PUBH 6570 Topics in Healthcare Administration

SECTION 001

Understanding Clinical Quality Using Administrative Data
Fall 2018

COURSE & CONTACT INFORMATION

Credits: 2
Meeting Day(s): Tuesdays
Meeting Time: 1:25-3:20 PM
Meeting Place: Mayo D199

Instructor: Helen Parsons, PhD
Email: pars0100@umn.edu
Office Phone: 612.625.0404
Office Hours: TBD
Office Location: Mayo A369

Instructor: Stephanie Jarosek, PhD
Email: herb0079@umn.edu
Office Phone: 612.625.5683
Office Hours: TBD
Office Location: Mayo A369

Instructor: Schelomo Marmor, PhD
Email: marm0014@umn.edu
Office Phone: 612.301.2174
Office Hours: TBD
Office Location: Mayo C261

COURSE DESCRIPTION

This is an introductory course designed for students interested in learning how to effectively use administrative data (e.g., billing or claims data, clinical registries, enrollment records) to inform program development, program or policy evaluation and mandatory reporting.

During the course, students will learn about quality frameworks; payment systems and how they translate into available administrative data; common coding and billing systems; structure of administrative data; common data available from each source; approaches for linking data across sources; reporting considerations; strategies for risk adjustment and applications to current local and national quality improvement programs.

The course will provide practical, hands-on training for individuals to lead teams who analyze and report outcomes using administrative data—without the need to analyze the data themselves.

COURSE PREREQUISITES

There are no pre-requisites for this course.
COURSE GOALS & OBJECTIVES
The goal of the course is to develop future healthcare leaders who are informed about the source, structure, strengths and limitations of administrative data. In other words, we want to develop healthcare leaders who ask the right questions to appropriately evaluate the validity and reliability of reports and metrics developed using administrative data.

By the end of the course, students will be able to:

1. Evaluate frameworks for evaluating healthcare quality and developing quality metrics
2. Understand predominate payment and coding systems used to reimburse healthcare services in the United States
3. Evaluate the strengths and limitations of administrative data for evaluating healthcare quality
4. Describe how administrative data can be used for quality measurement (e.g., developing measures)
5. Examine how the payment systems associated with different sectors of healthcare (physician, hospitals services, post-acute care, etc.) affect the availability of administrative data to measure quality
6. Articulate how quality and value-based programs are implemented, measured and could be improved across healthcare settings
7. Ensure protection of patient data when it is used for quality reporting purposes
8. Design a plan for directing analysts to conduct quality measurement using available administrative data

METHODS OF INSTRUCTION AND WORK EXPECTATIONS

Course Workload Expectations
Understanding Clinical Quality Using Administrative Data is a 2 credit course. The University expects that for each credit, you will spend a minimum of three hours per week attending class or comparable online activity, reading, studying, and completing assignments, etc. over the course of a 15-week term. Thus, this course requires approximately 90 hours of effort spread over the course of the term in order to earn an average grade.

Learning Community
School of Public Health courses ask students to discuss frameworks, theory, policy, and more, often in the context of past and current events and policy debates. Many of our courses also ask students to work in teams or discussion groups. We do not come to our courses with identical backgrounds and experiences and building on what we already know about collaborating, listening, and engaging is critical to successful professional, academic, and scientific engagement with topics.

In this course, students are expected to engage with each other in respectful and thoughtful ways.

In group work, this can mean:
• Setting expectations with your groups about communication and response time during the first week of the semester (or as soon as groups are assigned) and contacting the TA or instructor if scheduling problems cannot be overcome.
• Setting clear deadlines and holding yourself and each other accountable.
• Determining the roles group members need to fulfill to successfully complete the project on time.
• Developing a rapport prior to beginning the project (what prior experience are you bringing to the project, what are your strengths as they apply to the project, what do you like to work on?)

