

Health Services Research TSCI 6065 Health Services Research

Fall 2021

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

CLASSROOM: ALTC 2.213

COURSE FACULTY: Course Director: Helen P. Hazuda, PhD

OFFICE LOCATION: Hazuda: DTL 316T **OFFICE HOURS:** By Appointment via Teams

EMAIL: hazuda@uthscsa.edu

TELEPHONE: Hazuda: 210.862-1243

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 an abstract 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.

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 Teams** (Please visit Microsoft for the free download, if needed)
- **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. Required and optional readings will be posted on Canvas prior to relevant class sessions.

Reading Assignments – Assigned readings are listed below on the class schedule 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 how you will be evaluated:

Weekly Quiz (20 points):

A 2-item quiz will be given at the beginning of each class covering the required reading(s) for that class. Each item (usually multiple choice) will be worth 1 point. Make-up quizzes will not be offered in case of late arrival or absence, regardless of the reason. Quizzes will be completed via CANVAS.

Introductory Assignment (20 points):

Students will conduct a literature search in MEDLINE (using PUBMED or OVID) to identify a peer-reviewed research article that:

- focuses on assessing or improving the quality of health care on a topic of their choosing
- includes empirical data (i.e., not a review article or opinion piece), and
- was published during the prior 24 months.

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 the following elements:

- 1) Identification of the “health service” assessed or improved (2 points)
- 2) Identification of the quality indicator(s) defined/measured (3 points)
- 3) Correct classification of each quality indicator(s) used based on Donabedian’s Framework (i.e., as either a structural, process, or outcome measure) WARNING: do not blindly accept labels used by authors – apply Donabedian’s Framework. (3 points)
- 4) Description of the study objectives, design, and findings (3 points)
- 5) Specification of whether the quality indicator(s) related to prevention, acute, or chronic care (3 points)
- 6) Comparison of the quality indicators used in the study you have chosen with those studied in 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.
 - Discussion of whether quality indicators in the study you chose were similar to those in McGlynn et al., 2003 (3 points)
 - Discussion of how findings about the level of adherence to quality indicators in the study you chose compare to adherence levels for comparable preventive, acute, or chronic care in McGlynn et al. 2003. (3 points)

Assignments should be double-spaced with 0.5-inch margins using Arial 11pt fonts.

The assignment will not be graded unless it is accompanied by a PDF of the full-text version of the journal article (either embedded as a link or physically attached as a PDF). The assignment must be completed and submitted on CANVAS prior to the start of the 5th session (i.e., by 2:30 pm on 9/23/2021).

Secondary Database Assignment (30 points):

Each student will:

- 1) select a secondary database (from a pre-specified list that will be distributed during class) that has been utilized in health services research,
- 2) complete a structured worksheet (WORKSHEET A) describing the purpose and content of the selected database, as well as how the database can be accessed, and
- 3) conduct a literature search in MEDLINE (either using PUBMED or OVID) to identify a peer-reviewed research article that:
 - was published during the prior 24 months, and
 - analyzed data from the selected database
- 4) complete a structured worksheet (WORKSHEET B) describing and critically appraising the article.

Students must indicate their top 3 database choices by the end of class on September 17th. The same database may not be used by more than 1 person. Assignments must be submitted on CANVAS (due by 2:30 pm on 10/24/2020) and should be double-spaced using 0.5-inch margins using Arial 11pt fonts. The assignment will not be graded unless it is accompanied by a PDF of the full-text version of the journal article (either embedded as a link or physically attached as PDF).

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 using structured worksheets that will be posted on CANVAS. 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 proposed analytic plan. Assignment instructions will be distributed on 10/24/2019. The

written assignment must be submitted on CANVAS prior to 15th class (i.e., by 2:30 pm on 12/15/2020). 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 Arial 11pt 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 Americans 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/eeo/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 IX 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 are 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.

