Dana Gelb Safran, Bruce E. Landon, Matthew P. Day, and Michael E. Chernew, “Changes in Health Care Spending and Quality 4 Years into Global Payment,” New England Journal of Medicine, October 30, 2014, 371(18):1704-14. Reports on a large scale effort to shift providers from fee-for-service reimbursement to taking risk. Importantly, the effort was voluntary (why is that important?). Cost reduction was cumulative, and was achieved in part by shifting referrals away from high-cost outpatient facilities (why is that important?) Who was the beneficiary of these cost reductions? 10% of revenues were at stake for achievement of quality standards, and quality did improve. http://www.nejm.org.ezp-prod1.hul.harvard.edu/doi/pdf/10.1056/NEJMsa1404026

OPTIONAL:


Devolving Financing Risk Toward Providers: Accountable Care Organizations (ACO’s)

My take at this point is that much if not most of the American health policy world (but not necessarily the American public) has accepted that a decentralized delivery system with fee-for-service reimbursement from a passive insurer is inefficient – or at least that any give up in quality and outcomes from moving toward greater centralization of the delivery system and shifting financial risk toward provider groups and away from fee-for-service reimbursement is worth the saving in cost (decentralized small practices can handle very little if any financial risk). As a result, there is now a policy push toward reorganizing into larger groups and devolving some financial risk toward providers.
How rapidly those who actually have to carry out this reorganization, meaning physicians and hospitals, act and how successful they will be are open questions. Almost surely, however, the reorganization that seems to be underway will take many years with some failures along the way. And in the short run most of the savings are likely to accrue to providers – not purchasers or consumers. Indeed, if they don’t accrue to providers, there is not likely to be much reorganization of the delivery system since providers have to lead the reorganization effort and the effort is going to require them to make some upfront investment.

The traditional managed care arrangements in the US, with a few notable exceptions such as Kaiser Permanente, had arms-length contracts between insurers who took financial risk and providers who did not take financial risk and were paid fee-for-service by the insurer. Despite the current push toward reorganizing and devolving financial risk toward provider groups, fee-for-service continues to play an important role. To begin with, as noted above, individual physicians, even if they are in groups taking some financial risk, are still paid largely or entirely on a fee-for-service basis. Furthermore, for now and probably for several more years delivery systems or groups that take some financial risk have to be somewhat schizophrenic because a good part of their business is still reimbursed fee-for-service, including TM beneficiaries that are not attributed to them and commercial insurers who are paying fee-for-service. In the fee-for-service part of the business, the financial incentive is to deliver more services than in the part of the business where they take risk.

As the proportion of fee-for-service reimbursement declines, however, provider incentives change, in particular the incentives to invest in tools to integrate and coordinate care among various providers by adding care managers, disease management, and other services that are underprovided in the pure fee-for-service system (see the Bodenheimer reading in Class 15). Likewise, the volume of some services that are highly profitable in the fee-for-service system may be reduced to generate savings to be shared.

Medicare ACO’s are delivery systems that are reimbursed at Traditional Medicare rates but share in decreases from a spending target. The spending target is an estimate of what spending would have been if the group had not taken risk and were simply reimbursed by Traditional Medicare at its usual rates for a set of patients that are “attributed” to it. More specifically, the delivery system shares savings if Medicare spending for the set of attributed patients is kept below the target, and in a few cases it shares a portion of any spending above the target. From the group’s point of view it loses financially if this happens.

In the future Medicare is going to pay physicians aligned with organizations taking financial risk higher rates than it pays other (see the slide from class 6 which is repeated in the slides for this class). But Medicare is treading gingerly; it will also pay the same higher rates to physicians in a Patient Centered Medical Home, which involves no downside financial risk for the physician practice.

ACO’s are something of a halfway house between an episode-based bundled payment that includes MDs, for example, a lump sum paid to the hospital for all the care involved in a
given surgical procedure, and full-blown capitation, a fixed per member per month payment with full sharing by the entity taking the capitation in upside and downside financial risk; this latter is the Kaiser model. ACO’s arose in part because some policy analysts, especially Elliott Fisher at Dartmouth and Mark McClellan at Brookings, who were seeking ways to improve quality of care and to lower cost, came to the realization that not only were cost reduction and quality improvement probably not going to come about without the delivery system’s evolving toward more organized forms of practice and less individual physician autonomy, but that trying to move from the present system to organizations that would accept full financial risk (or more accurately having a large proportion of patients in such organizations) was a bridge too far in the short run. Hence, they began a movement for Accountable Care Organizations (ACO’s), which the ACA embraced. Successful ACO’s can opt to become Medicare Advantage plans, which take full risk (Class 8), although Medicare reimbursement is currently not neutral between ACO’s and Medicare Advantage plans, nor between either of those two programs and Traditional Medicare. As a result, it may or may not be in the financial interest of a successful ACO to transition to MA. Importantly, for political reasons Medicare does not require patients to enroll in or otherwise select an ACO; rather CMS “attributes” patients to an ACO based on what physicians patients use and what physicians are affiliated with an ACO.

Of course, it does not make much sense for an organized delivery system to invest in the infrastructure required to manage care when taking financial risk and then limit its patient population only to Medicare patients in an ACO. Thus, many of the delivery systems opting into the Medicare ACO program also have or plan to have commercially insured patients and in some cases Medicaid patients for whom they share risk. Commercial ACO’s, however, differ from Medicare ACO’s because they can use networks and differential cost sharing (lower for within-ACO providers) to reduce “leakage” of patients to non-ACO providers; in that sense, they are like standard commercial insurance plans with the key exception that the risk is shared between a delivery system and the insurer rather than being solely with the insurer (or with the employer in a self-insured plan). Unlike Medicare ACO’s, commercial ACO’s require an active choice by the consumer (or perhaps the employer).

Governance of provider organizations that take financial risk is in my view a large issue. In my mind it is still an open question whether the governance of ACOs will ultimately be dominated by: a) hospitals with largely employed physicians; b) by physician groups that will contract with hospitals and other providers such as home health agencies for services; or c) will be genuinely joint ventures among hospitals and physicians or some joint entity that sits above both (the last is essentially the Kaiser Permanente model). The slide on hospital market power (near the end of the slides) makes it look as if the hospital or the “fully integrated” model is winning, although the Leavitt Partners reading below makes it look like a more equal split. Regardless, a lot of hope –maybe too much hope – for cost reduction is being placed in these efforts. The general assumption among the advocates of more assumption of risk by providers is that whatever entity is taking financial risk can successfully manage it. There were some spectacular failures to do so in California in the 1990’s, which the Burns and Pauly article describe.

The slides cover some key design issues that CMS faced in the Medicare ACO
demonstration; e.g., is the assignment or attribution of patients to ACO’s retrospective (based on PCP use in the current year) or prospective (based on PCP use in the prior year)? This seemingly minute detail turns out to have important consequences. CMS decided that attribution would be retrospective for Shared Savings Program ACO’s, though the organization receives quarterly updates on who is likely to be assigned. (Pioneer ACO’s, which are now being phased out, could choose the method.) The Next Generation ACO program, however, is using prospective attribution. A second design issue is whether the assignment of patients to providers is made based on a PCP who accounts for majority of a patient’s use or just the plurality of use. The proportion assigned, of course, is considerably higher if a plurality rule is used, which is how Medicare chose to do it.


Lawton R. Burns and Mark V. Pauly, “Accountable Care Organizations May Have Difficulty Avoiding the Failures of Integrated Delivery Networks of the 1990’s,” Health Affairs, November 2012, 31(11):2407-16. http://content.healthaffairs.org.ezp-prod1.hul.harvard.edu/content/31/11/2407.full.pdf A skeptical view of the current enthusiasm for ACO’s and a reminder that delivery system reform is not easy. The appendix to the online version is an excellent bibliography on several different techniques of medical management and other topics bearing on the organization of the delivery system, including care coordination, disease management, patient centered medical homes, health IT, clinical decision support, computerized order entry, electronic health records, PCP’s, physician practice organizations, providers’ experience with strategic and organizational change, retail clinics, specialty hospitals (class 5), ambulatory surgery centers (class 5), transitional care programs, and the triple aim. It’s a lengthy list!

OPTIONAL:

David J. Nyweide, Woolton Lee, Timothy T. Cuerdon, Hoangmai H. Pham, Megan Cox, Rahul Rajkumar, and Patrick H. Conway, “Association of Pioneer Accountable Care Organizations vs Traditional Medicare Fee for Service with Spending, Utilization, and Patient Experience,” JAMA, June 2, 2015, 313(21):2152-61. The CMS evaluation of the Pioneer ACO demonstration. I have made this Optional because the required McWilliams, et al. paper covers the same ground using roughly similar methods and reaches reasonably similar overall conclusions on Year 1 spending, although this paper’s Year 1 results are
more favorable to ACO’s than McWilliams, et al. (There are methods differences that presumably account for this.) This paper also has Year 2 results, which are not as favorable to ACO’s as this paper’s Year 1 results, whereas McWilliams, et al. only have Year 1 results. This paper also has similar results on patient experience in ACO’s as the following Optional McWilliams, et al. paper. In this paper there is a 5% difference in treatment and control group spending in the baseline period that is not duplicated in McWilliams, et al. (the difference is <1% in McWilliams, et al.). This seems a bit odd, since in principle much the same method of choosing a control group was being used and is why I have put McWilliams, et al. on the required list. http://jama.jamanetwork.com.ezp-prod1.hul.harvard.edu/article.aspx?articleid=2290608


The slides allude to the tension between the potential for greater efficiency and better outcomes from increased vertical and horizontal integration in health care on the one hand, and the potential for pricing abuses in the commercial market from the accumulation of market power. If you want to read more on this, the following is for you.

Robert Berenson, Paul B. Ginsburg, and Nicole Kemper, “Unchecked Provider Clout in California Foreshadows Challenges to Health Reform,” Health Affairs, April 2010, 29(4):699-705. They raise concern about ACO’s market power raising prices to private payers, and, based on what they see as the recent ineffectiveness of antitrust policy, they propose regulatory approaches such as price caps or all-payer rate setting. I view the recent experience antitrust experience as more mixed than Berenson, et al., e.g., the Evanston Hospital case http://www.ftc.gov/opa/2007/08/evanston.shtm and also the Michigan Blue Cross case (class 10), which resulted in settlements for the government and for private plaintiffs.

http://content.healthaffairs.org.ezp-prod1.hul.harvard.edu/content/32/8/1426.full.pdf+html  Points out need for neutrality between Medicare Advantage and Accountable Care Organizations in antitrust, solvency, governance, and reimbursement. Although some envision that successful ACO’s taking partial risk would evolve into Medicare Advantage plans that take full risk, the current non-neutral regulatory environment may inhibit this.

http://jama.jamanetwork.com.ezp-prod1.hul.harvard.edu/data/Journals/JAMA/24854/joc120071_1015_1023.pdf  Substantively, the Prepaid Group Practice Demonstration that this paper describes was a forerunner of the ACO demonstrations (it is referred to in the Tu et al. paper); although the Prepaid Group Practice Demonstration’s initial results were mixed across the 10 sites (see also the Iglehart paper immediately below), as one can see in the paper, the overall results were nonetheless sufficient for the Congress to authorize the Medicare ACO demonstrations in the ACA. There is one methodological point in this reading; the authors underestimated their standard errors, probably by a lot. If you read this paper, see if you can figure out why.

http://www.nejm.org.ezp-prod1.hul.harvard.edu/doi/full/10.1056/NEJMp1013896  This is related to the prior paper. Skeptics of ACO’s as a cost containment device find support here. They point to the fact that half of the 10 practices in the demonstration did not demonstrate savings and that the participating organizations were those best able to carry out the management that ACO proponents envision. On the other hand, the proponents might say these organizations were already high up the curve and could not do much better. (The target for cost comparisons is Traditional Medicare beneficiaries in the same service area.)

http://jama.ama-assn.org.ezp-prod1.hul.harvard.edu/content/306/7/758.short  Some cautionary notes.


**CLASS 17 – COMPARATIVE EFFECTIVENESS RESEARCH (March 30)**

In the late 1980s and early 1990s “outcomes research,” meaning how alternative treatment methods affected outcomes, was widely touted as a silver bullet to improve quality and/or lower cost. Outcomes research has now been renamed “comparative effectiveness research,” which in principle is to lead to greater knowledge of what is effective treatment and thereby enhance “evidence based medicine” and “value for money” in health care. ARRA, the stimulus bill of 2009, substantially increased the funding for comparative effectiveness research, and the ACA established the Patient-Centered Outcomes Research Institute (PCORI, see slides) to continue this work.

The McClellan, et al. paper nicely illustrates what I think is the main methodological hurdle that comparative effectiveness or outcomes research faces, namely selection or the non-random allocation of treatments in observational data, together with a way to address it in some cases – but most assuredly not in all cases. The pervasiveness of selection in observational data has limited progress in comparative effectiveness research. I think progress likely will continue to be slow, although slow does not mean no progress; see for example Sanghavi, et al. in the Optional reading. The instrumental variable methods McClellan, et al. use illustrate how one can make causal inferences with observational data if certain conditions are satisfied. This part of the class thus relates back to Class 3 on methods used to study demand for medical care. Many of the slides for this class go over the McClellan, et al. article, focusing on its methodology, as well as problems in the alternative to the use of observational data, the randomized controlled trial.

Mark McClellan, Barbara J. McNeil, and Joseph P. Newhouse, “Does More Intensive Treatment of Acute Myocardial Infarction Reduce Mortality?” *JAMA*, 272(11), September 21, 1994, 859-866. This was the first attempt to take the econometric technique of instrumental variables and apply it in a health services research context. [http://jama.ama-assn.org.ezp-prod1.hul.harvard.edu/content/272/11/859](http://jama.ama-assn.org.ezp-prod1.hul.harvard.edu/content/272/11/859)

versus placebo controlled trials; see the slides.


OPTIONAL:

Prachi Sanghavi, Anupam B. Jena, Joseph P. Newhouse, and Alan M. Zaslavsky, “Outcomes of Basic versus Advanced Life Support for Out-of-Hospital Medical Emergencies,” Annals of Internal Medicine, November 3, 2015, 163(9):681-90. Like McClellan, et al., this paper illustrates the application of instrumental variables (IV) in comparative effectiveness analysis, in this case the outcomes with basic and advanced life support ambulances. Interestingly in this application IV is probably not necessary because there appears to be little selection even in the observational data; an advanced life support ambulance would typically be dispatched for the medical problems studied if it is available, and availability should be independent of any unobserved severity of the individual case. In addition to a propensity score analysis, the paper shows results from using the instrumental variable of the proportion of cases treated by advanced life support ambulances in the county to infer that basic life support ambulances get better results than advanced life support ambulances. (The propensity score analyses are qualitatively similar for all diagnoses except AML) The main idea is to use the proportion of advance life support ambulances serving other types of medical problems than the problem the individual person has (this is strongly related to the proportion of advanced life support ambulances in the county’s stock of ambulances), so that any unobserved severity of the individual’s case is not associated with the likelihood of using advanced life support for his or her case. If you read this paper, it is important to understand why the quantitative results are not the same with the propensity score methods as with the IV methods. http://annals.org.ezp-prod1.hul.harvard.edu/issue.aspx?journalid=90&issueid=934638&direction=P

Laura Faden Garabedian, Paula Chu, Sengwee Toh, Alan M. Zaslavsky, and Stephen B. Soumerai, “Potential Bias of Instrumental Variable Analyses for Observational Comparative Effectiveness Research,” Annals of Internal Medicine, July 15, 2014, 161(2):131-8. These authors make the point that IV has been overused, or more precisely used in situations where the assumptions are unlikely to hold. Moreover, although they are critical of the use of distance as an IV because of potential confounding, I am not much concerned about that criticism in the context of McClellan, et al. since heart attack patients are generally rushed to a nearby hospital and treated there, and the distribution of severity of heart attacks, the principal determinant of a fatal outcome, is probably not strongly associated with socio-economic variables. But the paper should serve as a reminder that every methodological approach has potential weaknesses and needs to be evaluated on the degree to which those weaknesses apply to any specific study. http://annals.org.ezp-prod1.hul.harvard.edu/article.aspx?articleid=1887030&resultClick=3


The next several papers take up the relationship of the clinical trial literature and comparative effectiveness research.

Justin Timbie, Eric C. Schneider, Kristin van Busum, and D. Steven Fox, “Five Reasons that Many Comparative Effectiveness Studies Fail to Change Patient Care and Clinical Practice,” *Health Affairs*, October 2012, 31(10):2168-75. Deals with why clinical trials frequently do not change practice; their first reason is economic incentives. [http://content.healthaffairs.org.ezp-prod1.hul.harvard.edu/content/31/10/2168.full.pdf+html](http://content.healthaffairs.org.ezp-prod1.hul.harvard.edu/content/31/10/2168.full.pdf+html)


Katharine Cooper Wulff, Franklin G. Miller, and Steven D. Pearson, “The Ongoing Saga of Vertebroplasty: Can Coverage Be Rescinded When Negative Trial Results Threaten A Popular Procedure?” *Health Affairs*, December 2011, 30(12):2269-76. [http://content.healthaffairs.org.ezp-prod1.hul.harvard.edu/content/30/12/2269.full.pdf+html](http://content.healthaffairs.org.ezp-prod1.hul.harvard.edu/content/30/12/2269.full.pdf+html) A rather dark view of the possibilities for benefit from CER.


CLASS 18 –THE LAW OF TORTS AND PROFESSIONAL LIABILITY/MALPRACTICE (even the terminology here is loaded!) (April 4).

The American plaintiff’s bar believes they are an agent for quality improvement. Much of the public seems to agree, although virtually all physicians feel otherwise. Whichever view one takes, I believe it is important to understand the role that the law of torts plays in US health care. The law of torts is part of American civil law, which derives from English common law, so similar law applies in the UK and British Commonwealth countries such as Canada.

Most of the reading and the class session is around professional liability or malpractice, whichever term you prefer, but tort law in health care also encompasses the issue of product liability of drug and device makers, including the liability of manufacturers for adverse reactions to vaccines. There have been Supreme Court cases on whether FDA approval to market a drug or device should exempt the manufacturer from tort liability. In two different cases the Supreme Court determined that it should exempt device manufacturers but not brand drug manufacturers (Riegel vs. Medtronic, 2008, Wyeth vs. Levine, 2009); the decisions differed because of different wording of the underlying statutes. In a subsequent decision, however, the Court did exempt generic drug manufacturers (Pliva vs. Mensing, 2011). There have been (to date) unsuccessful efforts in the Congress to make device and generic drug manufacturers also liable. Almost all of the following reading is on professional liability/malpractice, but I have also included one short reading on liability for drugs and devices.


OPTIONAL:

If you want some empirical evidence on state dependent utility beyond what is in the slides, read one or both of the following:


Moshe Levy and Adi Rizansky Nir, “The Utility of Health and Wealth,” Journal of Health Economics, March 2012, 31(2):379-92.  This paper shows that data from cancer and diabetes patients support a utility function of the form $U = \text{health} \times \log(\text{wealth})$, which is consistent with the Finkelstein, et al. finding that better health increases the marginal utility of wealth.  http://ac.els-cdn.com.ezp-prod1.hul.harvard.edu/S0167629612000100/1-s2.0-S0167629612000100-main.pdf?_tid=6613d2c-2222-11e4-a684-00000aaecb361&acdnat=1407849474_66fac669b1718c75d43333004e6bf301

The next two readings are books that go into malpractice in much greater depth than the required reading.  I used to require one of the two books, but the length of the reading list together with the availability of the Kessler survey has led me to make them Optional.  Even though they are now many years old, tort law has not much changed, and for any of you writing testimony on malpractice/professional liability, it would be a good idea to at least dip into one of these books, as well as into some of the articles that follow.


Patricia Danzon, Medical Malpractice; Harvard University Press, 1985, Chapters 1-4, 7, 8,
12, 13. Those who want a more formal economic approach will prefer this book to Weiler’s (Weiler is a lawyer, Danzon is an economist), but be warned, the writing style is considerably harder going. A more distilled version is Danzon’s chapter in the Handbook of Health Economics, vol. 1. The slides make some use of Danzon’s exposition.

Paul C. Weiler, Howard H. Hiatt, Joseph P. Newhouse, Troyen A. Brennan, Lucian L. Leape, and William G. Johnson, A Measure of Malpractice: A Study of Medical Injury, Malpractice Litigation, and Patient Compensation; Cambridge: Harvard University Press, 1993. This book summarizes the methods and results from the Harvard Medical Practice Study to which Kessler refers and from which many of the following papers are derived.


A. Russell Localio, et al., “Relation Between Malpractice Claims and Adverse Events Due to Negligence,” New England Journal of Medicine, 325:4, July 25, 1991, 245-251. [http://www.nejm.org/doi/full/10.1056/NEJM19910725325250405] The tort system is noisy, though the later evidence from Studdert, et al. in the required reading (and reproduced in the slides) is that it is less noisy than this paper suggests, probably because Localio, et al., is based on a much smaller sample than Studdert, et al. Not surprisingly, the risk of any claim and of multiple claims was strongly related to specialty.


Michelle Mello, Amitabh Chandra, Atul Gawande, and David Studdert, “National Costs of the Medical Liability System,” Health Affairs, September 2010, 29(9):1569-
Reaches an estimate that malpractice system accounts for 2.4% of total health spending. Several cites to relevant literature. Note that both this study and Kessler say there is no evidence on the deterrence effect (but see Currie and MacLeod below).

The next four papers are some of the stronger papers in the literature on defensive medicine.


Katherine Baicker, Elliott S. Fisher, and Amitabh Chandra, “Malpractice Liability Costs and the Practice of Medicine in the Medicare Program,” *Health Affairs*, May/June 2007, 26(3):841-52. Another paper on defensive medicine, using a fixed-effects model with states as the unit of observation to explain growth in Medicare spending as a function of growth in malpractice premiums. They estimate an elasticity of total Medicare spending with respect to malpractice premiums of 0.1. On the basis of their estimate, they conclude that the 60% growth in malpractice premiums between 2000 and 2003 might have caused total health care spending to rise 6%. This three year period, however, was a period of very rapid growth in malpractice premiums; from 1993-2001 real premiums only rose about 1% per year. They also find imaging and evaluation and management services are the most responsive to variation in malpractice premiums. Although they don’t note it, the results on imaging and to a lesser degree on evaluation and management are helpful because they strengthen a defensive medicine interpretation. Because areas with higher rates of procedures will have more patient injuries and likely more claims, causality could go from procedures to malpractice premiums, but this will not be the case for imaging and mostly not for evaluation and management (with the important exception of claims for failure to diagnose).[http://content.healthaffairs.org.ezp-prod1.hul.harvard.edu/content/26/3/841.abstract](http://content.healthaffairs.org.ezp-prod1.hul.harvard.edu/content/26/3/841.abstract)

Ronen Avraham and Max Schanzenbach, “The Impact of Tort Reform on Intensity of Treatment: Evidence from Heart Patients,” *Journal of Health Economics*, January 2015, 39:273-88. Finds that caps on non-economic damages decrease the frequency of angioplasty or CABG, which the authors interpret as a reduction in defensive medicine, and shift the mix of the two toward CABG, which is the riskier procedure and hence more likely
to lead a malpractice claim.  

Janet Currie and W. Bentley MacLeod, “First Do No Harm? Tort Reform and Birth Outcomes,” *Quarterly Journal of Economics*, May 2008, 123(2):795-830.  Shows deterrence appears to work for obstetrics.  Reform of the joint and several liability rule to say that a defendant must be responsible for some minimum share of the harm to be liable (this is modeled as an increased share of the liability the obstetrician faces) leads obstetricians to perform fewer Cesarean sections and fewer inductions, which results in fewer complications, whereas damage caps cause the opposite.  


Michelle M. Mello and Thomas H. Gallagher, “Malpractice Reform – Opportunities for Leadership by Health Care Institutions and Liability Insurers,” *New England Journal of Medicine*, April 15, 2010, 362(15):1353-6.  Sketches three versions of “disclose-and-offer” models, in which the health care institution admits error, apologizes, offers compensation, and uses the results to improve safety going forward.  This approach has the virtue that it can be implemented by health care institutions without legislation and may be a way around the legislative impasse over tort reform.  Kessler in the required reading comments on this reform.  


The Profession versus the Market


I have put this article, which raises issues around quality of care, on the reading list for you to think about, although it is a departure from the other reading in the past several classes on quality of care and is unrelated to tort law. Lee and Brennan argue that medical care should not be like any other consumer good and specifically that consumers should not be allowed to spend their own money on the tests that they discuss in the paper. Setting aside issues of enforceability, the case that the consumer should not be allowed to make a mistake is clearly strengthened by the argument that in the specific cases they take up there is really no advantage to the consumer (and several disadvantages) to buying the good in question. The authors, however, go on to argue that the profession of medicine is different than other suppliers of goods and services and that it “should act in a unified fashion when faced with critical choices,” which I interpret to mean consumer sovereignty can be trumped by professionalism. How would this argument be applied (or should it apply?) if there were some small, but real benefit to these tests? Also, does “acting in a unified fashion” mean medicine should be exempt from antitrust laws?  (On my reading of American law, it is now settled law that professions are not exempt, so this last question is very much a hypothetical.) Even if medicine should be exempt, is it at all realistic to think that 700,000+ American physicians would act in a unified fashion on decisions to administer a non-invasive test where the likelihood of a malpractice claim is much lower than the likelihood of a false positive?  More generally, how does a profession with its own norms and ethics fit into a market system?

OPTIONAL:

Donald M. Berwick, “The Epitaph of Profession,” British Journal of General Practice, e-publication. This short essay is something of a counterpoint to Lee and Brennan and is strongly recommended for mid-career MDs. Berwick, an international leader in quality improvement efforts, was Acting Administrator of CMS in the first Obama administration and was knighted by the Queen for his efforts to improve care in the National Health Service (one of four Americans to have been knighted at the time he was knighted). http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2629825/pdf/bjgp59-128.pdf/?tool=pmcentrez


CLASS 19–THE ECONOMICS OF PHARMACEUTICALS AND MEDICARE PART D
(April 6)

This class covers both the economics of pharmaceuticals and the Medicare drug benefit, Part D. Private insurance companies may administer the Medicare drug benefit in house or they may contract out negotiating with pharmaceutical companies around price to pharmacy benefit managers (PBM’s). The two largest PBM’s are Express Scripts and CVS-Caremark. The same method of negotiating prices with drug manufacturers is used by insurers for their commercial business, but state run Medicaid systems have a complex system for purchasing drugs and by law they obtain lower prices than insurers or PBM’s pay in Medicare. (The Veterans Administration gets even lower prices than Medicaid but has a much more restrictive formulary.) The slides touch on Medicaid, but to keep the complexity and the amount of institutional detail down, I say relatively little about the Medicaid drug benefit and focus on the economics of drugs and Medicare.


John Hsu, Vicki Fung, Jie Huang, Mary Price, Richard Brand, Rita Hui, Bruce Fireman, William H. Dow, John Bertko, and Joseph P. Newhouse, “Fixing Flaws in Medicare Drug Coverage That Prompt Insurers To Avoid Low-Income Patients,” Health Affairs, December 2010, 29(12):2335-43. http://content.healthaffairs.org.ezp-prod1.hul.harvard.edu/content/29/12/2335.short How administered pricing can go awry in what is often touted as a model for how to introduce more price competition into Medicare. The particular problem with risk adjustment for the Low Income Subsidy (LIS) group that is discussed in this article should have been easily fixed a year or two after the program began, in that much better data to estimate the adjustment were readily available at that point, but CMS did not re-estimate risk adjustment weights until 2011, which did fix the problem described in this paper; see the Kautter, et al. paper in the Optional reading if you want to know about the fix. I don’t know why it took so long; although CMS was (and remains) strapped for resources, this adjustment is easy to estimate, and the misestimation caused many beneficiaries to have to change plans (and formularies), so one would have thought it would have had a high priority.

The design of Part D assumes competition among drug manufacturers will be effective, but it also designates six protected therapeutic classes, which effectively eliminates competition in those classes of drugs. What, if anything, should Medicare do about this? CMS proposed rules in January 2014 that would have cut the number of protected classes from 6 to 3, but chose not to go forward with the rule in part because of pushback from disease advocacy organizations.


OPTIONAL:


An overall description of the economics of the pharmaceutical industry by a distinguished economist of industrial organization. Not very technical.

Mark Duggan and Fiona Scott Morton, “The Effect of Medicare Part D on Pharmaceutical Prices and Utilization,” American Economic Review, March 2010, 100(1):590–607. Shows that the basic architecture of Part D – increase the price elasticity facing manufacturers for Medicare beneficiaries without prior drug insurance – worked in the sense that prices fell at least 24 percent. Also their Table 5 supports the notion that there is a potential problem for drugs facing little or no price competition (on this point see the Frank paper in the required reading and the Frank and Newhouse paper below); price declines did not appear in the categories in which there were few substitutes.

Yuting Zhang, Julie M. Donohue, Judith R. Lave, Gerald O’Donnell, and Joseph P. Newhouse, “The Effect of Medicare Part D on Drug and Medical Spending,” New England Journal of Medicine, July 2, 2009, 361(1):52-61. Part D lowered spending for services covered by Parts A and B for Medicare Advantage participants who were previously uninsured for drugs (presumably from better compliance) and raised spending for Parts A and B services for those who were reasonably well insured (perhaps from polypharmacy).

Jason Abaluck and Jonathan Gruber, “Heterogeneity in Choice Inconsistencies among the Elderly: Evidence from Prescription Drug Plan Choice,” American Economic Review, May 2011, 101(3):377-81. Only 12 percent of beneficiaries chose plans that minimized their cost, and the excess expected payment was about $300. Beneficiaries overweighted premiums, about which there is no uncertainty, relative to expected cost sharing. In other words, beneficiaries didn’t process probabilities well (see also the material on choice under uncertainty in Class 2).

Florian Heiss, Adam Leive, Daniel McFadden, and Joachim Winter, “Plan Selection in Part D: Evidence from Administrative Data,” Journal of Health Economics, December 2013, 32:1325-44. A paper consistent with Gruber and Abaluck (above); only about a quarter of consumers appear to choose the plan that minimizes their ex ante cost according to the CMS PlanFinder. Like Abaluck and Gruber, Heiss, et al. find that on average consumers appear to spend about $300 too much.
Jeffrey R. Kling, Sendhil Mullainathan, Eldar Shafir, Lee C. Vermeulen, and Marian V. Wrobel, “Comparison Friction: Experimental Evidence from Medicare Drug Plans,” *Quarterly Journal of Economics*, February 2012, 127(1):199-236. This paper describes an intervention that was a letter sent to a random group of Medicare Part D beneficiaries with personalized cost information on the cost of alternative plans. The intervention group had an 11 percentage point increased rate of plan switching, which saved the beneficiaries on average $100. Even if the CMS website offers good information on Part D plans (in my view), encouraging persons to use it makes a difference. [http://qje.oxfordjournals.org.ezp-prod1.hul.harvard.edu/content/127/1/199.full.pdf+html](http://qje.oxfordjournals.org.ezp-prod1.hul.harvard.edu/content/127/1/199.full.pdf+html)

Jonathan D. Ketcham, Claudio Lucarelli, and Christopher A. Powers, “Paying Attention or Paying Too Much in Medicare Part D,” *American Economic Review*, January 2015, 105(1):204-33. Contrary to the choice overload hypothesis from behavioral economics, which says that too many options freeze the consumer, these authors find the Part D market functions as standard theory predicts. For example, in 2010 half the enrollees were not in the plans they chose in 2006, and larger choice sets increased plan switching unless the additional choices were relatively expensive. Neither switching overall nor price responsiveness declined over time. Moreover, on net there was no substantial effect on price from switching friction. [http://pubs.aeaweb.org.ezp-prod1.hul.harvard.edu/doi/pdfplus/10.1257/aer.20120651](http://pubs.aeaweb.org.ezp-prod1.hul.harvard.edu/doi/pdfplus/10.1257/aer.20120651)


Richard G. Frank and Joseph P. Newhouse, “Should Drug Prices Be Negotiated Under Part D of Medicare? And If So How?” *Health Affairs*, January/February 2008, 27(1), pp.33-43. [http://content.healthaffairs.org.ezp-prod1.hul.harvard.edu/content/27/1/33.short](http://content.healthaffairs.org.ezp-prod1.hul.harvard.edu/content/27/1/33.short). The answers to the two questions in the title in my view turn out to be more gray than black or white. See also the Duggan-Scott Morton optional reading for some empirical support.

David H. Howard, Peter B. Bach, Ernst R. Berndt, and Rena M. Conti, “Pricing in the
Market for Anticancer Drugs,” Journal of Economic Perspectives, Winter 2015, 29(1):139-62. [http://pubs.aeaweb.org.ezp-prod1.hul.harvard.edu/doi/pdfplus/10.1257/jep.29.1.139](http://pubs.aeaweb.org.ezp-prod1.hul.harvard.edu/doi/pdfplus/10.1257/jep.29.1.139) Shows a high correlation (0.9) between drug pricing and incremental survival benefits suggesting a rational model of pricing by manufacturers with market power. Controlling for survival benefits, however, there has been about a 10 percent annual increase in the launch price of cancer drugs per life year gained even if drugs were not clinical substitutes, meaning they were indicated for different types of cancers. The authors infer from this finding that launch prices may not be profit maximizing but rather set somewhat above immediately launch prices of recently introduced cancer drugs (mostly for other sites of cancer). The authors call this a reference price model of demand, with consumers taking the price of observed past price as a reference point. (This notion comes from behavioral economics.) This behavior, however, is also consistent with pricing so as to not attract a lot of negative publicity and/or regulatory attention.

The slides touch on the 340B program, but if you want more see Rena M. Conti and Peter B. Bach, “The 340B Drug Discount Program: Hospitals Generate Profits by Expanding to Reach More Affluent Communities,” Health Affairs, October 2014, 33(10)1786-92. [http://content.healthaffairs.org.ezp-prod1.hul.harvard.edu/content/33/10/1786.full.pdf+html](http://content.healthaffairs.org.ezp-prod1.hul.harvard.edu/content/33/10/1786.full.pdf+html)

The slides also cover patient-assistance or coupon programs, but if you would like to read something about them, I list three papers next.


The slides also touch on biosimilars; if you want to read more here are two short papers:


Johnson and Johnson and the British National Health Service agreed that J&J would only be reimbursed for a biotech agent to treat multiple myeloma if the treatment was successful. As best I know, however, this method of reimbursement has not much spread to other agents or other purchasers. If it did, it would represent a large change in incentives for manufacturers and potentially improve efficiency. The article explains why.


