

Health Services Research TSCI 6065
Health Services Research

Fall 2017

CLASS DAYS and TIME: Thursdays 3:00 p.m. – 5:00 p.m.

CLASSROOM: ALTC 2.211C

COURSE FACULTY: Course Co-Directors: Helen Hazuda, PhD & Polly H. Noël, PhD

OFFICE LOCATION: Hazuda: DTL 5.602U Noël: ALM VA Hospital: F311 **OFFICE HOURS:** By Appointment

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READ THIS DOCUMENT CAREFULLY - YOU ARE RESPONSIBLE FOR ITS CONTENTS.

COURSE DESCRIPTION AND OBJECTIVES

Include the course description from the course catalog as well as any requirements for adhering to HIPAA or lab, environmental, health, and safety regulations, if applicable.

Pre-requisites – TSCI Methods-1 & TSCI Methods-2

Semester credit hours – 2 hours

By the end of this course, each student should be able to:

- Articulate core concepts used in health services research.
- Describe basic methods used in health services research
- Identify relevant databases used in health services research
- Critically appraise and interpret published reports of health services research
- Identify potential funding opportunities and develop specific aims for a health services research project

COURSE ORGANIZATION

The main teaching modalities used in this course include:

- 1) Lectures with interactive discussion and break-out groups
- 2) Papers completed outside of class
- 3) Class presentations

Materials – Readings & Assignment Handouts, which will be posted on Canvas & distributed in class.

Computer Access – Various materials and assignments will require access to a computer with internet capabilities.

Computer Requirements:

Students are required to have a laptop computer that can connect to and operate over a wireless network.

Software required:

- Microsoft Office Suite (A personal copy of the latest version can be purchased at The UTHSCSA bookstore at student pricing with a student ID)

Laptops with an Apple based Operating System must be able to also operate using a Windows based Operating System. It may be necessary to purchase Windows (student pricing available at The UTHSCSA bookstore with a student ID) and virtualization software.

All laptops will connect to The UTHSCSA network via the HSCwave broadcast wireless connection. Authentication for wireless use is based on The UTHSCSA domain username and password.

Verification of proper operation **prior** to the start of class is highly recommended.

Assistance is available thru the IMS Service Desk

- Telephone:(567-7777
- E-mail (ims-servicedesk@uthscsa.edu)

Assistance is also available at the IMS Student Support Center (ALTC 106).

ATTENDANCE POLICY:

Attendance at scheduled classes and examinations is crucial to meeting course objectives. Therefore, regular attendance in class is expected of each student.

- Attendance is defined as being present within 15 minutes after the scheduled beginning of the class and until 15 minutes before the scheduled ending of the class.
- Excused absences may be granted by the Course Director in cases such as formal presentations at scientific meetings, illness, or personal emergency.
- Excused absences are considered on an individual basis and require electronic communication with the Course Director to request an excused absence. The e-mail request to the Course Director for consideration of an excused absence must provide details regarding the circumstances and specific dates.
- It is expected that students will provide *advanced notice* of absence for scheduled events.
- If a student has excessive unexcused absences in a given course, they will automatically receive a grade of *unsatisfactory* unless *makeup* has been approved by the Course Director.
- Makeup of absences (both excused and unexcused) is allowed at the discretion of the Course Director.
- Allowable unexcused absences will be determined by the credit hours of the course as follows:

Course Semester Credit Hours	Allowable Unexcused Absences
3.0	3
2.0	2
1.0	1

TEXTBOOKS

Required: There are no textbooks for this course. Requires and optional readings will be posted on Canvas prior to relevant class sessions.

Reading Assignments – Assigned readings are listed below on the class scheduled and will be posted on Canvas prior to relevant class sessions

GRADING POLICIES AND EXAMINATION PROCEDURES

This is a **PASS/FAIL** course. To PASS this course, you must accumulate at least **80 out of 100 points** over the semester. The following outlines the manner by which you will be evaluated:

Weekly Quiz (20 points):

There will be a 1-2 item quiz given during the first 5 minutes of each class covering the readings for that class. Each item (either multiple choice or fill in the blank) will be worth 1 point. Make-up quizzes will not be offered in case of late arrival or absence, regardless of the reason.

