HMP 777
Healthcare Quality and Information Management
2 credits
Department of Health Policy and Management
Gillings School of Global Public Health

Spring 2018 Syllabus
Online Meeting Times: Wednesday evenings 7:00-9:00pm

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Course Overview
The HMP 776 and 777 course sequences integrate essential methods and principles in healthcare quality and information management, emphasizing use of information to measure and improve quality. They provide a broad overview of the drivers, components, and methods of quality and information management, including quality improvement methodologies and techniques, information infrastructure, database management tools, change management, patient safety and project management. HPM 776 focuses methods and tools for both public health and healthcare administration applications, while HPM 777 focuses on applications of the methods/tools as well as new developments in the field. The format of the courses will include presentations, individual/group projects, exercises, and group discussion.

Learning Objectives and HPM Competencies

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<th>Course Learning Objective</th>
<th>Competencies</th>
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<tr>
<td>1 Apply quality improvement methodologies and tools to address a real-life quality improvement project</td>
<td>Change management</td>
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<td>Information seeking</td>
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<td>Innovative thinking</td>
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<td>Systems thinking</td>
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<td>Performance Evaluation &amp; Improvement</td>
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2 Understand Predictive Analytics concepts and application
Information technology
Analytic thinking

3 Understand the concepts of relational databases and be able to query data from an existing multi-table database and analyze the results:
- Analysis tool benefits
- Relational database structure/design
- Query tools
Analytic thinking
Information technology
Performance measurement

4 Understand justification and implementation of public reported and value-based purchasing programs.
Innovative thinking
Systems thinking

5 Understand the importance of patient safety and creating a ‘Just Culture’ to improve safety, teamwork and accountability
Change management
Systems thinking

6 Understand how to plan, execute, and manage projects involving resources, scope and impact.
Project Management

Resources

Sakai
The Sakai site is the primary source for all course information including the latest copies of the course syllabus and schedule, links to the online readings (on the Health Science Library website) and all projects and other assignments.

Text
Required:
- Memory Jogger 2 or (available at www.goalqpc.com) – available in paper or electronic format. The Public Health and the Healthcare versions of the Memory Jogger offer more specific examples and the Lean Memory Jogger for Healthcare offers lean examples – any of the three meet the needs of the course.

Reference:
- Beating the Access Syntax Blues (available via Sakai)
- Access 2010 All-in-One Desk Reference for Dummies

Articles
See the course schedule and/or Sakai site for online articles to be read for each class.

Web Sources
There is a large number of useful websites related to quality and information management, including:

- Institute for Healthcare Improvement (www.ihi.org)
- Agency for Healthcare Research and Quality (www.ahrq.gov)
- The National Center for Health Statistics (www.cdc.gov/nchs/)
- The Henry J. Kaiser Family Foundation (www.kff.org)
- The Commonwealth Fund (www.cmwf.org).
- Center for Medicare and Medicaid Services (http://www.cms.gov/)
- The Joint Commission (http://www.jointcommission.org/)
- The National Academies Sciences, Engineering and Medicine – Health and Medicine Division (http://www.nationalacademies.org/hmd/)
- National Quality Forum (http://www.qualityforum.org/)
- National Committee for Quality Assurance (http://www.ncqa.org/)
- Foundation for Health Care Quality (http://www.qualityhealth.org/)
- Centers for Disease Control (http://www.cdc.gov):
  - Hospital Acquired Conditions (http://www.cdc.gov/hai/)
- American Health Quality Association (http://www.ahqa.org)

Additional resources will be posted on Sakai.

Requirements and Expectations

Students will work in groups on two projects this semester. Both group projects will have a peer evaluation component.

