

**Sociology 190**  
**Life and Death in the USA:**  
**Medicine and Disease in Social Context**

**Monday, Wednesday 3-4**  
**Spring Term 2011**  
**Location: see course website**

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**Course Websites:**

iSite: <http://www.courses.fas.harvard.edu/0021>  
ITL site: <https://galileo.seas.harvard.edu/students/enroll/?courseID=2800>

**Course Description:**

This course examines the social causes and context of illness, death, longevity, and health care in the U.S. today. Who stays healthy and who falls ill? Who has a long life and who has a short one? What is a good death and why do so few Americans achieve it? What is good medical care, who gets it, and why? What role do physicians play in producing health in our society? To what extent do factors outside individuals' control (factors such as geography, social networks, parental traits, or hospital quality) influence health and health care? Does socioeconomic inequality in society harm individual health? Do certain kinds of social networks or neighborhoods improve health? What are the collective constraints on individuals' life prospects? What is the difference between an individualistic and a public health perspective on illness? And what issues of ethics and justice are raised by such questions? Would a different organization of society, different public expenditures, or different public policies matter?

While exploring these questions, we will also consider how social scientists, epidemiologists, public health experts, and doctors address them — how they use theory to understand them and how they make “causal inferences” based on observational or experimental data. However, students are not expected to have in-depth knowledge of social science methods or statistics. The readings span the medical, public health, and social science literatures, and they reflect both qualitative and quantitative approaches. In many ways, this course serves as an introduction to the field of public health.

### **Course Requirements:**

- section attendance and participation (10%)
- 18 out of 23 very brief question sets (25%)
- in-class mid-term exam on March 9 (25%)
- take-home final exam (40%)

Regarding the brief question sets: For 18 of the 23 class meetings (after the first class), by 10 pm the night before lecture (but beginning as early as a week before the lecture) students must go online (at the ITL course website) and post short responses to three (or four) questions. Each response should be about 30 words long, and students will be evaluated based on effort, not correctness. Two of the questions will be substantive questions about the ideas in the readings. The last question will always be: “Tell us about the single thing that you found most difficult or confusing about the readings. If you found nothing difficult or confusing, tell us about the thing you found most interesting.”

Regarding the mid-term exam: It will have a few multiple choice questions and two short essays. There will be some choice. It will be administered on March 9.

Regarding the final exam: It will consist of 2-3 essay questions, for a total of roughly 15-18 pages. There will be some choice, but all the questions will require in-depth engagement with the major themes of the whole course. The exam will be distributed on or before April 28 and will be due at a time to be determined (during reading period). We will be asking you to submit a hard copy of the exam and also to upload it to a secure part of the course website (instructions will be provided).

Because various electronic checks will be performed on all submitted materials, please be sure that all your work is your own and that you cite sources appropriately. Please do not cut and paste text (from any source) without attribution, as this can lead to a lot of unhappiness. Professor Christakis reviews grades; if you feel your exam has been graded in error, feel free to talk to him about it.

### **Course FAQ:**

A selection of common questions is below, but many more are addressed at:

**<http://christakis.med.harvard.edu/pages/teaching/faq.html>**

We are using a new interactive, online platform for the course. Please go to **<https://galileo.seas.harvard.edu/students/enroll/?courseID=2800>** to set up an account. Students should make sure they log in with the same email address they used to register; if you forget your password, please click the “forgot password” link.

Sociology 190 counts for **GenEd credit**, in the “United States in the World” area.

In contrast to prior years, **we will not be offering the class pass/fail this year.**

**Graduate students** taking Soc 190 for credit should see the instructor in order to arrange different requirements.

**Sections:**

Sections will meet beginning the second week of class. There will be online registration for sections, and section timing has yet to be determined, but there will be many time slots to choose from. The head TF is:

Keren Ladin  
Department of Health Policy  
kladin@fas.harvard.edu  
office hours: Mondays, 1:00-2:55, or by appointment  
in the office next to William James Hall 570, or as otherwise announced

**Books and Readings:**

Books are available for purchase at the Harvard Coop Book Store. Readings from books and articles average about 55 pages per session (range 15-200), or 110 pages per week. Given very low demand in prior years, there is no course packet available for purchase. Readings are available online via Hollis e-reserves, and also linked via the course website for you to print out. A course packet of readings is also on reserve at Lamont Library.