Introductory Assignment (20 points):

Students will conduct a literature search in MEDLINE or PUBMED to identify a peer-reviewed research article that was published during the prior 12 months, includes empirical data (i.e., not a review article or opinion piece), and focuses on assessing or improving the quality of health care on a topic of their choosing. Students will prepare a 2-3 page paper outside of class that describes the study and incorporates concepts from the first 3 class sessions and reading assignments. For full credit, the paper **must** include all of the following: 1) what type of “health service” was being assessed or improved?, 2) how was “quality” defined & measured?, 3) what type of quality measure was used from Donabedian’s Framework? Students must also describe the study findings and reflect on them in relation to one of the seminal papers on the quality of care: *McGlynn EA et al., The quality of health care delivered to adults in the United States. N Engl J Med 2003;348(26):2635-45*. The assignment must be completed and submitted on Canvas prior to the start of the 5th session (i.e., by 2:30 pm on 9/22/2016).

Secondary Database Assignment (30 points):

Each student must complete a written assignment on secondary databases that will be completed outside of class. Each student will select a secondary database (from a pre-specified list that will be distributed during class) that has been utilized in health services research and related fields. The student will be asked to complete a structured worksheet describing the purpose and content of the selected database, as well as how the database can be accessed. In addition, the student will be required to: 1) conduct a literature search in MEDLINE and/or PUBMED to identify a peer-reviewed research publication published during the prior 12 months that has utilized data from the selected database; 2) report which variables from the database were utilized in the research article; and 3) critically appraise the article. The worksheet and detailed instructions will be distributed to students during the 4th class (9/15/2016). The assignments will be due 5 weeks later (submitted on Canvas) prior to the 9thth class (i.e., by 2:30 pm on 10/20/2016).

Health Services Research Funding Assignment (30 points):

Awareness of various funding opportunities may stimulate interest in health services research. Each student will be asked to select an active Funding Opportunity Announcement (FOA) from Federal Agencies (e.g., NIH, AHRQ, PCORI, VA, DoD) or not-for-profit foundations (e.g., Robert Wood Johnson, Hartford Foundation) from a pre-specified list that could be used to address a health services research question of interest to the student. Students will prepare a 2-page summary. The first page will identify the Agency / Component, FOA Title & Number, and Activity Code, as well as briefly summarize the Funding Opportunity Purpose, Research Objectives, and Specific Areas of Research Interest. The second page will be used to briefly state a research question or specific aim that could be addressed by the FOA, proposed study design / methodology, setting, study population, data source(s), and types of collaborators/areas of expertise needed. Assignment instructions will be distributed on 10/27/2016. The written assignment must be submitted on Canvas prior to 15th class (by 2:30 pm) on 12/8/2016. Students will present and discuss these during the last two class sessions.

Assignment Format: Unless otherwise specified, all assignments should be double-spaced using 0.5 inch margins using 11 Arial pt fonts.

Late Assignments: 20% of the total possible points will be subtracted for assignments that are turned in late.

Extra Credit: Extra credit may be assigned at the instructors’ discretion.

Grading System

Pass = 80-100 points

Fail = < 80 points

REQUESTS FOR ACCOMODATIONS FOR DISABILITIES

In accordance with policy 4.2.3, **Request for Accommodation Under the ADA and the ADA Amendments Act of 2008 (ADAAA)**, any student requesting accommodation must submit the appropriate request for accommodation under the American with Disabilities Act (ADA, form 100). to his/her appropriate Associate Dean of their School and a copy to the ADA Coordinator. Additional information may be obtained at <http://uthscsa.edu/eo/request.asp>.