Using the aging of the population as an exogenous change in market size for various drugs and exploiting the differential use of various classes of drugs by different age classes, they find a large response of innovation to market size. But see the next reference.


Like Acemoglu and Linn, they also find a response of innovation to market size but a considerably smaller one than Acemoglu and Linn. Moreover, they estimate that there is a threshold of an expected $2.5 billion in revenue to bring a drug to market.


Ingenious use of clinical trial data to show effects of increased demand for better results on research (see her Table 1). Uses three case studies to show potentially large dynamic effects in one case, negative but small effects in the two others.


Shows that diffusion of drugs is faster (launch dates are earlier) in countries with less price regulation and stronger patent regimes.

128. [http://content.healthaffairs.org.ezp-prod1.hul.harvard.edu/content/20/2/115.full.pdf+html](http://content.healthaffairs.org.ezp-prod1.hul.harvard.edu/content/20/2/115.full.pdf+html) Explains in greater detail the price discrimination point made in the slides.


John Kautter, Melvin Ingber, Gregory C. Pope, and Sara Freeman, “Improvements in Medicare Part D Risk Adjustment Beneficiary Access and Payment Accuracy,” *Medical Care*, December 2012, 50(12):1102-8. [http://ovidsp.tx.ovid.com.ezp-prod1.hul.harvard.edu/sp-3.13.1a/ovidweb.cgi?&S=ACFLFPDEDHDDFFKBNCLEOBGBOPAA00&Link+Set=S.sh.22.23.27.31%7c13%7csl_10](http://ovidsp.tx.ovid.com.ezp-prod1.hul.harvard.edu/sp-3.13.1a/ovidweb.cgi?&S=ACFLFPDEDHDDFFKBNCLEOBGBOPAA00&Link+Set=S.sh.22.23.27.31%7c13%7csl_10) Describes the improvements made in the Part D risk adjustment scheme that corrected the flaw noted in the Hsu, et al. required reading by estimating five different risk adjustment formulas. Four of them were for the non-institutionalized: the elderly non-LIS; the elderly LIS; the non-elderly non-LIS; and the non-elderly LIS. The fifth was for the institutionalized.


Others aspects of pharmacy benefit management in addition to formularies are step therapy, sometimes referred to as fail first, and prior authorization. If you are interested in these topics, here are a few papers; they are mostly studies of Medicaid populations, because of the availability of data.

Step therapy for antidepressants reduced antidepressant use but raised overall cost. Note that antidepressants are a protected class in Part D.

http://content.healthaffairs.org.ezp-prod1.hul.harvard.edu/content/26/3/800.short  
Step therapy reduced use of ARBs (used for hypertension and heart failure) moderately. The authors worry about the need to switch drugs if formularies change or if MD is confronted with multiple formularies.

Cyclooxygenase-2 (Cox-2) inhibitors are a type of non-steroidal anti-inflammatory drug, the best known of which are Vioxx (now off the market) and Celebrex. Prior authorization reduced use. The welfare effects are unknown.

http://content.healthaffairs.org.ezp-prod1.hul.harvard.edu/content/27/3/w185.short  
Prior authorization substantially reduced use among schizophrenics, very likely with adverse health and cost consequences.

Prior authorization reduced use of non-preferred agents, but also appeared to increase the risk of discontinuing therapy. Similar results in Christine Y. Lu, et al. Medical Care, January 2010, 48(1):4-9.

CLASS 20 – MEDICAID AND LONG-TERM CARE (April 11; Testimony 2 due before class)
I have grouped Medicaid and long-term care together for this class because Medicaid dominates US long-term care financing. Medicaid, however, also plays a very different role as the insurer of low-income persons for acute care services. In addition, it fills in most of the cost sharing requirements for low income elderly enrolled in Traditional Medicare, that is, it acts as their Medigap plan.

Medicaid: General Background

There is less literature about Medicaid than Medicare for several reasons. Note that when I say Medicaid I will often include the Children’s Health Insurance Program (CHIP, sometimes called S-CHIP) as well. The CHIP program, enacted in 1997, covers low income children in lower income households whose incomes are too high to be eligible for the original Medicaid program, but in many states those children are simply enrolled in Medicaid.

First, whereas Medicare is a federal program, meaning for practical purposes it has uniform eligibility and benefits throughout the nation, Medicaid is a state administered program, financed through federal matching funds, and the (federal) law offers states many options, including in principle not having a Medicaid program at all. Although in fact all states have an original Medicaid and a CHIP program, not all states have chosen to expand Medicaid to those previously not eligible under the ACA; see the slides. Moreover, states differ in other ways such as who is eligible, what services are covered, and how much providers are reimbursed. In short, unlike Medicare, Medicaid differs from state to state, making it difficult to describe the program in a concise way. Furthermore, these differences have increased over time because, starting in the Clinton administration, the use of waivers for states to modify their Medicaid programs has greatly expanded. In fact, all states have now applied for exemptions from certain federal requirements, which have mostly been granted. Since the states differ in what they have applied for and done, this has further increased the variation in the program across states.

Second, within each state Medicaid was historically three functionally somewhat different programs, one for low-income mothers and children (and in some states both parents), one for (certain of) the disabled, and one for the low-income elderly. To those three groups the ACA added all other low income citizens in those states that have elected to expand Medicaid. This latter group of persons, those previously not eligible for Medicaid, are primarily childless adults, the population sampled for the Oregon Health Insurance Experiment. Most of the Medicaid dollars for the elderly go to the coverage of chronic long-term care, although as noted above Medicaid also wraps around Medicare to cover cost sharing for acute services for the low income elderly; Medicaid thus serves as supplementary insurance for the low income elderly. Importantly, before Medicare Part D was enacted in 2006 Medicaid provided a drug benefit for low income elderly.

Third, outside analysts have traditionally had a more difficult time obtaining Medicaid claims data than Medicare claims data, in part because each state controlled its own data whereas CMS controlled Medicare data. Further complicating the analysis of Medicaid data (relative to Medicare), individuals may and do move in and out of eligibility monthly, for example if they get a job with employment based insurance, and when they move out there
are obviously no Medicaid claims data or other Medicaid administrative data on their behavior. By contrast, Medicare beneficiaries typically remain covered by Medicare for the rest of their lives so they can be continuously followed, as in the McClellan, et al. study of AMI treatment in class 17. There is a caveat about Medicare, however. Historically if a TM beneficiary joined MA, CMS had little information about services received in MA; in other words, there was no analog to the TM claims data for MA enrollees. Thus, for purposes of analysis if a Medicare beneficiary left TM for MA it was a bit like a Medicaid enrollee losing eligibility. CMS has now started to collect encounter data for MA enrollees, however.

Fourth, and related to the first point above, variation across the states in covered services and eligibility limits the possible analyses; for example, if one state covers chiropractic services and another doesn’t, not only are there no claims data on chiropractic services in the state that doesn’t cover them but it is hard to know whether differences in substitute services that might be affected by that variation in coverage (e.g., orthopedic surgeons) are attributable to the coverage difference or some other difference such as differences in physician fees. Although Mr. Justice Brandeis famously said that states were the laboratories of democracy, an $n$ of 50 (actually slightly more because the District of Columbia, Puerto Rico, and American territories also have Medicaid programs) makes it hard to infer causality in many instances. Furthermore, as the role of managed care plans has grown in the Medicaid program, less detail on services has been available, analogous to the TM-MA issue alluded to in the prior paragraph.

Because there is less literature on Medicaid than Medicare and because the issues pertaining to provider reimbursement in Medicaid are analytically similar to the Medicare issues covered in earlier classes, I have given Medicaid less play than Medicare in the course, even though a large portion of federal and state budgets go to Medicaid. For those of you particularly interested in the Medicaid program, an excellent source of information are the reports of the Medicaid and CHIP Payment and Access Commission, or MACPAC (www.macpac.gov), which was established by the ACA. Two other excellent sources of information about Medicaid are the Kaiser Family Foundation website (http://www.kff.org/archive/health.html); click on an index of documents for Medicaid/uninsured and the Commonwealth Fund web site (www.cmwf.org). The CMS website (www.cms.hhs.gov) also has Medicaid data.

Medicaid: General


OPTIONAL:

The following three readings are all descriptions of Medicaid if the slides and the Iglehart-Sommers paper are not enough.


Rob Cunningham, “Once a Welfare Add-On, Medicaid Takes Charge in Reinventing Care,” Health Affairs, July 2015, 34(7):1080-3. http://content.healthaffairs.org.ezp-prod1.hul.harvard.edu/content/34/7/1080.full.pdf+html  Another descriptive paper that describes how Medicaid has evolved into a heavy reliance on managed care.  For those of you that want even more detail on Medicaid, see Alan Weil’s interview with Cindy Mann in the same issue of Health Affairs.  Mann was the Deputy Administrator of CMS with responsibility for Medicaid from 2009-2015.  Weil is the editor of Health Affairs and before assuming that job was the president of the National Academy of State Health Policy (and before that the Executive Director of the agency that administered the Colorado Medicaid program), so he knows a lot about Medicaid. http://content.healthaffairs.org.ezp-prod1.hul.harvard.edu/content/34/7/1092.full.pdf+html

Because of the ACA and Medicaid’s relatively recent shift toward managed care, much of the historical literature on Medicaid and acute care is no longer relevant.  Thus, I have not required any reading about Medicaid and acute care.

**Medicaid: Acute Care**

**OPTIONAL:**

fiscal impact of the ACA’s Medicaid expansion.


Like Medicare, Medicaid includes a Disproportionate Share (DSH) program, the intent of which is to allocate funds to safety net hospitals, and the Medicaid program is considerably larger. As the slides describe, however, from a federal point of view the states have abused this program. States would say they are just reacting to the incentives the feds have put before them. What follows are two papers that are critical of how the Medicaid Disproportionate Share program has been implemented.


Federal law requires that states must cover some populations such as women and children below a certain income level, e.g., children between 6 and 18 years of age in families under 100% of the Federal Poverty Limit, but have options to cover other persons (with a federal match if they take up the option). The following are papers on both outcome effects of expanded eligibility and crowdout effects, i.e., dropping of private insurance from expanding Medicaid. Although these papers are old, they are relevant to the issue of whether the ACA Medicaid expansions could lead to crowdout.

Janet Currie and Jonathan Gruber, “Saving Babies: The Efficacy and Cost of Recent Expansions of Medicaid Eligibility for Pregnant Women,” Journal of Political Economy, 1996, 104:1263-1296. http://www.princeton.edu/~jcurrie/publications/saving_babies.pdf Medicaid expansions appeared to reduce infant mortality, but at a rather high price per year of life saved, especially as one moves up the income scale. Other authors, however, do not find an outcomes effect; see, for example, the papers by Haas, et al. and Epstein and Newhouse in the supplementary readings.

along the same lines.

Leemore Dafny and Jonathan Gruber, “Public Insurance and Child Hospitalizations: Access and Efficiency Effects,” Journal of Public Economics, January 2005, 89(1):109-29. http://www.sciencedirect.com.ezp-prod1.hul.harvard.edu/science/article/pii/S0047272704000076 Expansion of Medicaid did not reduce hospitalization of children because of additional outpatient care (what the authors term the “efficiency” effect, but what could also be termed an offset effect); indeed, the additional outpatient care increased hospitalizations (what the authors term an “access” effect), similar to the findings of the RAND Health Insurance Experiment (class 3). The increased hospitalizations are concentrated among non-discretionary admissions.

There is a substantial literature on the issue of crowdout or the degree to which expansions of Medicaid cause the rate of private insurance coverage to fall. Three papers on that topic follow; you can find more papers on this topic on the supplementary list. Alas, the findings are quite diverse. See also the reading for class 9 and the results for the Oregon Experiment (Class 3), which show relatively little crowdout.


Medicaid and Medicare: Issues Around Dual Eligibles

The slides deal with issues of financing and coordination of services for the dual eligible population, but if you want more read:

OPTIONAL:


Long-Term Care

Financing long-term care for the non-Medicaid eligible is an issue that the ACA addressed through the CLASS Act, but the Secretary announced in October 2011 that the Administration would not implement the CLASS Act, and the 2013 “fiscal cliff” legislation permanently repealed it. With the aging of the baby boomers, however, financing long-term care will only become a more pressing issue. Long-term care insurance, whether public or private, differs from health insurance in several respects; it is more oriented toward insuring an estate (hence, it is arguably more like life insurance than health insurance) than ensuring the future living standards of the insured (since the individual may well spend the rest of his or her life in institutional care). Also compared with health insurance, a substantially greater component of the cost covers hotel services rather than medical services. Americans have been more willing to see inequalities with respect to hotel services than with respect to medical care (though of course there are inequalities in medical care) and more willing to see the hotel services self-financed. Even more than most of the topics that this course covers, the course just scratches the surface of this one. The slides touch on a few more “economic” points, but there are numerous potential topics for Testimony. A web based resource on long term care is http://ltcfocus.org/


OPTIONAL:

Financing long-term care will almost certainly be a major policy issue going forward because of the modest assets of a substantial portion of the current and future elderly population, the low takeup of private long-term care insurance, and the aging of the baby boomers. This in turn will place large demands on state and federal financing. It may be a personal issue for you as well; your grandparents or parents may well require long-term care. The following reading is Optional, but if you want to see some data on this point see Anthony Webb and Natalia Zhivan, “How Much Is Enough? The Distribution of Lifetime Health Care Costs,” CRR WP 2010, February 2010. http://crr.bc.edu/wp-content/uploads/2010/02/wp_2010-1-508.pdf Figures 3A and 3B show their estimates of
remaining lifetime out-of-pocket costs for medical care and long-term care for a married
couple with no chronic disease at various ages. In 2009 dollars they estimate at age 65
expected lifetime costs of $260,000 and $570,000 at the mean and 95th percentile,
respectively. Because their estimates were done before the ACA, they do not account for
the closing of the donut hole in Part D. Cutting the other way, they also do not account for
costly new drugs that have come to market. In any event, it looks as if the costs are large
relative to many families’ savings.

Although this is now only of historical interest, for a summary of the ACA’s provisions in
long-term care see the Kaiser Family Foundation, “Medicaid Long-Term Services and
Act see http://www.kff.org/healthreform/upload/8069.pdf

The following two articles are a pair of short papers from an entire issue of Health Services
Research that is devoted to the Cash & Counseling Demonstration and Evaluation, an effort
to move policy toward financing care of the disabled, some of whom are in institutional long
term care, away from a policy of financing services toward a policy of providing the
disabled with cash and allowing them to buy services, including services of family
members. Accompanying this demonstration was an evaluation that shows (in my view)
largely favorable results, more or less in line with what a standard economic model would
have predicted. My sense is that this type of program has now become widespread, but I
have seen no data. Other papers in the issue of Health Services Research provide more
detail.

A.E. Benjamin and Mary L. Fennell, “Putting the Consumer First: An Introduction and
Overview,” Health Services Research, 42(1), Part II, February 2007, 353-
6773.2006.00694.x/pdf

Peter Kemper, “Commentary: Social Experimentation at its Best: The Cash and Counseling
Demonstration and its Implications,” Health Services Research, 42(1), Part II, February

Another thrust of policy in this domain has been to try to keep people in their homes as long
as possible (called “living in place”). A classic demonstration in this domain is described in:

Peter Kemper, “The Evaluation of the National Long Term Care Demonstration: Overview
that increasing community services did not save money but did have benefits for the group
that received the services. For more on the study see Weisert and Kane in the
supplementary readings, as well as the other papers in the special issue of Health Services
Research in which this paper appears.
The following several papers are summarized in the Brown and Finkelstein paper that is required, but if you want to pursue them further, I list them here.


Jeffrey R. Brown, Nora B. Coe, and Amy Finkelstein, “Medicaid Crowdout of Private Long-Term Care Insurance Demand: Evidence from the Health and Retirement Survey,” in Tax Policy and the Economy, vol. 21, ed. James Poterba; Cambridge: MIT Press, 2007. Available from Harvard websites as http://www.nber.org.ezp-prod1.hul.harvard.edu/papers/w12536. Attributes low demand for private long-term care insurance to Medicaid crowdout, but also estimates that if all states had as restrictive an asset test as the most restrictive state, penetration of private insurance would only rise from 9 to 12 percent. Think about why crowdout by Medicaid appears to be such a much larger factor in the demand for private long-term care insurance than for private health insurance.


Brant E. Fries, Don P. Schneider, William J. Foley, Marie Gavazzi, Robert Burke, and Elizabeth Cornelius, “Refining a Case-Mix Measure for Nursing Homes: Resource Utilization Groups (RUG-III),” Medical Care, 32(7), July 1994, pp. 668-
A basic descriptive article on RUGs, the basis for payment used by most state programs (and as we saw in class 5 for the Medicare SNF benefit as well).


The Pepper Commission Report, available at: Before the ACA this report was the last serious effort at the federal level to deal with long-term care insurance. It is interesting to look at the remainder of the report to see how many issues from the late 1980s are still on the policy agenda.

CLASS 21 - PHYSICIAN WORKFORCE ISSUES AND SOME CLOSING THOUGHTS (April 13)

Physician Workforce

The slides present an economic framework for thinking about physician workforce issues. From this framework I conclude that workforce planning as usually conceived is virtually an impossible problem in practice, a view I think is consistent with the experience in this domain, which I sketch below.

One part of the economic framework emphasizes the possibility of substituting lower level personnel for physicians, an idea first developed by Uwe Reinhardt in his PhD dissertation in the late 1960s. (See Reinhardt’s paper on the Optional list.) Reinhardt’s work emphasized the possibility of substituting allied health personnel such as physician assistants and nurses for physicians in producing medical services. Although there has been some substitution (e.g., advanced practice nurses, including nurse midwives and nurse anesthetists), in several states the medical profession has been able to maintain entry barriers by lobbying at the state level for practice restrictions through scope-of-practice laws that preclude or severely limit independent practice by allied health personnel. Surprisingly, much of the subsequent literature on workforce policy has ignored substitution possibilities, although they are now receiving more mentions as a means for addressing the presumed shortage of primary care physicians (PCP’s).

In addition to an economic framework about total numbers of physicians, the slides also present an economic framework for the geographic and specialty distribution of physicians. Current US (and many other countries as well) policy is based on the view that the market fails in both domains; I do not believe the market fails in the geographic domain, as is made clear in the reading below. As for the specialty domain, we may not like the results the market produces, but those results seem to stem from a combination of administered prices and the market power of various specialties. The slides also cover why the view...
developed that the market fails for geographic distribution; I think that view has persisted largely for reasons of political economy.

The slides also give one person’s view (mine 😊) of the history of the physician workforce issue in the US. In 1968, based in part on an analysis by the 1967 National Health Manpower Commission that declared there was a shortage of physicians, the US began to subsidize the construction of new medical schools and to offer financial incentives to existing medical schools to increase the number of students enrolled (PL 90-490, the Health Manpower Act of 1968). (An earlier 1963 Act was the first federal aid for medical schools, but the amount of aid was modest by the standards of the 1968 Act.) Medical schools responded to these incentives, with the result that the number of US medical school graduates doubled over a period of about eight years, with consequences that remain to this day.

Only a few years later, in the early 1970s, the focus of the workforce debate changed from a presumption of a general shortage to a view that total numbers were adequate, even though the actual stock of physicians had little changed. Although we were now thought to have enough physicians in total, the new view was that physicians were maldistributed by specialty (not enough primary care physicians; this argument can also be found in the 1967 Health Manpower Commission Report) and geography (too many in metropolitan areas, too few in rural areas). The two issues of specialty and geographic maldistribution have echoed through the debate ever since. The Council on Graduate Medical Education (COGME), a federally appointed group, for many years recommended in its annual reports that 50 percent of American physicians should be generalists (the actual number has been under 40 percent for many years; see the slides), although starting in its 2005 report COGME backed away from this view. In response to the concerns about geographic distribution, the federal government has implemented relatively small scale interventions (small by comparison with federal payments for physician services in Medicare and Medicaid), such as the National Health Service Corps and modestly higher Medicare payments in “shortage” areas.

The generalist-specialist debate surfaced in the ACA debate (as it did in the failed 1993 Clinton reform) as a concern over whether there would be enough primary care physicians if insurance coverage were substantially expanded. There were echoes of this controversy in the Cooper-Dartmouth controversy (class 14).

Returning to the issue of the adequacy of the total number of physicians, by the late 1970s the debate took another turn. Even though the doubling of the flow of medical school output had not yet much affected the total stock of physicians (the initial larger cohorts were just coming out of residency, although a substantial number of international medical school graduates were starting to appear on the scene, giving rise to yet another controversy in the workforce domain about international medical graduates and the “brain drain”), the Graduate Medical Education National Advisory Committee (GMENAC), using very different analytical methods from the 1967 National Commission, concluded there would be a growing physician surplus that would become very large by the year 2000. (Talk of physicians having to drive taxicabs to earn a living was bandied about in cocktail party conversations in the early 1980s.) The future surplus view propounded by GMENAC dominated policy thinking until sometime in the 1990s, although there were a few dissenting voices in the 1980s that did not much affect policy. (Cooper, et al., below, attribute the ending of federal subsidies for
undergraduate medical education to the GMENAC analysis predicting a surplus of MDs, but I think it is fairer to attribute it to the general hostile attitude of the Reagan administration to discretionary domestic spending.) Starting in the mid-1990s, with no sign of a physician surplus on the horizon, some started talking again about a physician shortage, and even a shortage of specialists. That view has now become more widespread, especially with the ACA’s expansion of insurance, and, as you can see in the slides, both allopathic and osteopathic school enrollments have started to rise in recent years and a few new schools have opened.

The aficionado and historian in this area might want to read the reports of the 1967 Commission and the GMENAC, mostly to see what passed for policy analysis in another era, but I have not found them on the web and so are not readily accessible today. In the bibliographic reading I give you some cites and some places on the web where you can get a sense of this debate. The slides reiterate some of this extended history in part to give you a flavor of methods in policy analysis studies and how they can influence conclusions and policy.

Although this class is on the physician workforce, there is also a large literature on nurses and nursing labor markets, some of which is pertinent to minimum nurse staffing requirements in some jurisdictions, most notably California. Limitations of time have led me to leave that important topic out of the course. For those interested, I included two readings in the Optional reading.

There is also the controversy around Medicare Graduate Medical Education (GME) payments, which is relevant for policy toward workforce, but because Class 5 covered that issue, I do not revisit it here.


Richard A. Cooper, Thomas E. Getzen, Heather J. McKee, and Prakash Laud, “Economic and Demographic Trends Signal an Impending Physician Shortage,” Health Affairs, January/February 2002, 22(1): 140-154. [http://search.epnet.com.ezp1.harvard.edu/login.aspx?direct=true&db=aph&an=6115974&loginpage=Login.asp&scope=site](http://search.epnet.com.ezp1.harvard.edu/login.aspx?direct=true&db=aph&an=6115974&loginpage=Login.asp&scope=site) For several years before this paper Cooper was a leading proponent of the view that there was no physician surplus. If you want to get a flavor of some of the “steam” of Blumenthal’s title, read some of the “Perspectives” that immediately follow Cooper et al. in the same issue. Cooper, et al.’s methods are in the same spirit as the 1967 Commission and the Schwartz, Sloan, and Mendelsohn paper in the 1988 NEJM that is on the bibliographic list in projecting historical trends in demand forward.

The next two articles highlight a related debate; whether there should be workforce policy or attempts to intervene in the market at all.
Grumbach advocates workforce planning and recounts the history of this issue in the 20th century. He does predict that the US is headed back to what he terms a “retail” market for physician labor; more than a decade later I’m not sure how many would agree with him on that point, especially in light of the increased proportion of employed physicians. Note also that he asserts teaching hospitals are “utterly dependent” on Medicare GME dollars to fund residencies (see class 5).

Reinhardt argues that with no overall policy control of demand in the US (but is that now on the horizon?) that workforce control is undesirable.

OPTIONAL:

The following two papers are on nurse staffing mandates:

Minimum staffing legislation is binding but had no effect on the two patient outcomes studied.


Eva M. Aagaard and Mona Abaza, “The Residency Application Process – Burden and Consequences,” New England Journal of Medicine, January 28, 2016, 374(4):303-5. This isn’t about total numbers but rather the inefficiency of the medical education process and specifically the fourth year of medical school. It may be of particular interest to medical students and residents.
Specialty Distribution:

David A. Kindig, James M. Cultice, and Fitzhugh Mullan, “The Elusive Generalist Physician: Can We Reach a 50% Goal?” JAMA, September 1, 1993, 270, pp. 1069-1073. http://jama.ama-assn.org.ezp-prod1.hul.harvard.edu/content/270/9/1069.short A view, written during the earlier Clinton reform debate, that there are too few generalists. Two decades later this remains the dominant view.


OPTIONAL:


Gary S. Becker and Kevin M. Murphy, “The Division of Labor, Co-ordination Costs, and Knowledge,” Quarterly Journal of Economics, 107(4), November 1992, pp. 1137-1160. http://qje.oxfordjournals.org.ezp-prod1.hul.harvard.edu/content/107/4/1137.short I put this paper here because the primary care physician has the role of coordination, and the difficulty and cost of that role clearly increases with the stock of knowledge. In fact, the logic of this paper is that there is an optimal degree of specialization, an argument from economics that has to my knowledge not surfaced in the health services research or manpower planning debate at all.

Actual empirical work on the value of specialization is conflicting:


Geographic Distribution:

Meredith Rosenthal, Alan Zaslavsky, and Joseph P. Newhouse, “The Geographic Distribution of Physicians Revisited,” Health Services Research, December 2005, 40(6, Part I):1931-52. http://onlinelibrary.wiley.com.ezp-prod1.hul.harvard.edu/doi/10.1111/j.1475-6773.2005.00440.x/pdf This paper gives my views on the geographic distribution issue, which are contrary to almost all of the policy (but not the economics) literature, which favors the maldistribution and market failure notions. The bibliographic reading list gives some of those papers. The papers in the policy literature generally rely upon physician/population ratios by county or groupings of counties to demonstrate geographic maldistribution. As shown in this paper, such indicators are seriously flawed as measures of access to physician services. Interestingly, Grumbach’s paper on the reading list above, which clearly is unsympathetic to a market-based approach to workforce policy generally, argues that the market does, and within reasonably broad limits should, determine geographic distribution.

OPTIONAL:


Catherine Dower and Edward O’Neill, “Primary Health Care Workforce in the United States,” Princeton: Robert Wood Johnson Foundation, 2011. https://folio.iupui.edu/bitstream/handle/10244/983/070811.policysynthesis.workforce.rpt.pdf A statement of what I take to be the mainstream policy view on this issue. Their main conclusion (the bold is in the original) is: “Many individuals in the United States—particularly those in rural, frontier or underserved communities—experience challenges to obtaining primary health care. Indeed, the maldistribution of primary care providers is a well-documented challenge for some regions and some populations, including children. …” If one reads through their report, however, the few cites they have that support this point are in fact consistent with standard location theory.

Closing Thoughts:

potential for cost sharing to reduce iatrogenic services, especially among the employed population, but otherwise an overview of much of the course.

Katherine Baicker and Amitabh Chandra, “Myths And Misconceptions About U.S. Health Insurance,” Health Affairs, November/December 2008, 27(6):w533-43. [http://content.healthaffairs.org.ezp-prod1.hul.harvard.edu/content/27/6/w533.full.pdf+html](http://content.healthaffairs.org.ezp-prod1.hul.harvard.edu/content/27/6/w533.full.pdf+html) If you absorbed the course material, this should be mostly familiar territory. If it isn’t, you get a second bite at the apple.

OPTIONAL:

Joseph Antos, John Bertko, Michael Chernew, David Cutler, Dana Goldman, Mark McClella, Elizabeth McGlynn, Mark Pauly, Leonard Schaeffer, and Stephen Shortell, “Bending the Curve: Effective Steps to Address Long-Term Healthcare Spending Growth,” American Journal of Managed Care, October 2009, 15(10):676-80. Written during the ACA debate, this paper has numerous sensible recommendations from 10 distinguished (and bipartisan) experts on reducing the rate of cost growth, several of which were implemented in the ACA. They do not take up the question of the potential magnitude and timing of cost reductions if their recommendations were implemented. Although they don’t say it, I think they believe there is a synergistic effect on cost across the recommendations. [http://www.ajmc.com/publications/issue/2009/2009-10-vol15-n10/AJMC_09Oct_Antos_Rep676to80](http://www.ajmc.com/publications/issue/2009/2009-10-vol15-n10/AJMC_09Oct_Antos_Rep676to80)

“CLASSES” 22, 23, AND 24 - TESTIMONY 2 (April 18, 20, and April 25)

“CLASS” 25 - IN CLASS EXAMINATION (April 27)
Competitive Strategy Determination
HPM 231
Fall 2015, Syllabus

Instructors:
Nancy Kane  email: nkane@hsph.harvard.edu  Phone: (617) 432-4512
William Bean  email: wbean@hsph.harvard.edu  Phone: (617) 513-3440

Classroom Time and Location
Fall 2: Tuesday and Thursday, 10:30-12:20  Classroom FXB G12

Course Objectives:
At the completion of this course, students will have developed an “executive-eye view” of managing organizations. Chester Barnard, an early contributor to the definition of executive functions, believed that purpose is a central condition for achieving effective and efficient organizations¹. He defined organizational purpose as an executive function that serves to unify the complex social systems constituting organized effort. Leadership requires taking the initiative in forming organizational objectives in a way that is clearly understood and is achievable within the resources and processes of the organization. The study of the choice and implementation of long-term purposes is generally the integrative course of a graduate management curriculum.

The components of defining and implementing organizational purpose will require that students demonstrate the following competencies by the end of the course:

• Develop a strategic orientation: “the ability to draw conclusions in light of public health, clinical, market, legal, regulatory, and payment trends, and to use these insights to develop a guiding, ethical vision for a healthcare organization”²
• Demonstrate the ability to undertake analytic and innovative thinking in the development of organizational strategy.
• Integrate knowledge and concepts from other program courses on organizational behavior, control systems, information systems, leadership, and financial analysis to inform strategic analysis and decision making.

Outcome Measures:
Classroom participation: Students are expected to be active participants in classroom discussions. This includes attending all classes, being prepared by having read and analyzed the assignments ahead of class time, and being ready to offer analyses and insights to the class.

²
The **group grade** will be based upon ongoing class assessments of the quality of group discussion. Listening to and offering constructive comments to the thoughts and analyses of others in the classroom will be an important component of class participation and the group grade.

The **individual grade** will deviate from the group grade based on timely and regular class attendance. Any unexcused absence will result in a failing grade for the individual component; excused absences, obtained before the class begins, for reasons of job interviews, your own or your immediate family’s illness, or professional conferences committed to before the course begins (specified to course instructors in the first week of class), are limited to 2 before the individual component drops to failing. Three instances of unexcused tardiness (more than 10 minutes late to class) will constitute an “unexcused absence”.

In order to achieve a high level of class discussion and broad participation, laptops and other forms of electronic communication (phones, iPADs, etc) must be closed, turned off and ringers silenced during class time.

**Written Assignments**: Students must demonstrate the ability to apply conceptual material (readings and lectures) to the case assignment, to analyze, synthesize, and come up with conclusions, and to be able to communicate their conclusions persuasively. Applying abstract concepts to real situations in a way that is useful for decision-making is a skill that takes practice, and is a key objective of this course. Papers must be well organized and written succinctly, directly addressing the assignment questions.

**Grading**:  
Student grades will be determined as follows:
- Homework assignments (3) 30%
- Final exam 50%
- Class preparation and participation:
  - Group 10%
  - Individual 10%

**Course Evaluations**:  
Completion of the evaluation is a requirement for this course. Your grade will not be available until you submit the evaluation. In addition, registration for future classes will be blocked until you have completed the evaluation for courses in prior terms.
Assignments:

Homework assignments should be handed in on or before the specified dates and times. All papers must be typewritten, double spaced, using Arial or Times New Roman font, font size 11, one-page maximum. Please drop an electronic version of your homework or exam in the course web site drop box by the due date/time.

Homework Assignment 1: Stanford UCSF
Due November 12, 2015 at 10:15 AM
Using the five forces framework, which one of the five types represented the greatest external threat facing UCSF and Stanford Health Services in the mid-1990s? Explain why you picked that one. Then describe how a merger of the two might help to address it.

Homework Assignment 2: Quick MedX
Due November 24, 2015, at 10:15 AM
Might QuickMedx be a “disruptive” innovation? Which established players could it disrupt, and how? What might keep it from being disruptive?

Homework Assignment 3: Veterans Administration Hospital
Due Dec 8, 2015 at 10:15 AM
As the new Director of the VA in 2015, what are two strategic metrics that would move the organization toward a more politically sustainable and effective position? How would you set the target performance levels for them? How frequently would you want to review these two metrics (e.g. daily, monthly, annually)? Explain your rationale.
Session 1  10/27/15  
Course Introduction  
What is Strategy?

Readings:  

Instructors will provide overview of course and introduce key course concepts.

Session 2  10/29/15  
Value Propositions and Fit of Activities;  
Identifying Key Assumptions

Reading:  

Case: athenahealth at the Tipping Point?  

1. What is the value proposition that athenaHealth offers its customers? (Identify the key themes and activities undertaken to support those themes)
2. What are the key assumptions about the future that underlie athenahealth’s strategy? How well do these assumptions fit the likely reality?
Session 3  11/3/15  Value Proposition; Achieving Strategic “Fit”, Tradeoffs


Questions to prepare for case discussion:
1. What is the environmental context in South Africa in 1998-1999 when loveLife was launched?
2. What was the vision Michael Sinclair and David Harrison had for loveLife at its founding?
3. Who were loveLife’s customers? Who were NOT loveLife’s “customers” in the HIV/AIDS spectrum of possible populations to serve?
4. What was loveLife’s “value proposition” to its customers? What did the customers value about what loveLife provided?
5. What strategic trade-offs did loveLife make? Where they good ones, in your opinion?

Session 4  11/5/2015  Value Proposition and Fit During Transformational Environmental Change: Safety Net Provider Facing Expanded Insurance Coverage

Reading: Not required but recommended. Background readings on safety net providers and the Affordable Care Act provisions affecting them are as follow:


For a summary of the ACA’s key provisions, see http://kff.org/health-reform/fact-sheet/summary-of-the-affordable-care-act/; focus on sections dealing with Medicaid: Expansion of Public Programs, Cost Containment, and Improving Quality/Health System Performance.

