

EVIDENCE-BASED MEDICINE & ORGANIZATIONAL CHANGE

WINTER 2016

HEALTH POLICY & MANAGEMENT 217

Patricia A. Ganz, M.D.

Time: Wednesday, 1:00 to 3:50 PM

Place: A2-125 CHS, Conference Room

Required readings: Electronically available through CCLE
<https://ccle.ucla.edu/course/view/16W-HLTPOL217-1>

Course objectives: (See Attached Learning Objectives and Competencies)

This weekly seminar emphasizes discussion of primary literature (case studies) as its major source of material, although videos are also included. Homework is assigned in relationship to topics that are discussed. The course emphasizes participation of the students in critical review and discussion of the selected literature; therefore regular attendance is required. Specific assignments will have students explore relevant databases and information to promote active learning.

The course focuses on how medical information is accumulated, disseminated, and implemented by health care providers and organizations in various care settings. Students will be introduced to the concept of randomized clinical trials and meta-analytic approaches as a source for determining treatment efficacy and standards for evidence-based care. Examples of the dissemination of clinical trial results are examined. The use of consensus development and practice guidelines are reviewed as strategies for affecting medical practice. Finally, the course examines variations in patterns of care as a means of understanding actual medical practice, with a discussion of mechanisms to change physician behavior. At the completion of the course, students should have greater appreciation of the complexities of health care delivery and the variability of service delivery based on provider and organizational behavior and characteristics. The implications for implementation research and health policy are emphasized throughout the course.

Evaluation of Student Performance:

Class participation	20%
Mid-term examination	35%
Class Presentation	10%
Term Paper	35%

Office hours and availability:

4-5PM after class on Wednesdays

By appointment: contact me at 310-206-1404 or pganz@mednet.ucla.edu

HPM 217: Learning objectives and competencies

LEARNING OBJECTIVES: What you will learn in this course	Health Policy & Management MS/PHD Competencies related to the learning objective	How you will be evaluated/Assessed
To understand of the principles of evidence-based medicine and its application in the delivery of health care	Competency #1-Acquire knowledge of the context of health and health care systems, institutions, actors, and environment.	Participation in class discussion and homework assignments Mid-term exam
To critically evaluate the dissemination and adoption of health care practices and their variation	Competency#5-Describe the strengths and weaknesses of study designs to appropriately address specific health services research questions.	Participation in class discussion and homework assignments Mid-term exam Class paper
To develop critical thinking and analysis skills related to the review of relevant literature and application to health care delivery	Competency #3-Pose relevant and important research questions, evaluate them, and formulate solutions to health problems, practice and policy. Competency #8-Demonstrate proficiency in the appropriate application of analytical techniques to evaluate HSR questions.	Participation in class discussion and homework assignments Mid-term exam Class paper
To enhance professional writing skills	Competenct#10-Effectively communicate the process, findings, and implications of health services research through multiple modalities with stakeholders.	Class paper
To refine presentation skills	Competenct#10-Effectively communicate the process, findings, and implications of health services research through multiple modalities with stakeholders	Presentation of class paper

<p>To actively participate in discussions with classmates and the instructor</p>	<p>Competency#9- Work collaboratively in teams within disciplines, across disciplines, and/or with stakeholders.</p> <p>Competenct#10-Effectively communicate the process, findings, and implications of health services research through multiple modalities with stakeholders</p>	<p>Class discussions, review of homework assignments</p>
<p>To refine professional skills</p>	<p>Competency#9- Work collaboratively in teams within disciplines, across disciplines, and/or with stakeholders.</p> <p>Competenct#10-Effectively communicate the process, findings, and implications of health services research through multiple modalities with stakeholders</p>	<p>Providing feedback to peers about the quality of in-class presentations and reflecting on feedback from peers.</p>

HEALTH POLICY & MANAGEMENT 217

Schedule of Topics

1. January 6, 2016
Introduction to Course
Video: Temple of Science
2. January 13, 2016
Randomized Clinical Trials
Video: Random Cuts
3. January 20, 2016
Clinical Trials: Dissemination
4. January 27, 2016
Clinical Trials: Meta-Analysis
5. February 3, 2016
Consensus Development/Other Evaluation Processes
6. February 11, 2016
Mid-Term Examination
7. February 17, 2016
Diffusion of New Technologies and Therapies
8. February 24, 2016
Variations in Care
9. March 2, 2016
Changing Behavior/ Practice Guidelines/Research in
the Practice Setting
10. March 9, 2016
Class Presentations - Term Papers Due