ACADEMIC INTEGRITY AND PROFESSIONALISM

Any student who commits an act of academic dishonesty is subject to discipline as prescribed by the UT System Rules and Regulations of the Board of Regents. Academic dishonesty includes, but is not limited to, cheating, plagiarism, collusion, the submission for credit of any work or materials that are attributable in whole or in part to another person, taking an exam for another person, signing attendance sheets for another student, and any act designed to give unfair advantage to a student or the attempt to commit such an act. Additional information may be obtained at <http://catalog.uthscsa.edu/generalinformation/generalacademicpolicies/academicdishonestypolicy/>

TITLE IX AT UTHSCSA

Title IX Defined:

Title of the Education Amendments of 1972 is a federal law that prohibits sex discrimination in education. It reads “no person in the United States shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity receiving Federal financial assistance.”

University of Texas Health Science Center San Antonio’s Commitment:

University of Texas Health Science Center San Antonio (UTHSCSA) is committed to maintaining a learning environment that is free from discriminatory conduct based on gender. As required by Title IX, UTHSCSA does not discriminate on the basis of sex in its education programs and activities, and it encourages any student, faculty, or staff member who thinks that he or she has been subjected to sex discrimination, sexual harassment (including sexual violence) or sexual misconduct to immediately report the incident to the Title IX Director.

In an emergency, victims of sexual abuse should call 911. For non-emergencies, they may contact UPD at 210-567-2800. Additional information may be obtained at <http://students.uthscsa.edu/titleix/>

EMAIL POLICY

Every student is issued a University e-mail address and account at the time of enrollment. As a matter of University Policy, communications between students and faculty that occur using the student’s University e-mail address is considered official business. Therefore, **students are expected to check their university email inboxes on a regular basis** so that any announcements, instructions, or information regarding this course will be received in a timely way. Missed communications due to inadequate monitoring of incoming emails on the University’s email server will never be a valid excuse for unsatisfactory academic progress.

USE OF RECORDING DEVICES

Recording of lectures and other learning activities in this course by any means (*e.g.*, video, audio, etc.) is only permitted if approved by the instructor or required for compliance with Americans with Disabilities Act (ADA).

ELECTRONIC DEVICES

Cell phones should be turned off during all class sessions. Computers and electronic tablets are allowed for participating in classroom activities (*e.g.*, viewing slides presented in lecture or conference materials). Use of electronic devices for purposes that are not directly connected with classroom activities (*e.g.*, texting, tweeting, emailing, web-surfing, or gaming) during class sessions may result in dismissal resulting in an unexcused absence for that session.

TENTATIVE CLASS SCHEDULE

TSCI 6065

Health Services Research

Fall 2017

WEEK	DATE	TOPIC	Lecturer / Assignment	Instructor and Modality
Week 1	Aug 24	Course Overview / Intro to HSR	Polly H. Noël, PhD	
Week 2	Aug 31	History of HSR / Role of Theory	Helen Hazuda, PhD	
Week 3	Sept 7	Quality of Care	Polly H. Noël, PhD	
Week 4	Sept 14	Secondary Data	Polly H. Noël, PhD	
Week 5	Sept 21	Access	Helen Hazuda, PhD	
		Intro Assignment Due Before Class		
Week 6	Sept 28	Pharmacoepidemiology Research using NCHS Surveys	Kelly Reveles, PharmD, PhD	
Week 7	Oct 5	Health Information Technology	Bryan Alsip, MD	
Week 8	Oct 12	Patient-Reported Outcomes	Polly H. Noël, PhD	
Week 9	Oct 19	HSR for Cardiovascular Research	Barbara Turner, MD	
		Secondary Data Assignment Due Before Class		
Week 10	Oct 26	Geographic Variation & Small Area Analysis	Bob Ferrer, MD	
Week 11	Nov 2	Health Disparities	Helen Hazuda, PhD	
Week 12	Nov 9	Patient Safety & Medical Errors	Jose Cadena, MD	
Week 13	Nov 16	Studying Change in Health Care Organizations	Jacqueline Pugh, MD	
	Nov 23	Thanksgiving – No Class!		
Week 14	Nov 30	Improvement Science & Implementation Research	Kathleen Stevens, PhD	
Week 15	Dec 7	Class Presentations	Drs. Hazuda & Noël	
		Funding Assignment Due Before Class		
Week 16	Dec 14	Class Presentations (last session)	Drs. Hazuda & Noël	
Week 17		Final Grades Due		