FALL 2021 CLASS SCHEDULE

TSCI 6065 Health Services Research

Final schedule subject to change depending on lecturer availability

| WEEK | DATE | TOPIC | Lecturer / Assignment | Instructor and Modality |
|---------|---------|---|-----------------------|-------------------------|
| Week 1 | Aug 26 | Course Overview / Intro to HSR | Helen P. Hazuda, PhD | |
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| Week 2 | Sept 2 | History of HSR / Role of Theory | Helen P. Hazuda, PhD | |
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| Week 3 | Sept 9 | Quality of Care | Polly H. Noël, PhD | |
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| Week 4 | Sept 16 | Secondary Data | Helen P. Hazuda, PhD | |
| | | Secondary Data Assignment Distributed | | |
| Week 5 | Sept 23 | Access to Care | Helen P. Hazuda, PhD | |
| | | Intro Assignment Due Before Class | | |
| Week 6 | Sept 30 | Health Services Research with National Surveys | Kelly Reveles, PharmD | |
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| Week 7 | Oct 7 | Patient-Reported Outcomes | Polly H. Noël, PhD | |
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| Week 8 | Oct 14 | TBD | TBD | |
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| Week 9 | Oct 21 | Population Health Management | Chandana Tripathy, MD | |
| | | Secondary Data Assignment Due Before Class | | |
| Week 10 | Oct 28 | Health Disparities | Helen P. Hazuda, PhD | |
| | | Health Services Funding Assignment Distributed | | |
| Week 11 | Nov 4 | Mixed Methods and Trial Designs | Luci Leykum, MD | |
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| Week 12 | Nov 11 | Geographic Variation & Small Area Analysis | Bob Ferrer, MD | |
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| Week 13 | Nov 18 | TBD | TBD | |
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| | Nov 25 | Thanksgiving – No Class! | | |
| Week 14 | Dec 2 | Improvement Science & Implementation Research | Kathleen Stevens, PhD | |
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| Week 15 | Dec 9 | Class Presentations | Helen P. Hazuda, PhD | |
| | | Written Funding Assignment Due from ALL Learners Before Class | | |
| Week 16 | Dec 16 | Class Presentations (last session) | Helen P. Hazuda, PhD | |
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| Week 17 | Dec 22 | Final Grades Due | | |


Health Services Research

Lesson Objectives & Readings for Individual Sessions

| Session | Topic | Lesson Objectives & Reading Assignments |
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| Week 1 Aug 26 | Course Overview / Intro to HSR | Objectives: 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 |
| | | 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. |
| Week 2 Sept 2 | HSR History / Role of Theory | Objectives: 1. Describe seminal studies in HSR 2. Describe the role of theory in HSR 3. Discuss examples of theories, models, or conceptual frameworks used in HSR |
| | | Required Reading: McGlynn EA, Asch SM, Adam J, Keesey J, Hicks J, DeCristofaro A, Kerr EA. The quality of health care delivered to adults in the United States. NEJM 2003;348:2635-45. Optional Reading/Resource: National Cancer Institute. Theory at a glance: A guide for health promotion practice (2 nd Ed). US Dept of Health & Human Services, NIH Publication No. 05-3896. Sept 2005. |
| Week 3 Sept 9 | Quality of Care | 1. Identify definitions of health care quality 2. Identify major strategies for assessing quality of health care 3. Describe interventions to improve quality of care |
| | | Required Readings: . Defining and measuring quality of care: A perspective from US researchers. International Journal for Quality in Health Care 2000;12(4):281-295. |
| Week 4 Sept 16 | Secondary Data | Objectives: 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 |
| | | Required Reading Bradley et al., Health Services Research and Data Linkages: Issues, Methods, and Directions for the Future. Health Services Research 2010;Special Issue:1468-1488. |