In group discussion, this can mean:
• Respecting the identities and experiences of your classmates.
• Avoid broad statements and generalizations. Group discussions are another form of academic communication and responses to instructor questions in a group discussion are evaluated. Apply the same rigor to crafting discussion posts as you would for a paper.
• Consider your tone and language, especially when communicating in text format, as the lack of other cues can lead to misinterpretation.

Like other work in the course, all student-to-student communication is covered by the Student Conduct Code (https://z.umn.edu/studentconduct).

COURSE TEXT & READINGS
There are no required textbooks for the course. A variety of journal articles, websites, policy documents and book chapters are assigned as readings to complete prior to class. Additional readings from the literature may be added during the course.
<table>
<thead>
<tr>
<th>Week</th>
<th>Topic(s)</th>
<th>Readings</th>
<th>Activities/Assignments</th>
</tr>
</thead>
</table>
**Assignments Due**  
Introduce yourself on Canvas (Not graded; Due 11:59PM Sept 7th) |
**Assignments Due**  
Week 2 (Group 1) Reading Discussion (Presented In-class) |
### Week 3 September 18th, 2018
**Instructor:** Schelomo Marmor  
**Introduction to Data Coding Systems**


3. Basic Introduction to ICD-10-CM.  


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### Week 4 September 25th, 2018
**Instructor:** Helen Parsons  
**Common Administrative Data Sources**


4. Department of Health and Human Services. Healthdata.gov (read “About” and select 2-3 datasets that you are interested in learning more about. Prepare a short background on their source, contents and availability for discussion).  
(www.healthdata.gov)

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### Week 5 October 2nd, 2018
**Instructor:** Stephanie Jarosek  
**Identifying Cohorts**


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<thead>
<tr>
<th>Week 6 October 9th, 2018</th>
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<tbody>
<tr>
<td>Instructor: Schelomo Marmor</td>
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<tr>
<td>Risk Adjustment/Comorbidities</td>
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1. Casalino, Lawrence; Robin R. Gillies; Stephen M. Shortell; Julie A. Schmittdiel; Thomas Bodenheimer; James C. Robinson; Thomas Rundall; Nancy Oswald; Helen Schauffler; and Margaret C. Wang. "External incentives, information technology, and organized processes to improve health care quality for patients with chronic diseases." Jama 289, no. 4 (2003): 434-441.


4. Chronic Conditions Warehouse. Condition Categories. (Pick 2 conditions of interest and examine the codes used to identify them using ICD-9/ICD-10.)
https://ccwdata.org/web/guest/condition-categories

<table>
<thead>
<tr>
<th>In-class Case Study</th>
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<tr>
<td>Assignments Due</td>
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<tr>
<td>Week 6 (Group 5)</td>
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<tr>
<td>Reading Discussion</td>
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<td>(Presented In-class)</td>
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<tr>
<th>Week 7 October 16th, 2018</th>
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<tr>
<td>Instructor: Helen Parsons</td>
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<tr>
<td>Inpatient Services</td>
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<tr>
<th>In-class Case Study</th>
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<tr>
<td>Assignments Due</td>
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<tr>
<td>Week 7 (Group 6)</td>
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<tr>
<td>Reading Discussion</td>
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<tr>
<td>(Presented In-class)</td>
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<tr>
<th>Week 6 (Group E) Case Synthesis</th>
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<td>(Due 11:59PM October 15th)</td>
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### Week 8 October 23rd, 2018
**Instructor:** Schelomo Marmor  
**Physician Services**


2. Centers for Medicare and Medicaid Services. Quality Payment Program. https://qpp.cms.gov/ Read about both the MIPS and APM program as well as measures used to determine payment.


