

UNIVERSITY
OF MINNESOTA

**School of
Public Health**

PubH 6570, Section 3
Topics in Health Care Administration:
Leading Performance Improvement in Health Care
Course Syllabus
Spring Semester 2009

Credits:	2
Meeting Days:	Wednesdays, January 21-May 6, 2009 (except March 18 and 25)
Meeting Time:	1:25 p.m. – 3:20 p.m.
Meeting Place:	Moos Tower 1-430
Office Address:	Division of Health Policy and Management MMC 729, D375 Mayo 420 Delaware St. SE Minneapolis, MN 55455
Office Phone:	612-624-4371
E-mail:	gmosser@umn.edu
Office Hours:	By appointment

I. Course Description

PubH 6570, section 3, Leading Performance Improvement in Health Care, is an elective course for students who intend to lead, design, or staff performance improvement programs in healthcare institutions.

The course provides an introduction to concepts of performance improvement, an account of the role of leadership and management in quality improvement programs, a review of quality improvement topics currently widely discussed in the U.S., an overview of quality measurement, and an account of continuous quality improvement compared and contrasted with other approaches to quality improvement. The course emphasizes the conceptual basis of performance improvement and leadership of performance improvement programs. The tools and techniques of continuous quality improvement are summarized briefly.

The course stresses performance improvement in healthcare delivery organizations, especially hospitals and medical groups. However the principles apply also to public health, and examples from public health are included. Students do group projects to learn how performance improvement is put into practice in selected health systems, hospitals, and medical groups in the Twin Cities and nearby.

II. Course Prerequisites

Students must be enrolled in an MHA, MPH, or certificate program in the School of Public Health. Alternatively, students may take the course with consent of the instructor.

III. Learning Objectives

After taking this course, students will have improved their abilities:

- (1) to be able to define and use the concept of quality as it is applied in health care;
- (2) to devise and lead performance improvement programs in healthcare organizations;

- (3) to craft the design of performance improvement programs with knowledge of current concerns of the public, government, employer-purchasers, and accreditation agencies;
- (4) to oversee measurement of performance within healthcare institutions;
- (5) to explain the various approaches available for improving performance in health care, including continuous quality improvement (CQI), lean thinking, six-sigma methods, and the Baldrige criteria;
- (6) to choose among these approaches to performance improvement and to oversee their uses or make use of them directly.

IV. Methods of Instruction and Work Expectations

Sessions consist primarily of lectures and discussions led by the instructor with some presentations and discussions led by students and some presentations by guest lecturers. PowerPoint slides and other materials are distributed in class and posted on the course WebVista site. (For instructions on how to set up your computer for WebVista access, go to: <http://webct.umn.edu/students/>.)

Students are expected to attend all classes, to do the reading assignments prior to class, to participate actively in class discussions (without dominating the discussions), and to lead discussions as requested. Students are expected to let the instructor know in advance if they will miss a class.

The course includes in-class tests, a group project to be done outside of class, an oral presentation by each group on its project, and a written report by the group on its project. Students are expected to make their oral presentations as scheduled and to turn in the written assignment on time.

The criteria that will be used in evaluating the group oral presentation, the group written assignment, and class preparation and contribution are included in the Appendix below.

V. Textbooks and Other Readings

There are two required textbooks:

Ransom ER, Joshi MS, Nash DB, Ransom SB. *The Healthcare Quality Book: Vision, Strategy, and Tools*. 2nd ed. Chicago: Health Administration Press, 2008. ISBN number 978-1-56793-301-7. (Available from Amazon.com, BarnesandNoble.com, ache.org/hap.cfm, and the U of M Bookstore in Minneapolis.)

Ryan, MJ. *On Becoming Exceptional*. Milwaukee: ASQ Quality Press, 2007. ISBN number 978-0-87389-715-0. (Available from Amazon.com, BarnesandNoble.com, asq.org/quality-press, and the U of M Bookstore in Minneapolis.)

In addition, the following articles, chapter, and reports are required reading:

- (1) Chassin MR, Galvin RW. The urgent need to improve health care quality. *JAMA*. 1998 Sept 16; 280(11):1000-1005.
- (2) Berwick DM. A user's manual for the IOM's 'Quality Chasm' report. *Health Affairs*. 2002 May/June; 21(3):80-90.
- (3) Leape LL. Error in medicine. 1994 Dec 21; 272(23):1851-1857.
- (4) Reason J. Human error: models and management. *BMJ*. 2000 Mar 18; 320:768-770.
- (5) National Quality Forum. Serious reportable events: transparency & accountability are critical to reducing medical errors. Available at: <http://www.qualityforum.org/projects/completed/sre/fact-sheet.asp>
- (6) Berwick DM. Continuous improvement as an ideal in health care. *New England Journal of Medicine*. 1989 Jan 5; 320(1):53-56.
- (7) Langley GJ, Nolan KM, Nolan TW, et al. *The Improvement Guide: A Practical Approach to Enhancing Organizational Performance*. Chapter 1: A model for improvement. San Francisco: Jossey-Bass Publishers, 1996. Pp. 3-11.
- (8) Spear SJ. Fixing health care from the inside, today. *Harvard Business Review*. 2005 Sept; 83(9):78-91.