Case: Alameda Health System  

Questions to prepare for case discussion:
1. What is the environmental context of AHS at the time of the case?
2. Who are the major “customers” of the Alameda Health System (AHS) services?
3. What is the value proposition that AHS provides to these customers?
4. How might the implementation of the Affordable Care Act affect the AHS value proposition and its traditional customer base?
5. What should be AHS’ senior management team’s top three priorities for 2015?
Session 5  11/10/2015  
Environmental Analysis and Five Forces Framework

Reading:

Case: Southcoast (A)

Questions to prepare for case discussion:
1. Identify the environmental forces that the board of St Luke’s was dealing with at the time of the (A) case.
2. What were St Luke’s strategic options? What were the pros and cons of each option?
3. What should the board have decided to do?

Session 6  11/12/2015  
Environmental Analysis and Five Forces Framework; Strategic Alliances; Creating Value from Mergers

Readings:

Cases: Southcoast (B) and The Merger of UCSF Medical Center and Stanford Health Services

Questions to prepare for case discussion:
1. Using the five forces framework, what environmental forces were UCSF and Stanford Health Services dealing with in the mid-1990s? How well positioned were the hospitals to deal with those forces?
2. How might a merger help the two academic medical centers deal with the greatest competitive threats?
3. Using the McKinsey matrix as a framework, what kind of value would you expect this merger to achieve and why?
4. Using the Kotter article’s 8 steps as a guide, compare the merger implementation processes of Southcoast B with those of Stanford-UCSF. What do you learn from this comparison?
Session 7  11/17/2015  Scope of Service Positioning and Strategic Collaborations

Readings:

Case: Kane, NM.  MedCATH Corporation.  February 2010

Questions to prepare for case discussion:
1. How did the joint hospital ownership venture between MedCATH and its physician co-owners create greater value than either partner could have achieved separately?
2. Using the Five Forces framework, which one force represented the greatest competitive threat for MedCATH?
3. What lessons do you draw from MedCATH’s experience in cardiovascular care specialization with regard to what is required for the Porter model of an ideal delivery system to succeed?

Session 8  11/19/2015  Scope of Service Positioning and Strategic Collaborations


Questions to prepare for case discussion:
1. What is the Cleveland Clinic’s overall strategy for improving value for patients? Identify the critical components and their rationale.
2. Who are their strategic partners and what value do they bring to the collaboration?
3. What major challenges do they face with this strategy?
4. Which vision of the future - Porter or Enthoven - most closely describes Cleveland Clinic’s strategy?
Session 9  11/24/2015  Disruptive Innovation

Reading:

Case: QuickMedx Inc.  Harvard Business School Case 5 – 605-012

Questions to prepare for case discussion:
1. What is the QuickMedx business model?
2. Is it viable?
3. How should QuickMedx grow?
4. Might QuickMedx be a “disruptive” innovation? Which established players could it disrupt, and how? What might keep it from being disruptive?

11/26/2015  Thanksgiving Holiday  No Session

Session 10  12/1/2015  Managing Organizational Restructure

Reading:
Pearce JA, Robbins DK.  “Strategic transformation as the essential last step in the process of business turnaround.” Business Horizons 2008 (51): 121 - 130

Case: Strategic Change at Whitman Walker Health

Questions to prepare for case discussion:
1. How did the vision that Don Blanchon had for Whitman Walker Health differ from the vision that prevailed in the 1980’s and 1990’s, when Mr Graham led the Clinic?
2. What factors, both internal to the organization and externally, contributed to the change in vision between the two leaders?
3. What were the implications of those differences in vision in terms of service scope, financing, patient population characteristics, and staff culture at WWH?
4. Where is WWH at this point in terms of its turnaround /strategic transformation? (see Pearce and Robbins reading). What additional steps do you think they need to take to achieve long-term strategic sustainability while adhering to their mission?
Session 11  12/3/2015    Strategic Planning Process

Reading:


Questions to prepare for case discussion:
1. What did Dean Miller and the Search Committee want to change about the Department of Surgery when they initiated the search for a new chair in 2002?
2. As of the time of the case, what did Dr Frieschlag accomplish as chair, with regard to what the Dean and Search Committee originally envisioned?
3. How did Dr. Frieschlag accomplish that?
5. What were the major accomplishments of the planning process (beyond the plan itself) for each cycle?

Session 12  12/8/2015    Strategic Performance Management Systems

Readings:

Case:  Eoin Trevelyan, “The Performance Management System of the Veterans Health Administration” (A), Excerpts

Questions to prepare for case discussion:
1. What were the key elements of the Performance Management Program when originally designed in the 1990’s?
2. What other organizational policy changes (besides the Performance Management Program) were necessary to execute this strategic transformation?
3. How did the Performance Management Program contribute to the 2014 “wait list” scandal at the VA? What other factors contributed?
4. What conclusions from these readings do you draw about the design and use of strategic performance management systems in health care delivery organizations?
Reading:


Questions to prepare for case discussion:
1. Does Schon Klinik have a strategic balanced scorecard? If you believe they do, what is your rationale? If you believe they don’t, what do they need to do to make it one?
2. What in your opinion is the biggest strategic challenge facing Schon Klinik? How might Schon Klinik address it?
3. How might a balanced scorecard help the leadership team address this challenge?

Reading:

Case: Medical Tourism at ABC Health Plan.

Questions to prepare for case discussion:
1. Why is medical tourism of growing interest in the United States?
2. What ethical positions (in terms of business objectives or constraints) support ABC Health Plan coverage of medical tourism for its beneficiaries? Identify at least one business objective and one type of constraint that would support coverage.
3. What ethical positions (in terms of business objectives or constraints) argue against ABC Health Plan coverage of medical tourism for its beneficiaries? Identify at least one business objective and one type of constraint that would not support coverage.
4. Do you think ABC Health Plan should cover medical tourism? Why/why not?
Readings:


Case: Reliance Hospital

Questions to prepare for case discussion:
1. What are a nonprofit hospital board’s primary functions?
2. How well is the Reliance hospital board performing those functions?
3. What recommendations would you give the CEO with regard to improving the board’s effectiveness as a governing body?
Operations Management in Service Delivery Organizations and Strategies for Managing Variable Patient Demand in Health Care Settings

Professor: Eugene Litvak, Ph.D.

Classes: Tuesday, Thursday  8:30 AM - 10:20 AM
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Course Background

This course is about operations management and operations managers. Operations managers are responsible for the vital function of producing the goods and services in any organization. Operations management is concerned with evaluating the performance of operating units, understanding why they perform as they do, designing new or improved operating procedures and systems for competitive advantage, making short- and long-run decisions that affect operations, and managing the workforce.

Operations management has undergone fundamental changes over the last decade, changes both in its perceived importance and its scope. In the 1950s, operations management in the United States was equated with "production management," and was seen as a rather mundane, unimportant topic. In fact, many graduate schools of management ceased to teach the subject altogether, on the ground that it was either too technical for future general managers to understand, or that the problems were too trivial to compete for space in an increasingly crowded professional management curriculum. The economist John Kenneth Galbraith, for example, declared the problems of production "solved" following the post-war emergence of the United States as a world technological leader. The result was that corporate attention and resources were diverted to other, presumably more profitable, pursuits. The Japanese and Europeans have recently shattered these myths by their relentless competitive challenge based largely on excellence in production management.

But while professional management attention was diverted from production, something else also happened. The United States found that its service economy was rapidly expanding. Service firms found that some of what had been learned by industrial firms applied to them as well. Most important, they observed that operations could be a substantial source of competitive advantage or disadvantage. This led to what marketing guru Theodore Levitt called the "industrialization of service," and the substitution of the more generic term "operations management" for the term "production management." Operations management became commonplace in nearly all service industries. However, there was a field that had no need to improve its efficiency in order to compete - health care. The main reasons for that were an unlimited budget without significant oversight and the overriding concern of physicians to provide maximal quality without regard to cost. These two issues have become main areas of focus in the new healthcare environment of managed care.

The explosive growth in managed care in the United States health care system presents a serious challenge to the future of medical centers and primary care physicians (PCP) practices. It is of utmost importance for these centers and practices to become as efficient as possible in the delivery of health care while at the same time improving service quality. This process of improving efficiency is especially critical for academic medical centers, which bear additional costs related to their research, and teaching activities that make it difficult for them to compete on pure cost with non-academic hospitals.

One of the main problems in improving health care efficiency is the lack of specialists in this area. Historically health care organizations have not seriously considered this issue because they simply have not been required to be cost-effective. The traditional approach offered by most consulting firms of merely providing descriptive statistics to evaluate hospital performance, is superficial, and cannot provide the required level of operational cost reduction without a substantial reduction in quality of care. The majority of consulting companies is not familiar with operations research methodologies, which can provide such a reduction. There is also a danger associated with using descriptive statistics alone. In order to
make decisions, data must be collected over a long period of time to account for systematic fluctuations, since the decisions to be made are very sensitive to variations in the data. However, since demand and performance often change within that long observation period, empirical data are likely to lead to the wrong conclusions. Thus, simulation models that enable accurate prediction are necessary.

The main obstacle in improving the efficiency of health care centers and PCP practices is variable and unpredictable nature of their operations. Efficient management of such variability requires PCPs, hospital executives and departmental managers to make complicated and frequently counterintuitive decisions.

For those who are interested in learning more about the theory of operations management, we recommend the following book: F.S. Hiller, G.J. Liberman, *Introduction to Operations Research*, 6th Edition, McGraw-Hill, Inc., 1995. We will use chapters of this book as reading for some classes. We will refer to this book as H&L.

**Course Objectives and Perspectives**

The history of operations has shown that ideas from one industry or sector are often transferable to others. Therefore, we can study operational issues and techniques in a variety of settings. At the same time, we attempt to focus on the dynamics of particular situations so that it is clear how the operations function must grow and change over time in response to competitive, technological, economic and social changes. The main area of applications considered in this course is healthcare. This course is designed to introduce students to the wide range of real-life practical scenarios when variable patient demand needs to be managed to reduce costs while maintaining or even improving quality of care. The students will be introduced to the quantitative techniques and new variability-based methodology used to solve these problems in different hospital departments. For some of these scenarios problem oriented software will be used. The constant in our study of operations management is the focus on the role and challenges of the operations manager.

This course focuses on those "fundamentals" that every operating manager, regardless of industry, must master:

1. To understand the role of operations in any organization, a manager must understand:
   a. process analysis
   b. capacity analysis
   c. types of processes
   d. productivity analysis
   e. development and/or use of quality standards
   f. role of operating strategy in corporate strategy

2. To gain a broad working knowledge of the techniques, types of systems, and skills required to:
   a. improve quality, productivity, and responsiveness to changing tastes, technology and economic conditions
   b. plan capacity -- both physical and human

3. For healthcare applications additional objectives are to:
   a. understand the theoretical and practical effects of variability in resource demand and supply on cost and quality of care within hospitals and PCP offices
   b. formulate the problems specifically related to variability in real-life providers’ environments and the methodologies for their solutions

**Course Flow**

The course begins by focusing on the elements of process, productivity, and capacity analysis. Process flow analysis involves charting the flow of operations, while looking for opportunities to simplify or otherwise improve them. Capacity analysis is necessary to understand what the organization is capable of producing.

In our course work, you will examine a number of different types of processes. These examples provide the basis for the development of an important classification scheme. Experience has shown that process type is associated with a number of other important descriptors of the operating environment, including type of organization, ease of new product introduction, and key business success factors.
The second part of the course concentrates on variability in healthcare operations. We begin by defining and classifying variability in customer and operational terms. We then learn how to use the concepts of variability to redesign process to ensure both high quality of care and productivity.

The final segment of the course deals with the design and implementation of operating strategies for specific healthcare applications. We will discuss the key elements of an operating strategy and how they fit within broader concepts of corporate strategy.

Teaching Approach

We will use case studies extensively in this course, along with lectures and readings relating to important concepts. A case is a somewhat comprehensive exposition of a real managerial situation describing a set of problems and requiring a plan of action. The case method provides a pragmatic framework for the learning process. Its success depends heavily on thorough student preparation and active participation in class discussions. You should plan to spend at least three hours in preparation for each case. A collection of articles and other readings provide the necessary background for analysis of some cases. Given the novelty of variability analysis in healthcare applications, the readings on variability-related cases are very limited, and special emphasis will be given to active participation in the class discussions.

Daily Assignments

The "Class Schedule and Assignments" document in your course packet provides specific questions that will guide and speed your class preparation. You should read them carefully when preparing for class. They are not intended, however, to lead you to a complete solution to the problems any case represents and you should try to push beyond them.

Class Participation

In a typical class, one or more students will be asked to start the class by answering a specific question or discussing a specific issue. Preparation of the case (including the assignment questions) should be sufficient to handle such a leadoff assignment. After a few minutes of initial analysis, we will open the discussion to the rest of the class. As a group, we will then try to complete the analysis of the situation and address the problems and issues presented in the case. We will also spend time talking about the implementation of those recommendations and the complexities of change in strategic management situations.

Most general managers spend very little time reading and even less time writing reports. The vast majority of their interactions with others are verbal. For this reason, the development of verbal skills is given a high priority in this course. The classroom should be considered a laboratory in which you can test your ability to convince your peers of the correctness of your approach to complex problems, and of your ability to achieve the desired results through the use of that approach. Some of the things that have an impact on effective class participation are the following:

1. Is the participant a good listener?
2. Are the points that are made relevant to the discussion? Are they linked to the comments of others? Have they referenced other individuals in class by name?
3. Do the comments add to our understanding of the situation?
4. Do the comments show evidence of analysis of the case?
5. Does the participant distinguish among different kinds of data (that is, facts, opinions, beliefs, concepts, etc.)?
6. Is there a willingness to test new ideas, or are all comments "safe"? (Ex: repetition of case facts without analysis and conclusions or a comment already made by a colleague)
7. Is the participant willing to interact with other class members or only with the instructor?
8. Do comments clarify and highlight the important aspects of earlier comments and lead to a clearer statement of the concepts being covered?

These questions deal with both the process of class participation and (of equal or greater concern) the content of what you say. As will be noted subsequently, class participation will be an important factor of your grade in this course.

Class policy:

1. It is anticipated that you participate in the class and review the recommended reading material prior to each class.
2. Assignments are due before the corresponding lecture starts on their due dates.

3. It is imperative that you come to class on time. By coming later you would disrupt the class and are likely to miss the important information.

4. If you have to miss the exam, you will receive a grade of “0” unless you have a doctor’s report, which states that your illness prevents you from taking the exam on March 10, 2016.

Recommended (not required) books:


**ASSIGNMENTS AND GRADING POLICIES**

1. **OPERATION OBSERVATION**
   a. Due in Class 8
   b. Write up and presentation
   c. Should be done jointly with a few colleagues.
   d. More detailed description towards the end of syllabus

2. **CASE ANALYSIS**
   a. Due in class March 1 or March 3
   b. Write up
   c. Individually assigned
   d. More detailed description towards the end of syllabus

3. **EXAM**
   a. Due March 10, last day of class

**Grading Policies**

Evaluation of your performance will be based on your class participation, your two assignments and the final exam. We will weight these components of your grade as follows:

- First Written Assignment 20%
- Second Written Assignment 20%
- Class Participation 30%
- Final Exam 30%

Please remember that class attendance and participation in discussions are important parts of your learning and your participation grade. The quality of contributions in class is more important than the quantity.

We strongly urge you to form study groups to work jointly on the preparation of cases for class where possible. This will enhance both your learning and the quality of class discussion.
CLASS SCHEDULE AND ASSIGNMENTS

Class 1, January 26
In this first class we will provide an overview of the course and Operations management. We will also collect from you pertinent personal information so that we might know your individual objectives in taking HPM 232.

Class 2, January 28
In this class we will compare and contrast the production processes at McDonald's and Burger King. This comparison, based on operations familiar to most of us, will allow us to see how production processes relate to marketing strategies, human resource management and economics.

Cases:
- McDonald's Corporation (HBS 9-681-044)
- Burger King Corporation (HBS 9-681-045)

Readings:
- Note on Process Analysis in Health Care
- Types of Processes (HBS 9-682-008)

Questions:
1. Draw a process flow diagram for both restaurants. Where are inventories held? How is inventory size controlled?
2. How does the method of cooking the meat patty (grill or continuous chain broiler) affect the store's operations?
3. Examine the processes for taking and communicating customer orders. How do McDonald's and Burger King differ from one another in this respect? Why? How do the processes described in the case differ from any recent personal experiences you have had with these restaurants?
4. Measure the capacity of each system to meet its peak hour's demand for cooked hamburger patties.
5. Which of the two stores would you rather own? Which one would you rather operate? Where would you rather work? Why?

Class 3, February 2

The first part of the class:
Most of the processes we examine in this course are ones, which we plan to repeat many times. In this class, we will explore the management of operations, which we anticipate performing only once. As we shall see, "project" management has become a science of its own.

Reading:
- The ABCs of the Critical Path Method (HBR 63508)
- How to Avoid Getting Lost in Numbers (9-682-010)

Exercise:
- Arrow Diagramming Exercise (HBS 9-613-021)

Please read these materials carefully and master the basic concepts. Apply what you have learned to the Arrow Diagramming Exercise you have been given. In class we will review this exercise.

The second part of the class is Queuing (please see the readings and questions from class 4)
Class 4 Queues, February 4

One of the major problems in service organizations is matching random demand and fixed capacity. The main tool in solving those problems is Queuing Theory. We will briefly consider the main types of queues, service processes and queuing characteristics, i.e., the number of requests waiting for service, waiting times, etc.

Reading:
- Notes on queues.
- Note on the Management of Queues (HBS 9-682-010)
- Match Supply and Demand in Service Industries (HBR 76608)
- Queuing Theory Accurately Models the Need for Critical Care Resources

Questions:
1. What are the main differences among types of service?
2. When is each service discipline better than the others?
3. Give practical examples of different arrivals and service time distributions?

Class 5, February 9

In the first part of the lecture we will finish Queues.

Second part of the lecture:

In service operations, it is not possible to inventory the product itself. It is possible, however, to "inventory" additional production capacity. In today's case you will examine the staffing level of an 800 number telephone answering service.

Case:
- Sof-Optics, Inc. (HBS 9-681-052)

Reading:
- Designing Services that Deliver (HBR 84115)

Questions:
1. What is the capacity of the current setup of Sof-Optics and how does it compare to anticipated demand?
2. How much capacity should Langstaff plan on needing in 6 months? One year? Think about both equipment and people. How do they interact?
3. Outline a detailed plan of action for Ms. Langstaff over the next two years.

Class 6, February 11

Cost and/or quality? Variability in demand and performance in health care organizations.

What prevents healthcare from being efficient and providing a high quality care simultaneously? Can we "kill two birds with one stone" in real life?

Reading:
- Smoothing the Way to High Quality, Safety, and Economy
• Cost and quality under managed care: Irreconcilable Differences?
• Optimizing Patient Flow by Managing Its Variability
• More Patients, Less Payment: Increasing Hospital Efficiency in the Aftermath of Reform (course website)
• Managing Variability in Healthcare Delivery
• Mismanaged Hospital Operations: A Neglected Threat to Reform

Questions:
1. Why is variability a concern?
2. What are the types of variability in hospital departments and PCP offices?
3. How can variability be measured?
4. How can different types of variability be reduced?

Class 7, February 16

Variability in hospital bed occupancy.

About one third of the budget for most hospitals is spent on nursing salaries. If the hospital bed occupancy were steady state or at least naturally variant around the mean, staffing problems would be minimal. But, what to do if the bed occupancy is both non-random and non-predictable, so on one day we need too many nurses and on the other too few?

Reading:
• Cost and quality under managed care: Irreconcilable Differences?
• Smoothing the Way to High Quality, Safety, and Economy
• Optimizing Patient Flow by Managing Its Variability
• Managing Unnecessary Variability in Patient Demand to Reduce Nursing Stress and Improve Patient Safety
• Nurse staffing, hospital operations, care quality, and common sense
• Emergency Room Diversion: Causes and Solutions

Questions:
1. What are the major sources of variability in hospital bed occupancy?
2. What may be the reasons for the variability?
3. How does variability in hospital bed occupancy affect the Emergency Room? How does it affect hospital length of stay? How does it affect hospital expenses and revenue?
4. How can variability in hospital bed occupancy be reduced? Can it be completely eliminated?
5. What are the main obstacles in reducing this variability?

Class 8, February 18
Observation Exercise Due: You should do this paper jointly with nine other students in this class.

Prepare a description (5 page maximum, excluding exhibits) and analysis of a process you have personally observed since starting this course. Bring six copies of your paper to class.

Your assignment is to observe an actual production operation and describe it in no more than 5 pages. As part of this description you may wish to include suggestions for improvement, but this is not essential. What is essential is that you observe actual goods or services being produced, and describe in ways relevant to a manager what you have seen. To the extent feasible, your description will include measures of capacity, throughput, productivity and quality.

This assignment will give you the opportunity to observe, from a managerial perspective, what you may well have observed casually as a consumer or a worker many times before.

There is no limit on what you can observe. You cannot, however, rely on past experience or recollection for this exercise. In the past, students interested in manufacturing have observed activities as diverse as bicycle assembly lines and aircraft engine production. Students have observed services as simple as a hair stylist and as complicated as air traffic control. Students of public management have ridden in snowplows, attended paupers’ funerals and spent the night in homeless shelters. One student did an analysis of the utilization of park benches in Boston Common, while another rode in a Boston Police Squad Car on the midnight platoon.

One additional rule: be creative, get as close to the delivery system as you can, but respect the rights of individuals and organizations.

In your analysis, address the following questions and any others you deem relevant:

1. What is the existing workflow and how can it be improved? (Be sure to prepare a flow chart of the operation and perform whatever capacity analyses are important to your analysis.)

   NOTE: We recognize that you may not be able to get "behind the scenes" of the operation you choose to observe. Do the best you can, remembering to respect the rights of those you observe. You will be graded on your observation, analytical and managerial skills, not your technical sophistication.

2. What are the objectives of this operation and how do they relate to what you know or surmise to be the key choices regarding the flow of activity?

3. How can the management of this organization use this operation for strategic advantage?

4. What are the major types of variability in the organization? How do they affect its performance?

Site visits students have used in the past:

- Service operations at Crowfoot dental clinic in Calgary (Canada).
- Manufacturing operations, such as GM automobile assembly line in Framingham.
- Service operations in the private sector, such as a fast food restaurant, carnival or hair salon.
- Services operations in the public sector, such as the IRS, Registry of Motor Vehicles, Immigration and Naturalization, emergency rooms, etc.
- Not-for-profit activities, like a shelter for the homeless, a church service, or a rape crisis center.
- Service operations in the blood bank at Boston Children's Hospital.
- Unusual operations, like traffic intersections, a park, or a piece of public art.

Your paper will be a major input to this class discussion. Please bring six copies of the paper to class; one will be handed in to the professor, the others will be shared with class members. Reminder: This is a graded exercise.

Classes 9, February 23 (Guest lectures)

Cases:

- Variability in Operating Room and its Institutional Effect
In today’s managed care environment, the success of an academic medical institution is measured by its ability to continue to provide superior medical care, fulfill its teaching and research missions, and at the same time, reduce cost. Competition for patients with community hospitals operating at inherently lower cost and generally higher efficiency presents a severe challenge to survival. For surgical patients, the cost of operative services is usually 50% or more of the entire cost of the episode of care. Improvement of efficiency of provision of operative services will therefore be a major determinant of success of any operations improvement program.

- Re-engineering Operating Room (OR) Services

**Reading:**

- Mayo Clinic on implementing Variability Methodology (publication is located on the course Web site – class 9)
- Variability in Surgical Caseload and Access to Intensive Care Services

Note: Operating Room re-engineering (concepts, methodology, results and conclusions) will be provided during class sessions.

**Questions:**

1. Why is there a need for OR re-engineering?
2. What are the major two types of cases performed in the OR? What prevents OR utilization from being equal to 100%?
3. What are the types of variability in resource demand and performance in the OR? What are the sources of variability? How should we reduce (manage) variability in the OR?
4. How does turnover time affect OR utilization rate and unscheduled case waiting times?
5. How can we redesign the OR to increase its utilization and reduce patient waiting times?
6. What methodology should be used to optimize number of beds in the Recovery Room?

**Class 10, February 25**

*First part of this class is finishing class 9.*

The second part of the class is:

**Case studies:** Mayo Clinic (FL), The Johns Hopkins Medical Center, Cincinnati Children’s Hospital, Boston Medical Center, Elliot Hospital, New Jersey Partnership for Patients project and St. Thomas Community Health Center.

**Class 11, March 1 & Class 12, March 3**

**Written Case Analysis** (due as individually assigned)

By lot, we will assign each student a case for written analysis. These 5 page analyses (including supporting exhibits) will be turned in prior to class. Typically, students preparing written analyses will not be called on for the first half of the class discussion.

This approach offers students the opportunity to compare the class's group analysis to his or her individual analysis, thus revealing some of the benefits and disadvantages of group activities. This approach also allows the instructor to track more accurately the progress of the class during the semester.

Please note that while we will assign cases by lot, you are free to trade your assignment with any other willing trading partner. Merely notify your instructor of the trade after you have arranged it.

Your written case analysis should be carefully constructed to show a logical flow and integrated set of thoughts about the case. Avoid undocumented assertions, but do not avoid the monetary (and other resource) implications. Also, do not avoid implementation issues. You will likely need more than one draft to achieve good clarity, consistency, and structure for your paper.
Make sure that any exhibits are immediately understandable to a busy executive. Do not include exhibits merely to show the amount of work you did. You may use as many exhibits as you deem necessary. Make sure you refer to these exhibits in the appropriate places in the text of the paper.

Further details on the assignment

- The cases are in your course packet
- Select ONLY the case you identified in the Doodle poll
- The paper should be ~5 pages + exhibits
- You are expected to apply a very similar strategy to the group project, but more comprehensive than just queuing theory
- Use the questions in the syllabus to guide you, however overall structure should things such as: executive summary, key performance indicators, financial implications, background summary, variability methodology, application of queuing theory, critical path - if applicable, barriers, etc.

Class 11, March 1

Many of you have been to a campus medical facility and we have all said that we could do a better job of managing it. Now is your chance.

Case: University Health Services: Walk-in Clinic (HBS 9-681-061)

Questions:

1. Compare the new triage system to the old. How well do you think the Walk-In Clinic operation is performing? Are waiting times now acceptable?
2. In your judgment, are walk-in appointments a problem? What, if anything, should Ms. Angell do about them?
3. What other actions would you recommend to Ms. Angell? Scheduling changes? New equipment? Anything else?

Class 12, March 3

Case: New England Health Plan (BU)

Questions:

1. Why are there long waits for scheduled operations?
2. Why is OB/GYN's utilization of the OR low?
3. What should Dr. Stevens do to address his problems? Evaluate the courses of action he is considering at the end of the case.

Class 13, March 8

Case: Acute vs. Rehabilitation hospitals

Reading:

- Quality on the Line (HBR 83505 )
- No Waiting: A Simple Prescription that could dramatically improve hospitals (course website)
- Rethinking Rapid Response Teams (course website)

Questions:

1. What is the main problem in relations between acute and rehabilitation hospitals? How does this problem financially affect both sides?
2. Which industries have similar problems? How have they solved them?

3. How does a reservation system improve relations between acute and rehab hospitals? What would happen to other hospitals not participating in the system?

4. Offer an alternative design to improve relations between acute and rehabilitation hospitals.

Problem oriented software will be used in the discussion of one redesign solution to this problem.

4. Compare the new triage system to the old. How well do you think the Walk-In Clinic operation is performing? Are waiting times now acceptable?

5. In your judgment, are walk-in appointments a problem? What, if anything, should Ms. Angell do about them?


Class 14, March 10

Exam!
I. Course Description:

This course will focus on both the formulation and execution of marketing strategy in healthcare organizations. The course has been designed to focus on the “four P’s” of marketing: product, promotion, place, and price. In addition, market planning, brand strategy, and new media will be covered.

The course emphasizes the concept of marketing as creating value for the target consumers, based on identifying their underlying needs, evaluating the market opportunities associated with these, and developing a strategic approach to meeting these needs to benefit both the organization and the target market.

In lieu of a textbook, this class uses the Harvard Business Review Core Curriculum articles in Marketing, plus a few supplemental articles in key subject areas. In addition, case studies will be employed to develop skills in marketing strategy formulation. The case studies have been selected to represent a broad array of healthcare and non-profit organizations and marketing issues, and to explore the four P’s in detail. Also, the selected case studies will introduce students to various marketing concepts as represented by companies producing healthcare products and drugs, healthcare organizations that deliver services and an association designing a social marketing campaign.

Students will learn to plan and execute marketing strategy through team development of a marketing plan for a real healthcare organization.

The weekly assigned readings and case studies will take 2-3 hours of preparation. Active participation in class discussion is essential, and preparation is key.
II. Objectives:

The objectives of this course are to:

1. Understand the field of marketing and be able to apply current key concepts and tools to healthcare organizations and companies;

2. Understand the importance of an organization's mission, vision and culture as necessary Prerequisites to planning and marketing;

3. Develop skills in marketing strategy formulation through case analysis;

4. Develop skills in strategy execution through the development of a marketing plan for a real organization facing a current marketing challenge;

5. Master a marketing framework, based upon the four Ps of marketing, that will be useful to students throughout their careers in leading health care or other organizations.

6. Explore the expanding role of customer engagement through new media.

III. Student Evaluation Method:

- Class Participation (discussion of cases, participation in lectures) 20%
- Case Analysis and Written Submission. Students are expected to write up two of the assigned cases. 30%
- Marketing Project. This project, which will be done in teams, will involve:
  - Presentation 20%
  - Written Marketing Plan 30%

There are no tests in this course.

IV. Description of Assignments:

A. Case Assignments

Case studies bring real world situations into the classroom, and require students to think of themselves as decision makers who must make decisions with less than perfect information. The assigned cases are intended to give you practice in developing logic, insight and analytic skills to support your recommendations, and to incorporate the learning from the course text and other course activities. Students are expected to be prepared to fully participate in class discussions of all assigned cases, and to write up an analysis of two cases. While the students may choose which to submit, all students are strongly encouraged to submit their first case early in the semester, so that they can get feedback.
The following guidelines may be useful in preparing for case discussions and your two case write-ups:

1. Read the case quickly for the major issues and type of information contained.
2. Reread carefully to pick out the important points. Decide what the action issues are, as well as the root causes of the problem(s).
3. Develop a reasoned plan based on the information that is available in the case and the questions that will be assigned at the beginning of the semester. You should not attempt to find out what happened to the company as a basis for making your recommendations and decisions.
4. Prepare your answers to the discussion questions the Instructor assigns with each case. If this is for a case write-up, note the assigned role and format in the questions that will be assigned at the beginning of the semester.
5. When making recommendations or action plans, be specific. Be action driven, making a clear recommendation or decision with specific tactics.

Case Write-up Guidelines

A hard copy of case write-ups will be brought to class on the day of the class discussion, and emailed to the Instructor prior to the start of the class for which the case is assigned. Late papers will not be accepted. Cases should be no more than two to three pages in length and should contain the following:

1. A succinct problem definition statement, which identifies the key issues facing the company.
2. An analysis, which synthesizes and integrates the answers to the key questions for the case. Do not restate the case, but include an assessment and logic based on the details in the case.
3. Provide recommended strategy and a plan for implementation, as well as a contingency plan for particular barriers or counter-moves by competitors. This section should be the bulk of your report. Be as specific as possible, i.e. include specific tactics in addition to broader strategies.
4. Any exhibits should be in an Appendix (no more than two pages) and tied into the body of the report.

B. Marketing Plan

Students will work in groups to develop a marketing plan for a real healthcare service or product in a real organization. The plan can focus either on the development of a plan for a new product or service OR the expansion (increased market penetration) of a current product or service. Your task is as follows:

1. Select a health care product or service for which your team can find sufficient data to complete a marketing plan. Your team will submit this information to the instructor by March 3rd.
2. You will be asked to give a brief (3 minutes) overview of the organization, service or product, and its marketing challenges on March 31st.
3. Prepare a Written Report that will supplement your presentation. This report should be no more than 10-12 pages in length, including exhibits that should be integrated into the text.
You must include a one page executive summary. Your Written Report will be due on May 3rd or 10th pending your team’s scheduled Presentation.

4. Develop a Presentation of your Marketing Plan that you would make to the senior management team at the organization that will describe your recommendations and expected results. Your presentation should be no more than 20 minutes to be followed by a 10 minute Q&A from the class.

Guidelines for Presentation

The presentation is an overview of the full written report that should be viewed as the sales opportunity for your team. It should be no more than 20 minutes, and will be followed by a Q&A from the class. An outline of what should be included is below:

- Overview of Company/Organization
- Brief Industry Overview (few key bullets or chart)
- Brief Competitive Landscape (i.e. Current State)
- Key Issues and Goals for Marketing
- Marketing Plan
- Evaluation Methodology

Guidelines for Written Report

Based on an assessment of the product’s or service’s market issues and challenges, as well as its target market(s), you will recommend a plan covering the full marketing mix – product, price, place and promotion to achieve the organizations goals. The focus of the assignment is on your strategic recommendations and, more importantly, your pragmatic and research-based reasons why you think your approach will achieve the stated goals.

Do not just toss out information. The entire presentation and paper should present a tight, logical, step-by-step assessment, such that each section is based on your team’s discussion of information and materials that came before it, and all data presented must be relevant for decision-making.

Below is the outline you should follow in writing the paper, **although the amount of data students will be able to obtain will vary dependent on their selection of their company/organization.**

1. Executive Summary: Should be a compelling, winning summary of the entire proposal.
2. Situation Analysis (depends on data availability for team’s project)
   A. Industry Background: Size; Growth; Current Trends; Macro-environmental Factors and Issues (e.g. demographic, economic, technological, political, legal, social, cultural and/or environmental); Demand Analysis.
   B. Organization’s Snapshot: Competitive Position (size, growth, image); Sales History; Target Markets
   C. Product or Service Brand Position and Review: Market Share; Sales/Revenue; Growth; Strengths and Weaknesses; Key Benefits; Brand Image; Positioning.
   D. Competitive Review: Direct and Indirect Competitors; Target Markets; Competitors’ Positioning, Advantages, Weaknesses.
E. Consumer Analysis: User Profile (demographic, geographic, psychographic, behavioristic factors); Buying Decision Process; Who Buys the Product; Who Influences the Purchase Decision: Who Makes the Decision; Decision Criteria

F. SWOT Analysis or Porter’s 5 Forces Analysis

G. Promotional Program Situation Analysis: Review of Existing and Past Programs, including Budgets, Promotion Mix, Message Strategies, and Media Strategies

3. Problems and Opportunities: When developing a marketing plan, the marketing objectives and strategies come directly from the problems and opportunities.

4. Target Market: Primary and Secondary Targets; include core consumers for an existing product or service and high potential new consumers;

5. Marketing Objectives and Strategies: Both quantitative targets and qualitative factors must be taken into consideration in the development of marketing objectives, which are driven by sales or volume objectives for the product or service. Marketing objectives should be specific, measurable, relate to a specific time period and focus on affecting target market behavior.