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Winter 2016

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Session 1

Introduction to Course Video: Temple of Science

Required Reading:

Berwick DM. Health Services Research and Quality of Care: Assignments for the 1990's. Medical Care 27:763-771, 1989.
PMID: 2755218

Wennberg, JE. Practice variations and health care reform: connecting the dots. Health affairs, Suppl, VAR140-4, 2004.
PMID: 15471778

Bland C S. The Halsted mastectomy: present illness and past history. Western journal of medicine. 1981;134(6):549-55
PMID: 7020254

Session 2

Randomized Clinical Trials Video: Random Cuts

Required Reading:

Topol EJ, Leya F, Pinkerton CA, et al. A comparison of directional atherectomy with coronary angioplasty in patients with coronary artery disease. New England Journal of Med 329:221-227, 1993.
PMID: 8316266

Adelman AG, Cohen EA, Kimball BP, et al. A comparison of directional atherectomy with balloon angioplasty for lesions of the left anterior descending coronary artery. New England Journal of Med 329:228-33, 1993.
PMID: 8316267

Hamm CW, Reimers J, Ischinger T, et al. A randomized study of coronary angioplasty compared with bypass surgery in patients with symptomatic multivessel coronary artery disease. New England Journal of Med 331:1037-43, 1994.
PMID: 8090162

Farkouh M E, Domanski M, Sleeper L A, Siami F S, Dangas G, et al. Strategies for Multivessel Revascularization in Patients with Diabetes. The New England journal of medicine. 2012;
PMID:23121323

Jadad A R, To M J, Emara M, & Jones J. Consideration of multiple chronic diseases in randomized controlled trials. JAMA: the Journal of the American Medical Association. 2011;306(24):2670-2672.
PMID:22203536

Session 3 Clinical Trials: Dissemination

Required Reading:

Fisher B, Bauer M, Margolese R, et al. Five-year results of a randomized clinical trial comparing total mastectomy and segmental mastectomy with or without radiation in the treatment of breast cancer. New England Journal of Med 312:665-73, 1985.
PMID: 3883167

Lazovich D, White E, Thomas DB, Moe RE. Underutilization of breast-conserving surgery and radiation therapy among women with stage I or II breast cancer. JAMA 266:3433-3438, 1991.
PMID: 1688350

Nattinger AB, Gottlieb MS, Veum J, et al. Geographic variation in the use of breast-conserving treatment for breast cancer. New England Journal of Med 326:1102-7, 1992.
PMID: 1552911

Hersh AL, Stefanick ML, Stafford RS. National Use of Postmenopausal Hormone Therapy: Annual Trends and Response to Recent Evidence. JAMA 291: 47-53, 2004.
PMID: 14709575

Cowper P A, DeLong E R, Whellan D J, Allen LaPointe N M, & Califf R M. Economic effects of beta-blocker therapy in patients with heart failure. The American journal of medicine. 2004;116(2):104-111.
PMID:14715324

Homework Assignment: Pick a clinical condition and review clinical trials that are available for this condition at www.ClinicalTrials.Gov. Plan to discuss what you found.

Session 4 Meta-Analysis, Systematic Reviews and Comparative Effectiveness

Required Reading:

L'Abbe KA, Detsky AS, O'Rourke K. Meta-analysis in Clinical Research. Annals of Internal Medicine 107: 224-233, 1987.
PMID: 3300460

Egger M, Ebrahim S, Smith GD. Where now for meta-analysis? Int J Epid 31:1-5, 2002.
PMID: 11914281

Manchikanti L, Datta S, Smith H S, & Hirsch J A. Evidence-based medicine, systematic reviews, and guidelines in interventional pain management: part 6. Systematic reviews and meta-analyses of observational studies. Pain physician. 2009;12(5):819-50.
PMID: 19787009

Smith GC, Pell JP. Parachute use to prevent death and major trauma related to gravitational challenge: systematic review of randomised controlled trials. BMJ 327:1459-1461, 2003.
PMID: 14684649

Grodstein F, Clarkson TB, Manson JE. Understanding the Divergent Data on Postmenopausal Hormone Therapy. N Engl J Med 348(7):645-650, 2003.
PMID: 12584376

Kryzanowska MK, Pintilie M, Tannock IF. Factors Associated With Failure to Publish Large Randomized Trials Presented at an Oncology Meeting. JAMA 290(4):495-501, 2003.
PMID: 12876092