- (9) Nelson-Peterson DL, Leppa CJ. Creating an environment for caring using lean principles of the Virginia Mason Production System. *The Journal of Nursing Administration*. 2007 June; 37(6):287-294.
- (10) Frankel HL, Crede WB, Topal JE, et al. Use of corporate six-sigma performance-improvement strategies to reduce incidence of catheter-related bloodstream infections in a surgical ICU. *Journal of the American College of Surgeons*. 2005 Sept; 201(3):349-358.
- (11) 2009-2010 Baldrige National Quality Program. Health Care Criteria for Performance Excellence. Pp. i-26. Available at: http://www.quality.nist.gov/PDF_files/2009_2010_HealthCare_Criteria.pdf
- (12) Solberg LI, Mosser G, McDonald S. The three faces of measurement: improvement, accountability, and research. *Joint Commission Journal on Quality Improvement*. 1997 Mar; 23(3):135-147.
- (13) O'Connor PJ, Quiter ES, Rush WA, et al. Impact of hypertension guideline implementation on blood pressure control and drug use in primary care clinics. *Joint Commission Journal on Quality Improvement*. 1999 Feb; 25(2):68-76.
- (14) Murray M, Bodenheimer T, Rittenhouse D, et al. Improving timely access to primary care: case studies of the advanced access model. *JAMA*. 2003 Feb 26; 289(8):1042-1046.
- (15) Bodenheimer T, Wagner EH, Grumbach K. Improving primary care for patients with chronic illness. *JAMA*. 2002 Oct 9; 288(14):1775-1779.
- (16) Stroebel RJ, Scheitel SM, Fitz JS, Herman RA, et al. A randomized trial of three diabetes registry implementation strategies in community internal medicine practice. *Joint Commission Journal on Quality Improvement*. 2002 Aug; 28(8):441-450.
- (17) Pronovost P, Needham D, Berenholtz S, et al. An intervention to decrease catheter-related bloodstream infections in the ICU. *New England Journal of Medicine*. 2006 Dec 28; 355(26):2725-2732.
- (18) Jain M, Miller L, Belt D, King D, Berwick DM. Decline in ICU adverse events, nosocomial infections and cost though a quality improvement initiative focusing on teamwork and culture change. *Quality and Safety in Health Care*. 2006 Aug; 15(4):235-239.
- (19) Britto MT, Anderson JM, Kent WM, et al. Cincinnati Children's Hospital Medical Center: transforming care for children and families. *Joint Commission Journal on Quality and Patient Safety*. 2006 Oct; 32(10):541-548.
- (20) Kaplan RS, Norton DP. The balanced scorecard—measures that drive performance. *Harvard Business Review*. 1992 Jan-Feb; 70(1):71-79.
- (21) Davies HTO, Nutley SM, Mannion R. Organisational culture and quality of care. *Quality & Safety in Health Care*. 2000 June; 9(2):111-119.
- (22) Øvretveit J, Bate P, Cleary P, et al. Quality collaboratives: lessons from research. *Quality and Safety in Health Care*. 2002 Dec; 11(4):345-351.
- (23) Bodenheimer T. *The Science of Spread: How Innovations in Care Become the Norm*. Oakland: California HealthCare Foundation, 2007. Available at <http://www.chcf.org/topics/chronicdisease/index.cfm?itemID=133461>
- (24) Painter MW, Lavizzo-Mourey R. *Aligning Forces for Quality: a program to improve health and health care in communities across the United States*. *Health Affairs*. 2008 Sept/Oct; 27(5):1461-1463.
- (25) Leape LL, Berwick DM. Five years after To Err Is Human. *JAMA*. 2005 May 18; 293(19):2384-2390.
- (26) National Priorities Partnership. *National Priorities & Goals: Aligning Our Efforts to Transform America's Healthcare*. Washington, DC: National Quality Forum, 2008. (This item will be distributed in class.)