Bosk, CL. *Forgive and Remember*. Chicago: University of Chicago Press, 2003 [1979].  
Christakis, NA and Fowler JH. *Connected: The Surprising Power of Our Social Networks and How They Shape Our Lives*. New York: Little Brown, 2009.  
Cutler, D. *Your Money or Your Life*. Cambridge: Oxford University Press, 2004.  
Harris, J. *Enhancing Evolution: The Ethical Case for Making Better People*. Princeton: Princeton University Press, 2007.  
Illich, I. *Limits to Medicine: Medical Nemesis, The Expropriation of Health*. New York, NY: London: Marion Boyars Publishers, 1999 [1976].  
Martin, E. *The Woman in the Body: A Cultural Analysis of Reproduction*. Boston: Beacon Press, 2001 [1987].  
Marmot, M. *The Status Syndrome: How Social Standing Affects Our Health and Longevity*. New York: Holt, 2005.

## **January 24 (Mon)**

### **I. Course Introduction**

We will briefly review the burden of illness and death in the U.S., touching on the costs, family effects, and implications for people's well-being and suffering. We will also review the leading causes of death and how they vary by certain socio-demographic attributes. We will note geographic variation in illness and mortality and also the relevance of circumstances of birth, (including *in utero* exposures, birthweight, birth order, parental occupation, etc.) to life-long health. In short, we will introduce the basic bio-social facts to be explored in the course. And we will introduce the tension between individualistic and collective perspectives on medical care. We will in particular consider the case of suicide and the extent to which it reflects individual decision-making or collective constraints.

## **January 26 (Wed) and January 31 (Mon)**

### **What Medical Care Has and Has Not Achieved**

What are the benefits of medical care? How much do doctors actually help people? What are the relative roles of curative and preventative maneuvers in the health of the public? On the population level, what have been the benefits of "big medicine"? We will consider how the nature of illness and death has changed over the last century in the U.S., as part of the "health transition." And we will introduce some ways of defining and measuring health other than mortality, including morbidity, physical functioning, and quality of life.

### **II. Session 1: The Role of Medical Care (January 26)**

Cutler D. *Your Money or Your Life*. Cambridge: Oxford University Press, 2004, Chapter 5, "The Heart of the Matter" (pp. 47-60).

Bailar JC and Gornik HL. Cancer Undefeated. *New England Journal of Medicine* 1997; 336: 1569-1574, along with commentaries, retorts, rejoinders, and ripostes in *New England Journal of Medicine* 1997; 337: 935-938.

Kramer BS and Klausner RD. Grappling with Cancer — Defeatism versus the Reality of Progress. *New England Journal of Medicine* 1997; 337: 931-934.

Preston S. American Longevity: Past, Present, and Future. Distinguished Lecturer in Aging Series, Center for Economic Policy, Syracuse University Policy Brief 7/1996 (pp. 1-18). available online (<http://www-cpr.maxwell.syr.edu/pbriefs/pb7.pdf>)

### **III. Session 2: The Health Transition (January 31)**

Cutler D. *Your Money or Your Life*. Cambridge: Oxford University Press, 2004, Chapters 1-2 (pp. 1-21).

Fries JF. Measuring and Monitoring Success in Compressing Morbidity. *Annals of Internal Medicine* 2003; 139: 455-459.

Fogel, RW. Secular Trends in Physiological Capital: Implications for Equity in Health Care. *Perspectives in Biology and Medicine* 2003; 46(3 Supl): S24-S38.

Omran AR. The Epidemiologic Transition: A Theory of the Epidemiology of Population Change. *Milbank Memorial Fund Quarterly* 1971; 29: 509-538. Please just read the partial extract and extension reprinted in the *Bulletin of the World Health Organization* 2001; 79(2): 161-170, Available at: <http://www.scielosp.org/pdf/bwho/v79n2/v79n2a11.pdf>

**February 2 (Wed) and February 7 (Mon)**  
**The Social Distribution of Illness**

We will examine how disease and survival are distributed by basic socioeconomic variables. What is the role of sex, race, ethnicity, education, income, marital status, and other social variables in patient preferences, patient risks, patient care, and health outcomes? What are the methodological challenges of demonstrating and interpreting differences in health outcomes and care? How do we distinguish the problem of unequal outcomes from that of unequal treatment, and what is the ethical implication of this difference?