The group project this semester is:
1) Quality Improvement Project
   a. Teams will interview the project sponsor during class about a specific problem they have encountered and follow the Lean/Six Sigma quality improvement methodology covered in class to assess the problem, identify the root causes and recommend solutions
   b. Each team will create (1) a short presentation and (2) a final report which must include
      i. Project description
      ii. Brief overview of the selected improvement methodology for the project
      iii. A3 document (boxes 1-7 only)
      iv. Process flowchart
v. Data on current process displayed in two different types of charts
vi. A root cause analysis, displayed in a fishbone diagram
vii. Recommendations to address the root causes displayed in an action plan grid. At least one of the solutions must be “Nike/Just do it” (i.e. does not require new personnel or significant financial investment).
viii. An impact-effort diagram/PICK chart showing relative ease/challenge and potential impacts for each of the recommendations in the action plan
ix. A force field diagram to showing impact/challenges of implementing one of the recommended actions
x. At least two identified metrics to track to monitor process improvement. Include a clear definition of each metric and a description of appropriate format for display of the data
xi. An infographic related to the project/recommendations
c. Each team will present their key finding and recommendations to the project sponsor (and instructor and class) during the on-campus session at the end of the semester. The presentation is limited to eight minutes and at least two members from each team must present.
d. The final report must be submitted in Microsoft Word and cannot exceed ten pages (size 12 font, double-spaced, 1 inch margin). Charts/diagrams do not count toward the page limit. All of the charts/diagrams must be submitted in a single file – can be a different file/format.

There will be one relational database query assignment. Students are be required to use Microsoft Access. Students who do not have Microsoft Access on their computers can use the program via the UNC Virtual Lab at https://virtuallab.unc.edu/. Technical support for the lab is available via the UNC Help Desk at 919-962-HELP.

There will be several additional short assignments related to the week’s readings or class discussion. Assignments due dates will be provided in the course reading/assignment schedule. Most will be due prior to the next class.

Class Participation
- Each student is expected to actively participate in class discussions and activities. If a student misses a class with a graded activity, they will not receive credit for the activity as an active participant. Beyond the ease of scheduling and the ability to work while learning, the strength of any executive program is the contribution made by each student-professional.
Evaluation Method

Grade Components

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<th>Component</th>
<th>% of Grade HPM 777</th>
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<tr>
<td>Quality Improvement Project</td>
<td>45%</td>
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<tr>
<td>Database assignment</td>
<td>10%</td>
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<tr>
<td>Class participation (includes other assignments)</td>
<td>45%</td>
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<tr>
<td>TOTAL</td>
<td>100%</td>
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Grading Scale

95 or above (H)
90-94 (H-)
85 to 89 (P+)
80 to 84 (P)
75 to 79 (P-)
70 to 74 (L+)
65 to 69 (L)
60 to 64 (L-)
Below 60 (F)

Exams

The course does not have any exams.

Evaluation Criteria

- Logical, appropriate, evidence-based conclusions, analyses, and recommendations
- Clearly written case analysis with topics arranged logically. Well-designed tables and figures that convey relevant, important information.
- Effective, appropriate application of course materials and other resources in the case analysis metrics and quality improvement assignments.
- Other evaluation criteria as defined in grading rubrics
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, because 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).

Read “The Instrument of Student Judicial Governance” (http://instrument.unc.edu).

Valuing, Recognizing, and Encouraging Diversity

Promoting and valuing diversity in the classroom enriches learning and broadens everyone’s perspectives. Inclusion and tolerance can lead to respect for others and their opinions and is critical to maximizing the learning that we expect in this program. This may challenge our own closely held ideas and personal comfort zones. The results, however, create a sense of community and promote excellence in the learning environment.

Diversity includes consideration of (1) the variety of life experiences others have had, and (2) factors related to “diversity of presence,” including, among others, age, economic circumstances, ethnic identification, disability, gender, geographic origin, race, religion, sexual orientation, social position.

*This class will follow principles of inclusion, respect, tolerance, and acceptance that support the values of diversity.*

Course Evaluation

HPM participates in the UNC-CH’s online course evaluation system, enabled at the end of each semester by DigitalMeasures. Your responses will be anonymous, with feedback provided in the aggregate. Open-ended comments will be shared with instructors, but not identified with individual students. Your participation in course evaluation is an expectation, since providing constructive feedback is a professional obligation. Feedback is critical, moreover, to improving the quality of our courses, as well as for instructor assessment.