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

Spring 2019 Syllabus
Online Meeting Times: Wednesday evenings 7:30-9:30pm

<table>
<thead>
<tr>
<th>Instructors:</th>
<th>Larry Mandelkehr &amp; Franklin Farmer</th>
<th>TA:</th>
<th>Trini Thach</th>
</tr>
</thead>
<tbody>
<tr>
<td>Email:</td>
<td><a href="mailto:Larry.Mandelkehr@unchealth.unc.edu">Larry.Mandelkehr@unchealth.unc.edu</a> / <a href="mailto:Franklin.Farmer@unchealth.unc.edu">Franklin.Farmer@unchealth.unc.edu</a></td>
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<tr>
<td>Phone:</td>
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<td>Use email</td>
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<tr>
<td>Office hours:</td>
<td>By appointment</td>
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Course Overview

The HPM 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

<table>
<thead>
<tr>
<th>Course Learning Objective</th>
<th>HPM Competencies</th>
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<tbody>
<tr>
<td>1. Learn and practice key aspects of multiple change management models, quality improvement methodologies and tools. Complete a quality improvement project using a basic improvement methodology</td>
<td>Systems Thinking *</td>
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<tr>
<td></td>
<td>Performance Evaluation and QI *</td>
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<td></td>
<td>Project Management *</td>
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<td>Innovative Thinking</td>
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<td>Communications Skills</td>
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<td>2. Understand the concepts of relational databases and be able to query data from an existing database and analyze the results</td>
<td>Data Analysis</td>
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<td>3. Understand the benefits of dashboards and be able to create a dashboard of quality measures including design of the dashboard’s overall structure, indicator selection, and appropriate selection of data visualization formats</td>
<td>Innovative Thinking</td>
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<tr>
<td></td>
<td>Data Analysis</td>
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<td>4. Understand the challenges in creating a culture of safety.</td>
<td>Performance Evaluation and QI *</td>
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<td></td>
<td>Systems Thinking *</td>
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<td></td>
<td>Organizational Dynamics</td>
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<td>5. Understand the structures and drivers in incentive programs to improve care and safety</td>
<td>Performance Evaluation and QI *</td>
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<tr>
<td></td>
<td>Change Management</td>
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<tr>
<td></td>
<td>Innovative Thinking</td>
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<tr>
<td>6. Understand the opportunities available when utilizing predictive analytics. Configure a predictive analytic model.</td>
<td>Systems Thinking *</td>
</tr>
<tr>
<td></td>
<td>Data Analysis</td>
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<tr>
<td>7. Understand how better communications and practices team behaviors leads to better team performance</td>
<td>Team Citizenship</td>
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<tr>
<td>8. Learn key Project Management concepts and tools</td>
<td>Project Management *</td>
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* Competencies for which HPM760 is the “primary home course”

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:

HPM 777
Spring 2018 2

Larry Mandelkehr
UNC-Chapel Hill
- Memory Jogger 2 or (available at www.goalqc.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 Henry J. Kaiser Family Foundation (www.kff.org)
- The Commonwealth Fund (www.cmwf.org).
- National Academy of Sciences – Reports (www.nas.edu)

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 (final detailed subject to change and will posted when project is assigned)
      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. A Gantt chart outlining implementation of one proposed action
xi. A RACI diagram with the role and responsibilities for the proposed action in the Gantt chart
xii. 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
xiii. 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 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

<table>
<thead>
<tr>
<th>Component</th>
<th>% of Grade HPM 777</th>
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<tbody>
<tr>
<td>Quality Improvement Project</td>
<td>45%</td>
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<tr>
<td>Class participation (includes all other assignments)</td>
<td>55%</td>
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<tr>
<td>TOTAL</td>
<td>100%</td>
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Grading Scale

<table>
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<tr>
<th>Numerical Score</th>
<th>Course grade</th>
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<tbody>
<tr>
<td>92-100</td>
<td>Honors (H)</td>
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<tr>
<td>75-91</td>
<td>Pass (P)</td>
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<tr>
<td>60 - 74</td>
<td>Low Pass (L)</td>
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<tr>
<td>Below 60</td>
<td>Failing (F)</td>
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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

Recognizing, Valuing, and Encouraging Diversity:

The importance of diversity is recognized in the mission statement of HPM. In the classroom, diversity strengthens the products, enriches the learning, and broadens the perspectives of all in the class. Diversity requires an atmosphere of inclusion and tolerance, which oftentimes challenges our own closely-held ideas, as well as our personal comfort zones. The results, however, create a
sense of community and promote excellence in the learning environment. This class will follow principles of inclusion, respect, tolerance, and acceptance that support the values of diversity.

Diversity includes consideration of: (1) life experiences, including type, variety, uniqueness, duration, personal values, political viewpoints, and intensity; and (2) factors related to “diversity of presence,” including, among others, age, economic circumstances, ethnic identification, family educational attainment, disability, gender, geographic origin, maturity, race, religion, sexual orientation, social position, and veteran status.

**Disability Accommodation:**

UNC-CH supports all reasonable accommodations, including resources and services, for students with disabilities, chronic medical conditions, a temporary disability, or a pregnancy complication resulting in difficulties with accessing learning opportunities.

All accommodations are coordinated through the UNC Office of Accessibility Resources & Services (ARS), [http://accessibility.unc.edu](http://accessibility.unc.edu); phone 919-962-8300 or email accessibility@unc.edu. Students must document/register their need for accommodations with ARS before any accommodations can be implemented.

**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](http://instrument.unc.edu)).

**Course Evaluation:**

HPM participates in the UNC-CH’s online course evaluation system. 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.

**Counseling and Psychological Services (CAPS):**

CAPS is strongly committed to addressing the mental health needs of a diverse student body through timely access to consultation and connection to clinically appropriate services, whether for short or long-term needs. Go to their website: https://caps.unc.edu or visit their facilities on the third floor of the Campus Health Services building for a walk-in evaluation to learn more.