**IV. Session 1: Socioeconomic Status and Health (February 2)**

- Goldman DP, Smith JP. Can patient self-management help explain the SES health gradient? *Proceedings of the National Academy of Science* 2002; 99: 10,929-10,934.
- Link BG and Phelan J. Social Conditions as Fundamental Causes of Disease. *Journal of Health and Social Behavior* 1995 (Extra Issue): 80-94.
- Pickett KE, and Lauderdale DS. Widening Social Inequalities in Risk for Sudden Infant Death Syndrome. *American Journal of Public Health* 2005; 95: 1976-1981.
- Smith JP. Healthy Bodies and Thick Wallets: The Dual Relation Between Health and Economic Status. *Journal of Economic Perspectives* 1999; 13: 145-166.

**V. Session 2: Unequal Treatment or Unequal Outcomes with Respect to Race and Ethnicity (February 7)**

- Baicker K, Chandra A, Skinner JS, Wennberg JE. Who You Are And Where You Live: How Race And Geography Affect The Treatment Of Medicare Beneficiaries. *Health Affairs*, "web exclusive" 10.1377/hlthaff.var.33 (pp. 33-44).
- Blackhall LJ, Murphy ST, Frank G, Michel V, and Azen S. Ethnicity and Attitudes Toward Patient Autonomy. *JAMA* 1995; 274:820-825.
- Lauderdale D. Birth Outcomes for Arabic-Named Women in California Before and After September 11. *Demography* 2006; 43: 185-201.

**February 9 (Wed)**

**VI. The Social Construction of Illness and Medicine**

How are the seemingly objective, natural or scientific concepts of "body," "illness," or "treatment" influenced and determined by social phenomena and the medical system itself? How does the way people come to view the world have concrete and measurable effects on their health? How do people cognitively construct medically relevant concepts, such as diagnostic categories, and how do these constructions in turn influence medical care and human experience? We will consider diverse examples, ranging from childbirth to plastic surgery to mental illness to cardiac care.

- Martin, E. *The Woman in the Body: A Cultural Analysis of Reproduction*. Boston: Beacon Press, 1987, pp. 27-67.
- Ecker JL and Frigoletto FD. Cesarean Delivery and the Risk-Benefit Calculus. *New England Journal of Medicine* 2007; 356(9): 885-888.
- Block JJ. Issues for DSM-V: Internet Addiction. *American Journal of Psychiatry* 2008; 165: 306-307.

**February 14 (Mon) and February 16 (Wed)**  
**Death and Dying**

We will explore the nature of dying in the U.S. and what might be done to improve end-of-life care. We will consider the nature of a good death, how death affects family members, and where death occurs. We will examine how social policy or clinical arrangements affect the experience of dying. We will especially focus on the role of physician decision-making and on ethical aspects of terminal care, including decisions about euthanasia and life support withdrawal. During this set of sessions on the care of the terminally ill, we shall also begin to consider the process by which physicians are socialized to their role as doctors. How does physician training influence health care delivery and patient experience?

**VII. Session 1: The Nature of Dying in the U.S. (February 14)**

- Butler K. What Broke My Father's Heart: How Putting in a Pacemaker Wrecked My Family's Life. *New York Times Magazine* June 18, 2010, p. 39-43.
- Lynn J, et al.. Perceptions by Family Members of the Dying Experience of Older and Seriously Ill Patients. *Annals of Internal Medicine* 1997; 126:97-106.
- Steinhauser KE, et al.. Factors Considered Important at the End of Life by Patients, Family, Physicians, and Other Care Providers. *JAMA* 2000; 284: 2476-2482.

**VIII. Session 2: Practical and Ethical Aspects of Care at the End of Life (February 16)**

- Christakis NA and Lamont EB. Extent and Determinants of Error in Doctors' Prognoses for Terminally Ill Patients: Prospective Cohort Study *British Medical Journal* 2000; 320: 469-473.
- Drickamer MA, Lee MA, Ganzini L. Practical Issues in Physician-Assisted Suicide. *Annals of Internal Medicine* 1997; 126: 146-151.
- Kleinman, A. *The Illness Narratives: Suffering, Healing, and the Human Condition*. New York: Basic Books, 1988, chapter 3, "The Vulnerability of Pain and the Pain of Vulnerability," (pp. 56-74) and chapter 9, "Illness Unto Death" (pp. 146-157).