6. Positioning Strategy: establishes the desired perception of your product or service relative to the competition.

7. Marketing Mix: Address implementation tools include product/service; pricing; place; promotion.

8. Marketing Budget and Calendar

9. Execution Issues

10. Measurement and Evaluation

V. Readings:


**Cases**

MedImmune: FluMist Introduction KEL012-PDF-ENG

Canadian Blood Services W11531-PDF-ENG

Metabical: Positioning & Strategy for New Weight Loss Drug 4240-PDF-ENG

Thrive or Revive? The Kaiser Permanente “Thrive” B5804-PDF-ENG

Marketing Program

Zimmer: The Gender-Specific Knee KEL276-PDF-ENG

Merck: Pricing Gardisal KEL400-PDF-ENG

American Legacy: Beyond the Truth Campaign 504014-HCC-ENG

MedNet.com Confronts “Click-Through” Competition 2066-PDF-ENG

Aravind Eye Care System: Providing Eye Care to Rural Population W11212-PDF-ENG

Aspect Medical System 600076-PDF-ENG

Homeless World Cup E376-PDF-E
Readings and Articles

Creating a Marketing Plan: An Overview 2564BC-PDF-ENG
Framework for Marketing Strategy Formation 8153-HTM-ENG
Marketing Intelligence 8191-HTM-ENG
Competitive Strategies 8158-HTM-ENG
Consumer Behavior and the Buying Process 8167-HTM-ENG
Customer Management 8162-HTM-ENG
Segmentation and Targeting 8219-HTM-ENG
Brand Positioning 8197-HTM-ENG
Brands and Brand Equity 8140-HTM-ENG
Product Policy 8208-HTM-ENG
Pricing Strategy 8203-HTM-ENG
Marketing Communications
Planning for Integrated Marketing Communications
Digital Marketing 8224-HTM-ENG
Adding Social Media to the Marketing Mix IIR051-PDF-ENG
Increase the ROI of Social Media Marketing SMR431-PDF-ENG
Developing and Managing Channels of Distribution 8224-HTM-ENG
Business-to-Business Marketing 8145-HTM-ENG
Sales Force Design and Management 8213-HTM-ENG
Global Marketing; 8182-HTM-ENG
Cause-Related Marketing: More Buck Than Bang BH172-PDF-ENG

VI. Session Outlines/Assignments:

Sessions are designed around the key components of a marketing strategy.

<table>
<thead>
<tr>
<th>Session</th>
<th>Topic(s)</th>
<th>Readings and Assignments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>January 26</td>
<td>Health Care in Marketing Organizations</td>
</tr>
<tr>
<td>2</td>
<td>February 2</td>
<td>Strategy and Market Planning</td>
</tr>
<tr>
<td>3</td>
<td>February 9</td>
<td>Consumers and Decision Making</td>
</tr>
<tr>
<td>4</td>
<td>February 16</td>
<td>Segmentation, Targeting and Competitive Strategy</td>
</tr>
<tr>
<td>Date</td>
<td>Topic</td>
<td>Readings</td>
</tr>
<tr>
<td>------------</td>
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<td>--------------------------------------------------------------------------</td>
</tr>
<tr>
<td>February 23</td>
<td>Positioning and Brand Development</td>
<td>Readings: Brand Positioning, Brands and Brand Equity</td>
</tr>
<tr>
<td>March 1</td>
<td>4 P's: Product</td>
<td>Reading: Product Policy</td>
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<td></td>
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<tr>
<td>March 8</td>
<td>4 P's: Price</td>
<td>Reading: Pricing Strategy</td>
</tr>
<tr>
<td>March 15</td>
<td>4 P's: Promotion</td>
<td>Readings: Marketing Communications; Planning for Integrated Marketing Communications</td>
</tr>
<tr>
<td>March 22</td>
<td>No Class</td>
<td></td>
</tr>
<tr>
<td>March 29</td>
<td>Digital and Social Media</td>
<td>Guest Speaker</td>
</tr>
<tr>
<td>April 5</td>
<td>Online Media and Measurement</td>
<td>Readings: Adding Social Media to the Marketing Mix; Increase the ROI of Social Media</td>
</tr>
<tr>
<td>April 12</td>
<td>4 P's: Place (Channels of Distribution)</td>
<td>Reading: Developing and Managing Channels of Distribution</td>
</tr>
<tr>
<td>April 19</td>
<td>B2B Marketing, Sales Force Design</td>
<td>Readings: Business-to-Business Marketing; Sales Force Design and Management</td>
</tr>
<tr>
<td>April 26</td>
<td>Global Marketing</td>
<td>Readings: Global Marketing; Cause Related Marketing</td>
</tr>
<tr>
<td>May 3</td>
<td>Marketing Plan Presentations</td>
<td></td>
</tr>
<tr>
<td>May 10</td>
<td>Marketing Plan Presentations</td>
<td></td>
</tr>
</tbody>
</table>
I. Course Description and Objectives:
Health care inflation in the United States—and in many other countries—has exceeded overall inflation since the mid-1990s, and employers, government, and individuals are increasingly reluctant to pay ever-rising amounts for health care coverage. Employer-based health care coverage is under threat, and escalating health care costs threaten other important programs of local and state governments. Even with the recent slowdown in health care inflation, future health care costs represent a significant economic challenge in the US, as well as in many other developed and developing countries.

The Affordable Care Act has led to a substantial decrease in the portion of the population which is uninsured, and attention has turned to the task of decreasing health care costs while not diminishing quality or innovation. This course will use lectures, case studies and a simulation to examine the major factors that determine the cost of health care in the United States, and the impact of these forces on system stakeholders. We will review the fundamentals of managed care, with a focus on some of the practical challenges and major public policy issues that arose with the growth and decline of managed care. This course will critically evaluate multiple solutions proposed for managing health care costs, including benefit design, medical management, utilization review, provider profiling and reporting, information technology, and regulatory action. We will also review efforts to improve health care affordability in other countries, although the main focus of the course is the US health care system.

Students will be encouraged to develop their own critical assessment of the prospects of using these techniques to control health care spending and to improve access and quality of care. Students will
work in groups to complete a mini-business plan for a product or service to manage health care costs. Guest speakers will provide a first-hand perspective on some topics.

II. Methods of Evaluation:

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Points</th>
<th>Date Due</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Introductory Survey</strong></td>
<td>10 points</td>
<td>Before the second class</td>
</tr>
<tr>
<td>Complete the survey <a href="#">at this URL</a></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Response Paper</strong></td>
<td>15 points</td>
<td>Prior to any one class except for Classes 1, 13 and 14</td>
</tr>
<tr>
<td>Each class member is required to turn in a brief response to the reading material from one of the classes. This should be no more than 500 words (approximately 2 double-spaced pages). The paper should <strong>argue a point of view</strong>. There is no need to summarize the readings.</td>
<td>(3 point bonus available for completing this prior to Class 7)</td>
<td></td>
</tr>
<tr>
<td><strong>Blog Post</strong></td>
<td>15 points</td>
<td>All must be completed by Wednesday, December 9</td>
</tr>
<tr>
<td>Each class member is required to turn in a single blog post. This should be less than 500 words, and all hyperlinks should be properly formatted. Please post your blog on the class website for others to read and comment upon, and also submit via the Canvas “Assignments” page in MS Word, with hyperlinks. Include a proposed headline and send any images as a separate small JPG file. The best of these might be posted on managinghealthcarecosts.blogspot.com; be clear if you do not want yours posted.</td>
<td>(3 point bonus available for completing this prior to Class 7)</td>
<td></td>
</tr>
<tr>
<td><strong>Mid-semester Group Project</strong></td>
<td>20 points</td>
<td>Group must submit its country choice by Friday, November 6</td>
</tr>
<tr>
<td>Groups of approximately 5 students will examine the efforts to control costs in another country, with a special focus on the techniques, stakeholders, challenges, and generalizability beyond your chosen country. Note that groups will be assigned at the beginning of the semester. Paper: Maximum of 7 pages, excluding sources. Presentation: Each group will also prepare a 1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Final Group Project and Presentation**
Groups of approximately 5 students will prepare an advocacy paper and presentation (a “pitch”) for an approach to lower the cost of health care. The group will specify the audience for its project, which could be:
- Health plans
- Payors
- Providers
- Patients
- Government
- Venture capital or private equity funders
- Other

Groups will offer an assessment of impact on stakeholders, and an assessment of potential economic impact from pursuing this initiative.

**Presentation**: 10 minutes maximum
(Alternative is to prepare a YouTube-style video presentation)

**Paper**: Maximum of 10 pages, excluding sources

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<table>
<thead>
<tr>
<th></th>
<th>30 points</th>
<th>Choose topic: Monday, November 23</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>One page outline due: Monday, November 30</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Paper due: Friday, December 11 by 7:00pm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Presentation due: Saturday, December 12 by 11:59pm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Presentations: December 14 and 16</td>
</tr>
</tbody>
</table>

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**Class Participation**
Participation includes: attending class sessions; participating in mandatory exercises; completing required readings; preparing assignments before class; and participating in class discussions. Active participation in the class blog will count toward class participation.

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**Group Grade**
We will ask each group member to confidentially grade fellow group members for contribution. Anonymized feedback from this exercise will be returned to each member of the group.

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<table>
<thead>
<tr>
<th></th>
<th>15 points</th>
<th>Throughout semester</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>(Note that as many as 15 additional points can be awarded for blog contributions)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Participation in group grading is part of class participation. Between 0-10 points will be allocated for insightful feedback to your team members.</td>
<td></td>
</tr>
</tbody>
</table>
### Final Presentation Evaluations

| | 10 points | Between 0-10 points will be allocated for insightful feedback via web survey to groups for their final project presentations. |

### Session Evaluations

We ask students to voluntarily complete a brief blinded evaluation after each class session, using a web-based tool. These evaluations will help us assess how the course is going, address any issues, and improve the course in the future. **We will raffle an Apple watch** at the end of the course – each student will get one chance for each completed survey. Only the winner needs to unblind his/her survey identity, and can do this with HSPH staff (as opposed to faculty) or after grades are posted if s/he desires.

| | -- | After each class session |

Note that total possible points is 125. Final number of points will be scaled for grading purposes.

**NOTE:** We expect all deliverables to be typewritten, double spaced, with 11-point or 12-point font and one-inch margins. Be sure to use footnotes where appropriate (hyperlink for the blog post), and be especially careful to avoid taking the words or ideas of others without appropriate acknowledgment. All deliverables should be uploaded to the course “Assignments” page on Canvas.

**Note that readings for this course are classified as required, optional and in depth.** Pay special attention to the abstract, results, discussion and conclusions of required research articles; it’s fine to skim sections on analytic methods. Optional readings are really optional; there is no expectation that you will prepare these for classes. In depth readings are for those very interested in the topic and could be helpful as future references.

### III. Description of Assignments:

A description of the assignments will be reviewed during the first meeting of the class. Groups will be pre-assigned and will remain the same throughout the course. Please contact the teaching staff if there are group issues that you have difficulty resolving.

All assignments must be submitted electronically through the course web site’s “Assignments” page on Canvas. If you have any difficulty submitting using this, please send your file to both teaching
assistants with an explanatory note. There is no need to print hard copies of assignments.

When emailing the instructor or teaching assistants, please put HPM235 in the subject line of the email.

IV. Readings:
Readings will be from peer-reviewed journals, the business and popular press, book chapter(s), and some privately published work from not-for-profit foundations and consulting firms. Many of the readings will require you to log in to Harvard University to retrieve the full text. The syllabus will be distributed on the first day of class and will be available on the course website. *If a reading is not available or a link appears broken, please email the instructor and the teaching assistants.*

Class members are encouraged to follow and participate in the class blog at [www.managinghealthcarecosts.blogspot.com](http://www.managinghealthcarecosts.blogspot.com), which will link to additional source material. Note that this blog is available to those outside the Harvard community.

There is no textbook for this course.

V. Office Hours:
Jeff Levin-Scherz will be available by appointment Monday and Wednesday mornings before class between 8-8:30 a.m. and other times by appointment. Please e-mail him in advance to arrange any desired meeting.

VI. Electronic Resources:
There are a number of electronic forums that you may find valuable through this course. Many of them send out regular emails with new content. Links to these sites and others can be found on the course website.

Recommended sites include:
- [www.managinghealthcarecosts.blogspot.com](http://www.managinghealthcarecosts.blogspot.com) Jeff's Blog
- [www.kff.org](http://www.kff.org) Kaiser Family Foundation, one of the best web resources on Medicaid and other topics
- [www.kaiserhealthnews.org](http://www.kaiserhealthnews.org) Kaiser Health News - offers a daily summary to your email
- [www.cbo.gov](http://www.cbo.gov) The Congressional Budget Office has done excellent work in analyzing potential impact of various interventions on health care cost. Keep in mind the CBO “lens” is impact on the federal deficit – not overall costs
- [www.cmwf.org](http://www.cmwf.org) The Commonwealth Foundation has produced reports of how the US (and each state) rate in terms of quality and affordability of health care
- [www.healthleaders.com](http://www.healthleaders.com) Offers daily and weekly summaries of health care news
- [www.healthaffairs.org](http://www.healthaffairs.org) The premier health policy journal– many of its articles are published on the web and available to nonsubscribers for two weeks from publication. This journal is available electronically through the Countway Library
- [www.dartmouthatlas.org](http://www.dartmouthatlas.org) Offers electronic access to much data showing small area variation in
Medicare claims data

- [www.ajmc.com](http://www.ajmc.com) American Journal of Managed Care – full text is available without subscription but requires login

Some additional suggested news sites:

- Vox.com [http://www.vox.com](http://www.vox.com) Sarah Kliff is an exceptional health care reporter
- Wonkblog: [www.washingtonpost.com/wonkblog](http://www.washingtonpost.com/wonkblog) Jason Millman replaced Kliff at the WaPost’s new journalism site
- NYT Upshot: [www.nytimes.com/upshot](http://www.nytimes.com/upshot) Look especially for the writing of Austin Frakt, a BU economist, and Aaron Carroll, a pediatrician and professor at the University of Indiana. Note that they are also the principal authors of The Incidental Economist. [www.theincidentalaeconomist.com](http://www.theincidentalaeconomist.com)
- Five Thirty Eight [www.fivethirtyeight.com](http://www.fivethirtyeight.com) Editor in Chief Nate Silver is focused more on sports than politics since joining the ESPN family, but Emily Oster often has good health data related essays

Some additional suggested blogs:

- Jaan Siderov Disease Management Blog [http://diseasemanagementcareblog.blogspot.com](http://diseasemanagementcareblog.blogspot.com)
- Health Affairs Blog [http://healthaffairs.org/blog/](http://healthaffairs.org/blog/)

### VII. Class Sessions and Assignment Calendar:

<table>
<thead>
<tr>
<th>Class</th>
<th>Day</th>
<th>Date</th>
<th>Title</th>
<th>Can Do Response Paper?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Monday</td>
<td>Oct 26</td>
<td>Introduction: Where does the money go? (Providers)</td>
<td>No</td>
</tr>
<tr>
<td>2.</td>
<td>Wednesday</td>
<td>Oct 28</td>
<td>Where does the money come from? (Payers)</td>
<td>Yes</td>
</tr>
<tr>
<td>3.</td>
<td>Monday</td>
<td>Nov 2</td>
<td>What about the patients? (CHAT Exercise: class held in Kresge LL6)</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Date</td>
<td>Day</td>
<td>Topics</td>
<td></td>
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<tr>
<td>4.</td>
<td>Wednesday</td>
<td>Nov 4</td>
<td>Medical Management, Prevention and Public Health</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Friday</td>
<td>Nov 6</td>
<td><strong>Deliverable: Group must submit country for midterm project</strong></td>
<td>n/a</td>
</tr>
<tr>
<td>5.</td>
<td>Monday</td>
<td>Nov 9</td>
<td>The Role of Employers (Guest Speaker: Ron Fontanetta)</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Wednesday</td>
<td>Nov 11</td>
<td>Veteran’s Day - No Class</td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>Monday</td>
<td>Nov 16</td>
<td>Information Technology: Health Care Costs Cure or Trap? (Guest Speaker: Mike Lee) AND Designing your final project</td>
<td>Yes</td>
</tr>
<tr>
<td>7.</td>
<td>Wednesday</td>
<td>Nov 18</td>
<td>What about the rest of the world? (International Approaches; <strong>Midterm project presentations and paper due. Paper submitted via “Assignments” page on Canvas</strong>)</td>
<td>Yes</td>
</tr>
<tr>
<td>8.</td>
<td>Monday</td>
<td>Nov 23</td>
<td>Combating Health Care Costs: Call in the Government (Guest Speaker: Nancy Turnbull)</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Monday</td>
<td>Nov 23</td>
<td><strong>Deliverable: Submit brief proposal for final project</strong></td>
<td>n/a</td>
</tr>
<tr>
<td></td>
<td>Wednesday</td>
<td>Nov 25</td>
<td>No class - Thanksgiving Holiday</td>
<td>n/a</td>
</tr>
<tr>
<td>9.</td>
<td>Monday</td>
<td>Nov 30</td>
<td>Pharmacy</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Monday</td>
<td>Nov 30</td>
<td><strong>Deliverable: Final project one-page outline due</strong></td>
<td>n/a</td>
</tr>
<tr>
<td>10.</td>
<td>Wednesday</td>
<td>Dec 2</td>
<td>Obstetrics and Influencing Physicians (Guest Speaker:</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Day</td>
<td>Date</td>
<td>Event</td>
<td>Requirement</td>
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<tr>
<td>11</td>
<td>Monday</td>
<td>Dec 7</td>
<td>Liberal/Conservative Views on Combating Health Care Costs (Guest Speakers: Neil Minkoff Brian Rosman)</td>
<td>Yes</td>
</tr>
<tr>
<td>12</td>
<td>Wednesday</td>
<td>Dec 9</td>
<td>Disruptive Innovation and the Future of Health Care Costs</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Friday</td>
<td>Dec 11</td>
<td>Final paper due by 7:00pm EST</td>
<td>n/a</td>
</tr>
<tr>
<td></td>
<td>Saturday</td>
<td>Dec 12</td>
<td>Final presentation slides due at 11:59PM</td>
<td>n/a</td>
</tr>
<tr>
<td>13</td>
<td>Monday</td>
<td>Dec 14</td>
<td>Final Presentations</td>
<td>No</td>
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<td>14</td>
<td>Wednesday</td>
<td>Dec 16</td>
<td>Final Presentations AND Course Wrap-Up</td>
<td>No</td>
</tr>
</tbody>
</table>

**VIII. Instructor Biographies:**

**Jeffrey Levin-Scherz, MD MBA FACP**  
Assistant Professor

Jeff Levin-Scherz is a co-leader of the National Health Management Practice of Towers Watson, a global consultancy. He has previously served in leadership positions in health care delivery, including President of the Mount Auburn Community Independent Practice Association, and Chief Medical Officer of the network division of the integrated delivery system Partners HealthCare, the multispecialty group Harvard Vanguard and its parent organization Atrius Health, and a venture funded high tech primary care practice, One Medical Group. He has also served as a Vice President at Tufts Health Plan, and consulted for Reden and Anders, a division of United Health Group.

Jeff is an Assistant Professor at Harvard Medical School and at the Harvard School of Public Health, where he teaches courses on managing health care costs and provider payment and policy. He graduated from Boston University School of Medicine and completed his residency at Mount Auburn Hospital in Cambridge, MA. He is board certified in Internal Medicine, and a Fellow of the American College of Physicians. He completed his MBA at Columbia University.

**Laura Clote (Harvard Chan 2016)**  
Laura is a second-year student in the Health Policy and Management department with a management concentration. She is passionate about innovative primary care models that improve patient...
engagement, satisfaction, and outcomes and reduce health care costs. Prior to attending graduate school, Laura worked at The Advisory Board Company, a health care consulting firm, where she conducted research and consulted on emerging care models, payment reform, and employer-provider partnerships. She then served as the Director of Accountable Care at the American Gastroenterological Association where she led the organization’s accountable care strategy and worked directly with practices who were undertaking risk contracts. This past summer Laura interned with Paladina Health, a direct primary care provider headquartered in Denver, to improve their care management strategy and processes. She is a 2008 graduate of Washington University in St. Louis.

Elisabeth Rodman (Harvard Chan 2016)
Liz is also a second-year student in the Health Policy and Management department with a management concentration. She is focused on helping providers succeed under alternative payment models while simultaneously helping the highest risk/most vulnerable patients obtain more appropriate, higher quality care. This past summer, as an intern in the Office of Population Health at Atrius Health, Liz worked on the organization’s Pioneer ACO program as well as a redesign of their case management program. Prior to graduate school, Liz worked at Families USA in Washington, D.C., providing technical assistance to state-based health care organizations on issues pertaining to Affordable Care Act implementation (Health Insurance Marketplace administration and Medicaid expansion). Liz then moved back to Massachusetts, her home state, and joined the Blue Cross Blue Shield of Massachusetts Foundation, where her work focused on accelerating state cost containment initiatives. Liz is a 2010 Tufts University graduate.

Session 1: Monday, October 26

Introduction: Where Does The Money Go? (Providers)

Learning Objectives:
1. Review course logistics including academic requirements and suggested resources
2. Discuss whether rising health care costs are really a problem and the recent slowdown in medical inflation
3. Define how we describe health care costs for populations
4. Examine budgets showing distribution of health care expenditures
5. Illustrate impact of health care providers, including hospitals and physicians, on the overall cost of health care
6. Illustrate how evaluation of variation can suggest areas where there is opportunity to lower cost or raise quality in the health care delivery system
7. Introduce an approach to evaluate plausibility of effectiveness of interventions aimed to lower medical costs.

Exercise for Session 1:
We will discuss the “Wonderland” article and discuss the bill faced by the medical student with two broken arms. Questions to consider for class discussion:
● What are the real “costs” of the medical care she received?
● Who is billing for what?
● How would different types of health insurance plans cover these services?
● Would any portion of this billing be considered fraud?
● How should insurance plans cover emergency department care?
● How valuable are referrals as a coordination tool?

Required Reading for Session 1 Class Exercise:
   http://content.healthaffairs.org.ezp-prod1.hul.harvard.edu/cgi/content/full/28/5/1515

Required Readings:
   http://jama.jamanetwork.com.ezp-prod1.hul.harvard.edu/article.aspx?doi=10.1001/jama.2013.281425 Those familiar with the US health care system can skim this article, with special attention to the figures and tables. The supplemental appendix, downloadable at this link, is especially interesting and is all figures (no significant text)
2. Anderson, GF, Reinhardt UE, Hussey PS and Petrosyan, V. “It’s the Prices Stupid: Why the United States is So Different than Other Countries.” Health Affairs. 2003; 22; 89-105.
   http://content.healthaffairs.org/content/22/3/89.full.pdf A classic article
   http://www.newyorker.com/reporting/2009/06/01/090601fa_fact_gawande

Optional Readings (REALLY Optional):
1. Dranove, D Garthwaite, Cody C “Health Spending Slowdown is Mostly Due to Economic Factors, Not Structural Change in the Health Care Sector” Health Aff 2014; 33:1399-1406
   http://content.healthaffairs.org.ezp-prod1.hul.harvard.edu/content/33/8/1399.long
   http://web.b.ebscohost.com.ezp-prod1.hul.harvard.edu/ehost/detail/detail?sid=ae14d6f2-4c2d-4baf-a5b0-6ab18ed2aea6%40sessionmgr115&vid=1&hid=127&bdata=JnNpdGU9ZWhvc3Q

   http://web.ebscohost.com.ezp-prod1.hul.harvard.edu/ehost/pdfviewer/pdfviewer?vid=3&sid=d7baaba-fdc2-42a2-82c0-d0330ed18bb8%40sessionmgr14&hid=19


   http://content.healthaffairs.org.ezp-prod1.hul.harvard.edu/cgi/reprint/hlthaff.w2.83v1

   http://content.healthaffairs.org.ezp-prod1.hul.harvard.edu/content/30/9/1647.long

   http://content.healthaffairs.org.ezp-prod1.hul.harvard.edu/cgi/reprint/28/5/1260

    http://content.nejm.org.ezp1.harvard.edu/cgi/content/full/355/9/920  (Concentrate on abstract and discussion/conclusion only – and note the assumptions)

    http://content.healthaffairs.org.ezp-prod1.hul.harvard.edu/content/30/9/1630.long


14. Ellis, P Sandy, LG, Larson AJ et al “Wide Variation in Episode Costs within a Commercially Insured Population Highlights Potential to Improve the Efficiency of Care” Health Aff 2012; 31: 2084-2093
    http://content.healthaffairs.org.ezp-prod1.hul.harvard.edu/content/31/9/2084.long

In Depth Reading: *(No expectation that anyone will read for class. Could be valuable as future resource or for those with special interest in going deeper)*

   http://www.iom.edu/Reports/2012/Best-Care-at-Lower-Cost-The-Path-to-Continuously-Learning-Health-Care-in-America.aspx  Note: This is 450 pages long. Summary of recommendations
Session 2: Wednesday, October 28

Where Does The Money Come From? (Payers)

Learning Objectives:
1. Examine the sources of funding for health care in the United States
2. Review goals of various funders - and how these goals impact funding allocations
3. Illustrate ways that health plans seek to influence the cost of health care
4. Review implications of different methods of paying providers, ranging from fee for service to capitation.

Exercise for Session 2:
Study the provided actuarial budget and note which types of service represent the largest chunks of the medical budget.

Consider the following questions:
● What areas would you focus on to try to control health care costs?
● Would this be different for a Medicare (over 65) population compared to a commercial (under 65) population

Required Readings:
   http://web.ebscohost.com.ezp-prod1.hul.harvard.edu/ehost/detail?vid=4&hid=11&sid=1ced8d4b-94e1-4005-be80-36d70fe5f70c%40sessionmgr14&bdata=JnNpdGU9ZWhvc3QtbGl2ZSZzY29wZT1zaxRl#db=aph&AN=4518586
   http://content.healthaffairs.org.ezp-prod1.hul.harvard.edu/content/32/5/929.long

Other Media:
Optional Readings:


   [http://content.healthaffairs.org.ezp-prod1.hul.harvard.edu/content/32/8/1440](http://content.healthaffairs.org.ezp-prod1.hul.harvard.edu/content/32/8/1440)


In Depth


Session 3: Monday, November 2

*What About the Patients?*

*Note that this class will be held in the HSPH Computer Lab - Kresge LL6*

Learning Objectives:

1. Demonstrate how benefit design affects the cost of health insurance
2. Illustrate the realities and challenges of making tradeoffs in health insurance coverage when resources are insufficient to meet all needs
3. Participate in a process of consensus building and interactive decision-making
4. Examine critically the move toward increased consumer cost-sharing in health care

Exercise for Session 3: CHAT (Choosing Healthplans All Together) computer simulation.
CHAT is a game about health insurance. In this session, we will design health insurance benefit packages, both for ourselves as individuals and for our community. The need to make trade-offs is
built into CHAT, providing the opportunity to confront and discuss the challenges of dealing with insufficient resources. *Note that this simulation was initially developed in the mid 1990s and we will be using a revised web based version of this software tool this fall.*

**Required Readings:**

   Fine to skim
4. Soumerae, SB, Ross-Degnan, D et al “Delayed and Forgone Care for Families with Chronic Conditions in High-Deductible Health Plans”  

**For Class Exercise: (OPTIONAL)**


**Optional Readings:**

2. Volpp, KG, Loewenstein, G, Asch, DA "Choosing Wisely: Low-Value Services, Utilization, and Patient Cost Sharing, JAMA 2012; 308: 1635  


Session 4: Wednesday, November 4

Medical Management, Prevention and Public Health

1. Describe common types of medical management programs and their likely impact on health care costs
2. Examine the current state of medical management programs, including:
   a. Who is running these programs?
   b. What is the nature of the interventions?
   c. How are medical management programs being evaluated?
3. Critically evaluate how to assess the financial and quality impact of medical management programs
4. Evaluate likely impact of various preventive strategies on health care cost
5. Examine which parties are in the best position to cost-effectively improve the overall health of Americans

Required Readings:

Optional Readings:


**In Depth Reading: (OPTIONAL)**


**Other Media: (OPTIONAL)**


**Excellent audio reference:**

**Important Web Site:**
www.dartmouthatlas.org

**Session 5: Monday, November 9**

**The Role of Employers**

**Guest Speaker:** Ron Fontanetta, MPH, Global Growth Leader, Towers Watson Health and Group Benefits

**Case Study:** Financial services company facing budget pressure

**Learning Objectives:**

1. Understand the financial funds flow and key stakeholders in employer sponsored health insurance
2. Review key regulations impacting employer sponsored health insurance.
3. Examine the levers that employers can use to lower their health insurance liabilities
4. Discuss trends in employer sponsored health insurance, including the impact of the Affordable Care Act
5. Evaluate case study data to formulate a recommendation to an employer considering future direction of its self-funded employee health insurance plan

**Required Readings:**

1. Case Study (will be available on course web site)
Optional Readings:

   You might be especially interested to read the accompanying memo to the Board of Directors.
   [http://content.healthaffairs.org.ezp1.harvard.edu/cgi/content/full/25/6/1548]
   [http://content.healthaffairs.org.ezp-prod1.hul.harvard.edu/cgi/content/full/29/6/1220]

Session 6: Monday, November 16

Information Technology: Health Care Cost Cure, or Trap? AND Designing Your Final Project
Guest Speaker: Mike Lee, MD MBA, Director, Clinical Informatics, Atrius Health

Note that Jeff will review the final project and some tools to help your group during the first portion of this class.

Learning Objectives:

1. Examine whether the use of information technology lowers costs in health care, as it does in many industries
2. Describe current efforts to improve information systems and efficiency in a large multispecialty group
3. Describe economic, structural and cultural barriers to deployment of healthcare information technology
4. Examine trade-offs required when investing in healthcare information technology
5. Review final project assignment, and how to build a mini-business plan

Reading for Business Plan:

1. Berry, T “A Standard Business Plan Outline” bPlans.com

Required Readings:

1. Kellerman, AL, Jones SS “What it will take to achieve the as-yet-unfulfilled promises of health information technology” Health Aff 2013; 32:163-68
   http://content.healthaffairs.org.ezp-prod1.hul.harvard.edu/cgi/content/full/29/4/629
   http://content.healthaffairs.org.ezp-prod1.hul.harvard.edu/content/30/9/1689
6. Mace, S "In Search of EHR's ROI" Health Leaders Media, January/February, 2014
   http://healthleadersmedia.com/print/MAG-300807/In-Search-of-EHRs-ROI

Optional Readings:
   http://content.healthaffairs.org.ezp1.harvard.edu/cgi/content/full/25/4/1079
   http://content.healthaffairs.org.ezp-prod1.hul.harvard.edu/content/28/2/323.full.pdf+html

Guest Speaker Bio:

**Michael A. Lee** MD, MBA is the Director of Clinical Informatics at Atrius Health, a large multi-specialty ambulatory group practice in the Greater Boston area. He is a pediatrician at Dedham Medical Associates (DMA), one of the Atrius Health affiliates, where he has practiced since 1991. He was President of the Board of Directors of DMA from 1996-2000. He was Chairman of the Board of Atrius Health at its inception from 2004-2006.
Atrius Health is a national leader in clinical quality and electronic patient record use, and cares for about 750,000 ambulatory patients. Dr. Lee led the installation of the electronic record at DMA and since 2007 has been the clinical leader of the platform for Atrius Health. He also directs a vibrantly growing patient portal with over 150,000 active members and led one of the largest installations for physicians of speech recognition software in the country. He serves Advisory Council of the Massachusetts State HIT council, which is establishing the Massachusetts Health Information Exchange. Dr. Lee received his medical degree from McGill University and interned and did his residency in pediatrics at Tufts Medical Center. He has a BA-Engineering Sciences from Yale and an MBA from the University of Massachusetts.

**Session 7: Wednesday, November 18**

**Managing Health Care Costs Around the World**

**Learning Objectives:**
1. Examine the techniques used to control health care inflation in other countries
2. Evaluate the results of these efforts
3. Assess the potential benefits, and the likely challenges, of attempting to export these techniques to the United States

**Required Readings:** None

**Optional Readings:** *(Note that you may complete these readings to do a response paper. These readings may be helpful to you as you complete the midterm project.)*

   http://content.healthaffairs.org.ezp-prod1.hul.harvard.edu/content/33/9/1516.full

Some Useful Resources for the Group Project:
1. The European Observatory on Health Systems and Policies (http://www.euro.who.int/observatory)
5. The International Network for Health Policy and Reform (http://www.healthpolicymonitor.org/index.jsp)
6. The Commonwealth Fund, International Health Policy program http://www.commonwealthfund.org/topics/international-health-policy

In Depth Reading: (OPTIONAL)
1. TR Reid, The Healing of America: A Global Quest for Better, Cheaper, and Fairer Health Care
   Penguin, New York, 2009 (Paperback, 277 pages, $12) This book is a quick and enjoyable read. It covers 9 countries, while the Frontline show covers only five (UK, Japan, Germany, Taiwan and Switzerland). Related PBS Frontline presentation is available at: http://www.pbs.org/wgbh/pages/frontline/sickaroundtheworld/view/

Session 8: Monday, November 23

Combating Health Care Cost: “Call in the Government”

Guest Lecturer: Nancy Turnbull

Learning Objectives:
1. Describe the multiple roles of government, as purchaser, provider and regulator of health care
2. Review the role that government has in controlling health care costs over the last half century
3. Illustrate some failures in government attempts to control health care costs
4. Prescribe public policy that could use the government to more effectively increase value in health care

Class Exercise:
Your group will be asked to take on a stakeholder role to address provider price disparities in the Massachusetts health care marketplace. The full case study will be posted on the course website.

**Required Readings:**


**Optional Readings:**

6. McDonough, JE. “Tracking the demise of state hospital rate setting” Health Affairs. 1997 Jan-Feb; 16(1): 142-9. [http://content.healthaffairs.org.ezp-prod1.hul.harvard.edu/content/16/1/142.long](http://content.healthaffairs.org.ezp-prod1.hul.harvard.edu/content/16/1/142.long)
7. Bodenheimer, T. “The Not-So-Sad History Of Medicare Cost Containment As Told In One Chart” Health Affairs, 2002; Web Exclusive
   http://content.healthaffairs.org.ezp-prod1.hul.harvard.edu/content/early/2002/02/23/hlthaff.w2.88.long

   http://content.healthaffairs.org.ezp-prod1.hul.harvard.edu/content/30/11/2125

Guest Lecturer Bio:

Nancy Turnbull is Associate Dean for Educational Programs and a senior lecturer in health policy at the Harvard School of Public Health. She is also the director of the two-year master’s program in health policy and management. Her research interests include health insurance, insurance regulation, and expanding health care coverage.