Health Services Research

Lesson Objectives & Readings for Individual Sessions

Session	Topic	Lesson Objectives & Reading Assignments
Week 1 Aug 24	Course Overview / Intro to HSR / Quality of Care	<p>Objectives:</p> <ol style="list-style-type: none"> 1. Describe the goals of the course 2. Define health services research and describe its domains 3. Evaluate a study to determine if it falls within the domain of health service research <hr/> <p>Required Readings Health Services Research: Translating Discovery & Research into Practice and Policy; Chapter 36 pp 543-561; from Clinical and Translational Science: Principles of Human Research. D Robertson & GH Williams (Eds) 2009.</p>
Week 2 Aug 31	HSR History / Role of Theory	<p>Objectives:</p> <ol style="list-style-type: none"> 1. Describe seminal studies in HSR 2. Describe the role of theory in HSR 3. Discuss examples of theories, models, or conceptual frameworks in used in HSR <hr/> <p>Required Readings: McGlynn EA, Asch SM, Adam J, Keeseey J, Hicks J, DeCristofaro A, Kerr EA. The quality of health care delivered to adults in the United States. NEJM 2003;348:2635-45. National Cancer Institute. Theory at a glance: A guide for health promotion practice (2nd Ed). US Dept of Health & Human Services, NIH Publication No. 05-3896. Sept 2005.</p>
Week 3 Sept 7	Quality of Care	<ol style="list-style-type: none"> 4. Identify definitions of health care quality 5. Identify major strategies for assessing quality of health care 6. Describe interventions to improve quality of care <hr/> <p>Brook RH, McGlynn EA, Shekelle PG. Defining and measuring quality of care: A perspective from US researchers. International Journal for Quality in Health Care 2000;12(4):281-295.</p>
Week 4 Sept 14	Secondary Data	<p>Objectives:</p> <ol style="list-style-type: none"> 1. Define secondary data 2. Describe major applications of secondary data 3. Describe how secondary data can be useful to a research career 4. Enumerate some limitations of secondary data 5. Describe how to address bias in secondary data analysis 6. Identify sources of healthcare-related secondary data <hr/> <p>Required Readings Bradley et al., Health Services Research and Data Linkages: Issues, Methods, and Directions for the Future. Health Services Research 2010;Special Issue:1468-1488 Kornegay & Segal: Chapter 8 Selection of data sources. In User Guide to Comparative Effectiveness Research AHRQ 2012 pp. 109-127</p>
Week 5 Sept 21	Access	<p>Objectives:</p> <ol style="list-style-type: none"> 1. discuss potential barriers to access: structural, financial and personal. 2. describe measures used to evaluate access to care

		<p>Required Readings: Fortney et al. A re-conceptualization of access for 21st century healthcare. <i>JGIM</i> 2011;26(Suppl 2):639-47.</p>
<p>Week 6 Sept 28</p>	<p>Pharmacoepi / NCHS Surveys</p>	<p>Objectives: 1. describe pharmacoepidemiology research 2. identify data sources that can be used in pharmacoepidemiological research</p>
		<p>Required Readings: Oramasionwu CU, Skinner J, Ryan L, Frei CR. Disparities in Antiretroviral Prescribing for Blacks and Whites in the United States. <i>J Natl Med Assoc.</i> 2009;101:1140-1144. Reveles KR, Lee GC, Boyd NK, Frei CR. The risk in Clostridium difficile infection incidence among hospitalized adults in the United States: 2001-2010. <i>Am J Infect Control.</i> 2014 Oct;42(10):1028-32.</p>
<p>Week 7 Oct 5</p>	<p>HIT</p>	<p>Objectives: 1. identify major benefits of HIT and electronic health records on health care quality 2. discuss experience using diabetes registry to monitor care quality and outcomes</p>
		<p>Required Readings: Jones SS, Rudin RD, Perry T, Shekelle PG. Health Information Technology: An Updated Systematic Review with a Focus on Meaningful Use. <i>Ann Intern Med</i> 2014;160:48-54. Wright A, Feblowitz J, Samal L, McCoy AB, Sittig DF. The Medicare Electronic Health Record Incentive Program: Provider Performance on Core and Menu Measures. <i>Health Services Research</i> 2014;49(1):325-346</p>
<p>Week 8 Oct 12</p>	<p>Patient-Reported Outcomes</p>	<p>Objectives: 1. articulate rationale for and conceptual issues related to the assessment of patient reported outcomes, including functional status and patient satisfaction 2. identify generic and disease-specific measures relevant to their content area of interest 3. articulate difference between patient satisfaction and patient care experience questionnaires</p>
		<p>Required Readings: The Use of Questionnaires & Surveys. (Chapter 9) Marcia A. Testa & Donald C. Simonson pgs. 137-153. In <i>Clinical and Translational Science: Principles of Human Research.</i> D. Robertson & GH Williams (Eds). Academic Press: Boston. 2009.</p>
<p>Week 9 Oct 19</p>	<p>HSR Cardiovascular Research</p>	<p>Objectives: 1. Understand strengths & limitations of research using administrative & EMR data. 2. Articulate issues related to “Big Data</p>
		<p>Required Readings: None for this class since Secondary Data Assignment is due.</p>

