HPM 884
Health Services/Health Policy Research Methods I
(Credit Hours: 3)
Department of Health Policy and Management
Gillings School of Global Public Health

Fall 2017

Class Location MC 1303
Meeting Time (Tuesday 3:30-6:30)

Instructor: Chris Beadles, MD, PhD
Office: RTI
Email: beadles@live.unc.edu
Phone:
Office hours: By appointment, generally Friday afternoon.

Course Overview

This is the first course in a three-semester sequence designed to create a foundation of knowledge and skills for health services and health policy researchers. The course has three primary goals: (1) introduction to health services research, (2) exploring a wide variety of topics central to HSR, and (3) developing a literature synthesis on a topic of interest to you.

Learning Objectives

By the end of this course, you should have a broad knowledge base in health services research and health policy; gain basic understanding of different research designs common to health services research (HSR); be familiar with the interdisciplinary aspects of the HSR community; be able to confidently develop an interesting and relevant research question; and have the skills to design and complete a high-quality literature review.

The objectives will be approached concurrently. We will use various HSR topics to understand the interdisciplinary nature of HSR and issues related to research methods. This will allow you to analyze various health care issues, practice generating research questions using a disciplinary or multi-disciplinary perspective, and learn research methods and apply them to important HSR areas.

In addition to the substantive concerns of health services research, the course emphasizes critical thinking. It requires you to attend to the basic structure of reasoning (“knowing how”)
as much as acquiring a body of knowledge (“knowing what”). More important, it requires you to retain, or regain, curiosity—a quality that is best manifested in the learning and inquiring minds of children and that is usually lost as we grow old and as our mind becomes fixated on a single and rigid mode of understanding. To become curious means you have to shift the focus of your thinking from answering to questioning and to asking “why.” It also means you have to acquire the ability to detect ambiguities, to challenge the conventional wisdom, and to think creatively. These capabilities do not come easily. You have to work hard at developing them. But you are not expected to work alone. In fact, another objective of the course is to create an environment where you can collaborate with your classmates, observe and learn from each other’s strengths, and take advantage of the diverse background of the class. This collaborative, co-learning environment makes learning fun, challenging, rewarding, and effective.

Topics in Health Services Research

The range of topics covered in the course is selective. In selecting the topics, we have tried to stay current and broad while retaining some historically important research. However, the topics should not be considered as fully representative of issues currently, and traditionally, addressed by health services researchers. They merely serve to illustrate the kinds of issues examined in HSR and the typical study approaches that researchers have taken in the field.

HSR focuses largely on the intersection of three primary areas: cost, quality, and access/population health. In the diagram below, you can see roughly how course topics fit into these areas. Although most topics can be viewed primarily through the lens of one of these areas, they all play a role throughout health care and HSR.
HPM Competencies

Below are the specific course learning objectives and how they tie into the HPM Competencies.

<table>
<thead>
<tr>
<th>Course Learning Objective</th>
<th>Competencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Understand the history and current use of health services research</td>
<td>Understand critical issues related to health policy in the United States</td>
</tr>
<tr>
<td>2 Understand a variety of topics critical to health policy in the United States</td>
<td>Understand critical issues related to health policy in the United States</td>
</tr>
<tr>
<td>3 Identify different research designs and understand their use in answering specific questions</td>
<td>Select appropriate research designs and methodologies (quantitative and qualitative) for health services/health policy research</td>
</tr>
<tr>
<td>4 Understand the ethical implications of research design decisions</td>
<td>Identify the ethical implications of research methods</td>
</tr>
<tr>
<td>5 Be able to develop a conceptual model</td>
<td>Identify and appropriately apply theoretical knowledge and conceptual models in support of health services/health policy research</td>
</tr>
<tr>
<td>6 Be able to develop a strong research questions</td>
<td>Develop hypotheses that can be supported in a research project</td>
</tr>
<tr>
<td>7 Become proficient at searching for and assessing published literature</td>
<td>Review and synthesize a body of research literature</td>
</tr>
<tr>
<td>8 Critically analyze the published literature</td>
<td>Review and synthesize a body of research literature; Critically evaluate articles from scholarly journals and research presentations</td>
</tr>
<tr>
<td>9 Synthesize findings of the published literature</td>
<td>Review and synthesize a body of research literature; Interpret and explain the results of research</td>
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</table>