### In-class Case Study
**Assignments Due**
- **In-class Case Study Assignments Due**
  - Week 8 (Group 7)
  - Reading Discussion (Presented In-class)

### Week 7 (Group F) Case Synthesis
- **Due 11:59PM October 22nd**
- Critical Review of a Peer-Reviewed Article Using Administrative Data (Due 11:59PM October 26th)

### Week 9 October 30th
**Instructor:** Stephanie Jarosek  
**Outpatient Services**


2. Hospital Outpatient Quality Reporting Program (CMS website). https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/HospitalQualityInitiatives/HospitalOutpatientQualityReportingProgram.html


### In-class Case Study
**Assignments Due**
- **In-class Case Study Assignments Due**
  - Week 9 (Group 8)
  - Reading Discussion (Presented In-class)

### Week 8 (Group G) Case Synthesis
- **Due 11:59PM October 29th**

### Week 10 November 6th, 2018
**Midterm/Special Topics**  
**To be Determined**

**Midterm**
- **Closed Book, 1 hour Exam**
2. Meyers DJ, Mor V, Rahman M. 2018. Medicare advantage enrollees more likely to enter lower-quality nursing homes compared to fee-for-service enrollees. Health Affairs, (1): 78-85.  
5. About Nursing Home Compare Data (website) [https://www.medicare.gov/NursingHomeCompare/Data/About.html](https://www.medicare.gov/NursingHomeCompare/Data/About.html) | In-class Case Study | Assignments Due  
Week 11 (Group 9) Reading Discussion (Presented In-class)  
Week 9 (Group H) Case Synthesis (Due 11:59PM November 12th) |
| Week 12 November 20th, 2018 | Thanksgiving Week | N/A | N/A |
Week 13 (Group 10) Reading Discussion (Presented In-class)  
Week 11 (Group I) Case Synthesis (Due 11:59PM November 26th) |


| Assignments Due | In-class Case Study
|-----------------|-------------------------|
| Week 14 (Group 11) | Assignments Due
| Reading Discussion (Presented In-class) | Week 13 (Group J) Case Synthesis (Due 11:59PM December 3rd)

| Week 15 December 11th, 2018 | Final Group Presentations | Assignments Due | Final Group Presentation
|-----------------------------|--------------------------|-----------------|-----------------------------
SPH AND UNIVERSITY POLICIES & RESOURCES

The School of Public Health maintains up-to-date information about resources available to students, as well as formal course policies, on our website at www.sph.umn.edu/student-policies/. Students are expected to read and understand all policy information available at this link and are encouraged to make use of the resources available.

The University of Minnesota has official policies, including but not limited to the following:

- Grade definitions
- Scholastic dishonesty
- Makeup work for legitimate absences
- Student conduct code
- Sexual harassment, sexual assault, stalking and relationship violence
- Equity, diversity, equal employment opportunity, and affirmative action
- Disability services
- Academic freedom and responsibility

Resources available for students include:

- Confidential mental health services
- Disability accommodations
- Housing and financial instability resources
- Technology help
- Academic support

EVALUATION & GRADING

This class consists of lectures and interactive learning including class discussions, small group case-studies and group presentations. The main objectives of the course will be achieved through a combination of individual and group work that build on knowledge learned throughout the course of the semester. It is expected that students will read assigned articles prior to class to facilitate active, informed discussions.

Student performance will be evaluated based on the following criteria:

- **Critical review of a peer-reviewed article using administrative data (25%)**
  
  Instructors will provide an article that utilizes administrative data for evaluating healthcare quality. Students will critically evaluate the source of the data, balance/accuracy of presentation, clarity of discussion and impact on healthcare delivery.

- **Synthesize weekly reading for leading class discussion (10%)**
  
  Each week a small group of students will be assigned to synthesize the weekly readings in order to lead the class discussion around specific weekly topics. Instructors will provide guidance to focus the discussion. Students will be asked to briefly present 4-5 slides and submit talking points and slides at the end of each class.

- **Synthesize weekly case study (10%)**
  
  A case study will presented each week for in-class discussion. Each week, one small group of students will be assigned to submit a written report of the key problem identified through the case study, possible avenues for analysis to understand the issue, and a recommendation on future action.

- **Midterm (25%)**
  
  The midterm will consist of a combination of multiple-choice answers, short-responses and one longer-format essay on an applied healthcare quality issue using administrative data.