Nancy has been an active participant in the passage and implementation of the health reform law in Massachusetts, including currently serving as the consumer representative on the board of the Commonwealth Health Insurance Connector Authority, the state’s insurance exchange, which has implemented many parts of the law.

Earlier in her career, Nancy was the First Deputy Commissioner and Deputy Commissioner of Health Policy at the Massachusetts Division of Insurance.

Nancy is on the board of a number of health care organizations, including Commonwealth Care Alliance, a consumer-governed organization that provides integrated medical care and social support to low-income frail elders and other individuals with complex special needs.

Session 9, Monday November 30

Pharmaceuticals and Health Care Costs

Learning objectives:
1. Analyze the factors that affect spending on prescription drugs
2. Examine efforts to moderate pharmacy cost trends, with a focus on techniques employed by health plans and delivery systems
3. Review impacts of pharmacy cost increases on stakeholders
4. Evaluate the impact of various governmental interventions on pharmaceutical prices and overall costs
5. Discuss the impact of biopharmaceuticals and specialty drugs on health care costs

Required Readings:


3. Light, DW and Lexchin, JR. “Pharmaceutical research and development: what do we get for all that money?” *BMJ* 2012; 345: e4348 (Published 7 August 2012)
http://www.bmj.com.ezp-prod1.hul.harvard.edu/content/345/bmj.e4348?view=long&pmid=22872694

4. Lotvin, AM, Shrank, WH Singh SC et al "Specialty Medications: Traditional And Novel Tools Can Address Rising Spending On These Costly Drugs" Health Aff 2014; 33:1736
http://content.healthaffairs.org.ezp-prod1.hul.harvard.edu/content/33/10/1736.full

5. CVS Caremark “2014 Annual Insights Report”
http://investors.cvshealth.com/~/media/Files/C/CVS-IR/reports/2014-cvs-caremark-insights-report.pdf Please skim this only - focus on the figures and tables.

Optional Readings:
1. Eban, K. "Bad Bargain." *Self.* June, 2009


In Depth Reading:

In Class Exercise for Pharmacy Session:

Case 1:
Your group has been asked to consult on pricing for a pharmaceutical company that is about to go to market with a novel antiviral agent that will cure a virus that is otherwise associated with liver failure, liver cancer, and death. This virus leads to:

- Cirrhosis, liver dysfunction in about half of those with the disease within 30 years.
- About 4% of those who have cirrhosis go on to frank liver failure each year, which is often treated by liver transplantation which costs about $250,000
- Liver cancer occurs in about 5% of those with this virus - usually more than 20 years after initial infection
- Liver related death in about half of those affected

One study suggests that the disease on average is responsible for the loss of 18 years of life.
The pill is an oral agent that is well tolerated and has a “cure” rate of about 90%. It must be taken once a day for 12 weeks. Previous drugs that have been on the market have required intravenous infusions, and have been associated with fever, body aches, nausea, and vomiting. The previous medications cost approximately $30,000, and offer a 30% cure rate after a 24 week course.

Question 1: How would you recommend your client price this new medication?

Case 2:
Your group is on the Strategy Team of a pharmaceutical company that has just received FDA approval for a new drug. Your team will present recommendations for drug price for this medication to the company’s CEO at the conclusion of this exercise.

This drug is approved for treatment of metastatic colon cancer that has proven resistant to other treatment regimens. It is given with 3 other chemotherapy drugs that were often given on their own prior to the approval of this new medication. The FDA approved this drug based on unpublished studies showing progression-free survival of 6.9 months (vs. 4.7 months with existing drugs) and survival of 13.5 months vs. 12.1 months with existing drugs.

The drug has serious side effects. These include:

- Bone marrow suppression
- Kidney dysfunction
- Headache
- Decreased appetite and weight loss
- Hypertension
- Liver dysfunction
- Occasional fistulas (1.5%) - leaks from the GI tract that can be life-threatening

Question 1: How would you recommend that your company price this new medication, assuming that there is no comparable medication available?

_HINT:_ Consider the quality adjusted life years obtained through this medication -- the increases from decreased progression, and the decreases from drug side effects.

Question 2: Before your drug goes on the market, a competitor gets FDA approval for a drug with similar efficacy and side effect profile. This drug is priced at $5000 per month. Does this change your price recommendation?

Session 10, Wednesday, December 2
Influencing Physicians to Increase Value and Maternity Care
Guest Speaker, Neel Shah, MD MPH, Assistant Professor HMS and HSPH, Cofounder of Costs of Care

Learning Objectives:
1. Demonstrate the importance of health care providers in improving value in health care delivery
2. Examine effectiveness of various interventions to better engage providers in increasing health care value
3. Use maternity care as an illustrative example to demonstrate how pregnant women in the US face higher cost and lower quality
4. Examine approaches to approve maternity care in the US and other developed countries.

Required Readings:

Optional Readings:
In Depth Reading:


Guest Lecturer Bio (Source)

Dr. Neel Shah, MD, MPP is an Assistant Professor at Harvard Medical School and associate faculty at the Ariadne Labs for Health Systems Innovation. His work broadly aims to help clinicians make decisions that lead to safe, affordable, patient-centered care. As an obstetrician-gynecologist at Beth Israel Deaconess Medical Center, Dr. Shah cares for patients from childbirth through menopause and practices both primary care and surgery.

In addition, he is the Founder and Executive Director of Costs of Care, a nationally recognized nonprofit that curates insights from clinicians to help delivery systems provide better care at lower cost. He has been listed among the "40 smartest people in health care" by the Becker's Hospital Review, and profiled in the New York Times, the New England Journal of Medicine, and other outlets for his efforts to expose how low value care can harm patients.

Dr. Shah completed residency at Brigham & Women's Hospital and received degrees in medicine and public policy from Brown Medical School and the Harvard Kennedy School of Government. He is co-author of the textbook Understanding Value-Based Healthcare (McGraw-Hill), a series editor at JAMA Internal Medicine, and former co-chair of the Institute for Healthcare Improvement National Forum.

Session 11: Monday, December 7

Liberal / Conservative Views on Combating Health Care Costs:

Guest Speakers: Neil Minkoff, MD and Brian Rosman

Learning Objectives:

1. Describe the impact of patient cost sharing and market competition in controlling health care utilization and cost
2. Illustrate the importance of price and quality transparency to a functional market
3. Review why market forces have not controlled health care costs in the US
4. Identify potential interventions to control health care costs that can achieve bipartisan support.
Required Readings:


Optional Readings:


3. Emanuel, EZ, Cutler, DM, Spiro, T “How the Federal Government can Save $100 billion or more in health care costs. Alternatives to blunt, misguided policies that merely shift costs” Center for American Progress, 2011

Guest Speaker Bios:

Neil B. Minkoff, MD founded FountainHead HealthCare in 2010 as a reaction to the ever growing complexity of the healthcare system and the need for independent thinkers who could provide some clarity in the chaos.

Dr. Minkoff is also the lead physician for EmpiraMed, Inc, working to develop Patient Reported Outcome tools.

In 2012, Massachusetts Governor Deval Patrick appointed Dr. Minkoff as a Commissioner of the Massachusetts Group Insurance Commission, which provides oversight of health insurance for the Commonwealth of Massachusetts.


Dr. Minkoff has previously served as the Associate Medical Director of Partners Community Healthcare, Inc., an integrated provider network of eight hospitals and over 4000 physicians. He has been Co-Chair of Medical Management and Co-Chair of P&T for the CareGroup Provider Service Network and Medical Director for Deaconess-Waltham Hospital.

Dr. Minkoff attended Bowdoin College, where he graduated summa cum laude in History, and was
awarded his MD from Dartmouth Medical School. He received an Executive Education Certificate from the Wharton School at the University of Pennsylvania. Dr. Minkoff trained in Internal Medicine at the Lahey Clinic and practiced as an Internist. He is the author and editor of multiple publications and has served on numerous Advisory Panels and Boards. Dr. Minkoff was awarded a Bronze United States Congressional Medal in 1986. Dr Minkoff served as Co-Chair of AHIP’s Specialty Pharmaceuticals Workgroup. In 2005, Dr. Minkoff was recognized by the Boston Business Journal as one of their “40 Under 40” leaders. He was one of the Boston Chamber of Commerce’s Future Leaders of 2007.

Dr. Minkoff is a frequent contributor to NPR and National Review.

**Brian Rosman** is the research director of Health Care For All. Brian’s work focuses on policy research and analysis related to Massachusetts and national health reform, public health coverage programs, health payment methods, private insurance concerns and other policy issues. He also teaches health policy to Masters of Public Policy students at Brandeis University, and to advanced degree nursing students at Regis College. He also lectures regularly at University of Massachusetts Medical School, Tufts School of Public Health, BU School of Law, Harvard Medical School, and other schools. Before joining Health Care For All in 2003, Brian was a senior policy associate at the Schneider Institute for Health Policy at Brandeis University's Heller School. From 1995-1998, Brian was the research director and general counsel for the House staff of the Joint Committee on Health Care of the Massachusetts legislature, and from 1989-1993, Brian was counsel to the Massachusetts Senate Committee on Ways & Means. He has a law degree from the University of Pennsylvania and a degree in Political Science from Stanford University.

**Session 12: Wednesday, December 9**

**Accountable Care Organizations and Disruptive Innovation**

**Learning Objectives for this session:**

1. Examine changes in the provider landscape, including development of “patient centered medical home” and “accountable care organizations”
2. Evaluate the impact of these new provider approaches on patients, providers, and health care costs
3. Describe “disruptive” and “accretive” innovation, and the impact each has on health care cost
4. Illustrate circumstances that favor increased “disruptive” innovation
5. Review distribution of capital investment in health care

**Required Readings:**

4. Ubel PA, Asch, DA "Creating Value In Health By Understanding And Overcoming Resistance To De-Innovation“ Health Aff 2015, 34:239 http://content.healthaffairs.org.ezp-prod1.hul.harvard.edu/content/34/2/239.full
6. Petersen M, Muhlestein, P “ACO Results: What we know so far” Health Affairs Blog, 2014 http://healthaffairs.org/blog/2014/05/30/aco-results-what-we-know-so-far/

Optional Reading:


Sessions 13 and 14: Monday, December 14 and Wednesday, December 16

Student Presentations and Wrap-Up

Class Objectives:

1. Class presentations
2. Review class and wrap up any loose ends
3. Preview of the future
4. Course evaluations

Readings: None

Note that you’re expected to give your peers meaningful feedback for the final projects. We will post
URLs to give feedback to each group. We will ask for your agreement or disagreement with the following statements:

1. This proposal will lower health care costs
2. This proposal is likely to be a business success (consider both financial and operational issues).
3. If I were an investor, I would invest in this proposal

You will also have the opportunity to give free text feedback to the group. We will share all comments with each group. You will need to identify yourself in the feedback, but your feedback will be given to your peers anonymously. There are 10 points available for insightful feedback. If you will be unable to attend either of the final sessions, let the instructor know in advance and we will tape the sessions so that you can watch the presentations online and you will get credit for your peer feedback.
DESCRIPTIONS OF COURSE DELIVERABLES

All written material for the class should be submitted using MS Word (not PDF), and should use conventional formatting (11 or 12 point font, margins of 1 inch).

I. Response Paper

Each student is required to complete one response paper during the semester. This is due prior to the start of the relevant class. The response paper should take a point of view on the reading material, and can incorporate additional source material, including your professional experience. The response paper should be a “tight” essay, with a topic paragraph and a clear organization. Use footnotes as appropriate to credit the research and writings of others. There is no need to summarize the readings themselves, nor are you required to include reference to all readings.

The response paper should be no more than 500 words, approximately two pages.

There is extra credit (3 points) for doing a response paper for readings from sessions 2-7, and the last class where you are able to complete a response paper is Class 12. Please complete these early to avoid the flurry of work at the end of the semester.

The response paper must be submitted via the “Assignments” page prior to the actual class session. If you have any trouble submitting, email the completed response paper to the instructor and both teaching assistants with HPM235 in the subject line.

II. Blog Post

Each student is required to turn in a single blog post. This should be less than 500 words, and all hyperlinks should be properly formatted. Please post your blog on the class website for others to read and comment upon, and also submit to the “Assignments” page in MS Word, with hyperlinks. Include a proposed headline and send any images as a separate small JPG file. The best of these might be posted on managinghealthcarecosts.blogspot.com. Please state clearly if you do not want yours posted.

Note that additional blog postings and commenting on colleagues’ postings are eligible for class participation credit. The blog that you wish to be graded on must be completed and posted on the course website AND submitted to the “Assignments” page before class 12.

Extra credit (3 points) is available for blog posts which are completed prior to class 7.

III. Midterm Project

Overview:
Your group will pick a country. The country you pick should be one that you can find published literature about, and that will hold some relevance for the United States. Your choice of country must be approved by the instructor. Pick your country early for the widest choice! Please do not choose:
- United States
- United Kingdom
- Canada

Extra consideration given to groups that choose developing countries for the midterm project.

Your assignment is to:

1. Provide a broad overview of the health care system in the country, with a focus on the financing system (e.g., the role of government, private payers and consumers) Page guideline: 1 page
2. Briefly analyze medical care costs in the country: How rapidly are health care costs rising? What are the trends in major categories of health care costs? What are the major cost challenges confronting the country? Page guideline: 1-2 pages
3. Describe and assess the success of ONE major technique deployed to control health care costs in the country. Page guideline: 2-4 pages. These techniques can include, but are not limited to, approaches that:
   a. Target consumers (e.g., benefit design and cost-sharing, incentives for healthy behaviors)
   b. Target physicians and other providers (e.g., medical management programs, provider payment incentives)
   c. Target other suppliers (e.g., national drug price controls/formularies)
   d. Seek to control supply (e.g., limits on physician supply, limits on technology diffusion)
4. Assess what the US can learn from the cost control efforts of this country. Page guideline: 1 page

Deliverables: (See course schedule for due dates)
- 5-7 page paper (7 pages is the maximum length, excluding figures and tables)
- Single PowerPoint Slide
- Please use template provided on course website. One member of the group should be prepared to present the slide, although we might not cover all countries.

IV. Final Project

Overview:
Your group is charged with developing an innovation that can help manage health care costs. This could be any type of innovation—from keeping people healthier, to decreasing waste or duplication or otherwise streamlining the delivery of health care. The innovation doesn’t have to be implemented in health care itself, but it must have a substantial impact on health care costs.

Your chosen idea can apply to the whole country, or it could apply to a very small group of people, for instance the employees of a health plan.
Your chosen innovation doesn’t have to be a new idea – and it doesn’t have to be the ‘silver bullet’ that will cure our health care cost blues. However, you should be realistic about what resources it would take to implement your innovation, and what payoff you would expect at what point. Describe which stakeholders might object and how you would overcome concerns and convince skeptics.

You should back up your estimates of costs of implementation and potential savings through literature citations. However, you will likely need to make estimates and projections based on incomplete information, and you should feel free to do so. You should address risks of this implementation, including potential undesirable downstream impacts and how you would address these.

Instructor must approve each group’s proposed innovation, to avoid duplication among groups, and to help groups narrow their focus. Make your proposal early to avoid being scooped by other groups!

Elements to include in your final deliverable:
- Statement of the problem your innovation solves
- Identification of where cost savings will come from
- Stakeholder analysis
- Evaluation of potential adverse consequences
- Timeline for implementation
- Resource costs for implementation
- Expected savings, and where in the actuarial budget these savings will come from.

Some thoughts about how to make your project a success:
- Costs and savings should be specified for an implementation somewhere in the United States. Nonetheless, many of the ideas are likely to be applicable to diverse other countries.
- Pick an idea that you believe will really work. This is an advocacy paper, not an academic review. Be prepared to argue for why scarce resources and valuable attention should be exerted to implement your idea even as it competes with other potential projects.
- Do a stakeholder analysis – evaluating how diverse stakeholders might view this innovation, and how you’d address potential concerns.
- You should offer an abbreviated business plan for your innovation. We’ll provide a template for this. The TAs are available to help your group if you are not familiar with this approach.
- Consider the “time value” of money – so you’ll need to include some discounting so that savings which come in the near future are valued more highly than those which will be substantially delayed.
- Don’t propose an innovation that simply shifts costs to another party. An innovation that delays disease progression, however, is acceptable even if patients’ health care costs over their lifetimes might be greater.

Deliveryables: (See course schedule for due dates)
- Maximum 10 page paper (double spaced, 11- or 12-point font), including figures and tables
● PowerPoint presentation to be presented in class during sessions 13-14

● Note: Groups may instead choose to make their presentation as a short “YouTube” style video that should be no longer than 7 minutes.
HPM 242 - Data Analysis for Professionals

Course #: HPM242 Spring 1
Sessions: Monday/Wednesday, 8:30-10:20 am, Jan 25-Mar 9, 2016
Credits: 2.5 Credits
Classroom: Kresge 200

Course Instructors:

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Teaching assistant:
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ckreats@hsph.harvard.edu

Course Assistant
Laura Bostwick, MPH

Course website: https://canvas.harvard.edu/courses/8572

Special instructions: Bring laptops with JMP12 Pro software installed

*In order to meet the particular needs of the class, this syllabus is subject to change.*

Overview:

The ability to analyze and interpret data is an increasingly important skill for public health professionals. Using data—whether for research studies, management, quality improvement efforts, or policy development—lies at the heart of many public health activities, and is critical to a successful career in public health. In this course, students will gain data literacy through guided experiential learning. They will apply statistical concepts to public health, population management, clinical and administrative data. Students will deepen their understanding of the analytic skills they will need as public health professionals, as practitioners and decision-makers, as contributors to and consumers of data-driven knowledge. These learning goals will be supported by hands-on data analysis experiences.

Students will use JMP statistical software, free to Harvard students. JMP features a point-and-click interface and dynamic, interactive graphics for data exploration and communication. The skills learned in JMP are easily transferrable to other commonly available software such as Excel.

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1 This is partly a lab course. Please bring a laptop with JMP installed to class.
A. **Resources**

Software: JMP Statistical Discovery Software ([JMP 12 Pro](#)). Free [download](#) for HSPH students, available for both Windows and Mac computers. (Also available on all HSPH and Countway Library lab computers.)

Data: Publicly available and faculty shared datasets (to be provided)

Readings before class: All readings are available on the internet or will be provided in class. A list of suggested books is included at the end of the syllabus.

For reference and further reading, these books are on [reserve](#) at Countway Library:


B. **Goals for the students**

- Learn techniques and approaches to assess data quality and manipulate/clean data prior to analysis;
- Apply data analytical techniques to data from a variety of health management contexts, using statistical software to gain actionable knowledge;
- Communicate analytical results through graphic displays, charts, and explanations as appropriate to the audience, professional or lay;

C. **Student responsibilities**

- Every week, you will have one or two data analysis homework assignments due. The last 3 weeks, the data analysis assignments will be part of the final project.
- Some weeks, you will have a short written progress report due. These will consist of one or two quick online questions, separate from the main homework assignments. These could be questions on the required reading, reflections on your progress, or course feedback.
- Before each class, you will have readings. These include links to short internet articles such as: JMP help and documentation; information about data resources; illustrative analyses and presentations
of data; background and contextual information; academic articles; blog posts by thought leaders in data analysis.

- Each class will involve your active participation in class discussion. Bring your laptop computer to class as we will sometimes be doing activities together in JMP.
- Over the last 3 weeks of the course, you will complete a final project. The final project will be a more complex version of the weekly data assignments. You will submit a report on your findings, addressed to an appropriate audience of your choice, with your recommendations for decisions and actions based on your findings. The audience could be a memo to management, your colleagues, an agency, etc. You will also submit a short report to the instructors about the execution of your project, and a set of 3-5 slides that you would use for a presentation.

D. Grading

Data analysis homework (30%), progress reports (15%), class participation (15%), final project (40%)

E. A note about attendance

- If you cannot attend a class, you are expected to notify us beforehand.
- This course relies on collaborative learning. Your attendance is crucial to everyone’s success.
- Attendance will affect your grade.

F. Topics for the 7 weeks of the course.

<table>
<thead>
<tr>
<th>Date</th>
<th>Session Number</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan 25</td>
<td>Session 1a</td>
<td>Introduction to data analysis and JMP software</td>
</tr>
<tr>
<td>Jan 27</td>
<td>Session 1b</td>
<td>Exploratory Data Analysis (EDA); National public health surveys</td>
</tr>
<tr>
<td>Feb 1</td>
<td>Session 2a</td>
<td>Data visualization for exploration and communication</td>
</tr>
<tr>
<td>Feb 3</td>
<td>Session 2b</td>
<td>Accessing publicly available healthcare data</td>
</tr>
<tr>
<td>Feb 8</td>
<td>Session 3a</td>
<td>The quality improvement approach – Statistical Process Control (SPC) and control charts, Part 1</td>
</tr>
<tr>
<td>Feb 10</td>
<td>Session 3b</td>
<td>The quality improvement approach – Statistical Process Control (SPC) and control charts, Part 2</td>
</tr>
<tr>
<td>Feb 15</td>
<td>Session 4a</td>
<td>No class</td>
</tr>
<tr>
<td>Feb 17</td>
<td>Session 4b</td>
<td>Using financial data for healthcare management</td>
</tr>
<tr>
<td>Feb 22</td>
<td>Session 5a</td>
<td>Understanding health insurance claims data</td>
</tr>
<tr>
<td>Feb 24</td>
<td>Session 5b</td>
<td>Managing Data: intensive session</td>
</tr>
<tr>
<td>Feb 29</td>
<td>Session 6a</td>
<td>Patient satisfaction surveys, administrative data, and more</td>
</tr>
<tr>
<td>Mar 2</td>
<td>Session 6b</td>
<td>Telling a valid data story - Avoiding analysis pitfalls</td>
</tr>
<tr>
<td>Mar 7</td>
<td>Session 7a</td>
<td>Communicating with different audiences; Presentations</td>
</tr>
<tr>
<td>Mar 9</td>
<td>Session 7a</td>
<td>Communicating with different audiences; Presentations</td>
</tr>
</tbody>
</table>
G. Class sessions (detailed descriptions)

Session 1a (Jan. 25): Introduction to data analysis and JMP software

To do before class:
1. Download and install JMP; register as a JMP user when prompted. The instructions are on the course website: https://canvas.harvard.edu/courses/8572/pages/jmp-download-instructions. If you need help, contact acohen@hsph.harvard.edu.
2. Open JMP and do the JMP Beginners Tutorial. You can find it on the JMP Help menu under Tutorials. (Allow 10 minutes)

Session 1b (Jan. 27): Exploratory Data Analysis (EDA); National public health surveys

Readings before for class:
What is Exploratory Data Analysis (EDA) and how might it be a useful approach for you?

What do public health data sets look like and how can they be used?
1. (Briefly review) About the National Health and Nutrition Examination Survey (NHANES): http://www.cdc.gov/nchs/nhanes/about_nhanes.htm

What do data analysts do?
2. (Optional) Hadley Wickham, “Data science: how is it different to statistics?”: http://bulletin.imstat.org/2014/09/data-science-how-is-it-different-to-statistics%E2%80%89/

JMP specific readings – familiarize yourself with JMP Help resources. JMP Help is available from the HELP menu and online.
Session 2a (Feb. 1): Data visualization for exploration and communication

Readings before class:
What is the role of data visualization in healthcare management? How and why is it evolving?

5. (Optional) Graph makeover: Measles heat map: http://blogs.sas.com/content/jmp/2015/03/05/graph-makeover-measles-heat-map/

Telling data stories

JMP specific readings:
8. Overview of Graph Builder + review the NEXT few pages: http://www.jmp.com/support/help/Overview_of_Graph_Builder.shtml
9. (Optional) Unlocking the Power of Graph Builder (video): Unlocking the Power of Graph Builder

Session 2b (Feb 3): Accessing publicly available healthcare data

Guest: Cathy Barber of the Injury Control Center at the Harvard Chan School of Public Health will talk about how to use CDC Wonder and other publicly available health care data.

Readings before class:
What public health data resources are available to you for asking your own questions?

1. What is CDC Wonder?: http://wonder.cdc.gov/wonder/help/main.html#What_is_WONDER

Ask your own data questions!
JMP specific readings:
4. How is JMP Different from Excel?:
   http://www.jmp.com/support/help/How_is_JMP_Different_from_Excel.shtml
   a. (Reference for Windows users) Import Data Using the Excel Add-In:
      http://www.jmp.com/support/help/Import_Data_Using_the_Excel_Add-In.shtml
   b. (Reference for Mac users) Import Microsoft Excel Files:
      http://www.jmp.com/support/help/Import_Microsoft_Excel_Files.shtml

Session 3a (Feb 8): The quality improvement approach - Statistical Process Control (SPC) and control charts, Part 1

Readings before class:
Control charts are visual and statistical tools for finding signals in noise.
1. Helping leaders blink correctly: Split-second decisions have patient safety implications (Part 1)
2. Helping leaders blink correctly: Understanding variation in data can help leaders make appropriate decisions (Part 2)

JMP specific readings:
6. Overview of the Control Chart Platform:

Session 3b (Feb 10): The quality improvement approach - Statistical Process Control (SPC) and control charts, Part 2

Readings before class:
How do you measure a process?
1. The Science of Improvement on a Whiteboard!, Family of Measures (You will have to open an IHI account):
   http://www.ihi.org/education/IHIOpenSchool/resources/Pages/AudioandVideo/Whiteboard15.aspx
2. The New Terminology, Donald Wheeler; SPC Ink, 1998, no. 2:

2/18/2016 3:27:00 PM
3. Rate of Mass Shootings Has Tripled Since 2011, Harvard Research Shows
5. (Optional) How can the principles of statistical quality control be applied to statistics education: http://andrewgelman.com/2015/01/01/think-2015-can-principles-statistical-quality-control-applied-statistics-education/

JMP specific readings:

Session 4a (Feb 15): Holiday - No class

Session 4b (Feb 17): Using financial data for healthcare management

Guest: Laura Bostwick

Readings before class:

JMP specific readings:
1. Date/Time/Datetime columns should be Numeric: https://community.jmp.com/people/jeff.perkinson/blog/2015/11/01/10-more-things-you-dont-know-about-jmp#jive_content_id_2_DateTimeDatetime_columns_should_be_Numeric
2. Review Date/Time Functions: http://www.jmp.com/support/help/Date_Time_Functions.shtml
Session 5a (Feb 22):

Guest: John Freedman, MD, MBA, President, Freedman HealthCare (http://freedmanhealthcare.com/)

Readings before class:
1. Overview of the Massachusetts All-Payer Claims Database: 
2. The Basics of All-Payer Claims Databases: A Primer for States: 
   https://www.apcdcouncil.org/file/31/download?token=b7qt1hRQ
3. Gawande, A. “The Cost Conundrum.” This widely read article explores the possible reasons for 
   dramatic differences in health care costs in various areas of the country, based on Medicare claims 
   data analyses: http://www.newyorker.com/magazine/2009/06/01/the-cost-conundrum
4. Gawande, A. “Health Care’s Price Conundrum.” Gawande looks at a new study that used health 
   insurance claims data from three of the country’s largest insurance companies to revisit the findings 
   in his 2009 article: 
5. Anonymizing Data is Hard! :( Scroll down about half way) http://toddwschneider.com/posts/a-tale-
   of-twenty-two-million-citi-bikes-analyzing-the-nyc-bike-share-system/
6. (optional) The Price Ain’t Right? Hospital Prices and Health Spending on the Privately Insured. 
   https://canvas.harvard.edu/courses/8572/files/folder/Claims%20data%20files?preview=1919945 
   Manuscript for the study that is the basis of Gawande’s most recent article, above.

Session 5b (Feb. 24): Managing data: intensive session

Guest: Karthik Dinakar, MIT Media Lab. Karthik will be speaking about modeling and his work with big 
data: “Human-in-the-Loop Generative Models for Medicine.”

Readings before class:

Tidying data is the key element to valid data analysis
2. I’m a data scientist - mind if I do surgery on your heart?: http://simplystatistics.org/2015/06/08/im-
   a-data-scientist-mind-if-i-do-surgery-on-your-heart/

JMP specific readings
3. Managing Data-The commands on the Tables menu (and Tabulate on the Analyze menu) summarize 
   and manipulate data tables into the format that you need for graphing and analyzing. 
   http://www.jmp.com/support/help/Managing_Data.shtml
4. CREATE MAPS in JMP: Add Maps or Custom Shapes to Enhance Data Visualization: Start here -
   http://www.jmp.com/support/help/Create_Maps.shtml - and continue reviewing the options using 
   the contents at the bottom of the page.
5. Combining city & state information on map in Graph Builder - Part 1: 
   http://blogs.sas.com/content/jmp/2014/07/23/combining-city-and-state-information-on-a-map-in-
   graph-builder/
6. Visualizing geospatial data with the Street Map Service: 
   http://blogs.sas.com/content/jmp/2013/11/18/visualizing-geospatial-data-with-the-street-map-
   service/

**Session 6a (Feb 29): Patient satisfaction surveys, administrative data and more**

Guest: Richard Siegrist, MBA, MS, CPA, Adjunct Lecturer, Dept of Health Policy and Management. 
Former CEO of Press Ganey, Inc. (www.pressganey.com)

**Readings before class:**
1. HCAHPS Fact Sheet: http://www.hcahpsonline.org/facts.aspx
   https://canvas.harvard.edu/courses/8572/files/folder/Claims%20data%20files?preview=1927179
3. The Cost of Satisfaction: A National Study of Patient Satisfaction, Health Care Utilization, 
4. Relationship Between Hospital Performance on a Patient Satisfaction Survey and Surgical Quality: 

**JMP specific readings:**
1. About the Consumer Research platform in JMP-Analyzing Survey and Other Counting Data: 
   http://www.jmp.com/support/help/Categorical_Response_Analysis.shtml#161653
2. 5 things you don’t know about JMP: http://blogs.sas.com/content/jmp/2015/11/24/5-things-you-
   dont-know-about-jmp/
3. 5 more things you don’t know about JMP: http://blogs.sas.com/content/jmp/2015/12/15/5-more-
   things-you-dont-know-about-jmp/

**Session 6b (March 2): Telling a valid data story - Avoiding analysis pitfalls**

**Readings before class:**
Session 7a (March 7) and 7b (March 9): Communicating with different audiences; Presentations

[There will be 10 presentations in total. We will ask for volunteers or choose. There will be 3-4 options for the data to use.]

Readings before class:
1. Collaboration with Statisticians: http://stattrak.amstat.org/2012/05/01/collabstatist/
2. 7 Basic Rules for Making Charts and Graphs: https://flowingdata.com/2010/07/22/7-basic-rules-for-making-charts-and-graphs/
4. (Optional) How to share data with a statistician: https://github.com/shahabedinh/datasharing-with-statistician
I. BACKGROUND AND DESCRIPTION

A change occurred for public health in the wake of the terrorist assault of September 11, 2001 and the anthrax attacks that soon followed. Those changes were put to the test on April 23, 2009 when word came that a deadly virus was moving into the United States from Mexico, where it reportedly killed 90 people. The public health system once again was challenged by the 2014 Ebola outbreak in Western Africa and the subsequent appearance of cases in the United States.
In 2001, the public suddenly became cogently aware of the threats of terrorism and the possibility that a biological weapon could be unleashed that would wreak unprecedented devastation. A quick infusion of money and immediacy put the Centers of Disease Control and Prevention at the forefront of a massive effort to prepare the United States for this new and extraordinarily dangerous threat. It soon became apparent that achieving quick success in this endeavor was not simply a technical matter and was not something that public health could do on its own. Many people – in particular those outside the usual scope of “public health” thinking – would have to be engaged in the effort. Leaders in public health had to greatly expand their purview and their influence.

In 2009, leaders at the CDC quickly had to assess the nature of the danger from what was then called “swine flu” and “H1N1.” Despite years of planning and exercises, most of which imagined that a pandemic flu would originate in Southeast Asia, the advent of this deadly disease on our doorstep in North America caught many leaders by surprise. They had to quickly establish situational awareness, operationalize a mammoth system within the CDC, lead up to policy makers in Washington, and put into place a highly connected system to distribute medical supplies, inform state and local public health leaders, and begin the process for manufacturing a vaccine. One strategy and vocabulary that most CDC leaders in Atlanta had by their side was “meta-leadership.” The question is “What was the performance of the public health system in 2014 during the Ebola outbreak?”

From the beginnings of the declared 2009 “Public Health Emergency,” the importance of public health leadership in informing the public, guiding policy makers, and building an effective vaccine distribution and administration system was critical. It placed the public health system under new scrutiny and with it, there grew new opportunities to practice and advance public health leadership. This phenomenon became even more important as the full scope and nature of the pandemic evolved.

The importance of leadership as a determinant of the “public’s health” was made apparent in the aftermath of the Hurricane Katrina response. While the federal, state, and local leaders whose decisions and actions were at the center of the debacle did not identify themselves as “public health leaders,” their actions and decisions had a devastating impact on people whose
lives depended on the public system. The same was true during the 2010 Deep Water Horizon Gulf Oil Spill. These questions came into greater relief during the Ebola crisis of 2014-2015, when three nations in West Africa were overcome with cases and then, cases began to appear in the United States. Once again, public health questioned just what “leadership” meant for its mission to achieve safer and healthier people.

Two important public health lessons emerged. First is the importance of reaching beyond the traditional scope of “public health” to have a health impact, to include also matters of global warming, tobacco utilization, and nutrition. Second, the recognition that just as pollution, smoking, and stress are public health risk factors, so too is “bad leadership.”

It was in the midst of these developments, and in response to them, that the “meta-leadership” model emerged.

Meta-leaders are able to engage others often using “influence” when they may not have direct authority. Public health meta-leaders recognize that improving the public’s health ultimately is a systems enterprise that engages numerous other people and organizations: hence, the importance of “connectivity.” These systems encompass many silos of separate activity, expertise, and professional identity: among them epidemiologists, clinicians, managers, trustees, and different departments within an organization as well as outside organizations. The degree to which these silos are intentionally linked is an important predictor of system success. Organizational lines of authority and information technology certainly yield a measure of connectivity. Ultimately though, public health is a human enterprise, and human factors – chief among them leaders and leadership - determine the success or failure of system connectivity.