<p>Week 10 Oct 26</p>	<p>Geographic Variation & SAA</p>	<p>Objectives:</p> <ol style="list-style-type: none"> 1. explain the contribution of small area analysis to health services research. 2. describe the data sources and methods used in small area analysis 3. discuss the methodological challenges and limitations of small area analysis. <p>Required Readings:</p> <p>Wennberg J, Gittelsohn. Small area variations in health care delivery. Science 1973;182:1102-08. [Wennberg’s seminal study of surgical rates in Vermont]</p> <p>Fisher ES, et al. The Implications of Regional Variations in Medicare Spending. Part 1: The Content, Quality, and Accessibility of Care. Ann Int Med 2003; 138:273-287. [a widely-cited example of the Dartmouth group’s current work]</p> <p>Optional Readings:</p> <p>Folland S, Stano M. Small area variations: a critical review of propositions, methods and evidence. Medical Care Review 1990;47:419-465. [review of the assumptions and methodological limitations of small-area analysis]</p> <p>Diehr P, et al. What is too much variation? The null hypothesis in small-area analysis. HSR 1990;24:741-771. [explores the expected statistical distributions of small area statistics]</p> <p>Gawande A. 2009. The cost conundrum: What a Texas town can teach us about health care.</p> <p>Abelson R & Gardiner H. Critics question study cited in health debate. June 2, 2010. New York Times reprint.</p>
<p>Week 11 Nov 2</p>	<p>Health Disparities</p>	<p>Objectives:</p> <ol style="list-style-type: none"> 1. Describe the major sources of health disparities 2. Explain the research implications of differences between the NIH and IOM definitions of health disparities 3. Identify key challenges in conducting health disparities research with ethnically diverse populations <p>Required Readings:</p> <p>Hazuda HP. Minority issues in Alzheimer disease outcome research. Alzheimer Disease and Associated Disorders. 1997; 2(suppl. 6): 156-161.</p> <p>Isaacs SL, Schroeder SA. Class – The ignored determinant of the nation’s health. NEJM 2004;Sept 9:1137-1142</p>
<p>Week 12 Nov 9</p>	<p>Patient Safety/Medical Errors</p>	<p>Objectives:</p> <ol style="list-style-type: none"> 1. describe several examples of significant medical errors 2. describe components necessary for a successful patient safety program 3. describe potential funding agencies for patient safety research <p>Required Readings:</p> <p>Shekelle PG et al., Advancing the science of patient safety. Annals of Internal Medicine 2011;154:693-696.</p> <p>Morello RT et al., Strategies for improving patient safety culture in hospitals: A systematic review. BMJ Quality & Safety 2012;0:1-8</p>