To obtain the articles in this list, except for 3, 6, 12, 13, 16, and 20, go to the U of M libraries home page at <http://www.lib.umn.edu>.

- Click "E-Journals" in the top row of buttons.

- Type in the journal title in the "Title" box and click the GO button.
- This takes you to a list of journal titles. Click on the title of the journal you want.
- This takes you to a list of search sources. Click the one you want to use, usually the first one.
- At this point you will be prompted for your Internet ID and password if you are not already logged in.
- The next page normally displays the years in which the journal was published. Click the year you want, opening up a list of issues for that year. Click the issue you want.
- The next page normally shows the table of contents for that issue. Click the article you want.
- The next page normally shows the first page of the article or a bibliographic entry, in both cases with buttons along the top enabling you to select PDF or other viewing options. Normally you will want to select the PDF option.
- If you want to have a copy of the article, print or save the PDF.

For some journals, the sequence above is slightly different, but the pathway is ordinarily obvious. If it is not, you can request help at the Bio-Medical Library or Wilson Library.

Some materials will be distributed in class.

VI. Course Schedule

Session 1, January 21: Introduction; the need to improve healthcare quality

Reading: Article by Chassin (item 1 above).

Class content: Overview and introduction to the course; review of evidence that the quality of health care in the U.S. can and should be improved.

Session 2, January 28: Defining and measuring

Reading: Text by Ransom (cited above), chps. 1-3; article by Berwick 2002 (item 2 above).

Class content: Definition and basic concepts of quality in health care; measurement of quality broadly in the U.S.; public reporting of performance.

Session 3, February 4: Safety in health care

Reading: Ransom, chp. 11; article by Leape 1994 (item 3 above); article by Reason (item 4 above); National Quality Forum fact sheet on serious reportable events (item 5 above).

Class content: Introduction to safety in health care and lessons on safety from other industries.

Other: Form groups for projects.

Session 4, February 11: Taking action to improve performance

Reading: Ransom, chp. 4; article by Berwick 1989 (item 6 above); chapter by Langley GJ et al. (item 7 above).

Class content: History of systems-based quality improvement methods; explanation of continuous quality improvement and the Plan-Do-Study-Act (PDSA) cycle.

Session 5, February 18: Additional approaches to performance improvement

Test #1 at the beginning of class on material covered in sessions 1-4.

Reading: Article by Spear (item 8 above); article by Nelson-Peterson (item 9 above); article by Frankel item 10 above); Baldrige health care criteria for performance excellence (item 11 above).

Class content: Kaizen, lean thinking, and six-sigma methods; the Baldrige framework.

Session 6, February 25: Performance improvement in practice I

Reading: Article by O'Connor (item 13 above); article by Murray (item 14 above); article by Bodenheimer 2002 (item 15 above).

Class content: Examples of performance improvement activity in hospitals, medical groups, and public health.

Other: Guest presentation by Beth Averbeck, MD, from HealthPartners, Minneapolis

Session 7, March 4: Tools, techniques, and staffing

Reading: Ransom, chps. 7 and 14; article by Solberg (item 12 above).

Class content: Overview of quality improvement tools, statistics, and staffing.

Session 8, March 11: Performance improvement in practice II

Reading: Article by Stroebe (item 16 above); article by Pronovost (item 17 above); article by Jain (item 18 above).

Class content: More examples of performance improvement activity in hospitals, medical groups, and public health.

Other: Guest presentation by Steve Bergeson, MD, from Allina Medical Clinic, Minneapolis.

The class will not meet on March 18 or 25.

Session 9, April 1: Leadership for quality: engaging patients and families

Reading: Ransom, chps. 13 and 15; book by Sister Mary Jean Ryan (cited above); Ransom, chp. 9; article by Britto (item 19 above).

Class content: Leadership for quality; engaging patients and families in pursuing performance improvement.

Session 10, April 8: Monitoring performance and focusing improvement efforts; changing behavior

Reading: Ransom, chps. 5 and 10; article by Kaplan (item 20 above); Ransom, chp. 16.

Class content: Monitoring performance and using performance data to focus improvement efforts; changing the behavior of physicians, nurses, and others.

Session 11, April 15: The role of organizational culture; inter-organizational collaboration for improvement

Test #2 at beginning of class on material covered in sessions 5-10.

Reading: Article by Davies (item 21 above); article by Øvretveit (item 22 above); report by Bodenheimer 2007 (item 23 above); article by Painter (item 24 above).

Class content: Addressing the role of organizational culture; use of collaborations of various kinds to accelerate performance improvement.

Session 12, April 22: The present-day national context for healthcare improvement

Reading: Ransom, chp. 17; article by Leape 2005 (item 25 above); report from National Priorities Partnership (item 26 above).