Meta-leadership concepts and practices have been applied in a number of national scale events since its first development. Leaders of the Boston Marathon response (2013), the Hurricane Sandy response (2011), the Deep Water Horizon Gulf Oil Spill (2010) and the Joplin Tornado (2011) applied these models and methods to the complex processes of leading through a crisis that overwhelmed routine systems. Using these same methods on a day-to-day basis builds the emotional intelligence of leaders and the connectivity of large complex systems.
This course introduces the concept and practice of meta-leadership. Meta-leaders are committed and capable of advancing connectivity within the public health and health care domain and beyond. “Meta-leaders” are “leaders of leaders.” They act as system connectors able to reach outside their silo to fashion intentional linkages among separate endeavors. The course will delve into the five critical dimensions of meta-leadership practice. When infused into the culture of a complex health system, meta-leaders leverage system assets and capabilities to boost performance and productivity.

Leadership itself is a very personal set of skills, attitudes, behaviors, strategies and outcomes. It is much more than “management.” Leadership is very much about the leader as a person: what are his or her values and aspirations, and what is the unique style and thinking she or he brings to the task? There is rarely ONE correct way to address any particular leadership challenge. Different people will handle the same problem differently, often a function of their unique strengths and weaknesses. This is the “art” of leadership which complements the skills of leadership. The key to this “art” is leveraging the unique profile you have to the unique dimensions of the problems you face. And learning how to best create this fit – being as good as you can be in the situations you will face - is in part the learning and experience that you will gain in this course.

II. COURSE OBJECTIVES

Knowledge: By the end of the course, you will have knowledge of:

1. The principles of “leadership” and “meta-leadership” and their relevance to public health problem solving.
2. The application of systems thinking to public health leadership.
3. The differences and commonalities between leadership and management.

Skills: By the end of the course, you will be able to:

1. Create a leadership theme and activate others to follow you.
2. Deliver a speech on a topic of critical public health importance.
3. Engage people with different perspectives and agendas into a shared strategy and action plan.

Values: The course is based on the following values and assumptions:

1. You are the meta-leader: what you do, say, and believe will shape what you are able to accomplish and whether you will be able to get other people to follow you.
2. Leadership can be used for both good and evil purposes. It is among the most powerful of social movers. It is the hope of the instructors that you will use what is learned for good purposes.
3. Passion is a force shared by effective leaders. To be effective, you must find and communicate your passion and use it to shape your leadership values and goals.

Measurable Outcomes: Your grade will be developed in the following manner:

1. Your self-assessment of your work in the course and the learning you accomplished.
2. Your assessment should be based on your in-class participation, completion of the readings, and success on the assignments.
3. It is the hope of the instructors that you will apply what you have learned to shape your public health leadership career. You should incorporate in your assessment the extent to which you have used this week to fashion your leadership agenda.
4. The instructors will review your self-assessment and the quality of your assessment as they submit your grade for the course.

II. CLASS OUTLINE

DAY ONE: MONDAY, JANUARY 4, 2016  ~  LEADERSHIP: WHAT IS IT?

8:30 - 9:15 a.m. Introductions and review syllabus
*Name and Department

9:45 - 10:20 a.m. Theme: What is leadership and meta-leadership?
Leadership definitions.
Three leaders: a great one, lousy one, and you
Activity: Presentation and class discussion

10:20 – 10:30 a.m. Break

10:30 - 11:45 a.m. Theme: The Dimensions of Meta-Leadership Practice
Activity: Presentation

11:45 - 12:20 pm Introduction to the feedback exercise
Introduction to the afternoon activity

12:20 - 1:35 p.m. Prepare Afternoon Presentation and Lunch

1:35 - 5:20 p.m. Theme: Establishing your leadership presence
Activity: Your opening speech to your staff as the new
Department of Public Health Commissioner or National
Health Minister

Assignment: In one page, define yourself as a leader, what are your
strengths, and what are your skill areas needing
improvement?

Reading Assignment: Matusak, L. “No Previous Experience Required,” Finding


**DAY TWO: TUESDAY, JANUARY 5, 2016 ~ META-LEADERSHIP IN PRACTICE**

8:30 - 9:00 a.m. Discussion of readings

9:00 - 10:20 a.m. *Theme:* Your Practice of Meta-Leadership: Strengths and Weaknesses  
*Activity:* Discussion

10:20 – 10:30 a.m. Break

10:30 - 12:20 p.m *Theme:* Your Practice of Meta-Leadership: Strengths and Weaknesses  
*Activity:* Discussion

12:20 - 1:30 p.m. Lunch

1:30 - 3:20 p.m. To Be Determined: Suzet McKinney or Three Zone Meta-Leadership

3:30 – 4:20 p.m. *Theme:* Meta-Leadership in Practice  
*Activity:* Observe and analyze video of Dr. Richard Besser, Acting Director of the Centers for Disease Control and Prevention, Press Briefing on H1N1, April 26, 2009. White House Press Room, Washington, D.C.

4:20 - 5:00 p.m. Journaling

Assignment tonight: In one page, write about your passion for public health leadership.


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**DAY THREE: WEDNESDAY, JANUARY 6, 2016 ~ LEADERSHIP PERSONA & PASSION**

8:30 - 9:00 a.m.  Discussion of readings

9:00 - 10:50 a.m.  
*Theme:* “Your Meta-Leadership Brain”  
*Activity:* Eric J. McNulty, Director, Research and Professional Programs, National Preparedness Leadership Initiative, A joint program of the Harvard School of Public Health and the Harvard Kennedy School of Government

10:50 – 11:00 a.m.  Break

11:00 - 12:20 a.m.  
*Theme:* Crisis leadership: The response to the Boston Marathon bombings.  
*Activity:* Presentation and discussion

12:20 - 1:30 p.m.  
Lunch

1:30 - 3:20 p.m.  
*Theme:* “Your Leadership Story & Your Leadership Passion”  
*Activity:* Interviews, Lenny Marcus of Barry Dorn; Barry Dorn of Lenny Marcus

3:20 - 3:30 p.m.  Break

3:30 - 4:30 pm  
Discussion: Your leadership passion

4:30 - 5:00 p.m.  
Journaling
Assignment tonight: Prepare for the “Plot Your Career” exercise. On one page, predict your next four jobs, each of which you will have for five years. Next to each job, describe what you will need to know or be able to do to effectively lead in that position.


DAY FOUR: THURSDAY, JANUARY 7, 2016 ~ LEADERSHIP INTO PRACTICE

8:30 - 9:00 a.m. Discussion of readings

9:00 - 10:50 a.m.
Theme: “Meta-Leadership in Practice”
Activity: Speaker – Richard Serino\nDistinguished Visiting Fellow Harvard School of Public Health, National Preparedness Leadership Initiative
Former Director, Boston Emergency Medical Services
Former Deputy Administrator, FEMA

10:50 - 11:00 a.m. Break

11:00 - 12:30 p.m.
Theme: “Plot Your Career” Exercise
Activity: Meet in groups of four. Each person has 15 minutes, 10 minutes for presentation and 5 minutes for discussion.

12:30 - 12:35 pm Feed Back Exercise Assignments

12:35 - 1:45 p.m. Lunch
1:45 pm - 2:35 p.m.  
**Theme:** Your view of leadership – how you are viewed as a leader  
**Activity:** Feedback session one  
(Students)  
Students find out who observed them and give 25 minutes feedback.

2:35 – 2:45 p.m.  
Break

2:45 - 3:35 p.m.  
**Theme:** Your view of leadership – how you are viewed as a leader  
**Activity:** Feedback session two  
(Students)

3:35 – 3:45 p.m.  
Break

3:45 - 4:30 p.m.  
**Theme:** Lessons learned on the road to leadership  
**Activity:** Class discussion: Lessons learned from the leadership sessions…debrief class  
(Students)

4:30 - 5:00 p.m.  
Journaling

**Assignment tonight:**  
Prepare your class presentation for tomorrow.  
Put your vision into a compelling message. Excite the audience with your passion. Give them something they can do to be part of the effort you are leading. And at the end of the speech, will they want to follow you?

**DAY FIVE: FRIDAY, JANUARY 8, 2016 ~ THE PASSION & COMMITMENT OF THE LEADER**

8:30 - 10:20 a.m.  
**Theme:** Your public health passion  
**Activity:** Student presentations

10:20 – 10:30 a.m.  
Break

10:30 - 12:20 p.m.  
**Theme:** Your public health passion  
**Activity:** Student presentations (continued)

12:20 - 12:30 p.m.  
Break

12:30 - 1:00 p.m.  
Bag lunch together—bring desserts/drinks as you like

1:00 - 2:00 p.m.  
**Theme:** What is leadership- your career  
**Activity:** Class discussion: Leadership definitions

2:00 – 3:00 p.m.  
Course Journaling and Course Plus/Delta
CORE COURSE IN HEALTH POLICY 2015-2016
HEALTH POLICY 2000A/SUP957/HPM246-01

CLASS MEETINGS
Tuesday & Thursday, 4:15-6:00pm
14 Story Street, 4th Floor Conference Room

INSTRUCTORS
Joseph Newhouse
Kennedy School of Government; Department of Health Care Policy, HMS; Department of Health Policy and Management, HSPH
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TEACHING FELLOW
Kelsey Berry
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COURSE OVERVIEW
This yearlong seminar is required for doctoral candidates in health policy and is open to others by permission of the instructor. The course is intended to familiarize students with the health policy research literature and selected questions in the field. Topics covered will include the financing and organization of health care, medical manpower, medical malpractice, technology assessment, prevention, mental health, long-term care, and quality of care.

The course is organized around guest lectures by faculty from the Faculty of Arts & Sciences, the Kennedy School of Government, the T.H. Chan School of Public Health, the Medical School, the Business School, and the Law School. Discussion sessions will be interspersed with the invited lectures and will examine the policy relevance, research methods, and technical details of many of the presented topics in more depth.

READINGS
Readings for the course will generally consist of journal articles assigned by the guest lecturer and should be read in advance of each lecture. When provided by the lecturers, the syllabus includes an overview of the goals for the lecture and identifies key points for which to read in order to help you better prepare for class.
The majority of assigned readings are available electronically. Links are provided in the syllabus (see below), or students can search for the articles using the Harvard E-Research website: http://e-research.lib.harvard.edu. Some readings are available on the course website. Where readings are not available electronically or on the course website, books have been placed on reserve at Littauer Library in the Harvard Kennedy School of Government (HKS).

It is also suggested that you purchase the following books, which are available at the COOP and on reserve at Littauer Library at HKS:


**Library Training Sessions**

The teaching fellow has arranged for two library training sessions to be held during the fall semester. These sessions will help students prepare the literature review due at the end of the fall semester.

- George Clark, a reference librarian at Lamont, will provide training on how to search for government documents. These sessions will take place Fri., Oct. 2 from 10am-11am and 2-3pm in Lamont Library, Room 310. Please plan to attend one of the sessions.
- Paul Bain, a reference librarian at Countway, will provide training on how to use Pubmed. This session will take place Thurs., Oct. 8 from 6-8pm at 14 Story Street (dinner will be provided).

**Course Requirements**

**Attendance & Participation:** 33%

This course meets twice per week. Students are expected to attend and participate in the 2-hour lecture and discussion sessions. This participation includes reading 3-4 relevant articles assigned by the lecturers prior to each class. If you are unable to attend a lecture, please let the teaching fellow know by email in advance of the session.

**Written Assignments:** 67%

There will be written assignments for most of the 9 seminar sections, and a 10-15 page research proposal that students will develop throughout the Spring semester. Section assignments will
include short essay questions, a literature review, and critical appraisals of published research papers. Due dates are as follows:

**Fall**
- Essay #1 (Politics of Health): **10/6**
- Essay #2 (Public Health): **11/5**
- Essay #3 (Quality or Ethics): **12/3**
- Literature Review: **12/14**

**Spring (Tentative Dates)**
- 2-3-Paragraph Update on Research Proposal: **2/11**
- Essay #4 /Article Critique (Research Methods): **3/10**
- 2-page Description of Study Design/Methods: **3/31**
- Essay #5 (Economics of Health): **4/19**
- Presentation of Research Proposal: **4/21** and **4/28** (6:00-8:00 pm)
- Final Research Proposal: **5/05**

The research proposal should be written in the form of an F31 predoctoral fellowship application to NIH or AHRQ. You should download the instructions for PHS form 398 at [http://grants.nih.gov/grants/funding/phs398/phs398.html](http://grants.nih.gov/grants/funding/phs398/phs398.html). Go to Section 5.5 “Content of Research Plan” and follow the instructions. Note that there is a human subjects section, which pertains to the next requirement.

**Human Subjects Training:**
To pass the Spring semester, students will be expected to complete an online Human Subjects Training Course and present verification. The training can be accessed through the following link: [https://www.citiprogram.org/default.asp](https://www.citiprogram.org/default.asp). Students should do the Basic Course in the Protection of Human Subjects for Social and Behavioral Research Investigators. For affiliation, please select Harvard University (Cambridge/Allston Campus). Completed training certificates should be e-mailed to both the teaching fellow and to Jessica Livingston ([jessica_livingston@harvard.edu](mailto:jessica_livingston@harvard.edu)).

**Grades:**
Grades will be assigned separately for the first semester and the second semester.
FALL SEMESTER SYLLABUS

Please note that locations of readings are indicated in brackets below each citation. Email the teaching fellow if you have any trouble accessing the readings.

SECTION I: OVERVIEW (SECTION LEADER: JOE NEWHOUSE)

9/3: Overview of the Course and Health Care Financing (J. Newhouse)

Be prepared to comment on the themes of the Fuchs book, which is a classic.

  - Introduction to This [the 2nd Expanded] Edition
  - Introduction [this was part of the 1st edition]
  - Chapters 1 and 6
  - “What Every Philosopher Should Know About Economics”

9/8: Introduction to U.S. Health Care (H. Huskamp)

This session is intended to provide a broad overview of the U.S. health care system: how much we spend, the role of the government in financing health care, gaps in our health insurance system, and issues of value and quality of care. Most of the topics we will cover will be addressed in greater length in individual sessions later in the year. Although most of the class will be in lecture format given the amount of material to cover and the nature of the session, be prepared to discuss what you see as the strengths and weaknesses of our system and how the recent health reform law may affect them.

Required Reading:


Optional Reading (for those who would like more background):


9/10: Determinants of Health (D. Cutler)

This class discusses the evolution of human health over time, and briefly across space. The goal is to familiarize you with basic demographic trends that affect health policy debates.


  o Chapters 1 and 2


SECTION II: POLITICS OF HEALTH (SECTION LEADER: BOB BLENDON)

9/15: Public Opinion and Health Politics (R. Blendon)

  o Chapter 1


9/17: Comparative Health Systems (R. Atun)


9/22: The US Congress (D. King)

Objective:
We will explore a recent piece of health legislation (the “Mental Health Parity Act”) as a window into how health policy is handled on Capitol Hill. What roles do the various institutions play, and why do legislators take on some topics while avoiding others? Students will come to class with two brief written assignments that they should be ready to share with others, as described in “assignments” (2) and (5) below.

Assignments:
1. Please read the Haskell chapter first, because it is a useful overview of how the Congress works, at least in “theory.” The chapter focuses on process and procedure, not on personalities or expertise, but I need you to understand the mechanics well before reading the case.
2. Read the 13-page “Mental Health Parity” case twice. The first time through, just try to get a sense of who was involved, and why they got involved, and what institutional chutes folks went through. On the second reading, please make a list with two columns. Label one column “typical” and the other “not typical.” As you are reading, please write down elements of the case that you think are fairly typical of the way health policy is handled in Congress (the referrals to committees, for example), and elements that strike you as not typical. Don’t worry about getting a “right” answer – just put things down on paper.
3. Review the health subcommittee rosters for Ways and Means and for Commerce, using the links below. Choose one elected representative from each committee, and find information that might help you understand why they are on those subcommittees. For example, you might choose Kathy Castor (D-FL) from Commerc and Devin Nunes (R-CA) from Ways and Means. Explore, for a while, their wiki pages or other sources, and get a sense for why they might be interested in health policy. Be sure to note a major city for each of the
members you choose. (Clovis, CA is in Representative Nunes’ district, for example, and Caster represents much of Tampa, FL.)

4. Using the 990 finder from the National Center for Charitable Statistics, please find the most recently-available 990 for any health care organization in each of the congressional districts you identified above. You may find the 990 locator through foundationcenter.org to be a bit easier to use (http://990finder.foundationcenter.org). My goal is for you simply to find and open a couple of 990s – which will help give you a sense of how these non-profits are engaged in a congressional districts. In the example above, and focusing on Tampa, the University Community Hospital would be a natural choice.

5. Using opensecrets.org, please navigate to the 2014 “race summaries” for the two legislators you’ve chosen above. Please write down the names of the top five contributors to the member’s campaigns in the 2014 cycle, and be ready to share that list with the class.

Readings:

- National Center for Charitable Statistics, 990 Finder, (link off of the homepage here: http://nccs.urban.org/)
- Fundraising summaries by industry, for members of the House of Representatives, linked here: http://www.opensecrets.org/

9/24: The Politics of Medicare (A. Campbell)

  - Focus on Chapters 3, 4, 5, and 7

9/29: The History of US Health Reform (J. Hero)

Please think about the following questions with the readings:

1. Why did former national health reform efforts fail in the United States?
2. How would you design a study to determine the factors that cause health reform to fail versus succeed?
3. What can past reform efforts teach us about what to expect about health reform going forward?

4. What is the difference between political analysis and policy analysis?

Required Reading:


Recommended Reading:


  o This is a lengthy but useful (though dated) article. Skimming it effectively will expose you to the competing explanatory frameworks that exist within political science to understand the different forms of national health insurance (NHI) efforts (and outcomes) in Canada, Britain, and the US. It is less important to focus on the details (who, what, where) within each of the country case studies (after page 84), though I encourage you to all to look at the US case study pp.106-126.

SECTION III: PUBLIC HEALTH (SECTION LEADER: JOSH SALOMON)

OBJECTIVES:
Public health provides the theoretical basis for prevention and the practical tools for population-based care. A major emphasis of this section will be on the development, interpretation, and use of evidence for public health policy. The section aims to provide exposure to the techniques used to evaluate public health problems in the U.S. and globally, and to develop effective strategies to respond to these problems. Students should expect, through the sessions, discussions, and readings, to gain a broad exposure to population-based information systems, intervention strategies and analytic methods with an emphasis on their real-world relevance via national and international case studies; and an appreciation for the way that evidence drawn from diverse data sources, combined with analytic tools from disciplines such as epidemiology, economics and statistics, intersects with other considerations such as politics in the evolution of public health policy. Specific objectives for the section will include:
1. Assessment of health and disease problems in populations – to gain an understanding of the major tools from epidemiology, biostatistics and health economics used in population health assessment; how data sources are used to identify health trends and establish associations between health outcomes and preventable or modifiable factors; how the quality of information may be evaluated and multiple data sources synthesized.

2. Evaluation of public health policies – to gain an understanding of methods for assessing the possible impact of different policies; comparing alternative courses of action in terms of costs and health benefits; incorporating other types of considerations (e.g. distributional concerns) in setting priorities for public health policy.

3. Translation of evidence into action – to gain an understanding of how governmental and other agencies affect public health, and how public health practitioners can influence and participate in formulating, advocating and implementing policy; to consider examples of how evidence is used (or manipulated or ignored) in policy formulation; be able to identify and critique the fundamental function of public health within the various case studies that will be presented; to identify the strengths and limitations of general public health approaches.

10/1: Introduction, and Measuring Population Health (J. Salomon)


10/2: Library Training – Lamont/Searching Government Documents (G. Clark)

- No preparation required. Please attend one session, either from 10am-11am or 2-3pm. Lamont Library, Room 310.

10/6: Essay #1 (Politics of Health) DUE
10/6: Technology Assessment and Resource Allocation in Health Care (M. Weinstein)

This session concerns the inevitable need to allocate (i.e., ration) health care services, and various approaches that have been attempted or proposed to apply explicit, outcome-based criteria (e.g., cost-effectiveness analysis) for resource allocation.

Cost-effectiveness analysis is used widely in most of the industrial world to guide decisions about payment and reimbursement of medical services. In the US, use of cost-effectiveness analysis using quality-adjusted life years as the measure of health improvement is forbidden from policy decision making by the Affordable Care Act. It is used mainly behind the scenes in the private insurance sector, by medical professional organizations in guideline formulation, and to evaluate prevention programs such as vaccination. Can and should cost-effectiveness information be used in US health care decision making, and if so, how?

Required Reading:


Supplementary Articles:


10/8 4:15-8:00 pm: Discussion Section (K. Berry) and PubMed Training (P. Bain)
• Dinner will be provided during library training (6-8pm) at 14 Story Street.
• Discussion session (4:15-6pm) preparation TBD
• Update: In the survey I circulated regarding 10/8 discussion section, you expressed an overwhelming interest in ETHICS! The second choice was to chat about "big picture" health policy. I'd like to use the session to touch on both. Here's what I'd like you to prepare for tomorrow:
• ETHICS -- using Brock & Wikler's "Population-Level Bioethics: Mapping a New Agenda" (On Canvas)…
  o Please read sections 1, 2, 3, 5, 16, 18 [this amounts to ~7 paragraphs]
  o Read one additional section of your choosing, whatever strikes your fancy
  o Highlight or write down one sentence from what you've read (either the assigned paragraphs or your choice paragraph) that you thought was an interesting question, or claim, etc. and be ready to read it aloud in class.
• INTERDISCIPLINARY HEALTH POLICY -- using Berman's "Improving the Delivery of Health Services" (On Canvas)…
  o Read pages 14-16 and up to the red line on 17
  o Consider the role your or another disciplinary track (say, politics... ethics... those unrepresented in your cohort) plays in this case scenario, whether or not it is explicitly addressed in the reading. No need to prepare anything formal, this is just a jumping off point for discussion.
• This preparation should take no more than 45 minutes to an hour. If it's going beyond that, just stop where you are, and shoot me an email letting me know how far you got.

10/13: Post at least one possible topic for your literature review/research proposal to the Discussion Page on the course website. Each student should create his or her own discussion entitled “Research Proposal - First Name”.

10/13: Global Obesity Epidemics: Risk Factors and Policy Implications (F. Hu)

The worldwide increase in obesity has been driven by global trade liberalization, economic growth and rapid urbanization. Owing to the scope and complexity of the obesity epidemic, prevention strategies and policies across multiple levels are needed in order to have a measurable effect. Although many putative causes of the obesity epidemic exist, in this Review the effect of globalization on global trends in obesity prevalence is discussed and population-based interventions from several countries are reviewed. The authors make broad policy recommendations for obesity and chronic disease prevention at the global population level.


### 10/15: Public Health Case Studies: HPV and Cervical Cancer (J. Kim)


**10/20: Provide thoughtful feedback to 3 of your classmates on their proposed literature review/research proposal topics. Use the discussion forums that were previously created on the “Research Proposals” page of the course website.**

### 10/20: Debate Section (J. Salomon)

• Debate section, no preparation required

**SECTION IV: ETHICS (SECTION LEADER: NORMAN DANIELS)**

### 10/22: Justice and Health Policy (N. Daniels)

*Required Reading:*

  
  o Chapters 1, 2 and 3

*For students not familiar with the work of John Rawls, it is recommended that you skim:*

10/27: Priority Setting and Fair Process (N. Daniels)

  - Chapters 4 and 11

10/29: Responsibility for Health (D. Wikler)

**Required Reading:**

  - 20, See also erratum notice, *loc cit* July 2013 issue, 328-329

**Optional Reading:**


11/3: Ethical Issues in Cost-Effectiveness Analysis (D. Wikler)

**Required Reading:**


**Optional Readings:**


**Supplemental Readings:**


**11/5: Email to Kelsey Berry your final literature review/research proposal topic and, if desired, a presentation slide on that topic for Tuesday’s discussion section.**

**11/5: Essay #2 (Public Health) DUE**

**11/5 6-8 PM: Commodity: Selling Organs, Eggs, and Other Things (G. Cohen)**

*Note time change: Core will be held 6-8 PM on 11/5 rather than 4:15-6 PM. 14 Story St.*

• In Re Baby M, 537 A.2d 1227 (N.J. 1988) [Courseweb, taken from Joseph Singer, Property Law]

  o pp. 131-140 (Beginning of chapter on Prostitution and Baby Selling only until “A Special Case of Commissioned Adoptions”)

  o Chapter 6 (Organ Sales)

11/10: Discussion Section on Research Proposals (K. Berry) (Note: Harvard is holding class on Veteran’s Day)

• Please come prepared to present & discuss student research proposals

SECTION V: QUALITY (SECTION LEADER: BRUCE LANDON)

11/12: Quality of Care (B. Landon)


11/17: Scientific Basis of Improvement (D. Goldmann)


11/19: Organizational Behavior (S. Singer)

  o Please consider the following objectives and questions when reading the case:

Case Objectives:
• Distinguish conditions under which solving many small problems is more desirable than solving a few big impact problems
• Distinguish between first order and second order problem solving and analyze their consequences for performance of healthcare organizations
• Identify the potential conflicting incentives that cause people to choose to workaround rather than resolve problems
• Develop strategies for promoting sustainable second order change in organizations

Case Preparation Questions:
1. How has CCHMC designed its approach to improving quality to accommodate and leverage distinctive characteristics of healthcare organizations?
2. What do you think about CCHMC’s improvement team’s policy of transparency? Are they being too open with their performance data?
3. Consider Exhibit 3, Figure C. Which problem would you recommend they address first and why?
4. Moving forward, what would you recommend Kotagal do to sustain the hospital’s improvement efforts?

Additional Readings:

11/24: Patient Safety (S. Weingart)

11/26: No Class (Thanksgiving)

12/1: Medical Malpractice (A. Kachalia)


12/3: ESSAY #3 (Ethics or Quality) DUE

12/3: Quality Policy (D. Blumenthal)

*Required Reading:*

  - Executive summary
Optional Reading:


  Note: This article was also assigned for Dr. Weingart’s lecture on 12/1


12/4-12/10 FALL READING PERIOD

12/11-12/21 FALL EXAM PERIOD

12/14: Literature Review DUE

12/22–1/24 WINTER RECESS
POLITICAL ANALYSIS AND STRATEGY FOR U.S. HEALTH POLICY
SUP 575 / HPM 247
Harvard University
Harvard Kennedy School/ Harvard T.H. Chan School of Public Health
Spring 2016
Course Syllabus

<table>
<thead>
<tr>
<th>Faculty</th>
<th>Course Staff</th>
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<tbody>
<tr>
<td><strong>Robert J. Blendon</strong></td>
<td><strong>Teaching Fellows</strong></td>
</tr>
<tr>
<td>Office: HKS: Taubman 410 / HSPH: Kresge 402</td>
<td>The teaching fellows will use the following as the primary course email: <strong><a href="mailto:SUP575TFs@gmail.com">SUP575TFs@gmail.com</a></strong></td>
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<td>Loren Saulsberry</td>
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<td><em>PhD Candidate in Health Policy (Political Analysis)</em></td>
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<td><strong>Course Assistant</strong></td>
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<td>Elizabeth Steffen</td>
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<td>Taubman 471, Phone: 617-495-5066</td>
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Weekly Meeting Time and Location: Mon. & Wed. 4:15 pm – 6:00 pm, L140 (HKS Campus)
- **First Day of Class**: Monday, January 25, 2016
- **Last Day of Class (in-class final exam)**: Wednesday, April 27, 2016

Course Overview
Health policy making in the U.S. has a strong political dimension. This course offers analytical insights into understanding U.S. health policymaking and developing political strategies that influence health policy outcomes. The course provides strategic skills for those in future leadership roles to influence the health policy process. Major topics to be covered include analyzing how health policy is shaped by interest groups, media, public opinion, legislative lobbying, elections, coalition building, policy legacies, institutions, and the politics of information. Student-led case studies focus on marijuana legalization in Colorado and defunding Planned Parenthood, as well as major movements toward comprehensive national health insurance in the U.S. including the Clinton and Obama health plans and the debate over the implementation of the Affordable Care Act. **This course is not open to auditors.**
Course Objectives
This course is designed to meet the following objectives:
1. To understand why U.S. health policy involves political decision-making
2. To analyze the politics of major health policy developments in the United States;
3. To understand the ways political analysis can improve health policy and its implementation;
4. To develop the following skills in political strategy and case analysis:
   a. Diagnosing the political environment for health issues
   b. Identifying who makes the key health policy decisions
   c. Understanding when an issue will be a “political issue”
   d. Creating effective political strategies to influence U.S. health policy

Course Requirements
Students will be expected to complete assigned readings, participate in class discussions, prepare for case discussions, and write two political strategy memos and corresponding Op-Ed pieces. Students are also required to submit questions to the teaching fellows to be discussed in class.

The final exam will be given during the last day of class (Wednesday, April 27, 2016).

Case Assignments
All students are expected to submit a political strategy memo & op-ed on THREE (3) selected cases for political analysis. Students who prepare memos are expected to join in a group discussion of their case, representing their assigned actor. The memo is due via email on the day of case discussion, prior to the presentation. Late materials will not be accepted without prior discussion with a teaching fellow and permission from the instructor. Additional guidance regarding the case assignments, including the format of the strategy memo, op-ed and discussion will be made available to the students once the course begins.

Note on collaboration and academic integrity: please develop your own original work, always cite your sources, and do not collaborate with classmates on any of the assignments.

Electronic Materials & Course Website
- Materials are posted on the HKS course website on Canvas (https://canvas.harvard.edu/).
- Please note that although this course is cross-listed with HSPH, the HPM 247 course website will not be activated or used throughout the course.
- An internal mailing list will also be developed during the first few weeks of the course. Please ensure that you can receive emails from SUP575tfs@gmail.com.
- The Teaching Fellows will share information for cross-registered students to gain access to course materials through Canvas once the course begins.

Course Grading
Class Participation* 20%
Political Strategy Memos and OpEds (3) 45%
Final Exam: 35%

*Class Participation
Class participation includes: 1) attendance, 2) active participation during class time, 3) the case discussion (details in the Assignment Description document), and 4) submitting questions for at
least 8 different lecture days on assigned readings, relevant political strategies, cases, or for guest speakers throughout the course.

To facilitate class participation, please bring your name plate to each class. Students should either have a name plate made (the Staples on JFK Street makes them for ~$5, ask for the HKS name plate template), or bring your own name plate with your name clearly displayed in large font.

Questions will be graded on both quality and quantity (we suggest submissions for at least 8 lectures over the course of the semester). Please submit questions by 11:59pm on the night before lecture using the form emailed to you from the TFs in the first week of class. During each class, a few students may be selected to share their questions with the class, therefore all students should be prepared to restate and discuss their submitted question during class.

Class Protocol
Students are expected to attend all classes and attendance will be recorded. During class, please turn off cell phones or switch them to silent. Laptops are allowed, but please do not use the Internet for email or other purposes during class, as they distract your classmates. While covered drinks are allowed, please keep snacks to a minimum.

Lectures will not be videotaped, so regular attendance is required.

Course Participants
All students are welcome, no prerequisites are required. However, students will benefit most from this course if their professional interests include improving their skills and insights into how to influence the outcomes of future U.S. health policy debates. The principal focus of the course is political strategy in this field, rather than the more theoretical aspects of the politics of health policy. Enrollment is limited to those students taking the course for credit and is NOT open to auditors. Undergraduate students are welcome to enroll but may NOT take the course pass/fail.

Special Evening Sessions on American Politics and the Affordable Care Act
A special session will be held after class on Monday, February 8, 2016, for international students or others who wish to gain a more basic understanding of the American political system. The teaching fellows will email you with further information at the start of the semester.

Another special session as a primer to the Affordable Care Act will be held after class on Wednesday, February 10, 2016, for any student who wishes to gain a more basic understanding of the American health care system.

Required Books


Although we encourage students to read the entire book, we have assigned less than half of the chapters to ensure a manageable workload. Chapters 1-3, 5-6, 10, 14-16 and Epilogue are required readings.

Links to readings that are available online or through the Harvard Libraries are provided on the course website. Books are available on reserve at the Kennedy School Library and the Countway Medical Library.

**Recommended Further Reading**
We suggest that students read the following texts for additional background and context.


DETAILED COURSE SCHEDULE & READINGS

Session 0:  Shopping Day (Time and Location TBD)
Fri. 1/22/2016  Robert J. Blendon

Session 1:  The Politics of Health Care
Mon. 1/25/2016  Robert J. Blendon

Assigned Readings:
Kingdon JW. *Agendas, Alternatives and Public Policies*. Chapters 1-3 & 9. [REQUIRED BOOK]

Session 2:  Data for Political Strategy
Wed. 1/27/2016  Robert J. Blendon

Assigned Readings:

Session 3*:  Developing a Political Strategy for Health Politics Part I:
A Practical Guide to Political Analysis Research
Mon. 2/1/2016  Robert J. Blendon and Teaching Fellows

*This will be an interactive session on how to find data that helps you formulate a political strategy. If you have a laptop, please bring it to this session to follow along on how to access political data.

Assigned Readings:
Assignment Description document [Handout]
Harvard Kennedy School Communications Program. “How to Write an Op-Ed or Column.” Op-Ed guidelines [Handout]
Session 4: Developing a Political Strategy for Health Politics Part II: Writing a Political Strategy Memo/Op-Ed and Case Examples
Wed. 2/3/2016 Robert J. Blendon and Teaching Fellows

Assigned Readings:
Sample political strategy memo from a former student [Handout – not available on course site]

Session 5: Politics of Interest and Advocacy Groups
Mon. 2/8/2016 Robert J. Blendon

Assigned Readings:

Session 6: The Media and Public Opinion
Wed. 2/10/2016 Robert J. Blendon

Assigned Readings:

Mon. 2/15/2016: NO CLASS: President’s Day

Spring 2016 syllabus revised January 4, 2016
Session 7: Health Politics in the States  
Wed. 2/17/2016 Robert J. Blendon

Assigned Readings:

Session 8: History of Politics of the National Healthcare Reform Debate  
Mon. 2/22/2016 Michael Botta, PhD

NOTE: The speaker has requested that students do not bring laptops, tablets, or other digital devices to this session. Please prepare accordingly for taking notes by hand.

Assigned Readings:
Chapters 1-3 and 5-6. [REQUIRED BOOK]
Kaiser Family Foundation. 2009. National Health Insurance - a Brief History of reform efforts in the U.S.  