- **Final group project (30%)**
  
  The final group project will draw on a real-world problem proposed by a partnering healthcare organization. The project will focus on a challenge in effectively measuring, monitoring or maintaining quality according to proposed or current quality metrics (at the local or national level). Students will define the problem, evaluate potential data sources, and propose strategic plans to address the quality metric. We plan to have students present their findings directly to the healthcare partner during the final presentations to gain real world feedback on proposed solutions.

Note: Individual grading criteria for each assignment can be found within the assignment on Canvas
Grading Scale
The University uses plus and minus grading on a 4.000 cumulative grade point scale in accordance with the following, and you can expect the grade lines to be drawn as follows:

<table>
<thead>
<tr>
<th>% In Class</th>
<th>Grade</th>
<th>GPA</th>
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</thead>
<tbody>
<tr>
<td>93 - 100%</td>
<td>A</td>
<td>4.000</td>
</tr>
<tr>
<td>90 - 92%</td>
<td>A-</td>
<td>3.667</td>
</tr>
<tr>
<td>87 - 89%</td>
<td>B+</td>
<td>3.333</td>
</tr>
<tr>
<td>83 - 86%</td>
<td>B</td>
<td>3.000</td>
</tr>
<tr>
<td>80 - 82%</td>
<td>B-</td>
<td>2.667</td>
</tr>
<tr>
<td>77 - 79%</td>
<td>C+</td>
<td>2.333</td>
</tr>
<tr>
<td>73 - 76%</td>
<td>C</td>
<td>2.000</td>
</tr>
<tr>
<td>70 - 72%</td>
<td>C-</td>
<td>1.667</td>
</tr>
<tr>
<td>67 - 69%</td>
<td>D+</td>
<td>1.333</td>
</tr>
<tr>
<td>63 - 66%</td>
<td>D</td>
<td>1.000</td>
</tr>
<tr>
<td>&lt; 62%</td>
<td>F</td>
<td>1.000</td>
</tr>
</tbody>
</table>