Course Structure and Assignments

The class meets once a week. It is a seminar and you are expected to read the required readings before each class and fully participate in class discussions. Your contributions include, but are not limited to, evaluating and discussing readings based on your understanding and previous experience, and presentations. **Starting in Week 3, you are expected every week to submit a brief written assignment**, based on the readings, of some combination of: a) questions and issues you would like to discuss in class; b) promising questions and issues for new research; c) reflections on the readings and topics of the week. It is not necessary to devote equal attention
to each of these three items. These assignments should be submitted on Sakai by 8am on Tuesday the day the class meets.

In addition to reading and class participation, you will each choose two class sessions for which you will be responsible for presenting and leading the discussion of assigned material. This involves especially careful reading of the required readings on a topic, giving a short introduction and overview that identifies key discussion points, and leading discussion. When preparing for your session, keep in mind that one of the central goals of this course is to identify promising research areas and questions. Your introduction and the ensuing discussion should be geared towards that goal. A handout should be prepared and distributed in the class to facilitate discussion. The handout should summarize key substantive and methodological points of the readings, highlight strengths and weaknesses, relate the readings to each other and to previous discussions, and outline points for discussion. You are encouraged to solicit assistance from faculty and advanced HPM students who have expertise on the session’s topic.

In addition to the weekly assignments, there is one larger assignment that you are expected to develop over the course of the semester: a critical review of research on a topic of your interest. The literature review should be between 15-20 pages (typed, double-spaced, 12-point), due by December 5. To help you make progress on this project throughout the semester, there will be two preliminary milestones: a topic proposal (1-2 pages) due in week 5 (September 26) and a preliminary outline due in week 10 (October 31). The purpose of the review is for you to start familiarizing yourself with a subject area and to explore a potential topic for your dissertation. We will discuss how to conduct and write research reviews during the third session, and we will come back to the topic throughout the semester.

Resources

Website

HPM 884 has its own website using Sakai software (http://sakai.unc.edu). This syllabus is on the website. Although I will not make major changes to due dates or course structure, you should consider this syllabus a dynamic document. We can add or remove readings, add goals for specific classes, and make clarifications to assignments. Please feel free to offer suggestions as the class progresses.

Online Resources

We will reference several articles in the BMJ publication How to Read a Paper (http://www.bmj.com/about-bmj/resources-readers/publications/how-read-paper) that explain how to read and interpret different kinds of research papers. Although these are written primarily for assessing papers in clinical journals, you will find them useful for all types of research papers.
Text

We will use The Research Methods Knowledge Base, 3rd edition by Trochim and Donnelly. This textbook has recently been discontinued, so you will need to purchase it from a third party (e.g., Amazon or Ebay).

Articles

Journal articles will be assigned throughout the semester, listed for each class date. I have tried to ensure that assigned articles are relevant to the day’s class, and have also tried to limit them to the most important articles. Therefore, it is extremely important you complete the readings before class. The majority of our classes will only function if everyone is prepared for discussion. The alternative is for you to listen to me talk for three hours, which I’m confident none of us want.

Most articles are available through E-Reserves: http://eres.hsl.unc.edu/eres/coursepage.aspx?cid=2491. Sometimes I want to incorporate newer articles. Any articles not available at the E-Reserves link will be available electronically through UNC Libraries.

Requirements and Expectations

Course Conduct and Responsibilities

My philosophy is to assume we are all adults and can conduct ourselves as such. I have as much to learn from you as you do from me, so approach each class as an opportunity for mutual learning.

As the instructor, my role is to serve as guide, help create an effective learning environment, act as an expert resource, help students find additional resources, and facilitate learning.

Your role as class participants is to learn, and to help one another. You will do this by preparing for class, participating in class discussion, and completing required assignments. Most importantly, you are also expected to add value to the course by helping your fellow classmates, and serving as a resource in any way that you can.