Optional Further Reading:

Session 9: Case Discussion 1: Marijuana Legalization in Colorado  
Wed. 2/24/2016 Robert J. Blendon and Students

Assigned Readings:

Optional Further Reading:

Session 10: Campaigns, Elections, and Health Policy
Mon. 2/29/2016 Robert J. Blendon

Assigned Readings:

Session 11: The Massachusetts Health Care Plan: A Political Perspective
Wed. 3/2/2016 Guest: Nancy Turnbull Senior Lecturer on Health Policy/Associate Dean for Educational Programs at Harvard School of Public Health

Assigned Readings:

Session 12: Case Discussion 2: Clinton Health Reform
Mon. 3/7/2016 Robert J. Blendon and Students

Assigned Readings:
Optional Further Reading:

Session 13: Review Session
Wed. 3/9/2016 Robert J. Blendon

Assigned Readings:

Mon. 3/14 – Wed. 3/16 No Class - SPRING BREAK

Session 14: Politics and Policy Research
Mon. 3/21/2016 Guest: Diane Rowland, Executive Director, Kaiser Commission on Medicaid and the Uninsured, Executive Vice President, Henry J. Kaiser Family Foundation, and Former Deputy Assistant Secretary, HHS

Assigned Readings:

Session 15: Case Discussion 3: Obama Health Reform
Wed. 3/23/2016 Robert J. Blendon and Students

Assigned Readings:

Optional Further Reading:


Session 16: Designing Health Policies for Presidential Candidates
Mon. 3/28/2016 Robert J. Blendon

Assigned Readings:

Session 17: Health Politics in the U.S. House
Wed. 3/30/2016 Guest: Brian Biles, Former Health Staff Director, House Ways and Means Committee

Assigned Readings:
(Note: This reading was also assigned for Session 3)

Optional Further Reading:

Session 18: Case Discussion 4: Defunding Planned Parenthood
Mon. 4/4/2016 Robert J. Blendon and Students

Assigned Readings:


Session 19: Health Politics in the U.S. Senate
Wed. 4/6/2016 Guest: Sheila Burke, Former Chief of Staff, Senator Robert Dole, Kansas

Assigned Readings:


Session 20: Case Discussion 5: Florida Medicaid Expansion
Mon. 4/11/2016 Robert J. Blendon and Students

Assigned Readings:


Session 21: Educating and Influencing the Broader Public
Wed. 4/13/2016 Guest: Mollyann Brodie, Senior Vice President, Director of Public Opinion and Media Research, Henry J. Kaiser Family Foundation

Assigned Readings:


**Session 22: Connecting the Cases Together**

Mon. 4/18/2016 Robert J. Blendon

**Assigned Readings:**


**Session 23: Public Trust in Government: Implications for Health Policymaking in the Future**

Wed. 4/20/2016 Robert J. Blendon

**Assigned Readings:**


**Session 24: Course Wrap-up and Review**

Mon. 4/25/2016 Robert J. Blendon

**Session 25: Final Exam (closed-book exam administered during class time)**

Wed. 4/27/2016
Social Entrepreneurship & Innovation Lab (SE Lab) for US & Global Health

HPM 251, Spring Term 2016
Harvard T.H. Chan School of Public Health
Harvard Innovation Lab
Fridays 1-4pm
Course meets at Harvard i-Lab, Batten Hall, 125 Western Ave, Allston, MA 02163 (Allston/HBS campus)

There is a special Express Harvard Shuttle Longwood to i-lab Fridays @12:25pm
(departs from in front of HMS Vanderbilt Hall, 107 Avenue Louis Pasteur, Boston 02115, near the M2 stop)

Instructor: Prof. Gordon M. Bloom- EiR, Harvard Innovation Lab (i-lab)
Lecturer on Health Policy & Management, Department of Health Policy & Management
Harvard T.H. Chan School of Public Health gbloom@hsph.harvard.edu, tel: 617-432-6064 (o)

Teaching Fellows: Karima Ladhani, co-founder Barakat Bundle, ScD Program HSPH, kladhani@hsph.harvard.edu
Allison Blajda, MS Program in Health Policy & Management HSPH, ablajda@gmail.com
SE Lab Fellows: Andrea McGrath, founder AMPliﬁed Impact, HKS Alum, andrea.e.mcgrath@gmail.com
John Vrakas, MPA/MS Harvard john.vrakas.hks@gmail.com
Michaela Kerrissey, Health Policy PhD Program HBS/GSAS mkerrissey@hsbs.edu (for mid-term only)

Office Hours: Thursdays 2-3:30pm, and by appointment @ HSPH, Kresge 342, 667 Huntington Av., Boston MA 02115.
(Prof. Bloom) Fridays 11am-12pm, and by appointment @Harvard i-lab, Batten Hall, 125 Western Ave, Allston, MA 02163.

SE Lab Genius Bar is also offered informally, immediately after class for questions and problem solving

“The class is limited to 50 students by application to the instructor gbloom@hsph.harvard.edu.

“Tell me, what is it you plan to do with your one wild and precious life”
(Mary Oliver, “The Summer Day”)

Course Description

Social Entrepreneurship & Innovation Lab (SE Lab) for US and Global Health is a “Collaboratory” workshop, a university incubator where student teams design and develop innovative U.S. and international social ventures and organizations, addressing major challenges in public health and healthcare.

SE Lab fuses theoretical and practical approaches. It offers an overview of selected concepts and frameworks of social entrepreneurship and an opportunity for students to develop team based action projects. SE Lab participants collaborate by brainstorming, developing and iterating ideas, and by designing innovative and feasible solutions and plans for the problem and opportunity chosen. Class sessions combine lectures, case discussion, and small group workshops, as well as the participation of domain experts, social entrepreneurs, and guest faculty.

SE Lab is student-centered and projects are student-initiated. Proposed initiatives may be new entities or innovative projects, partnerships, or other arrangements that will have an impact on existing organizations and social outcomes locally or globally, focused on issues of public health and healthcare. Students may apply to the lab with a project or idea or simply to join a team.

Project development will vary with the skill set and experience of each individual and team, but will include: defining the problem and opportunity; articulating mission and vision; design and development of an innovative and feasible solution and determination of an applicable theory of change and value proposition; market research, industry and stakeholder analysis; creation of an advisory, governance and management structure; determination of strategic partners and assets, funding strategy; development of a basic ﬁnancial and operating model; development of measurement and evaluation framework. Teams will draft an executive summary and SE business plan for their initiative and will present their projects in the SE Lab, and may also create an optional 2 minute video. As appropriate, participants may also elect to pursue funding, and implementation of a pilot project.

Some examples of the issue areas that students may elect to address through the SE Lab in US and global health include: affordability, access, quality, pandemics and infectious disease, failing health systems and health care system change, health IT, medical device and technology innovation, clean water, environmental health and sustainability, nutrition and food systems, obesity alleviation, chronic disease management, diagnostics, population health management, poverty and humanitarian crises, gender equity and human rights, privacy, maternal and infant mortality, prevention and safety, drug development and distribution, social and behavioral health and substance abuse, education access, international conﬂict and violence and other issue areas as determined by the students.
SE Lab Learning Objectives:

1. To understand selected concepts and practices of social entrepreneurship, as it is developing in the U.S. and internationally, especially in connection with problem solving in public health/health care,
2. To collaborate in designing and developing an innovative initiative in public health/health care in the US or internationally,
3. To draft planning documents such as an executive summary, SE business plan and Power Point presentation for a social change organization or venture in public health/health care, addressing such issues as problem, opportunity, mission, vision, feasible solution, theory of change/logic model, social value creation/value proposition, management team/advisors, market/competitive landscape/stakeholders, business/funding model/sustainability, performance measurement/evaluation, strategic partners/scale.
4. To make informal and formal presentations in class and to give and receive feedback on presentations, especially for the midterm and end-term using Power Point or Prezi slides or similar technology.
5. To become more effective in social entrepreneurial pursuits, by building practical knowledge of the alternative strategies for turning good social ideas into viable and effective organizations and ventures,
6. To engage in developing personal responses to major challenges in public health in the US or internationally and to identify helpful resources in a chosen area of passion/interest, and
7. To engage in a collaborative learning process as we develop a better understanding of social entrepreneurship for public health/health care, including exploring our resources at Harvard and externally in the context of classes, speakers, and course assignments and projects.

Class Preparation, Reading/Writing Assignments:

1. Class preparation and participation are vital, as are the written assignments. **You are expected to read the materials and prepare written assignments and be prepared to respond to direct questions related to the readings and your evolving class project, as well as support each other in your projects through discovery, dialogue and discussion in and out of class.**
2. Attendance is required. If you expect to be absent (i.e. for health reasons, family issue, other vital issue) email Prof. Bloom.
3. SE Lab project teams will meet outside of, and during class to work through ideas and projects and are invited to meet with the course instructor and your advisors outside of class as is helpful.
4. Written assignments, individual and team presentations are due throughout the term
5. Peer Feedback is an essential component of our learning process.

SE Lab has weekly reading & short written assignments to facilitate progress on your project, oral presentations, peer collaboration & feedback, and suggested outside events. Assignments include a team project proposal, “pitch”, weekly 1-2 page draft of a designated part of your SE business plan, project executive summary, midterm and final presentations (PowerPoint or Prezi slides) and 10-15 page team (single spaced) final term paper/SE business plan for a new social organization/venture or partnership/innovation with an existing social venture, and an optional 2 minute video. Team members will contribute an evaluation of each other that will be factored into the grade. Major written assignments and presentations are done in teams. There are short individual assignments at the start of class prior to the finalizing of teams, and during the term two 1-2pp reflection assignments that are individual. N.B. use of laptops during discussion sections of class is discouraged. Policy subject to review.

Requirements/Grading:

20% Brief weekly written assignments (1-2pp)
15% Mid-term Presentation (15-20 minutes = ½ presentation + ½ feedback/Q&A) and Executive Summary (2pp)
20% Final Presentation (15-20 minutes = ½ presentation + ½ feedback/Q&A) and Executive Summary (2pp)
25% Final SE Business Plan (10-15pp max, single spaced + appendices)
20% Class Participation/Attendance/Reflection Assignments

Target Audience: This course will be most useful for students who see themselves, at some point in their careers, pursuing an entrepreneurial path in the social sector to benefit public health and healthcare. However, it is also helpful for those who aspire more generally to leadership positions in health care or social change organizations, in businesses, and in their communities, who will serve in governance functions on boards and as advisors, and who may be engaged individually or in organizations with philanthropy, or with corporate social citizenship. A better understanding of the dynamics of social entrepreneurship is helpful for a variety of community stakeholders desiring to effect and/or lead social change, to create social impact, and to benefit public health.
The SE Lab “Collaboratory” was created and developed at Stanford, Princeton & Harvard Universities. Past projects have been inspired by the work of pioneers and SE Lab participants such as Ashoka founder Bill Drayton and the Ashoka Fellows, and Grameen Bank and microfinance movement founder and Nobel Peace Laureate Muhammad Yunus, among many others.

The SE Lab combines:
- academic theory, frameworks, traditional research in organizations, management, leadership, public policy
- project development, action research, field work, and use of innovations and technology
- peer support, learning, and feedback
- participation of faculty, domain experts and social entrepreneurship practitioners.

Students enrolling in the SE Lab will convene into both larger classroom and smaller team or group sessions/meetings throughout the term to present and discuss case, readings and lecture material designed to help them define characteristics of high-performing entrepreneurial projects and especially to workshop their projects with peers and others. Students will make several informal and formal presentations of their projects to receive feedback, guidance, and suggestions from peer participants, faculty and other invited guests and social entrepreneurs.

WARNING: SE Lab is a time, energy, mind and work intensive course with weekly written and reading assignments and several out-of-class recommended events. Your projects require hard (team) work, ingenuity, and perseverance.

ENCOURAGEMENT: With effort and application you can do it!

Prerequisites: None, except curiosity about innovative solutions to global social problems and a willingness and desire to work hard toward contributing to their solution.

Further information on SE Lab:
http://www.hks.harvard.edu/content/download/68869/1248286/version/1/file/workingpaper_31.pdf

Overview*
SE Lab course draws upon a developing field that affects public policy/governments, the nonprofit sector, and the business world. It will use selected concepts and developments in this growing field of social entrepreneurship in the US and internationally, such as innovation, organizational mission and vision, value creation (social, financial), theory of change/logic models, problem/opportunity definition, performance measurement, management, and evaluation, organizational learning, sustainability, social venture capital and philanthropy, commercialization, and nonprofit development. It will utilize selected articles and formal or informal cases (written, video) that illustrate these and other concepts in theoretical and practical contexts for US and international organizations. In addition, we may touch upon, though only briefly, related topics, such as legal and tax issues, market discipline, and nonprofit capital markets. Students who apply themselves in the SE Lab will be better prepared to participate in, create, develop and lead socially entrepreneurial organizations and initiatives.

In the SE Lab, teams of students will design and/or develop their own U.S. or international social entrepreneurship initiative or work on an issue related to an existing social change organization or venture impacting public health. They will create or develop an executive summary, and an SE business plan (and an optional 2 minute video) for their final project (which may also function as a fundraising proposal). Some teams may choose to enter their ideas and plans in idea or business plan competitions, or related contests, such as the Harvard President’s Challenge, Deans’ Challenge for Health and Life Sciences, the Deans’ Food System Challenge, Harvard Business School New Venture Competition (Social Venture or traditional track), but we note that the Innovation Lab competitions (President’s and Deans’ Challenges) deadline is quite early in the semester (Feb. 8th - 5 page proposal due), and that the HBS New Venture Competition has specific eligibility requirements for non HBS students. Participating in these competitions is not a requirement of the class. Some individuals and teams may independently seek funding for their projects, and/or other awards in the marketplace of ideas. The lab involves guest speakers (either in person or electronically) and course visitors from the Harvard community and the global field of social entrepreneurship and innovation.

The Developing Field of Social Entrepreneurship: The term "social entrepreneurship" refers principally to the pursuit of opportunity to create pattern breaking social change, regardless of the resources you control (Childress, Stevenson). Often this involves nonprofit organizations and increasingly for-profit organizations with a social mission, and social businesses that are seeking to create systems changing, innovative responses to social needs, and a new class of hybrid organizations utilizing a variety of traditional, new, and emerging legal structures. This activity has been growing in intensity in recent years, creating a
more vibrant nonprofit sector and a proliferation of new hybrid organizations, and as the private sector has moved gradually into social mission driven initiatives, and as the capital markets have responded with innovations such as Social Impact Bonds and a movement toward “Impact Investing”. This intensity of activity brings new solutions but also new problems. It has been associated with downsizing of governmental involvement in social problems, innovative trends to make philanthropy and social investment more performance-oriented, and re-conceptualized notions of “market,” “clients,” “public charity,” and “community responsibility.” Added to this list is the increased openness to experimentation with market based approaches and business like methods in the social sector and a shift toward privatization of public services, leading to government contracting with both for profit and nonprofit providers. This shift has brought with it outcomes based (rather than needs based) approaches to funding, on the part of both private philanthropies and government agencies (social impact bonds are a recent example), along with more strategic thinking about corporate involvement in social and community issues, and hybrid approaches. Each of these innovations raises questions of ethics, professional preparation, and long term versus short term gains.

Together these trends are creating major changes in how societies around the world are dealing with the provision of public goods and services. This is leading to a blurring of sector boundaries and a call for more entrepreneurial spirit in the social sector. This course focuses on entrepreneurship in non governmental organizations, both nonprofit organizations and for profit. Because this is a developing field, definitions are not completely settled and innovation and change are a constant; but key concepts, their history and contemporary directions, figure significantly in understanding the field and will constitute the foundations upon which practical knowledge will be built in the course.

**Embracing Practical Knowledge:** This course combines theory/frameworks with policy & practice, but is more about practice than theory or policy, though theoretical and policy level discussions will inevitably arise. Its intent is on helping students access knowledge and skills that are needed to explore, discover, and engage in social entrepreneurship but are not generally emphasized in public policy or community development or standard management curricula. It focuses on the entrepreneurial management process. How do effective social entrepreneurs make their innovative ideas into viable social change organizations and ventures? What are the common mistakes that result in the failure of apparently great ideas? Effective social entrepreneurs need to be able to recognize and assess opportunities, mobilize resources to pursue those opportunities, establish a funding strategy for sustainability, and innovate and explore new approaches as needed to effectively pursue their social missions.

The SE Lab does not comprehensively address the whole entrepreneurial process from having an idea to growing an organization-nor can students realistically hope to do this in their projects in one semester. The SE Lab also can only selectively address the funding issues for SE ventures. The purpose of the lab is not to help students raise seed capital for their venture, although that is generally a welcome result.

However, it is undeniable that one of the key parts of effective social entrepreneurship is attracting the financial resources to support the work. The harsh reality is that most social entrepreneurs end up spending significant portions of their time raising money rather than implementing their programs. The economic side of social entrepreneurship matters a great deal. The wrong sources of funding can undermine the effectiveness of the organization, causing it to drift away from its mission to satisfy the interests of the funders. Where the money comes from and on what terms is a central element in any social entrepreneur's strategy. A clear idea, mission, model, and overall business plan is a fundamental tool in raising needed funds and mobilizing non-financial resources.

This course will integrate conceptual discussions with practical approaches, putting students in the position of social entrepreneurs making strategic decisions in the development of their social ventures. The cases and examples have been selected for pedagogical reasons, not as an endorsement of the organizations studied or projects being discussed.

* With thanks to Greg Dees, who wrote a prior version of portions of this text.
Readings:
Course readings are assembled from several sources and will be available on the course website (Canvas) or by links and case program sources as appropriate. Some recommended sources include:

*Enterprising Nonprofits: A Toolkit for Social Entrepreneurs*, Dees, Emerson, Economy et. al. (J.Wiley, 2001)
*Value Proposition Design (Strategyzer Series)*, Osterwalder, Pigneur (Wiley, 2014)

Some University-Based Resources/Information:
*Harvard Innovation Lab (i-Lab)* [http://i-lab.harvard.edu/](http://i-lab.harvard.edu/) and SE Resources [http://i-lab.harvard.edu/foundational-learning/social-entrepreneurship-resources](http://i-lab.harvard.edu/foundational-learning/social-entrepreneurship-resources)
*Harvard President’s Challenge* [http://i-lab.harvard.edu/experiential-learning/presidents-challenge](http://i-lab.harvard.edu/experiential-learning/presidents-challenge)
*Duke Center for the Advancement of Social Entrepreneurship*, Fuqua School of Business, [http://www.fuqua.duke.edu/centers/case/](http://www.fuqua.duke.edu/centers/case/)
*Legatum Center for Development & Entrepreneurship @MIT* [http://legatum.mit.edu](http://legatum.mit.edu)
*Oxford Skoll Centre for Social Entrepreneurship*, [http://www.sbs.ox.ac.uk/skoll/](http://www.sbs.ox.ac.uk/skoll/)

Some NGO and Related Resources
*Acumen Fund* [http://acumen.org](http://acumen.org) and +Acumen [http://plusacumen.org](http://plusacumen.org)
*Ideo.org* [http://www.ideo.org](http://www.ideo.org) and Open Ideo [https://openideo.com](https://openideo.com)
*Echoing Green Foundation* [http://www.echoinggreen.org](http://www.echoinggreen.org)
*Draper, Richards, Kaplan Foundation* [http://www.drkfoundation.org](http://www.drkfoundation.org)
*Skoll Foundation* [http://www.skollfoundation.org](http://www.skollfoundation.org)
SE Lab Guest Faculty, Mentors & Advisors:
The SE Lab invites faculty, domain experts and social entrepreneurship practitioners to participate and to give feedback and advice to students on their projects, presentations and plans - in classroom sessions and especially at the mid-term and final presentations. These guests and crucial presentation feedback judges, advisors, mentors, partners, collaborators, and friends of the SE Lab have included:

Prof. Muhammad Yunus, Founder, Grameen Bank, Nobel Laureate in Peace
Bill Drayton, CEO & Founder, Ashoka Innovators for the Public
Cheryl Dorsey, MD, President, Echoing Green (Foundation)
Jacqueline Novogratz, CEO and Founder, Acumen Fund
Prof. Dutch Leonard, faculty co-chair Social Enterprise Initiative, Harvard Business School; Harvard Kennedy School
Prof. Mark Moore, Harvard Kennedy School, Harvard Graduate School of Education
Prof. Christopher Winship, Harvard FAS/Sociology, Harvard Kennedy School
Gordon Jones, Managing Director, Harvard Innovation Lab (i-Lab)
Prof. Joseph Lassiter, Faculty Director, Harvard Innovation Lab (i-Lab)
Prof. Iqbal Quadir, Founder and Faculty Director Emeritus, Legatum Center for Development and Entrepreneurship, MIT
Prof. Lawrence Summers, University Professor and President Emeritus, Harvard University
Prof. Michael Chu, Social Enterprise Initiative, Harvard Business School
Dr. David Ager, Senior Fellow, Executive Education, Harvard Business School
Mark Kramer, Managing Director & Founder, Foundation Strategy Group; Chair & Founder, Center for Effective Philanthropy
Prof. Laura Scher, Co-founder and Executive Chair, Working Assets/Credo; Lecturer, Stanford University
Jessica Jackley, Co-founder, Kiva
Prof. Jim Phills, Director, Executive Program in Social Entrepreneurship, Stanford Graduate School of Business
Prof. John Daner, University of California, Berkeley & Princeton School of Engineering and Applied Sciences
Prof. Alnoor Ebrahim, Harvard Business School; Hauser Center for Civil Society & Center for Public Leadership. Harvard
Stacy Childress, Deputy Director, Education, Bill & Melinda Gates Foundation
Dr. Pamela Hartigan, Director, Skoll Centre for Social Entrepreneurship, Said Business School, Oxford
Iain MacLeod, PhD Co-founder and CSO, and David Raiser, Co-founder and CEO Aldatu Biosciences
Prof. Sara J. Singer, Harvard T.H. Chan School of Public Health/Harvard Medical School/Mass General Hospital
Kyle Westaway, author (Profit & Purpose, Wiley 2014), attorney http://kylewestaway.com
Prof. Sara Minard, Social Enterprise Institute, Northeastern University
Zach Leverenz, CEO of EveryoneOn: http://everyoneon.org
Matt Joyce, ED of Greenlight Fund Philadelphia: http://greenlightfund.org
Rye Barcott, Founder of Carolina for Kibera: http://cfk.unc.edu
Justin Pasquariello, ED of Children’s HealthWatch: http://www.childrenshealthwatch.org

Rose Wang, Co-founder and CEO, Laura D’Asaro Co-founder, Six Foods:
http://i-lab.harvard.edu/learning-library/venture-incubation-program-summer-2014-demo-day-six-foods
### SE Lab Schedule (subject to change)

Schedule and sessions’ design may be modified in response to student needs and/or to be responsive to course guest schedule.

#### Week 1

##### Tues, Jan 26
**Optional!**

<table>
<thead>
<tr>
<th>Challenge Workshop: Creating a Winning Business Proposal (PPT slides posted to Canvas)</th>
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<tbody>
<tr>
<td>5:30-7:00PM @ i-lab</td>
</tr>
<tr>
<td>Lynda Applegate, Sarofim-Rock Professor of Business Administration at HBS, will lead a workshop on how to write a winning business proposal. (PPT slides posted to Canvas under Resources, Workshops, Events tab)</td>
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</tbody>
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##### Thur, Jan 28

<table>
<thead>
<tr>
<th>Assignment 1.0 (Canvas) Due 11:59pm</th>
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##### Fri, Jan 29

<table>
<thead>
<tr>
<th>Introduction to Social Entrepreneurship and Innovation Lab (SE Lab) for US and Global Health</th>
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</thead>
<tbody>
<tr>
<td>Welcome: Gordon Bloom, EIR Harvard i-lab, Harvard T.H. Chan School of Public Health faculty</td>
</tr>
<tr>
<td>Jodi Goldstein, Bruce and Bridgitt Evans Managing Director, Harvard i-lab</td>
</tr>
<tr>
<td>Matt Guidarelli, Assistant Director, Social and Cultural Impact, Harvard i-lab</td>
</tr>
</tbody>
</table>

**Handouts**

Course Description/SE Lab Learning Objectives/Class Preparation, Reading/Writing Assignments/Requirements/Grading- Social Entrepreneurship and Innovation Lab for US & Global Health (posted/Canvas)

SE Lab Framework (posted/Canvas)

**Discussion**

What is social entrepreneurship? What are the pros and cons of social entrepreneurship as an approach to creating solutions to the most significant challenges in public health?

**Readings**


**Exercises**

Introductions (15-30 seconds around the room, “popcorn”). Who are you and what are key issues of interest?

**Sudan Child photograph- Kevin Carter. Rogerian appreciative listening.**

What is important to you? (Triads)

**Poem**

The Summer Day, Mary Oliver

**Optional**

“How to Change the World: First Steps Toward Becoming a Social Entrepreneur” by Ashoka Changemakers.net, Feb. 2004


**Video Library**

(Optional) Welcome to the Harvard Innovations Lab! (1:39 min 2012) [https://www.youtube.com/watch?v=NSwAgH-Nfjg](https://www.youtube.com/watch?v=NSwAgH-Nfjg)

Institute for OneWorld Health. Skoll.org. (8:18 min. 2009) [https://www.youtube.com/watch?v=NVP24_KmJ-g](https://www.youtube.com/watch?v=NVP24_KmJ-g)

The Best of Global X, Social Edge (2:51 min. 2009) [https://www.youtube.com/watch?v=FwWq4tGu-Vw&feature=player_embedded](https://www.youtube.com/watch?v=FwWq4tGu-Vw&feature=player_embedded)

**Assignment**

Please come to class Friday prepared to share a brief (15-30 second) introductory vignette of yourself and a problem or issue area in public health or healthcare that is important to you. This is simply so we can get some ideas out in the room and flowing (in a personal way), and note some synergies and team up possibilities.
**Events**

**Challenge Workshop: Creating a Winning Business Proposal**  
**Tuesday, January 26th | 5:30–7:00PM (i-Lab - Allston, MA)**  
Whether you’re participating in the President’s and Deans’ Challenges, or submitting an application for another business competition, a well-written business proposal is a critical component for helping your venture stand out and be positioned for strong consideration. In this session Lynda Applegate, Sarofim-Rock Professor of Business Administration at HBS, will lead a workshop on how to write a winning business proposal.

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**Module 1: CONCEPT DEVELOPMENT**

**Week 2**

**Tues Feb. 2nd**  
**Assignment**  
1 page (or less) brainstorm or reflection-project ideas/issues you would like to address. Build on your application/initial submission to class and discussions in and outside of class. If you can, give simple one or two sentence description that you can share with a classmate, to help form teams. Any related organizations you know that are of interest? Teammates in class? Individual assignment.  
Due 11:59 pm (Post to Canvas).

**Wed Feb. 3rd**  
**Recommended!**  
Early Registration Deadline: Feb. 3rd Noon (see Canvas)  
**Harvard Business School New Ventures Competition, Social Enterprise Track**  
This is a simple early registration for $1000 in reimbursable expenses in connection with project development  
Highly recommended based on eligibility- we know you may not have your project/team together yet...

**Fri. Feb. 5th**  
**i-lab, Rm. 201 (2nd floor)**

**Defining the Problem and Opportunity**  
Please Note that class on February 5th will be held in the second floor of the I-Lab in room 201 (HBS HIVES).

**Guests:** Team Barakat Bundle led by Karima Ladhani  
Professor Sara Minard, Social Enterprise Institute, Northeastern University  
http://www.damore-mckim.northeastern.edu/faculty/m/minard-e-sara-lawrence  
http://www.northeastern.edu/sei/2015/11/faculty-spotlight-catching-up-with-professor-sara-minard/

**Mini-Case**  
Barakat Bundle  
View Barakat Bundle video (before class) (http://www.hbs.edu/about/video.aspx?v=1_w2rlfood)

**Video (in class)**  
“On Fire” Sarah McLachlan [https://www.youtube.com/watch?v=FDmPcSWE0WU](https://www.youtube.com/watch?v=FDmPcSWE0WU)

**Defining the Problem & Opportunity**

**Mini-Case Videos**

Grameen Bank:  
Video 1 (Problem/History, 3:16): [http://www.youtube.com/watch?v=loqkEKTt1Gg](http://www.youtube.com/watch?v=loqkEKTt1Gg)  
Video 2 (Grameen model, 5:30): [http://www.youtube.com/watch?v=MgYes4bA7oM](http://www.youtube.com/watch?v=MgYes4bA7oM)

Muhammad Yunus is widely known for his work in establishing the Grameen Bank in Bangladesh in 1983 and as one of the pioneers of microfinance and social entrepreneurship, and as a Nobel Laureate in Peace. Dr. Yunus’ efforts include building social businesses and healthcare initiatives in Bangladesh, including Grameen Danone, Grameen Veolia Water, GC Eye Care Hospital, and Grameen Caledonian College of Nursing.  

**Reading**


“How to Change the World – Social Entrepreneurs and the Power of New Ideas”,  
David Bornstein, (Oxford University Press, 2007), Preface, Chapter 1 Restless People, p. ix-xvii, 1-10. (Canvas)

“The Process of Social Entrepreneurship: Creating Opportunities Worthy of Serious Pursuit.”  
Part II

Speed Dating and Team Formation I

Workshopping the Problem/Opportunity.

Optional


http://www.philanthropyroundtable.org/topic/excellence_in_philanthropy/new_ideas_people

N.B.

Start-up Career Fair, 1-4pm Harvard i-Lab Main Floor

Week 3

Tues Feb. 9th

Assignment

I page (max) submit brief description of SE project idea with team idea (in formation), including draft defining problem/opportunity you seek to address, or set of options if you have not decided. I will support you in the class whether you form a team or simply have a feedback partner in class for developing your project idea. Individual or team assignment. Due 11:59pm to Canvas.

Fri. Feb. 12th

i-Lab

Mission/Vision. Design Thinking/Human Centered Design

Carrie Tibbles, M.D., Director of Graduate Medical Education, Beth Israel Deaconess Medical Center
Lee Stone, Executive Director, Hope for the Children of Haiti (http://www.hfchaiti.org/)
Professor Sara Minard, Social Enterprise Institute, Northeastern University (http://www.damore-mckim.northeastern.edu/faculty/m/minard-c-sara-lawrence )

Exercise

Empathy Mapping and workshop Problem/ Opportunity, Mission/Vision
(Bring a hard copy of your Problem/Opportunity Statement to class in case you want to share)

Video

(In class)

Extreme by Design (video clips) Premiered on PBS Dec. 2013, Ralph King producer/co-director:

Extreme by Design: Being an Innovator (21:06 minutes, 2013)
https://www.youtube.com/watch?v=vc0Ld4qCHQo

Extreme by Design: The Challenge (2:24 minutes, 2013)
https://www.youtube.com/watch?v=vMnQRpyymSE

Extreme by Design: Prototyping (2:30 minutes, 2013)
https://www.youtube.com/watch?v=UAP98izAuYQ

Readings

Design Thinking

Quality Design for the Poor, Sally Madsen, Colleen Cotter (PATTERNS 2009 patterns.ideo.com) (Canvas)

Design Thinking, Tim Brown, (Harvard Business Review, June 2008) (link or Canvas)
http://hbr.org/2008/06/design-thinking/ar/1?conversationId=4936478

Readings


Part II
Team Formation II, and World Cafe

Optional Reference The Story of Ashoka http://www.youtube.com/watch?v=RfiY9rRsWqE


Events

Challenge Application Deadline
Monday, February 8th, 2016 | 11:59PM
Submit your application to the Deans’ or President's Challenges by February 8th at 11:59PM. Change the World. Impact Lives. Make a Difference.

Developing an Effective Social Enterprise Business Plan (slides from the 02/09 workshop)

Marketing You
Thursday, February 11th | 6:30-8:00PM
Marketing You is an engaging, high energy, and sometimes mildly inappropriate exploration of what it takes to find the right job, convince the right investor, or simply connect with others so that they invite you back. Chris Colbert, the i-lab’s Director of Programming and ex-agency head, will share 10 steps of personal marketing success, including the importance of finding your One Simple Thing.

Week 4

Tues. Feb 16th 1 page (max) draft articulating the mission/vision for your project, or if you haven’t decided give options.
Assignment Please indicate if you have formed a team and if so team members.
Individual or team assignment. Due 11:59pm to Canvas.

Fri. Feb 19th Proposing the Solution and Theory of Change (Logic Model)
Guest Alice Ly, Harvard Innovation Lab, Assistant Director, Deans’ Challenge for Health & Life Sciences https://i-lab.harvard.edu/explore/about/i-lab-staff/

Mini-case Live mini-cases from class (Mission/Vision)
**Social Entrepreneurship & Innovation Lab (SE Lab) for US & Global Health**

**April 22, 2016**

**Question**  
What social value are we creating and by what theory of change? Is it an innovative and feasible solution? Is it a sustainable model?

**Reading**  

**Scan**  
“Logic Model Development Guide”  
Note: Introduction & Chapter 1: pp. 1-14 only.  

**Part II:**  
Workshopping Proposing the Solution and Theory of Change  

**Video**  
Theory of Change – Development Impact & You (DIY) Framework & Video  

**Exercise**  
Solution and Theory of Change (DIY Framework)

**Team Building and Managing Conflict Resource**

**Video**  
How to Manage Conflict: Tips for managing toxic disagreements before they destroy a team.  
Lindred Greer, Stanford Graduate School of Business, October 31, 2014.  

**Optional**  
How Conflict Goes Viral. Linda Greer, Stanford Graduate School of Business, May 2014  

**Events**

**Innovation in Healthcare and Tech Startups**  
(Note location at Harvard Career Center)  
**Tuesday, February 16th | 4:00-6:00PM**  
Are you interested in healthcare? Are you curious about healthcare startups? Come hear from innovators in this space talk about their careers and opportunities that exist within the healthcare innovation landscape. Please register through Crimson Careers. Open to Harvard students only. Location: 54 Dunster St., Cambridge, MA 02138 (OCS Conference Room)  
[map](http://www.gsb.stanford.edu)

**HackLab: Build Mobile Apps with Swift and Parse**  
**Tuesday, February 16th | 6:00-10:00PM**  
Want to learn how to build mobile apps for iPhones? Join Austin S. Lin, Head TA for Harvard Extension School’s Mobile Application Development class in this hands-on, learn-by-building workshop. Harvard students and Affiliates only.

**HKS Forum: Addressing the Zika Virus**  
**Wednesday, February 17th | 6:00PM**  
A conversation with Helen Branswell, Senior Writer, Global Health, STAT; Michael VanRooyen, M.D., Director of the Harvard Humanitarian Initiative (HHI), Harvard University and Chairman of Emergency Medicine, Brigham and Women’s Hospital; Howard Zucker, M.D., Commissioner of Health, New York State and Former Assistant Director-General, World Health Organization; Sheila Burke (Moderator), Adjunct Lecturer in Public Policy, Harvard Kennedy School. Location: Harvard Kennedy School Forum (Littauer 1st)

**MODULE 2: START UP PROCESS**

**Week 5**

**Wed Feb 24th**  
**Assignment**  
1-2 page (max) draft Proposing the Solution and Theory of Change for your project.  
Also choose/list 3 related organizations in your idea space and give web links.  
1 page (max) draft on social value creation/value proposition for your project.  
Are there opportunities for disruptive & catalytic innovation?  
Team assignment. Due 11:59pm to Canvas.