- A = achievement that is outstanding relative to the level necessary to meet course requirements.
- B = achievement that is significantly above the level necessary to meet course requirements.
- C = achievement that meets the course requirements in every respect.
- D = achievement that is worthy of credit even though it fails to meet fully the course requirements.
- F = failure because work was either (1) completed but at a level of achievement that is not worthy of credit or (2) was not completed and there was no agreement between the instructor and the student that the student would be awarded an I (Incomplete).
- S = achievement that is satisfactory, which is equivalent to a C- or better
- N = achievement that is not satisfactory and signifies that the work was either 1) completed but at a level that is not worthy of credit, or 2) not completed and there was no agreement between the instructor and student that the student would receive an I (Incomplete).
<table>
<thead>
<tr>
<th>Evaluation/Grading Policy</th>
<th>Evaluation/Grading Policy Description</th>
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<tr>
<td><strong>Scholastic Dishonesty, Plagiarism, Cheating, etc.</strong></td>
<td>You are expected to do your own academic work and cite sources as necessary. Failing to do so is scholastic dishonesty. Scholastic dishonesty means plagiarizing; cheating on assignments or examinations; engaging in unauthorized collaboration on academic work; taking, acquiring, or using test materials without faculty permission; submitting false or incomplete records of academic achievement; acting alone or in cooperation with another to falsify records or to obtain dishonestly grades, honors, awards, or professional endorsement; altering, forging, or misusing a University academic record; or fabricating or falsifying data, research procedures, or data analysis (As defined in the Student Conduct Code). For additional information, please see <a href="https://z.umn.edu/dishonesty">https://z.umn.edu/dishonesty</a>. The Office for Student Conduct and Academic Integrity has compiled a useful list of Frequently Asked Questions pertaining to scholastic dishonesty: <a href="https://z.umn.edu/integrity">https://z.umn.edu/integrity</a>. If you have additional questions, please clarify with your instructor. Your instructor can respond to your specific questions regarding what would constitute scholastic dishonesty in the context of a particular class-e.g., whether collaboration on assignments is permitted, requirements and methods for citing sources, if electronic aids are permitted or prohibited during an exam. Indiana University offers a clear description of plagiarism and an online quiz to check your understanding (<a href="http://z.umn.edu/iuplagiarism">http://z.umn.edu/iuplagiarism</a>).</td>
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<tr>
<td><strong>Late Assignments</strong></td>
<td>Late assignments are subject to a 1-grade reduction every day the assignment is late.</td>
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<tr>
<td><strong>Attendance Requirements</strong></td>
<td>Absences must be discussed with the instructors prior to the class.</td>
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<tr>
<td><strong>Extra Credit</strong></td>
<td>Not applicable.</td>
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<tr>
<td><strong>Intellectual Property of Instructors' Material</strong></td>
<td>The MHA program prohibits any current student from uploading MHA course content (e.g., lecture notes, assignments, or examinations for any PUBH 65XX or PUBH 75XX courses) created by a University of Minnesota faculty member, lecturer, or instructor to any crowdsourced online learning platform.</td>
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<tr>
<td>Knowledge Domain</td>
<td>Course Learning Objectives</td>
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<td>---------------------------------------------------------------------------------</td>
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<tr>
<td>Explain public health history, philosophy and values</td>
<td>Understand predominate payment and coding systems used to reimburse healthcare services in the United States</td>
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| Explain the critical importance of evidence in advancing public health knowledge | Evaluate the strengths and limitations of administrative data for evaluating healthcare quality  
Describe how administrative data can be used for quality measurement (e.g., developing measures)                                                   | Assignment: Critical review of a peer-reviewed article using administrative data                                |
<p>| Explain the social, political and economic determinants of health to population health and health inequities | Design a plan for directing analysts to conduct quality measurement using available administrative data                                                                                                                   | Assignment: Final group project which will focus on a challenge in effectively measuring, monitoring or maintaining quality according to proposed or current quality metrics (at the local or national level)- and understanding variation within the measures. |</p>
<table>
<thead>
<tr>
<th>Competency</th>
<th>Course Learning Objectives</th>
<th>Assessment Strategies</th>
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<tbody>
<tr>
<td>L2.3 Improves Performance</td>
<td>Makes specific changes in the system or own work methods to improve performance; Does something better, faster, at lower cost, more efficiently</td>
<td>Assignment: Final group project which will focus on a challenge in effectively measuring, monitoring or maintaining quality according to proposed or current quality metrics (at the local or national level) - and understanding variation within the measures</td>
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<td>Design a plan for directing analysts to conduct quality measurement using available administrative data</td>
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<td>L3.3 Recognizes Multiple Relationships</td>
<td>Makes multiple causal links; several potential causes of events, several consequences of actions, or multiple-part chain of events (A leads to B leads to C leads to D); Analyzes relationships among several parts of a problem or situation (e.g., anticipates obstacles and thinks ahead about next steps, in detail, with multiple steps</td>
<td>Assignment: Critical review of a peer-reviewed article using administrative data</td>
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<td></td>
<td>Evaluate the strengths and limitations of administrative data for evaluating healthcare quality</td>
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<td></td>
<td>Describe how administrative data can be used for quality measurement (e.g., developing measures)</td>
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<td>L6.4 Facilitates Group Interactions</td>
<td>Uses varied communication management techniques, brainstorming, consensus building, group problem solving and conflict resolution; Demonstrates good meeting management techniques (e.g., agenda development, time management)</td>
<td>Assignment: Synthesize weekly case study</td>
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<td>Articulate how quality and value-based programs are implemented, measured and could be improved across healthcare</td>
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<tr>
<td>L12.1 Recognizes the Potential of Information Systems in Process and Patient Service Improvement</td>
<td>Understand predominate payment and coding systems used to reimburse healthcare services in the United States</td>
<td>Assignment: Synthesize weekly reading for leading class discussion</td>
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<td>Is familiar with current technology for patient tracking (especially registration, billing and records management), financial automation and reporting, and reimbursement management; Is open to automation of paper-based processes</td>
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