<p>Week 13 Nov 16</p>	<p>Studying Change in Healthcare Organizations</p>	<p>Objectives:</p> <ol style="list-style-type: none"> 1. Discuss models and tools used to study organizational change 2. Discuss key concepts of complex adaptive systems as they apply to health care <p>Required Readings:</p> <p>Tabak RG, Khoong EC, Chambers DA, Brownson RC. Bridging research and practice: Models for dissemination and implementation research. Am J Prev Med 2012;43(3):337-350.</p> <p>Simpson KM, Porter K, McConnell ES, Colón-Emeric C, Daily KA, Stalzer A, Anderson RA. Tool for evaluation research implementation challenges: A sense-making protocol for addressing implementation challenges in complex research settings. Implementation Science 2013,8:2.</p> <p>Optional Reading:</p> <p>Chambers DA, Glasgow RE, Stange KC. The dynamic sustainability framework: addressing the paradox of sustainment amid ongoing change.</p>
<p>Nov 23</p>	<p>Thanksgiving Week</p>	

<p>Week 14 Nov 30</p>	<p>Improvement Science / Implementation Research</p>	<p>Objectives:</p> <ol style="list-style-type: none"> 1. discuss the range of evidence on interventions for improving health care quality understand 2. barriers and facilitators to improving quality of care and patient outcomes <p>Required Readings:</p> <p>Toward evidence-based quality improvement. Evidence (and its limitations) of the effectiveness of guideline dissemination and implementation strategies 1966-1998. Grimshaw J, Eccles M, Thomas R, MacLennan G, Ramsay C, Fraser C, Vale L. J Gen Intern Med 2006;21(Suppl 2):S14-20.</p> <p>Shojania KG, Grimshaw JM. Evidence-based quality improvement: The state of the science. Health Affairs 2005;138-150.</p> <p>Optional Readings</p> <p>Stevens, KR and Ovretveit, J Improvement Research Priorities: USA Survey and Expert Consensus,” Nursing Research and Practice, vol. 2013, Article ID 695729, 8 pages, 2013. http://www.hindawi.com/journals/nrp/2013/695729/</p> <p>Plsek, P. E. (2001). Redesigning health care with insights from the science of complex adaptive systems [Appendix B]. In Institute of Medicine (Ed.), Crossing the quality chasm: A new health system for the 21st century (pp. 309-317). Washington, DC: National Academies Press. Link: http://www.nap.edu/openbook.php?record_id=10027&page=309</p> <p>Damschroder, L. J., Aron, D. C., Keith, R. E., Kirsh, S. R., Alexander, J. A., & Lowery, J. C. (2009). Fostering implementation of health services research findings into practice: a consolidated framework for advancing implementation science. Implementation Science, 4, 50. Link: http://www.implementationscience.com/content/4/1/50</p> <p>Stevens, K.R., (2013) "The Impact of Evidence-Based Practice in Nursing and the Next Big Ideas" OJIN: The Online Journal of Issues in Nursing Vol. 18, No. 2, Manuscript 4. http://www.nursingworld.org/MainMenuCategories/ANAMarketplace/ANAPeriodicals/OJIN/TableofContents/Vol-18-2013/No2-May-2013/Impact-of-Evidence-Based-Practice.html</p> <p>Mitchell, S. A., Fisher, C. A., Hastings, et al. (2010). A thematic analysis of theoretical models for translational science in nursing: mapping the field. [Research Support, N.I.H., Extramural; Review]. Nursing Outlook, 58(6), 287-300. Link: http://www.sciencedirect.com/science/article/pii/S002965541000312X</p>
<p>Week 15 Dec 7</p>	<p>HSR Funding Assignment Class Presentations</p>	<p>Objectives:</p> <ol style="list-style-type: none"> 1. Identify current funding opportunities for HSR 2. Develop and orally present an HSR project <p>Required Readings:</p> <p>N/A</p>
<p>Week 16 Dec 14</p>	<p>HSR Funding Assignment Class Presentations</p>	<p>Objectives:</p> <ol style="list-style-type: none"> 1. Identify current funding opportunities for HSR 2. Develop and orally present an HSR project <p>Required Readings:</p> <p>N/A</p>