**February 21**  
**NO CLASS, President's Day**

**February 23 (Wed) and February 28 (Mon)**  
**Iatrogenesis and Medical Error**

How common and serious are medical errors? What is the difference between harm, error, and maloccurrence? How do physicians cope with the inevitability of mistakes and harm? In what ways is "iatrogenesis" (doctor-caused injury) a widespread socio-medical phenomenon? Why does harm occur and what, if anything, can be done about it? What ethical and policy issues are raised by medical mistakes?

**IX. Session 1: The Problem of Medical Harm (February 23)**

- Illich, I. *Medical Nemesis: The Expropriation of Health*. New York, NY: Pantheon Books, 1976, part I (pp. 1-56).

Brennan TA, *et al.*. Incidence of Adverse Events and Negligence in Hospitalized Patients. *New England Journal of Medicine* 1991; 324: 370-376.

Reason J. Human Error: Models and Management. *British Medical Journal* 2000; 320: 768-770.

**X. Session 2: Socialization of Physicians with Respect to Medical Error (February 28)**

Bosk, C.L. *Forgive and Remember*. Chicago: University of Chicago Press, 1979 (pp.1-110).

**March 2 (Wed) and March 7 (Mon)**

**Health Behaviors**

How do individuals' choices and behaviors affect individuals' health risks and health status? We will consider a range of health-related behaviors that are socially patterned and that can have substantial effects on both individual and population health.

**XI. Session 1: Obesity and Exercise (March 2)**

McGinnis JM and Foege WH. Actual Causes of Death in the United States. *JAMA* 1993; 270: 2207-2212.

Mello MM, *et al.*. Obesity — The New Frontier of Public Health Law. *New England Journal of Medicine* 2006; 354: 2601-2610.

Paffenbarger RS, Hyde RT, Wing AL, and Hsieh CC. Physical Activity, All-Cause Mortality, and Longevity in College Alumni. *New England Journal of Medicine* 1986; 314: 605-613.

**XII. Session 2: Alcohol, Tobacco, and Firearms (March 7)**

Schroeder SA. Tobacco Control in the Wake of the Master Settlement Agreement. *New England Journal of Medicine* 2004; 350: 293-301.

Volpp KG, *et al.*. A Randomized Controlled Trial of Financial Incentives for Smoking Cessation. *New England Journal of Medicine* 2009; 360: 699-709.

Kellermann AL, *et al.*. Injuries due to Firearms in Three Cities. *New England Journal of Medicine* 1996; 335: 1438-1444.

Hemenway, D. Regulation of Firearms. *New England Journal of Medicine* 1998; 339: 843-845.

Wechsler H, Lee JE, Kuo M, and Lee H. College Binge Drinking in the 1990's: A Continuing Problem — Results from the Harvard School of Public Health 1999 College Alcohol Study. *Journal of American College Health*. 2004; 52: 159-168.

**XIII. March 9 (Wed)**

**MIDTERM**

**March 13-20**

**NO CLASS, Spring Break**

**March 21 (Mon), March 23 (Wed), and March 28 (Mon)**  
**Inequality, Social Hierarchy, Stress, and Social Support**

What do baboons in the Serengeti, civil servants in London, and actors in Hollywood have in common? How does relative position, and not just absolute position, matter to health? How can social structure be stressful? How can it be salubrious? What are the health consequences of stress and how might an individual's social support buffer the adverse effect of stress on health?

**XIV. Session 1: Social Inequality and Individual Health (March 21)**

Lochner K, Pamuk E, Makuc D, Kennedy BP, and Kawachi I. State-level income inequality and individual mortality risk: a prospective, multilevel study. *American Journal of Public Health* 2001; 91: 385-391.

Lynch JW, Davey-Smith G, Kaplan GA, and House JS. Income Inequality and Mortality: Importance to Health of Individual Income, Psychosocial Environment, and Material Conditions. *British Medical Journal* 2000; 320: 1200-1204

Subramanian SV and Kawachi I. Income Inequality and Health: What Have We Learned So Far? *Epidemiologic Reviews* 2004; 26: 78-91.