Case Read  Aravind Eye Hospital
Making Sight Affordable: The Aravind Eye Care System, V. Kasturi Rangan and R.D. Thulasiraj, Innovations (MIT Press, Fall 2007) (Canvas)
http://www.mitpressjournals.org/doi/pdfplus/10.1162/itgg.2007.2.4.35
http://www.youtube.com/watch?v=3cjnPua7Ag (Aravind Video)

Case Preparation Questions:
1. What is Aravind’s Value Proposition to its poor patients? To its fee-based patients? (Note: a Value Proposition is the set of benefits to a particular set of customers, based upon specific product/service offerings that they are willing to pay for/accept for free). Think broadly about all of the offerings and benefits Aravind provides to its patients.
2. What enables Aravind to serve so many people? Outline all major activities Aravind conducts. How do these activities support the value proposition? How are Aravind's operations like “McDonalds”? What are some of the self-reinforcing characteristics of Aravind’s model?
3. What tradeoffs (what they chose not to do) did Aravind make in defining their offerings? Should they have entered into intra-ocular lens (IOL) manufacturing? How do these choices reinforce Aravind’s unique position?
4. What is Aravind’s mission? Write down 5 words you think encapsulate its values.

Review  SE Lab Framework (Canvas)
http://www.hks.harvard.edu/content/download/68869/1248286/version/1/file/workingpaper_31.pdf

https://hbr.org/2006/12/disruptive-innovation-for-social-change/ar/1

7 Proven Templates for Writing Value Propositions that Work

Optional  4 Steps to Building a Compelling Value Proposition, Michael Skok, Forbes, June 14, 2013
http://www.forbes.com/sites/michaelskok/2013/06/14/4-steps-to-building-a-compelling-value-proposition/


Events  Startup Nation: Tuesday
February 23rd | 4:00-5:30PM
Want to learn about what has made Israel a center of innovation? Curious about the startup scene there? Please join us at a talk by Dan Senor (MBA 2001), co-author of Startup Nation: the Story of Israel’s Economic Miracle. Dan will share his fascinating perspective on the Israeli entrepreneurial ecosystem. He will be joined by Israeli entrepreneurs Udi Mokady (Founder & CEO of information security company, CyberArk) and Benzi Ronen (Founder & CEO of online farmer’s market, Farmigo). Open to all Harvard students. Located in Hawes 201 at Harvard Business School.

Introduction to Mass Challenge
February 23rd | 16:00-8:00PM
MassChallenge is a global startup competition and accelerator program that catalyzes the launch and success of high-growth, high-impact new startups with no equity taken. To be eligible to enter the MassChallenge Boston, a startup must be a seed- or early-stage startup (raised less than $500K of equity-based investment and less than $1M in annual revenue). Applications for MassChallenge Boston open February 9th. This event is co-hosted by She Starts and Women Entrepreneurs Boston (weBOS), and held at WeWork, 745 Atlantic Avenue Boston. Sign up here.

**The Other Side Speaker Series - with Maria Thomas**
**Tuesday, February 23rd | 6:00-8:00PM**
The Other Side Speaker Series engages innovation luminaries from across the globe to share “the other side” of their journeys: their successes – and their failures – and their perspective on what it takes to excel in today’s complex world. Maria Thomas was the first non-founder chief executive of e-commerce company Etsy. Her career has taken her from Amazon to NPR to American Express, and she is an active angel investor, an influential startup advisor, and sits on the boards of numerous companies.

**You're Networking Wrong**
**Wednesday, February 24th | 6:00-7:30PM**
If spamming people with “I’d like to add you to my professional network” invites is your idea of networking, then you DEFINITELY need to attend this session. This interactive session will incorporate examples of how to effectively and meaningfully connect and find common ground with people you are hoping to engage. Harvard students and affiliates only.

**Legal Aspects of Starting a Social Enterprise**
**Thursday, February 25th | 6:00-7:00PM**
In conjunction with the Social Enterprise Initiative at HBS, experts from Foley Hoag LLP will address high level issues that business plan entrants might have, including: choice of business entity to achieve their organizational goals relative to social and economic intended impact, structuring and negotiating funding, intellectual property protection, agreements among founders, employment law, and practical advice for starting a business. Harvard students only.

**Negotiating for Health: The Role of Negotiation and Dispute Resolution in Health Care**
**Saturday, February 27th | 9:00am - 4:00pm**
In choosing to focus on healthcare, the goal for the Symposium is to enable Harvard Negotiation Law Review (HNLR) to actively participate in dialogue on a topic that is important and relevant locally, nationally, and internationally. The Symposium will offer a unique perspective by exploring the ways in which alternative dispute resolution theory and practice could contribute to an understanding of this changing field. Sponsored by the Program on Negotiation, Harvard Law School

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### Week 6

**Tues. Mar. 1**
1 page draft of management, advisory team.  
*Reach out to 3-5 potential advisors, for suggestions on your project.*  
1 page draft of market, competitive/collaborative landscape, strategic partners  
Team assignment. Submit to Canvas by 11:59pm

**Thurs Mar 3**
Rough Draft of Executive Summary (2pp max)  
Team assignment. Submit to Canvas by 11:59pm

**Fri. March 4**
Market, Competitive & Collaborative Landscape. Strategy/Strategic Partners  
i-lab  
Discuss Market Analysis, Competitive Environment and Strategic Partners (incl. customers, beneficiaries, competitors, funders, etc.)  
**Guests:**  
*Professor John Danner,* UC Berkeley Haas School of Business and Princeton School of Engineering and Applied Sciences, co-author- The Other "F" Word: How Smart Leaders, Teams, and Entrepreneurs Put Failure to Work (w/ Mark Coopersmith. Wiley, 2015) http://johndanner.com/about/  
**Reading**  
Excerpts from The Other "F" Word: How Smart Leaders, Teams, and Entrepreneurs Put Failure to Work (w/ Mark Coopersmith. Wiley, 2015) (Canvas)
**Fast Expanding Markets for Good**, Mark Esposito, Terence Tse, and Ayesha Khalid
http://www.ssireview.org/blog/entry/fast_expanding_markets_for_good?utm_source=Enews&utm_medium=Email&utm_campaign=SSIR_Now&utm_content=Title

The 5 Competitive Forces that Shape Strategy, Michael Porter, Harvard Business Review, 2008. (Summary only) http://hbr.org/2008/01/the-five-competitive-forces-that-shape-strategy/ar/pr (also imbedded video link - check this out if you have access. Watch as much as you like)

**Scan**
[Gates Foundation and Rockefeller Foundation funded]

Optional


The Strategy that Will Fix Health Care, Michael Porter, Thomas Lee (HBR October 2013)
https://hbr.org/2013/10/the-strategy-that-will-fix-health-care/

**Video:**
Embrace http://csi.gsb.stanford.edu/viral-good

**Exercise**
Pitching
Wello http://socialenterpriseconference.org/photo-gallery/ (17th Panel, @6:30 HBS Pitch for Change)

**Part II:**
Presentation and Executive Summary Workshop

**Resources**
SE Lab Mid-Term Matrix (Canvas)
Pitching to VCs, David Rose, Video (Ted Talk) http://www.ted.com/talks/david_s_rose_on_pitching_to_vcs

Creating an SE B-Plan (Childress HBS 2007) (Canvas), (Including Executive Summary on slides 17, 18)

“Note on Writing a Compelling Executive Summary For the Social Sector”, Kwang Ryu, (Canvas)

**Resources**

**Events**
Apple ResearchKit 101
Tuesday, March 1st | 12:30-1:30 | Kresge G2, Harvard School of Public Health
The Harvard Chan Public Health Innovation and Technology (PHIT) Student Forum is hosting an expert panel to discuss Apple ResearchKit. The presentation will cover: what is ResearchKit all about? How is it being used in health research here in Boston? How can students and faculty leverage ResearchKit in their own projects? Lunch will be provided. Open to the Harvard community.

Finding Funding in the Impact Investing and Venture Philanthropy Arena
Tuesday, March 1st | 6:00-7:30PM
The funding world can be a locked black box without a key anywhere in sight. If you are a social impact startup looking for impact investing/venture philanthropy dollars, how do you know where to look for funding and how do you decipher what these funding organizations are looking for. Join Stephanie Dodson, Managing Director at Draper Richards Kaplan Foundation, for a conversation about how to unlock the mysteries of the funding world. Open to VIPs and Harvard affiliates only

Testing Your Social Venture: Iterating Based on Market Feedback
Wednesday, March 2nd 1 6:00 - 7:00pm
How do you test and iterate your idea? Our panel will discuss how social entrepreneurs can truly understand social needs and the demands of the impact economy, as well as how to skillfully and resiliently adapt their models as their understanding of these needs changes. Open to all students with an interest in creating social ventures.

**Understanding Customer Needs**

**Thursday, March 3rd | 6:00-8:00PM**

Customers are rarely the source of winning new product ideas—how can the customer know?—which means relying on the customer to tell you what to build is a recipe for failure. Yet both entrepreneurs and established companies expect just that. Real innovation, on the other hand, comes from a deep understanding of customer needs—the benefits that customers seek within given contexts or occasions. Join John Mitchell (AB ’96), President & Managing Principal of Applied Marketing Science, and an expert in customer insights as he discusses how to understand your customer.

**Social Enterprise Conference**

*Hosted by students at Harvard Business and Harvard Kennedy Schools*

**Saturday and Sunday, March 5th and 6th**

The annual Social Enterprise Conference brings together top leaders, practitioners, and students passionate about social enterprise. This year, the conference’s content will focus on the untold truths of Social Enterprise and challenge participants to dare to take the steps necessary to make a difference. Check out the full schedule [here](#). Students can [register](#) for both days for $75.00. There are also a few opportunities to attend for free as an event volunteer. Interested students can find out more and sign up [here](#).

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**Week 7**

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<tr>
<th>Mon March 7</th>
<th>Draft 2pp Executive Summary for your SE plan/Project</th>
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<td>Assignment Due 11:59pm to Canvas</td>
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<tr>
<th>Wed March 9</th>
<th>HBS New Venture Competition Social Enterprise Track DEADLINE</th>
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<tr>
<td>Special option Submit 2-3 page Executive Summary for your SE Plan/Project to enter competition</td>
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<tr>
<th>Fri March 11</th>
<th>Draft Pitch Slides</th>
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<td>Assignment Submit 2 slides to be used to guide your in-class pitch. Each team will be asked to give a 2-minute pitch of your venture in preparation for the mid-term presentations, and will receive feedback in a 15 minute working session.</td>
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<th>Fri March 11</th>
<th>Funding/Business Model and Strategy. Pitching</th>
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<tbody>
<tr>
<td>Pitching SE Lab Teams</td>
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| Videos Capture Your Business Model in 20 Minutes- Lean Canvas- [https://www.youtube.com/watch?v=7o8uYdUaFR4&feature=youtu.be](https://www.youtube.com/watch?v=7o8uYdUaFR4&feature=youtu.be) |

| Part II Workshopping Business Model |
|---|---|


| How to Create Your Lean Canvas [https://leanstack.com/LeanCanvas.pdf](https://leanstack.com/LeanCanvas.pdf) |


| Case on microfinance lender KIVA.org (pdf with more graphics also posted to Canvas) |
Ten Nonprofit Funding Models (Foster, Kim, Christiansen, Stanford Social Innovation Review, Spring 2009)
http://www.ssireview.org/articles/entry/ten_nonprofit_funding_models
Note: while this does discuss business and funding models, it is focused on large non-profit orgs (pdf with more graphics also posted to Canvas)


Videos
Business Model Canvas https://www.youtube.com/watch?v=QoAOzMTLP5s
How to Draw a Business Model Canvas https://www.youtube.com/watch?v=2tdpKdH7sM

Events
Essential Elements of a Life Science Startup
Monday, March 7th | 6:00-8:00PM
If you want to understand what components are needed to build a strong life sciences venture and compelling pitch, then join us as Dr. Johannes Fruehauf, biotech entrepreneur, Founder & President of LabCentral leads a dynamic discussion on how.

Measuring Social Impact
Tuesday, March 8th | 6:00-7:30PM
The question of how to measure social impact is an elusive one. For the past 12 years, Root Cause and its founder, Andrew Wolk, have been asking that question. In this workshop you will learn about that journey.

** DEADLINE: HBS New Venture Competition Social Enterprise Track **
Wednesday, March 9th | 12 noon
This is the FINAL deadline to enter the NVC I Executive Summaries are DUE!

Mastering Management
Thursday, March 10th 6:00-8:00pm
If you have a startup team and are scratching your head about how to get them more focused and/or productive, this workshop is for you. Chris Colbert, Harvard Innovation Labs’ Director of Programming and serial CEO, will share his stories and views on how and why to master the art and science of people management.

Week 8

March 12-20
Spring Break

Video
(Trophic Cascades, Environmental Theory)

Refining Happiness – Jay Shetty (motivational philosopher):
https://www.youtube.com/watch?v=pxCKjo8Y1Xo (Huff Post)

Events
ISPI Innovation Forum
March 13th-16th
Boston is a city where innovative thinking underpins and drives many industries including financial services, healthcare, life sciences, robotics, clean energy, big data, higher education, and government. This forum will engage academics, practitioners and policy makers in discussions about the innovation landscape and includes themes that highlight how the innovation landscape can and is changing

“Thriving Over Surviving”: TEDxBeaconStreet Healthcare Salon
March 17th 17:00PM
This special TEDxBeaconStreet Healthcare Salon event will feature 15 inspiring presentations about medical innovation, revolutionary patient care and personal stories that will change the way you think about healthcare. It will be held at the Westin Hotel next to the Hynes Convention Center. Join the conversation at this one
evening exploring the intersection of medicine, technology, and personal health transformation. This event will be live streamed to locations around the world. Register [here](#).

**Module 3: ORGANIZATIONAL DEVELOPMENT AND GROWTH**

**Week 9**

**Tues March 22**

*Assignment* Draft Executive Summary (2pp. single spaced)

Draft of Presentation Slides (8-12 PowerPoint or Prezi slides)
- Name of Org
- Problem, Opportunity, Mission, Vision
- Solution, Theory of Change
- Social Value Creation/Value Proposition
- Management/Advisory Team (Proposed)
- Market, Competitive/Collaborative Landscape
- Funding Strategy/Business Model
- Strategy/Strategic Partners
- Pilot Project

**Fri March 25**

*Assignment* Submit Mid-Term Presentation Slides and Executive Summary to Canvas. Due at 9am

**Fri. March 25**

SE Lab Mid-Term Presentations
All project teams for presentations & feedback, teaching team, and special guests TBD @ i-lab

**Events**

*The Perfect Pitch with Michael Skok*
Monday, March 21st | 6:00-8:00PM
Join renowned venture capitalist and startup maven Michael Skok as he presents the Perfect Pitch – an insider’s checklist to help you get behind the presentation and understand what VCs are looking for and what you might want to consider for your own pitch. Harvard students and affiliates only.

*The Tricodor is Here: Artificial Intelligence, Moore’s Law, and DNA Sequencing Transforming Healthcare* | EVENT CANCELLED
Tuesday, March 22 | 5:00-8:00 | Harvard University, Northwest Building - Lecture Hall B103
New advances in imaging, artificial intelligence, computer processing and DNA sequencing are converging to create a revolutionary new generation of smart medical devices. Scientist and entrepreneur Dr. Jonathan Rothberg discusses how this technology is enabling healthcare workers to learn more about their patients, improve treatment and reduce costs. Dr. Jonathan Rothberg has spent his career on the leading edge of innovation in medical technology. He’s founded ten companies and, in January, President Obama awarded him the National Medal for Technology and Innovation for his next-gen sequencing work.

*HackLab: Prototyping Workshop*
Wednesday, March 23rd | 6:00-10:00PM
Want to learn how to build interactive prototypes more quickly, easily, and effectively? Join Sam Gong, professional UX Process Consultant, in this hands-on workshop where you’ll learn the nuts and bolts of prototyping with InVision. [Harvard students and affiliates only](#).

*Courting Angels*
Wednesday, March 23rd | 6:00-7:00PM
After you’ve tapped the generosity of your friends and family for your new venture, you’re likely to think about more strategic sources of early funding, particularly angel investors. But how do you know what early funding terms are angelic for your company? Join two long-time angel investors, Charlie Cameron of Hub Angels and Christopher Mirabile of Launchpad and the Angel Capital Association as they debate with each other on topics you’re already thinking about.

**MARCH 24th DEADLINE**
Participate in Social Enterprise Research

Professors at Harvard Business School and Harvard Kennedy School are conducting exciting new research on social enterprise and would highly value your participation in their short, 10-minute survey: http://bit.ly/1Sna82k. As part of their commitment to the social enterprise community, the faculty will hold a seminar open to the community in which they will share the results of this survey and of the larger study it is a part of.

Week 10

Mon Mar 28th  **DEADLINE: HBS New Venture Competition Social Enterprise Track**  **
12 noon  ** All Social Enterprise Business Plans DUE **

Tues. Mar 29th  Reflection Assignment due (question to be distributed). 1-2 pages

Two-fold template and narrative on: (a) Pilot costs, and (b) 3-year projections (details to be distributed)

Fri. April 1  Social Venture Funding, Impact Investing, Sustainability

**Case**
Draper, Richards, Kaplan Foundation http://www.drkfoundation.org
Last Mile Health & Ebola (Sept. 2014)

**Guest:**
Alireza Masseur, Managing Director, Plug and Play Tech Center (Silicon Valley)
http://plugandplaytechcenter.com

**Readings**
http://www.ssireview.org/blog/entry/impact_investing_time_for_new_terminology

The Global Impact Investing Network (GIIN): “What You Need to Know About Impact Investing”
https://thegiin.org/impact-investing/need-to-know/#s1

“Trends in Seed-Stage Social Entrepreneurship: The Importance Of Investing In Emerging Social Entrepreneurship”, Cheryl Dorsey, founder, Echoing Green

“7 Lessons on Financial Sustainability”
https://www.philanthropyworks.org/seven-lessons-nonprofits-financial-sustainability

**Review**
Acumen: http://acumen.org

Can Venture Capital Save the World? (Forbes, November 2011)

**Videos**
Jacqueline Novogratz: *Investing in Africa’s Own Solutions*
https://www.youtube.com/watch?v=8k_XH-ajLo0

10 Years of Acumen Fund
https://www.youtube.com/watch?feature=player_embedded&v=nnJ3Tn8pTRI#

WHI Water - *What Would You Do To Keep Your Children Healthy?*
https://www.youtube.com/watch?v=PodmUhq4SJ8&feature=player_embedded

**Optional Readings**
Novogratz, Jacqueline “The Blue Sweater: Bridging the Gap Between Rich and Poor in an Interconnected World”, Rodale 2009 (selections)

“Social Impact Investing Will Be the New Venture Capital”, Sir Ronald Cohen, HBR
https://hbr.org/2013/01/social-impact-investing-will-be/
Case Foundation: Impact Investing
http://casefoundation.org/program/impact-investing/?nabe=6232213679505408.0&utm_referrer=https://www.google.com/

Acumen Fund: “What is Patient Capital” (readings + videos)
http://acumen.org/ideas/patient-capital/

**Optional Videos**

- 2010 Echoing Green Fellows Official Announcement (3 minutes)
  http://www.youtube.com/watch?v=XvJYPiUsnUg&feature=relmfu
- The 2011 Echoing Green Fellows (2 minutes)
  http://www.youtube.com/watch?v=2R6VjOX9Qb0&feature=relmfu
- Echoing Green Finalist Weekend 2011- The Pitches (15 minutes)
  http://www.youtube.com/watch?v=rLFM0y7Qve0&feature=relmfu
- Launching Social Entrepreneurs// Echoing Green 2009 Fellows (3 minutes)

**Events**

**Humanitarian Intervention in Syria: HKS Forum**
Wednesday, March 30th | 6:00PM
Harvard Kennedy School Forum featuring Peter Maurer, Presidents International Committee of the Red Cross; Michael Ignatieff, HKS and Jackie Bhabha, HSPH, HLS, University Adviser on Human Rights.

**The Value of Strategic Partnerships**
Thursday, March 31st | 6:00-8:00PM
Join us for an interactive session on the how young startups should approach strategic partnering. Ben Schlatka, Co-founder and VP of Corporate Development for MC10, a digital health company, will discuss the value of strategic equity investments, early stage product development deals, IP licensing and capability building deals. *Harvard students and affiliates only.*

**Harvard/Yale Pitch Off**
Friday, April 1st | 5:00-6:30PM
Experience the passion on stage and the innovation community on the ground – come meet the next breakout ventures from the Harvard Innovation Labs and the Yale Entrepreneurship Institute. One night. Two rival universities. Three teams each. Five judges. Winner takes all…the braggin’ rights.

**MIT Scaling Development Ventures Conference**
Friday, April 1st 18:30AM - 7:00PM
Join for a day of conversation on innovative solutions to international development challenges. Hear from leading entrepreneurs and practitioners — from within and outside MIT — as well as representatives from industry, government agencies, and NGOs. For more information and a complete conference program please visit the [website](http://m). Located at MIT

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**Week 11**

**Tues. April 5th**

**Assignment**

- **Ip a ge draft of funding and resource mobilization strategy.**
- What are your sources of funding (e.g. friends/family, foundations, competitions, SVC firms, etc.)?
- What is your strategy for financing your social venture?
- Team assignment. Due 11:59pm to Canvas

**Fri. April 8th**

**Performance Measurement/Evaluation & Social Impact Metrics**

**Read:**

- A short blog about how to think about measures to include in a dashboard, and an example dashboard from the One Acre Fund
  http://www.ssrreview.org/blog/entry/a_holiday_gift_for_your_board_a_refreshed_dashboard
  http://www.oneacrefund.org/results/impact/

- Information on the Global Impact Investing Network's efforts to improve and better standardize impact measurement:
  http://www.thegiin.org/cgi-bin/iowa/home/index.html
http://www.thegiin.org/cgi-bin/iowa/resources/research/625.html

Measurement as Learning by Jeri Eckhart Queenan and Matthew Forti (of the Bridgespan Group)

Measuring Innovation: Evaluation in the Field of Social Entrepreneurship
Overview includes perspectives on Ashoka, Echoing Green, Schwab Foundation, New Profit Inc.
PDF is posted on Canvas and can be downloaded (with registration) from FSG at link:

Video:
Think Big: Interview with Mark Kramer-
http://bigthink.com/markkramer#!video_idea_id=497

Events
The Other Side Speaker Series: Stephane Bancel
Thursday, April 7th | 6:00-8:00PM
Harvard i-lab is ecstatic to announce that Stephane Bancel, President and CEO of Moderna Therapeutics, will join us as our next speaker in the Other Side series. Under Bancel’s leadership, Moderna has become one of the fastest-growing companies in the biotech industry, raising more than $1.2 billion since 2011 to develop messenger RNA therapeutics.

Week 12

Tues. April 12th 1 page- draft on performance measurement/evaluation & social impact metrics
Assignment Team Assignment. Due 11:59pm to Canvas

Fri. April 15th Strategic Partners, Networks and Scale
http://www.ssireview.org/articles/entry/a_model_of_health


Events

**Unite for Sight: Global Health and Innovation Conference**  
Saturday & Sunday April 16th and 17th  
*(hosted at Yale University, New Haven, CT)*

The Global Health & Innovation Conference (#GHIC) is the world’s leading and largest global health conference as well as the largest social entrepreneurship conference, with 2,200 professionals and students from all 50 states and more than 55 countries. This thought-leading conference convenes leaders, changemakers, and participants from all sectors of global health, international development, and social entrepreneurship. **Professor Gordon Bloom** will be speaking at the conference. Register [here](#).

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**Week 13**

**Tues April 19**

1-2 pages on your plan regarding strategic partners, networks and strategy for scaling your project for impact. **Team assignment. Due 11:59pm to Canvas.**

**Fri. Apr. 22**

**The Power of Social Technology and Social Media. Maximizing Social Impact.**

**Reading & Case**


How is social media leveraged in Sameer Bhatia’s battle against Leukemia?

**Video**

(Social Media & The) Pursuit of Happiness (20 minutes) Jennifer Aaker- The Ink Talks  
[http://inktalks.com/blog/?p=517](http://inktalks.com/blog/?p=517)

**Exercise**

**Viral Videos & Workshopping Priority Areas**

Embrace  
[http://csi.gsb.stanford.edu/viral-good](http://csi.gsb.stanford.edu/viral-good)

Our Un-named Company: Power of Social Technology  
[http://www.youtube.com/watch?v=TPWXRGTXs0s](http://www.youtube.com/watch?v=TPWXRGTXs0s)

Orabrush  
[http://www.youtube.com/watch?v=nFeb6YBftHE&list=PLB73276F91DD26C78&index=1&feature=plpp_video](http://www.youtube.com/watch?v=nFeb6YBftHE&list=PLB73276F91DD26C78&index=1&feature=plpp_video)

Coca Cola Happiness Machine  
[http://www.youtube.com/watch?v=lqT_dPApj9U](http://www.youtube.com/watch?v=lqT_dPApj9U)

**Emerging and Traditional Legal Frameworks/Organizational Forms**

**Read**

Choosing a Legal Structure for Your Social Enterprise, Karyn Osinowo  

In Search of the Hybrid Ideal, Julie Battilana, Matthew Lee, John Walker, & Cheryl Dorsey (Stanford Social Innovation Review, Summer 2012). (posted to i-site)  

5 Bad Reasons to Start a For-Profit Social Enterprise, Rich Leimsider (Harvard Business Review, July 30, 2014)  
[https://hbr.org/2014/07/5-bad-reasons-to-start-a-for-profit-social-enterprise/](https://hbr.org/2014/07/5-bad-reasons-to-start-a-for-profit-social-enterprise/)

Emerging Legal Forms Allow Social Entrepreneurs to Blend Mission and Profits, Marc J. Lane (Triple Pundit: People, Planet, Profit, March 11, 2014)  

**Videos**

Benefit Corporation, L3C, Flexible Purpose Corporation (3 videos: 1 minute 30 secs each)  
[http://www.youtube.com/user/kylewestaway](http://www.youtube.com/user/kylewestaway)

**Optional**

Legal Workshop: Starting a Social Entrepreneurship Venture with Kyle Westaway  
[https://www.youtube.com/watch?v=365&v=ksOswO-mOl4](https://www.youtube.com/watch?v=365&v=ksOswO-mOl4) (1 hour 42 minutes)  
(please view this video if possible- helpful full background on SE legal frameworks)
Week 14

Tues. April 26th  1 page on how you can best utilize technology and/or the power of social media for your project.

Assignment  Include one paragraph on your proposed legal framework for your venture (non-profit, for-profit or hybrid?)

Team assignment. Due 11:59pm to Canvas.

Thur. April 28th  3 slide pitch deck (1 title slide, 2 slides for 2-3 minute pitch). Team assignment. Due 11:59pm to Canvas.

Assignment

Fri. April 29th  SE Lab Quick Pitch Event: All SE lab teams will present a 2-3 minute “quick pitch” in class on Friday, April 29th. Each team will receive 2 minutes of questions and feedback from the class directly following the pitch.

2016 SE Lab Teams:

- Baby Talk
- BettaBodi
- Blue Skies
- Bucket
- DiaMeter
- FAN (Female Athletes Network)
- GigBridge
- Global Connect
- Green Champions
- Troops to Counselors
- IsraHealthConnect
- KidConsult
- MindFarm
- MoBy
- Panacea
- Patient Safety
- Pharm 2 Bed
- Sapling Foods
- Smart First Aid
- Spectrum VR
- TuberClear
- U-Matr
- YoLO

Events  President’s Challenge Demo Day  
Monday, April 25th | 5:30-7:00PM

We are pleased to invite you to the President’s Challenge Demo Day here at the i-lab. The President’s Challenge encourages students from across Harvard to come up with creative solutions to the world’s most pressing problems. Ten finalist teams have been announced and awarded a seed grant of $5,000 along with support from the i-lab, including mentoring, workshops and workspace. At Demo Day these ten finalist teams will showcase their efforts and progress in making impact on the world around them. The Grand Prize Pool of $100,000 will be awarded to the winning team and three runners up.

Week 15

Tues. May 3  Draft of Final Executive Summary (2pp)

Assignment  Draft of Final Presentation Slides (10 minutes)

Team assignment due 11:59pm to Canvas

Thurs May 5  Submit Final Presentation Slides & Executive Summary (2pp) to Canvas

Team Assignment due 11:59pm
May 6th  
Final Presentations
All Teams, Special Guests TBD
10-minute Presentation, 10 minutes Feedback/Q & A (oral & written)
- Problem, Opportunity, Mission, Vision
- Solution, Theory of Change
- Social Value Creation/Value Proposition
- Management/Advisory Team
- Market/Competitive Landscape
- Funding/Business Model and Financials
- Performance Measurement/Evaluation
- Strategic Partners/Scale
- Pilot Project

Events
Deans’ Challenge Demo Day
Wednesday, May 4th | 5:30-7:00PM
We are pleased to invite you to this year’s Deans’ Challenges Demo Day. Ten finalist teams from two Deans’ Challenges will showcase their exciting ventures to the Harvard/Cambridge/Boston community. The sponsoring deans of each Challenge will announce the winners and runners-up and present more than $100,000 in prize money.

Week 16

May 12th  
Due noon Submit electronic pdf file to Canvas by Thursday May 12th noon.
Bring a hard copy printout to class Friday May 13th (double-sided printing please)

May 13  
Team Evaluation 360
Due noon Submit your Team Evaluation Form to Canvas on Friday May 13th by noon.

May 13  
Concluding Class
Reflections Exercise
Please come to class prepared to share some key reflections on your project and your experience in the course.
Snacks provided.
Please bring a hard copy of your final paper to class for Prof. Bloom

HSPH course evaluation form
Completion of the HSPH course evaluation form is a requirement. HSPH has indicated that your grade will not be available until you submit the evaluation. In addition, HSPH registration for future terms will be blocked until you have completed the evaluations for courses in prior terms.
SE BUSINESS PLAN (completed in teams):

10-15pp single spaced document including 2 page Executive Summary (should be able to stand alone) and charts, graphs, tables, pictures etc. Your write-up should reflect the categories of the SE Lab Guideline & Feedback Framework (appended below) that we have been using all term, and drawing from your prior assignments, subjects covered in lab and lab readings, and from your independent research. Below is an outline and selected references from our lab to help w/ your business plan.

Suggested categories of outline:
1. Executive Summary (2 page)
2. Problem/Opportunity
3. Mission & Vision
4. Solution/Theory of Change
5. Value Proposition/Social Value Creation
6. Team & Advisors
8. Funding and Business Model
10. Strategic Partners/Scale
11. Pilot Project
12. References, Sources of Inspiration
14. Appendices

Refer to your previous assignments and readings for the drafting and revision of the ideas in each section and the way you chose to present them. Some areas will inevitably be less developed than others but endeavor to cover each topic and, as always, utilize where helpful the frameworks and conceptual material presented in the lab and lab readings. The SE Lab Sessions, related presentations, and readings comprise a collective resource for your reference in drafting and revising your SE business plan. Selected materials and web links indicated are below or posted to the course platform in Canvas.

RESOURCES: Social Venture Development Tools

Executive Summary (examples)
- ES_BarakatBundle_exec.pdf
- ES_FOCUSFoods_exec.pdf
- ES_TomatoJos_Exec.pdf
- ES_Filtron Nigeria.doc

Tips on Preparing an Executive Summary
- Note on Compelling Executive Summary_Kwang Ryu.pdf
- Tips on Writing an Executive Summary_HBS Childress.pdf

HBS New Venture Competition (Social Enterprise Track)

Social Enterprise Tools
- Webinars with Alumni Social Entrepreneurs & Investors
- New Venture Competition Workshops
- Examples of Past Entries
- General SE Resources

Previous Winner Materials

2015 NVC SE Track
Runner Up - Barakat Bundle
Executive Summary
Business Plan
Presentation

2015 NVC SE Track
Winner - Focus Foods
Executive Summary

Presentation

Business Plan (to receive a copy of the FOCUS Foods business plan, please email julia@focusfoodsinc.com)

Dean's Health and Life Sciences Challenge
President's Challenge
  - FAQ's, Rules, Eligibility
  - Key Dates
  - Tools and Resources (from the iLab)
  - Experts and Mentors (schedule a meeting)

Business Plans


   [Including Executive Summary on slides 17,18]

   Great slides from HBS lecture/workshop

2) “Business Planning for Nonprofits” Rouson 2005),
   [http://www.nationalcne.org/index.cfm?fuseaction=feature.display&feature_id=130]


   [http://rootcause.org/documents/Business_Planning_for_Enduring_Social_Impact_0.pdf]

### Guideline & Feedback Framework: SE Lab Presentation & Plan

<table>
<thead>
<tr>
<th>Your Name: ____________________________</th>
<th>Project Name: ____________________________</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scale: 1=Poor  2=Satisfactory  3=Average  4=Good  5=Superior</td>
<td></td>
</tr>
</tbody>
</table>

#### Problem, Opportunity, Mission, Vision
- Clear problem definition
- Clear opportunity identification
- Clear and compelling mission and vision

#### Solution, Theory of Change
- Effective solution
- Innovative approach
- Coherent logic/theory of change

#### Social Value Creation/Value Proposition
- Substantial contribution to solving a significant societal & organizational problem
  - Coherent value proposition

#### Management/Advisory Team
- Individual & team’s ability to initiate venture, mobilize resources and network
  - Well chosen advisors

#### Market/Competitive Landscape
- Understanding of market - need, opportunity, size, competitive/cooperative landscape, risks
  - Stakeholders Analysis

#### Business Model and Financials
- Feasible model to achieve proposed impact
  - Realistic budget
  - Good funding strategy
  - Sustainable

#### Performance Measurement/Evaluation
- Clear, practical metrics for evaluating organizational outcomes
  - Strategy to deliver high performance
  - Demonstrates social benefits v. costs

#### Strategic Partners/Scale
- Quality of strategic partners
  - Proposed pilot project?
  - Model that can scale/grow as desired?

#### Overall Effectiveness of presentation/plan
- Is the presentation/plan compelling?
- Do you understand the idea and model?
- Project a good financial or social investment?
- Did the presenter/writer do a good job?

### Notes: ____________________________

(Over)
What are 3 greatest strengths of the presentation/plan?

1. 

2. 

3. 

What are 3 limiting weaknesses of the presentation/plan?

1. 

2. 

3. 

What do you recommend the individual/team do immediately?

1. 

2. 

3. 

Any suggestions for people or organizations this individual/team should contact?

1. 

2. 

3. 

Other Comments: