

NYU Wagner

Spring 2018

Faculty: Karen A. Scott, MD, MPH and Hillary Jalon, MSc

Meeting time: Wednesdays, 6:45- 8:25PM

Location: 194M 307, Washington Square

Faculty contact information:

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Email us both.

Please allow 24 hours for a response.

Office hours: by specific arrangement.

Continuous Quality Improvement (CQI)

HPAM-GP 2825 and GPH-GU 2425

Introduction

This course will provide students with an introduction to the tools and methods used to produce effective changes in improving healthcare systems. We will explore the current policy and practice environment driving the focus on value, quality and cost. We will discuss quality broadly, as defined by the Institute of Medicine report – including attention to safety, patient experience, and equity. Students will engage in how to initiate quality improvement (QI) work, using proven methodologies, and how to take QI projects to the level of widespread, sustainable change within a clinical practice, large healthcare provider, or healthcare system. We will study how to develop strategies to engage key stakeholders, use measurement and data, and create communications in order to achieve change.

Prerequisites:

- CORE-GP.1011, Statistical Methods for Public, NonProfit, and Health Management
- HPAM-GP.4833, Health Care Management 1: Control and Organizational Design
- Computer proficiency
- Students lacking the prerequisites must obtain permission to enroll in this course

Required for health management specialization students.

Learning Outcomes

At the successful completion of this course, students will be able to:

- Appreciate the historical evolution of healthcare quality improvement
- Apply a systematic method of improving a process using a team approach
- Plan for the sustainability and spread of an improvement effort

This course also addresses Core Competencies recommended by the Commission on Accreditation for Health Management Education (CAHME) which include:

- The ability to measure, monitor and improve safety, quality, access and system/care delivery processes in health care organizations (Assignment #1: Article Review and Assignment #3: Aim Statement and PDSA Worksheet)
- The ability to use information systems and evidence-based management principles for problem-solving, strategic planning and decision-making, and implementing and measuring change. (Assignment #2: Use of Analytic Tool for Problem Analysis)
- The ability to synthesize evidence, and apply statistical, financial, economic and cost effectiveness tools/techniques in organizational analysis. (Assignment #4: Run and Control Charts)
- The ability to present convincingly to individuals and groups the evidence to support a point of view, position or recommendation. (Assignment #5 Read and Review of Article and Assignments #6a and 6b Spread Planner)
- The ability to manage teams, projects and people; to work in change oriented health care organizations; and mentor a diverse and changing workforce. (Final Project Team Presentation)

**Expected level of competency to be achieved is denoted above as:

- (1) Basic: Foundational understanding of knowledge/skill/competency
- (2) Intermediate: Student demonstrates greater depth of understanding of this knowledge/skill/competency and can use this ability to analyze a problem
- (3) Advanced: student demonstrates expertise in this knowledge/skill/competency and can use this ability to evaluate, judge, and synthesize information.

Learning Strategies

This course is based on:

1. Discussion of current events and the common themes emerging that are affecting the delivery of healthcare services and
2. Learning by doing, i.e., applying methods learned in class to process improvement assignments.
3. Process analysis provides the student the opportunity to think, read, write, and present ideas logically in an organized manner. Emphasis will be placed on oral and written communication and working in teams.

In this course, students will take the role of a team in a specific department or service in a healthcare organization. Students will use management tools and techniques, diagnose problems and develop innovative, practical and cost-effective solutions to address a process needing improvement. Assignments are geared toward analyzing a specific process that is producing a less than optimum outcome, identifying the data required to analyze the problem, and using specific QI tools and techniques for innovative solutions. Finally, students will work on the additional tasks required to make a solution sustainable, or spread across an organization.

Teams

Working in teams is a critical aspect of quality improvement work. Students will be grouped

into teams of 4-5 members during the second/third sessions of this course, and work together throughout the term on a process improvement project. Students will select an organization, to which at least one team member has access, and investigate a process that needs improvement. The process you choose should be meaningful to the organization so that recommended changes can be adapted. You must be able to collect data (concurrently or retrospectively) about the process over time, so be sure to choose a process that is well-defined and lends itself to measurement.