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| Week 5 Sept 23 | Access to Care | Objectives: 1. Discuss potential barriers to access: structural, financial and personal. Describe measures used to evaluate access to care |
| | | Required Reading: Fortney et al. A re-conceptualization of access for 21 st century healthcare. <i>JGIM</i> 2011;26(Suppl 2):639-47 |
| Week 6 Sept 30 | Health Services Research with National Surveys | Objectives: 1. Describe pharmacoepidemiology research 2. Identify data sources that can be used in pharmacoepidemiological research |
| | | Required Reading: 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. |
| | | Optional Reading: 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. |
| Week 7 Oct 7 | Patient-Reported Outcomes | 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 |
| | | Required Reading: 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. |
| Week 8 Oct 14 | TBD | |

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| <p>Week9 Oct 21</p> | <p>Population Health Management</p> | <p>Objectives:</p> <ol style="list-style-type: none"> 1. Articulate rationale for population health management. 2. Identify policies that promote adoption of population health management. 3. Describe the theory of disruptive innovation and its application for health care. <p>Required Reading: Berwick DM, Nolan TW, Whittington J. The Triple Aim: Care, health, and cost. Health Affairs 2008; 3:759-769.</p> <p>Optional Reading: Hwang J, Christensen CM. Disruptive innovation in Health Care Delivery: A framework for business-model innovation. Health Affairs 2008; 27(5):1329-1335.</p> |
| <p>Week 10 Oct 28</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 <p>Required Reading: Isaacs SL, Schroeder SA. Class – The ignored determinant of the nation’s health. NEJM 2004;Sept 9:1137-1142.</p> |
| <p>Week 11 Nov 4</p> | <p>Mixed Methods and Trial Designs</p> | <p>Objectives:</p> <ol style="list-style-type: none"> 1. Define mHealth 2. Describe the application of mHealth in health promotion and health services research <p>Required Reading: Fetters et al. Achieving integration in mixed methods designs – Principles and practices. Health Services Research 2013;48(6, Part II):2134-2156.</p> <p>Optional Readings: Curran GM et al. Effectiveness-Implementation Hybrid Designs. Med Care 2012;50(3): 217-226.</p> <p>Kilbourne AM et al. Protocol: Adaptive Implementation of Effective Programs Trial (ADEPT): cluster randomized AMART trial comparing a standard vs enhanced implementation strategy to improve outcomes of a mood disorder program. Implementation Science 2014;9:132.</p> <p>Tong A et al. Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. Intl J Quality in Health Care; 9(6):349-357.</p> |

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| <p>Week 12 Nov 11</p> | <p>Geographic Variation & Small Area Analysis</p> | <p>Required Reading: 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>Optional Readings: 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 work] 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] 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] Gawande A. 2009. The cost conundrum: What a Texas town can teach us about health care. Abelson R & Gardiner H. Critics question study cited in health debate. June 2, 2010. New York Times reprint.</p> |
| <p>Week 13 Nov 18</p> | <p>TBD</p> | <p>Objectives: 1.</p> <p>Required Reading:</p> <p>Optional Reading:</p> |
| <p>Nov 26</p> | <p>Thanksgiving Week No Class</p> |  |
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| <p>Week 14 Dec 2</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 2. Understand barriers and facilitators to improving quality of care and patient outcomes <p>Required Reading: Nilsen P. Making sense of implementation theories, models, and frameworks. Implementation Science 2015; 10:53.</p> <p>Optional Readings: Grimshaw J, Eccles M, Thomas R, MacLennan G, Ramsay C, Fraser C, Vale L. Toward evidence-based quality improvement. Evidence (and its limitations) of the effectiveness of guideline dissemination and implementation strategies 1966-1998. J Gen Intern Med 2006;21(Suppl 2):S14-20. Shojania KG, Grimshaw JM. Evidence-based quality improvement: The state of the science. Health Affairs 2005;138-150. 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/ Plsek, P. E. (2001). Redesigning health care with insights from the science of complex adaptive systems [Appendix B]. In Institute of</p> |
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| | | <p>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 9</p> | <p>HSR Funding Assignment Class Presentations NOTE: All students must submit their funding assignments today</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 Reading: N/A</p> |
| <p>Week 16 Dec 16</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 Reading: N/A</p> |