Grading

Grade Components

<table>
<thead>
<tr>
<th>Deliverables</th>
<th>Cumulative %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paper development assignments</td>
<td>2 assignments @ 10% each</td>
</tr>
<tr>
<td>Final Systematic Review</td>
<td>1 term paper</td>
</tr>
<tr>
<td>Class discussion lead</td>
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<tr>
<td>Participation</td>
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</table>

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UNC-Chapel Hill
Participation

Class participation grades will be based on attendance, preparation for discussion, and participation in class activities. I take participation very seriously. Your future research careers will depend on your ability to engage in critical discussions, and your ability to work together as a team. Consider your classmates part of your team. I will offer an optional opportunity to submit 1-2 articles (not on the required reading list) that you find in your own research that most significantly add to your understanding of the course objectives for the week. I will select the top 2 articles from all submissions and supplement (10% of your participation grade for the week) the participation component for the individuals who submitted the 2 selected articles that week.

Term Paper

Your term paper will be a literature review on a topic of your choosing. The literature review should help you become more familiar with the work in the area, define the gaps in current knowledge, and potentially help you identify a possible line of research for your dissertation. I may ask that you share your topic with your faculty advisor for feedback.

YOUR FINAL TERM PAPER IS DUE DECEMBER 5 BY 5:00 PM.

Below is the grading scheme that will be used in assessing the final paper. You should refer to this when completing the final paper and the individual sections in the paper development assignments.
I. Background
   a. Background supports need for literature review 10 points  
   b. Clearly stated research question/objective 15 points  
   **25 Points**

II. Results
   a. Studies are grouped into coherent themes or subjects 10 points  
   b. Studies are clearly and objectively described 15 points  
   **25 Points**

III. Discussion
   a. Findings discussed and interpreted in order to develop a cohesive description of current knowledge 10 points  
   b. Quality of the studies are discussed 10 points  
   c. Study characteristics and quality are used to describe gaps in the current literature 5 points  
   d.  
   **25 Points**

IV. General
   a. Tables and figures are used appropriately 5 points  
   b. Clarity of writing 20 points  
   **25 Points**

   **100 Points total**

**UNC Honor Code**

The principles of academic honesty, integrity, and responsible citizenship govern the performance of all academic work and student conduct at the University, as they have during the long life of this institution. Your acceptance of enrollment in the University presupposes a commitment to the principles embodied in the Code of Student Conduct and a respect for this most significant Carolina tradition. Your reward is in the practice of these principles.

Your participation in this course comes with the expectation that your work will be completed in full observance of the Honor Code. Academic dishonesty in any form is unacceptable, as any breach in academic integrity, however small, strikes destructively at the University's life and work.

If you have any questions about your responsibility or the responsibility of faculty members under the Honor Code, please consult with someone in either the Office of the Student Attorney General (966-4084) or the Office of the Dean of Students (966-4042).

Please read “The Instrument of Student Judicial Governance” (http://instrument.unc.edu).
You are encouraged to collaborate on class assignments (unless instructed otherwise). To emphasize the importance of integrity and intellectual property in the profession, I reserve the right to require you to list each individual with whom you collaborated for each assignment. I will only do this if I observe a need to do so.

**Course Evaluation**

The statement below describes the official course evaluation process. I find formal evaluations critical to the ongoing development of my teaching. However, I also want you to feel that you can provide feedback to me at any point throughout the semester. You can do this in-person, by email, or you can drop an anonymous note in my mailbox. I want you to feel that you are getting the education you deserve; so please let me know of concerns while I still have a chance to remedy them. [There is no guarantee that I will teach this course again. Therefore, any feedback you wish to provide, or changes you wish to make, should occur as soon as possible.]

