Introduction to Health Services Research
Population Health 796

Spring 2014
WARF Room 758
Monday 9:00 AM-11:30 AM

Health Services Research is...

“... a multidisciplinary field, both basic and applied, that examines the use, costs, quality, accessibility, delivery, organization, financing and outcomes of health services to increase knowledge and understanding of the structure, process and effects of health services for individuals and populations.” [Institute of Medicine, 1995]

Course Instructor

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Teaching Assistant, Population Health Sciences

Course Description and Learning Objectives
The theoretical and methodological foundations of HSR are highly varied; however, an aspiration to conduct well-designed studies that yield meaningful and generalizable findings is common to all corners of HSR. This course is a response to that aspiration. In the first module, we will focus on the basic elements of research design and the process by which an idea becomes a feasible, compelling research question. The second module provides a critical overview of quasi-experimental research designs that play a particularly important role in HSR today. We will then consider the criteria -- effectiveness, efficiency and equity-- that health services researchers use to evaluate healthcare system characteristics, interventions, and policies. Applying the lessons of modules 1 and 2, we will study the definitions, theoretical foundations, and measurement of these criteria and critically review an illustrative sample of the resulting evidence.

Upon successful completion of the course, students should be able to:
1) Describe the aims and scope of health services research;
2) Read HSR literature critically including the identification and evaluation of research questions, hypotheses, theoretical framework, study design, methodological approaches, and conclusions; and
3) Identify the strengths and limitations of prominent quasi-experimental designs in HSR.

Course Requirements and Evaluation
1) Staying current with assigned readings, participation in class discussions and exercises
2) Three in-class tests
3) One cumulative final exam
4) In a small group, lead class discussion with the questions that you develop.

Tests
• The three in-class tests will cover the material from the following time periods: Test 1, Weeks 1-3; Test 2, Weeks 4-6; Test 3, Weeks 7-11.

Final Exam
• The final exam is cumulative. You will receive a limited number of questions in advance of the final exam. At the time of the final exam, you will be asked to answer a subset of those questions.

Discussion Questions
• During the 3rd module of the course, develop 8-10 discussion questions (and their answers) and lead discussion of these questions in class. Questions should apply the lessons from course modules 1 & 2 to a week's readings.
## Requirement
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<tr>
<th>Requirement</th>
<th>Date</th>
<th>% of final grade</th>
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<tbody>
<tr>
<td>Test I</td>
<td>February 17</td>
<td>20%</td>
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<tr>
<td>Test II</td>
<td>March 10</td>
<td>20%</td>
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<td>Test III</td>
<td>April 14</td>
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<tr>
<td>Final Exam</td>
<td>See UW Registrar for Date/Time</td>
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<tr>
<td>Participation</td>
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### Textbooks

**Required**
The Research Methods Knowledge Base, 3e. Trochim WMK. Atomic Dog Publishing: Cincinnati, OH.

**Recommended**


### REQUIRED READINGS BY WEEK AND TOPIC

#### MODULE I: BUILDING BLOCKS OF RESEARCH DESIGN IN HSR

<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Topic and Readings</th>
</tr>
</thead>
</table>
| 1    | 1/27/14 | Course Introduction, and Causal Thinking & Hypothesis Generation  
Aday, Chapter 1 pp.1-6 and Fig1.1.  
Brook RH. Health Services Research and Clinical Practice. 2010. JAMA. 305(15):1589-1590;  
Trochim Sections 1-1a through 1-1c; 1-1e; 1-2.d; 7-1; 7-1a;  
Mechanic D. 2002. Lessons from the unexpected: The importance of data infrastructure, conceptual models, and serendipity in health services research. The Milbank Quarterly 2001; 79:459-477 (read only section on conceptual model, pp 461-463)  
| 2    | 2/3/14 | Internal Validity I: Confounding, Endogeneity and Omitted Variables Bias  
Trochim Section 1-1d  
Again....  
| 3    | 2/10/14 | Internal Validity II: Reducing bias by design  
Trochim Sections 7-2 and 7-3 (pp.172-175) |
For the SCC readings, do not get bogged down in all of the names of designs. Rather, pay attention to the rationale, strengths and limitations of different combinations of design elements.

Shadish, Cook and Campbell (SCC) pp. 156-161 The Elements of Design (*Read this first among SCC readings*)

SCC pp103-110 Quasi-experimental designs that lack a control group or lack pretest observations on the outcome

SCC pp 135-144 Quasi-Experimental Designs that Use Both Control Groups and Pretests


**MODULE II: GREATEST HITS - QUASI-EXPERIMENTAL DESIGNS IN HSR**

### 7 3/10/14 Introduction and Overview

**TEST II, Covers Week 4-6**


*Additional readings will be added. Please check UW Learn site.*

### 8 3/17/14 SPRING BREAK

### 9 3/24/14 Interrupted Time Series (ITS)

SCC Chapter 6


Serumaga et al 2011. Effect of pay for performance on the management and outcomes of
<table>
<thead>
<tr>
<th>Date</th>
<th>Page</th>
<th>Content</th>
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<tbody>
<tr>
<td>4/7/14</td>
<td>11</td>
<td>Regression Discontinuity (RD)</td>
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<tr>
<td></td>
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<td>Trochim Section 10-2</td>
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<tr>
<td>4/14/14</td>
<td>12</td>
<td>EFFECTIVENESS</td>
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<td>TEST III, covers weeks 7-11</td>
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<td>Aday, Chapter 2 pp. 57-77 and Chapter 3, p. 93- top of p.110</td>
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<tr>
<td>4/21/14</td>
<td>13</td>
<td>EQUITY</td>
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<td>Aday pp. 195-198; Table 7.1 Appendix 7.1</td>
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<td>Andersen RM. 2008. National Health Surveys and the Behavioral Model of Health Services Use. Medical Care. 46(7):647-653. (Read only p.647 and pages 651-652; and Bring Figure 1 to Class)</td>
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<td>Additional readings will be assigned for this week. Please check UW Learn site.</td>
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<tr>
<td>4/28/14</td>
<td>14</td>
<td>EFFICIENCY</td>
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<td>Aday pp 121-139 in Chapter 4.</td>
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<tr>
<td>5/5/14</td>
<td>15</td>
<td>HSR, RIGHT NOW: Health insurance expansions &amp; experiments</td>
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Gruber J. 2011. The impacts of the Affordable Care Act: How reasonable are the projections? NBER Working Paper 17168. *(Read sections I and II only.)*


Sommers et al. 2013. The Affordable Care Act led to significant gains in health insurance and access to care for young adults. Health Affairs. 32(1):165-174.

*Again...*


_Last update: 1/20/14_