Liberati A, Altman D G, Tetzlaff J, Mulrow C, Gøtzsche P C, et al. The PRISMA statement for reporting systematic reviews and meta-analyses of studies that evaluate health care interventions: explanation and elaboration. Annals of Internal Medicine. 2009;151(4):W65-W94.PMID:19622512

Sipahi I, Akay M H, Dagdelen S, Blitz A, & Alhan C. Coronary Artery Bypass Grafting vs Percutaneous Coronary Intervention and Long-term Mortality and Morbidity in Multivessel Disease: Meta-analysis of Randomized Clinical Trials of the Arterial Grafting and Stenting Era. JAMA internal medicine. 2013;PMID: 24296767

Homework Assignment: Select a study from the Cochrane Database to review and present.
<http://www.cochrane.org/>

Session 5 Evidence Evaluation Processes

Required Readings:

National Institutes of Health Consensus Development Panel. National Institutes of Health Consensus Development Conference Statement: Breast Cancer Screening for Women Ages 40-49, January 21-23, 1997. J Natl Cancer Instit 89:1015-26, 1997.
PMID: 9230883

The Cancer Letter, 23(4):1-11, 1997: "Mammography Screening for Ages 40-49 Not Supported by Data, NIH Panel Says.

Sackett DL. A Science for the Art of Consensus. J Natl Cancer Instit 89:1003-1005, 1997.
PMID: 9230881

Woolf SH, Lawrence RS. Preserving Scientific Debate and Patient Choice: Lessons from the Consensus panel on Mammography Screening. JAMA 278:2105-2108, 1997.
PMID: 9403427

Schwartz LM, Woloshin S. News media coverage of screening mammography for women in their 40s and tamoxifen for primary prevention of breast cancer. JAMA 2002;287(23):3136-42. PMID: 12069679

Gotzsche PC, Olsen O. Is screening for breast cancer with mammography justifiable? The Lancet 355:129-134, 2000. PMID: 10675181

Kolata G. The Painful Fact of Medical Uncertainty. The New York Times, 10 February 2002.

Addressing the issue of insufficient evidence:
<http://www.uspreventiveservicestaskforce.org/uspstf09/methods/inevidup.htm#copyright>

Retirement of the NIH Consensus Development Program 2013; <http://consensus.nih.gov/>

Screening for breast cancer: U.S. Preventive Services Task Force recommendation statement. *Ann Intern Med.* 17 November 2009;151(10):716-726 PMID19920272 see also <http://www.uspreventiveservicestaskforce.org/uspstf/uspsbrca.htm>

Editors. When Evidence Collides with Anecdote, Politics, and Emotion. Breast Cancer Screening. *Ann Int Med* 2010; 152:531-32. PMID: 20157099

Homework Assignment: Select a Consensus Conference and a US Preventive Services Task Force recommendation to review and discuss.

Session 6 Mid-term Examination

Session 7 Diffusion of New Technologies and Therapies

Required Readings:

Berwick D M. Disseminating innovations in health care. JAMA: the Journal of the American Medical Association. 2003;289(15):1969-1975. PMID:12697800

Legorreta AP, Silber JH, Costantino GN, et al. Increased cholecystectomy rate after the introduction of laparoscopic cholecystectomy. JAMA 270:1429-1432, 1993. PMID: 8371441

Steiner CA, Bass E, Talamini MA, et al. Surgical rates and operative mortality for open and laparoscopic cholecystectomy in Maryland. *New England Journal of Med* 330:403-408, 1994. PMID: 8284007

Fendrick AM, Escarce JJ, McLane C, et al. Hospital adoption of laparoscopic cholecystectomy. *Medical Care* 32:1058-1063, 1994.
PMID: 7934272

Krieger N, Löwy I, Aronowitz R, Bigby J, Dickersin K, Garner E, Gaudillière JP, Hinestrosa C, Hubbard R, Johnson PA, Missmer SA, Norsigian J, Pearson C, Rosenberg CE, Rosenberg L, Rosenkrantz BG, Seaman B, Sonnenschein C, Soto AM, Thornton J, Weisz G. Hormone replacement therapy, cancer, controversies, and women. *Journal of epidemiology and community health* 2005;59(9):740-8. PMID: 16100311.