The Department of Health Policy and Management is participating in the university’s new online course evaluation tool, known as the Carolina Course Evaluation System (CES). It will be enabled at the end of each semester. Your responses will be anonymous, with feedback provided in aggregate; all open-ended comments will be shared with the instructors, but will not identified by the individual student who gave the feedback. Your participation in the CES is a course requirement, as providing constructive feedback is a professional expectation. This feedback is critical to improving the quality of our courses, as well as my future class instruction.
# HPAA 884
Health Services/Health Policy Research Methods I  
Department of Health Policy and Management  
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## CLASS SCHEDULE

<table>
<thead>
<tr>
<th>August 29</th>
<th>1</th>
<th><strong>Introduction and History of Health Services Research</strong></th>
</tr>
</thead>
</table>
| **Objectives** | | 1. Describe the field of health services research  
2. Describe what is and is not studied in health services research  
3. Discuss how health services research and health policy are connected  
4. Examine the different kinds of organizations involved in health services research  
5. Understand the different roles of various organizations, in funding, policy development, and conducting research  
6. Overview of research ethics  
7. Discuss the role of the IRB in research. |
| **Assignments** | None. |
## Objectives

1. Consider the concepts of validity and reliability
2. How to read a study
3. Describe different study designs commonly used in HSR
4. Consider the types of research questions that are appropriate for different study designs
5. Examine the ways study design influences the validity and reliability of a study
6. Effective strategies for literature search and review

## Readings

*The Research Methods Knowledge Base.* Chapter 1 and Chapter 7.


Greenhalgh Trisha. How to read a paper: getting your bearings (deciding what the paper is about) BMJ 1997; 315:243.

Greenhalgh Trisha. How to read a paper: Assessing the methodological quality of published papers BMJ 1997; 315:305.


**The following do not need to be read in detail, but examine the study designs, which we will discuss in class.**


## Assignments

None.
<table>
<thead>
<tr>
<th>September 5</th>
<th>3</th>
<th>Research Questions</th>
</tr>
</thead>
</table>
| **Objectives** | | 1. Introduce the PICOT framework  
2. Discuss how to formulate a research question  
3. Develop a conceptual model for research questions  
4. Consider the use of conceptual models in research  
5. Compare conceptual, logic, and theoretical models  
6. Examine how the Behavioral Model of Access has evolved over time  
7. Use our previous lessons on research questions to develop literature review questions  
8. Discuss the importance of a clear protocol for a systematic review  
9. Learn how to develop inclusion criteria that match your question |
| **Readings** | | *The Research Methods Knowledge Base*. Chapter 16.  
Greenhalgh Trisha. How to read a paper: Papers that summarise other papers (systematic reviews and meta-analyses) BMJ 1997; 315 :672  
**The below follow the Behavioral Model of Access to Care**  
<p>| <strong>Assignments</strong> | | None. |</p>
<table>
<thead>
<tr>
<th>September 12</th>
<th>4</th>
<th>Population Health/Sampling</th>
</tr>
</thead>
</table>
| **Objectives** | | 1. Define external validity  
2. Discuss the effects of sampling on generalizability  
3. Discuss sampling strategies  
4. Define population health |

|  |  | Readings |

|  |  | Assignments |
|  |  | None |

<table>
<thead>
<tr>
<th>September 19</th>
<th>5</th>
<th>Quality of Care/Measurement</th>
</tr>
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</table>
| **Objectives** | | 1. Define quality of care  
2. Discuss how quality is associated with access and costs  
3. Examine the Donabedian model of quality of care  
4. Discuss methods used to improve quality of care |
<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Assignments</td>
<td>Literature review topic (1-2 pages) due.</td>
</tr>
<tr>
<td>September 26</td>
<td>6 Access to Care/Measurement</td>
</tr>
</tbody>
</table>
| Objectives | 1. Measurement theory  
2. Define access to care  
3. Discuss factors that influence access to care |
| Readings | The Research Methods Knowledge Base. Chapter 3 and Chapter 4. |
|          | Greenhalgh Trisha. How to read a paper: Papers that report diagnostic or screening tests BMJ 1997; 315 :540 |
### October 3

<table>
<thead>
<tr>
<th>Assignments</th>
<th>None.</th>
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</table>

<table>
<thead>
<tr>
<th>Date</th>
<th>Objective</th>
</tr>
</thead>
<tbody>
<tr>
<td>October 3</td>
<td>1. Review the basics of health insurance, including private insurance,</td>
</tr>
<tr>
<td></td>
<td>Medicare, and Medicaid</td>
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<tr>
<td></td>
<td>2. Describe the RAND Health Insurance Experiment</td>
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<td></td>
<td>3. Describe the Oregon Medicaid Experiment</td>
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<td></td>
<td>4. Discuss the implications of the findings and the design of the two</td>
</tr>
<tr>
<td></td>
<td>studies</td>
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**Readings**