IHI Open School

This course will integrate with the IHI Open School for Health Professions, an online school for helping students learn about quality improvement and patient safety competencies. (See below)

Course Expectations

- Attend every class on time,
- Read all assigned materials prior to class,
- Actively participate in-class discussions and exercises,
- Actively engage and work with team members to complete assignments, and
- Complete online and written assignments on time.

Please discuss with us as soon as possible should you foresee difficulty in adhering to any course expectation. **All class absences must be excused in advance. Extensions for assignment completion are granted only in cases of emergency. Please contact us by email with either of these circumstances.**

Assignments and Grading

1. Written assignments (6) -- Total 48 points.
 - Assignments are to be handed in via email, before midnight of due date.
2. IHI Open school learning modules (5) -- total 25 points
 - completion online, evidenced by printed certificate.
 - IHI Open School course completed past the due date without approved extension will not be credited.
3. Final Team Project and Presentation -- total 20 points
4. Class Participation and attendance -- total 7 points
 - A point will be deducted for unexcused absence

Late assignments will lose 2 points per day after due date.

Final project and presentation: students will work in small teams to develop and present a specific improvement project, including the results of initial steps to test a change, data to support improvement, and planning to take a project to a new location or team (spreading improvement).

Wagner School Academic Code:

All students should review the Wagner School policies on academic honesty and grading by visiting the NYU Wagner School web site at: <https://wagner.nyu.edu>

Required Articles

Posted on NYU Classes

Required Online Courses

IHI Open School online courses are free to students and provide important lessons in patient safety, quality improvement and leadership.

Completion of the selected courses (and due dates) as noted in the syllabus is required. To receive credit for completion:

1. Generate the course completion certificate (you must complete the evaluation at the end of the course to generate the certificate)
2. Submit the certificate through the NYU Classes site under “Assignment” as an attachment.

Written Assignments

There are two individual assignments and four team assignments.

Individual (10 points each)

#1. One page analysis and response: “What is Quality Improvement?” Based on the editorial by Batalden and Davidoff, the recommended resources, and any other research as desired, please write one page describing what you view or understand to be key features or components necessary for effective quality improvement work. Explain how well these features are currently integrated into healthcare systems, and at least 2 options for strengthening that integration.

#5. Case Review and Critique: Pronovost P, Needham D, Berenholtz S, Sipopoli D, Haitao C, Cosgrove S, Sexton B, Hyzy R, Welsh R, Roth G, Bander J, Kepros J, Goeschel C.

An intervention to decrease catheter-related bloodstream infections in the ICU. *New England Journal of Medicine* 2006, 355(26): 2725-2732.

Apply what you have learned from this course to date to a real case.

From what you have learned in the Continuous Quality Improvement course about using the Model for Improvement to initiate and produce change, please read the article by Pronovost, et al, and assess the strengths and weaknesses of the authors’ approach this issue. As you pull together your analysis, please use the questions below as a guide:

1. Describe your thoughts about the interventions Pronovost and colleagues used in this endeavor. What are the pros and cons of each part of the intervention that hospitals were asked to implement?
2. What aspects of the team composition do you think were positive? What would you have changed about the team composition, and why? What other disciplines might you have considered to include?
3. What are your thoughts about the measurement strategy in this effort? Would you have included process measures in the design? If you would have approached the measurement strategy differently, please describe this here.
4. What do you think are some of the major strengths and successes of this work? What do you think are some of the major limitations of this work?
5. Please describe any other thoughts you might have about this effort, and how you think this type of endeavor has advanced the field of quality improvement and patient safety over the past 10 years.

Team (7 points each)

For each of the following assignments, please include a cover page stating your team name, members, and “problem” to be improved.

#2. Problem analysis: Select one analytic tool for analyzing your problem, prepare assessment of problem using that tool, and explain why that tool selected.

#3. Model for Improvement: Complete Aim Statement and PDSA Worksheets.

#4. Run chart/control chart. Run charts are graphs of data taken over time. Control charts build on run charts and are a key tool used to display variation in the process, and identify the presence or absence of special or common cause variation. Gather data and prepare a run chart; add upper and lower control limits to turn it into a control chart. Prepare a written statement of your analysis.

#6 a and b. Spread planner. Complete the template provided to plan a process for spreading an improvement from an initial project. The planner will guide you to consider the intervention, communication plans, creating a social network for change, measurement and leadership.

Course content and schedule – posted on NYU Classes/Syllabus