Prasad V, Cifu A, & Ioannidis J P. Reversals of established medical practices: evidence to abandon ship. *JAMA: the Journal of the American Medical Association*. 2012;307(1):37-38.
PMID:22215160

Berwick D M, & Hackbarth A D. Eliminating waste in US health care. *JAMA: the Journal of the American Medical Association*. 2012;307(14):1513-1516. PMID:22419800

Leff B, Finucane TE. Gizmo Idolatry. *JAMA* 299:1830-2, 2008.
PMID: 18413879

Homework assignment. Examine the Choosing Wisely Campaign website at <http://www.abimfoundation.org/Initiatives/Choosing-Wisely.aspx> and select one recommended test or procedure that should no longer be performed.

Session 8 **Variations in Care**

Required Readings:

McNeil BJ. Shattuck Lecture—Hidden Barriers to Improvement in the Quality of Care. *NEJM* 345:1612-1620, 2001.
PMID: 11757509

Wennberg JE, Freeman JL, Culp WJ. Are hospital services rationed in New Haven or over-utilised in Boston? *Lancet* May 23, pp 1185-1188, 1987.
PMID: 2883497

Sirovich, BE, Gottlieb, DJ, Welch, HG, et al. Variation in the tendency of primary care physicians to intervene. *Archives of Internal Medicine*, 165(19), 2252-6, 2005.
PMID: 16246991

Gawande A. Big Med. Can hospital chains improve the medical industry? *The New Yorker* August 13, 2012.

Emanuel E J. Where are the health care cost savings?. JAMA (Chicago, Ill.). 2012;307(1):39-40. PMID:22215161

Mathews S C, & Pronovost P J. Physician autonomy and informed decision making: finding the balance for patient safety and quality. JAMA: the Journal of the American Medical Association. 2008;300(24):2913-2915. PMID: 19109120

Djulgovic B, & Paul A. From efficacy to effectiveness in the face of uncertainty: indication creep and prevention creep. JAMA: the Journal of the American Medical Association. 2011;305(19):2005-2006. PMID: 21586716

Homework Assignment: Dartmouth Atlas- pick a medical treatment and examine the variation in use across the nation. Plan to discuss your findings in class.

<http://www.dartmouthatlas.org/>

Session 9 Changing Physician Behavior/Practice Guidelines/Research in the Practice Setting

Required Readings:

Brouwers M C, Thabane L, Moher D, & Straus S E. Comparative effectiveness research paradigm: implications for systematic reviews and clinical practice guidelines. Journal of clinical oncology. 2012;30(34):4202-4207. PMID:23071227

IOM Report brief on Practice Guidelines; <http://www.iom.edu/Reports/2011/Clinical-Practice-guidelines-We-Can-Trust/Standards.aspx>

Brawley O, Byers T, Chen A, Pignone M, Ransohoff D, et al. New American Cancer Society process for creating trustworthy cancer screening guidelines. JAMA (Chicago, Ill.). 2011;306(22):2495-2499. PMID:22166609

Oeffinger K C, Fontham E T, Etzioni R, Herzig A, Michaelson J S, et al. Breast Cancer Screening for Women at Average Risk: 2015 Guideline Update From the American Cancer Society. JAMA: the Journal of the American Medical Association. 2015;314(15):1599-614. PMID: 26501536

Miglioretti D L, Zhu W, Kerlikowske K, Sprague B L, Onega T, et al. Breast Tumor Prognostic Characteristics and Biennial vs Annual Mammography, Age, and Menopausal Status. JAMA oncology. 2015;1(8):1069-77. PMID:26501844

Cabana MD, Rand CS, Powe NR, et al. Why don't physicians follow clinical practice guidelines? JAMA 282:1458-1465, 1999.PMID: 10535437

Merenstein D. Winners and Losers. JAMA 291(1):15-16, 2004.PMID: 14709561

Avorn J, & Fischer M. 'Bench to behavior': translating comparative effectiveness research into improved clinical practice. Health affairs. 2010;29(10):1891-1900.PMID: 20921491

Fischer M A, & Avorn J. Academic detailing can play a key role in assessing and implementing comparative effectiveness research findings. Health affairs. 2012;31(10):2206-2212. PMID: 23048098

McCulloch P, Nagendran M, Campbell W B, Price A, Jani A, et al. Strategies to reduce variation in the use of surgery. Lancet (London, England). 2013;382(9898):1130-1139. PMID:24075053

Pronovost P J. Enhancing Physicians' Use of Clinical Guidelines. JAMA: the Journal of the American Medical Association. 2013; PMID:24310916

Homework Assignment: Pick a medical condition and look up in Guideline Clearinghouse <http://www.guideline.gov> to see whether or not there are any guidelines for management. How many are there and who prepared them? Plan to discuss your findings in class.

Session 10

Class Presentations - Term Papers Due