<table>
<thead>
<tr>
<th>Assignments</th>
<th>None.</th>
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<tbody>
<tr>
<td>October 10</td>
<td>8</td>
</tr>
<tr>
<td>------------</td>
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</tbody>
</table>
| Objectives | 1. Consider various quasi-experimental designs  
2. Define comparative effectiveness  
3. Define cost-effectiveness  
4. Understand the history of the comparative effectiveness movement  
5. Discuss priorities for comparative effectiveness studies  |
Big data in health care: Using analytics to identify and manage high-risk and high-cost patients. Health affairs 33, (7): 1123-1131  
Greenhalgh Trisha. How to read a paper: Papers that tell you what things cost (economic analyses) BMJ 1997; 315 :596  
| Assignments | None. |

<table>
<thead>
<tr>
<th>October 17</th>
<th>9</th>
<th>Public Health Policy/Other Designs</th>
</tr>
</thead>
</table>
| Objectives | 1. Examine other types of research designs used in HSR.  
2. Define public health policy. |
3. Describe the role of evidence in developing policy.

*The Research Methods Knowledge Base*. Chapter 11.


Assignments None.

**October 24**

<table>
<thead>
<tr>
<th>10</th>
<th>Health Disparities/Qualitative Measures</th>
</tr>
</thead>
</table>

**Objectives**

1. Understand role of qualitative measures
2. Examine racial, gender, and social inequalities in health care, health care access, and health outcomes
3. Discuss measurement of key concepts in social inequalities
4. Consider the differences between biological and social disparities
<table>
<thead>
<tr>
<th>Assignments</th>
<th>Literature review topic and outline due.</th>
</tr>
</thead>
<tbody>
<tr>
<td>October 31</td>
<td>11</td>
</tr>
<tr>
<td>Special Populations/Life Course</td>
<td><strong>Objectives</strong></td>
</tr>
<tr>
<td></td>
<td>1. Discuss special considerations for HSR involving children, older adults, and other special populations</td>
</tr>
<tr>
<td></td>
<td>2. Discuss unique needs in financing health care for these special populations</td>
</tr>
<tr>
<td></td>
<td>3. Examine health issues as they relate to different points in the life span</td>
</tr>
<tr>
<td></td>
<td><strong>Readings</strong></td>
</tr>
<tr>
<td>Assignments</td>
<td>None.</td>
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<table>
<thead>
<tr>
<th>November 7</th>
<th>12</th>
<th>Mental Health</th>
</tr>
</thead>
</table>
| Objectives | 1. Define mental health services and distinguish them from other health services  
2. Consider differences in financing for mental health services  
3. Examine unique access issues in mental health |
| Assignments | None. |

| November 14 13 | Pharmaceutical Policy |
| Objectives | 1. Discuss the unique role of pharmaceuticals in health care  
2. Examine the process of drug development  
3. Consider political issues related to pharmaceutical drugs |
| Assignments | None. |

<p>| November 21 14 | Global Health |
| Objectives |  |</p>
<table>
<thead>
<tr>
<th>Readings</th>
</tr>
</thead>
</table>
| 1. Define global health  
2. Consider the importance of a global perspective in health services  
3. Examine inequalities in health on a global scale |


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<tr>
<th>Assignments</th>
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</thead>
<tbody>
<tr>
<td>None.</td>
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</table>

| November 28 | 15 | Health Reform |
|----------------|
| Objectives |
| 1. Examine the history of health reform efforts in the United States  
2. Discuss the current state of health reform |


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<thead>
<tr>
<th>Readings</th>
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<table>
<thead>
<tr>
<th>Assignments</th>
<th>None.</th>
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</table>

<table>
<thead>
<tr>
<th>December 5</th>
<th>16</th>
<th>Ethics</th>
</tr>
</thead>
</table>
| **Objectives** | | 1. Understand the history underlying ethics in research.  
2. Discuss ethical implications of research design.  
3. Discuss ethical issues unique to public health.  
4. Discuss emerging ethical challenges in public health and HSR. |

| Assignments | None. |