**XV. Session 2: Stress, Status, and Social Hierarchy (March 23)**

Marmot, M. *Status Syndrome: How Your Social Standing Directly Affects Your Health and Life Expectancy*. London: Bloomsbury, 2004, chapters 1-6 and 10. (176 pages)

Sapolsky, RM. The Influence of Social Hierarchy on Primate Health. *Science* 2005; 308: 648-652.

**XVI. Session 3: Social Support and the Health Benefits of Relationships (March 28)**

House JS, Landis KR, and Umberson D. Social Relationships and Health. *Science* 1988; 241: 540-45.

Cohen S *et al.*. Social Ties and Susceptibility to the Common Cold. *JAMA* 1997; 277: 1940-1944.

**March 30 (Wed), April 4 (Mon), and April 6 (Wed)**  
**Health and Social Networks**

Can there be a non-biological transmission of disease? How does the health care delivered to one person affect the health of others? Does treating depression in parents prevent asthma in their children? Does weight gain or seatbelt use or drinking in those close to you directly affect your health? We will examine the difference between social support (measured at the individual level) and social networks (construed at the group level); and we will consider how illness and health-related phenomena (ranging from sexual practices to smoking to obesity to happiness) might spread within a social network and result in positive and negative "externalities." We will explore the evolutionary significance and biological basis for social network structure and function. We will also consider very new work involving interventions in online and offline networks to improve health. And we will introduce the idea of "computational social science."

**XVII. Session 1: Social Network Function (March 30)**

- Christakis, NA and Fowler JH. *Connected: The Surprising Power of Our Social Networks and How They Shape Our Lives*. New York: Little Brown, 2009, Chapters 1-4 (134 pages).
- Carrell SE, Hoekstra M, and West JE. Is Poor Fitness Contagious? Evidence from Randomly Assigned Friends. 2010; NBER working paper 16518, available at: <http://www.nber.org/papers/w16518.pdf>
- Liu KY, King M, and Bearman PS. Social Influence and the Autism Epidemic. *American Journal of Sociology*. 2010; 115: 1387-1434.

**XVIII. Session 2: Social Network Structure (April 4)**

- Christakis, NA and Fowler JH. *Connected: The Surprising Power of Our Social Networks and How They Shape Our Lives*. New York: Little Brown, 2009, Chapters 5, 7-9. (132 pages)
- Christakis NA and Fowler JH. Social Network Sensors for Early Detection of Contagious Outbreaks. *PLoS One* 2010; 5(9): e12948.
- Bearman PS, and Moody J. Suicide and Friendships among American Adolescents. *American Journal of Public Health* 2004; 94: 89-96.

**XIX. Session 3: Social Network Interventions (April 6)**

- Carrell SE, Sacerdote BI, and West JE. From Natural Variation to Optimal Policy: A Cautionary Tale in How Not to Improve Student Outcomes, September 30, 2010, available at: <http://www.econ.ucdavis.edu/faculty/scarrell/sortexp.pdf>
- Centola D. The Spread of Behavior in an Online Social Network Experiment. *Science* 2010; 329: 1194-1197.
- Valente TW, Ritt-Olson A, Stacy A, Unger JB, Okamoto J, and Sussman S. Peer Acceleration: Effects of a Social Network Tailored Substance Abuse Prevention Program Among High-Risk Adolescents. *Addiction* 2007; 102: 1804-1815.
- Salganik MJ, Dodds, PS, and Watts DJ. Experimental Study of Inequality and Unpredictability in an Artificial Cultural Market. *Science* 2006; 311: 854-856.

**April 11 (Mon)**

**XX. Social Capital**

We will examine the very important concept of “social capital,” first advanced by Coleman in 1988, and also the nature of “emergent” properties of social systems. How and why do groups of people come to have properties that do not inhere in the individuals themselves? And to what productive ends, both good and bad, might social capital be put — by individuals and by policymakers?

- Coleman J. Social Capital in the Creation of Human Capital. *American Journal of Sociology* 1988; 94: S95-S120.
- Hardin, G. The Tragedy of the Commons. *Science* 1968; 162: 1243-1248.

**XXI. April 13 (Wed)**  
**Neighborhood Effects on Health**

We will consider how neighborhoods, as a particular form of collective social structure, may influence individual health. We will examine how local social capital and collective efficacy play a role in health. And we will examine how local physical infrastructure and medical resources affect health. In the process, we will examine geographic variation in a large variety of seemingly objective medical procedures, including the striking differences in care at the end of life and the wide-varying patterns of elective surgery across the U.S.. And we will consider the phenomenon of “physician induced demand” for medical care.

Browning CR, Wallace D, Feinberg SL, and Cagney KA. Neighborhood Social Processes, Physical Conditions, and Disaster-Related Mortality: The Case of the 1995 Chicago Heat Wave. *American Sociological Review* 2006; 71: 661-678.

Leventhal T and Brooks-Gunn J. Moving to Opportunity: An Experimental Study of Neighborhood Effects on Mental Health. *American Journal of Public Health* 2003; 93: 1576-1582.

Omer SB, Salmon DA, Orenstein WA, deHart P, and Halsey N. Vaccine Refusal, Mandatory Immunization, and the Risks of Vaccine-Preventable Diseases. *New England Journal of Medicine* 2009; 360: 1981-1988.

Goodman DC, *et al.*. The Quality of End-of-Life Cancer Care for Medicare Beneficiaries: Regional and Hospital-Specific Analyses. *The Dartmouth Atlas of Health Care* 2010; please just peruse some of the graphics in the document available online at:  
[http://www.dartmouthatlas.org/downloads/reports/Cancer\\_report\\_11\\_16\\_10.pdf](http://www.dartmouthatlas.org/downloads/reports/Cancer_report_11_16_10.pdf)

**XXII. April 18 (Mon)**  
**Religion and Health**

Religion has numerous instrumental and symbolic effects on physical and mental health, and numerous aspects of religion may be relevant, from affiliation to religiosity to observance. Religious sentiments are also highly relevant to people’s choices regarding their own care, and their attitudes regarding medical advances.

Jarvis GK, and Northcott HC. Religion and Differences in Morbidity and Mortality. *Social Science and Medicine* 1987; 25: 813-824.

Phillips DP and Smith DG. Postponement of Death Until Symbolically Meaningful Occasions. *JAMA* 1990; 263: 1947-1951.

Strawbridge W, Cohen R, Shena S, and Kaplan G. Frequent Attendance at Religious Services and Mortality over 28 Years. *American Journal of Public Health* 1997; 87: 957-61.

**April 20 (Wed), April 25 (Mon), and April 27 (Wed)**  
**Public Policy and Health and Health Care**

We will examine some macro and micro public policies that can affect individual and public health. As a powerful illustration, we will examine how society might respond to the emergence of new bio-technologies that promise to provide “super-human” enhancements to the human body, and we will consider moral aspects of these development as well as how society might

regulate them. We will also consider the implications of lack of insurance for the health of over 46,000,000 Americans, a number slated to substantially decrease with the implementation of recent health reform legislation. We will close with a consideration of some illustrative individual, local, and national efforts to improve the health of the public, and with a recapitulation of the fundamental tension between individual and collective perspectives on health and health care.

**XXIII. Session 1: Social Control of Individual Use of New Biotechnologies (April 20)**

Harris, J. *Enhancing Evolution: The Ethical Case for Making Better People*. Princeton: Princeton University Press, 2007, chaps 1-6, 8. (128 pages)

**XXIV. Session 2: Access to Health Care and Health Insurance, and a Selection of Policy Interventions (April 25)**

Andersen RE, Franckowiak SC, Snyder J, Bartlett SJ, and Fontaine KR. Can Inexpensive Signs Encourage the Use of Stairs? Results from a Community Intervention. *Annals of Internal Medicine* 1998; 129: 363-369.

Brook R, *et al.*. Does Free Care Improve Adults' Health? Results from a Randomized Controlled Trial. *New England Journal of Medicine* 1983; 309: 1426-34.

Nattinger AB, Hoffmann RG, Shapiro R, Gottlieb MS, and Goodwin JS. The Effect of Legislative Requirements on the Use of Breast-Conserving Surgery. *New England Journal of Medicine* 1996; 335: 1035-1040.

Redelmeier DA and Tversky A. Discrepancy Between Medical Decisions for Individual Patients and for Groups. *New England Journal of Medicine* 1990; 322: 1162-1164.

**XXV. Session 3: Public Health and Individual Experience (April 27)**

McGinnis JM, Williams-Russo P, and Knickman JR. The Case for More Active Policy Attention to Health Promotion. *Health Affairs* 2002; 21: 78-93.

**Take-Home Final Exam Due at Time to Be Specified**