Class content: Overview of current concerns of the public, government, purchasers, accreditation bodies, and the health care industry.

Session 13: April 29: Presentations I

Reading: None.

Class content: Presentations of group projects.

Session 14, May 6: Presentations II

Reading: None.

Class content: Presentations of group projects.

Other: Assignment 2 due at the beginning of class.

VII. Evaluation and Grading

Basis for Grading

Students are also expected to take the two in-class tests and to complete two assignments. Assignment 1 will be a group oral report based on an investigation of how performance improvement is organized and carried out at a healthcare institution in the Twin Cities or nearby. Assignment 2 will be a group written report on this same investigation. The instructor will assign students to threesomes or foursomes to carry out Assignments 1 and 2. See the Appendix below for details of the two assignments and for the evaluation forms, which show the criteria that are used to grade the presentation and the paper.

Preparing for class, contributing to class discussions, and leading discussions when requested are important to the course's success. Evaluation of class preparation and contribution will be negatively affected by absences without prior notice, absences without good reason, inattention in class, failure to do the readings in advance of class, domination of class discussions, or failure to prepare materials needed to lead or contribute to discussions. See the Appendix for the evaluation form that shows the details of how preparation and contribution are evaluated.

The components of the final grade and their weights are as follows:

Test #1	15%
Test #2	15%
Assignment 1—group oral presentation	25%
Assignment 2— group written report	25%
Class preparation and contribution	20%

The grading scale is: 94-100 = A, 90-93 = A-, 87-89 = B+, 84-86 = B, 80-83 = B-, 77-79 = C+, 74-76 = C, 70-73 = C-, 66-69 = D+, 64-66 = D, 60-63 = D-, <60 = F.

Assignments turned in late without prior permission will be penalized up to one letter grade the first time and up to two letter grades the second time.

Incomplete Grade

An incomplete grade is permitted only in cases of exceptional circumstances and following consultation with the instructor. In such cases a grade of "I" will require a specific written agreement between the instructor and the student specifying the time and manner in which the student will complete the course requirements. Extension for completion of the work will not exceed one year.

University of Minnesota Uniform Grading and Transcript Policy

A link to the policy can be found at onestop.umn.edu.

Evaluation of the course by students

At the end of the course, students are encouraged to evaluate the course using a software system called CoursEval. Student feedback on course content and faculty teaching skills are important for improving teaching in the School of Public Health. Please complete an evaluation so that the instructor and future students can benefit from your observations.

The system sends e-mail notifications to students providing information about when and how they can complete the evaluations. Students who complete the course evaluations promptly are able to access their final grades as soon as the faculty member submits their grades. All students have access to their final grades two weeks after the last day of the semester regardless of whether they have completed an evaluation.

VIII. Other Course Information and Policies

Grade Option Change

Deadlines for students to change their grade options (changing among A-F, S-N, or audit) are specific to the particular term and can be found at onestop.umn.edu.

Course Withdrawal

Students should refer to the Refund and Drop/Add Deadlines for the particular term at onestop.umn.edu for information and deadlines for withdrawing from a course. As a courtesy, the student should notify the instructor of his or her intent to withdraw and, if applicable, should notify his or her advisor.

Students wishing to withdraw from a course after the posted final deadline for a particular term must contact the School of Public Health Student Services Center at sph-ssc@umn.edu for further information on how to proceed.

Student Academic Integrity and Scholastic Dishonesty

Academic integrity is essential to a positive teaching and learning environment. All students enrolled in University courses are expected to complete coursework responsibilities with fairness and honesty. Failure to do so by seeking unfair advantage over others or misrepresenting someone else's work as your own, can result in disciplinary action.

Students are responsible for knowing the University of Minnesota Board of Regents Student Conduct Code, found at <http://www.umn.edu/regents/polindex.html>. The Student Conduct Code defines scholastic dishonesty as follows:

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.

Plagiarism is an important element of this policy. It is defined as the presentation of another's writing or ideas as your own, regardless of whether the other person knows that you are presenting the material as your own or whether the other person has intentionally written material for you to use. For more information on this policy and for a helpful discussion of preventing plagiarism, please consult University policies and procedures regarding academic integrity at <http://writing.umn.edu/tww/plagiarism>.

Students are urged to be careful that they properly attribute and cite others' work in their own writing. For guidelines for correctly citing sources, go to <http://tutorial.lib.umn.edu> and click on "Citing Sources".

Students are responsible for maintaining scholastic honesty in their work at all times. Students engaged in scholastic dishonesty will be penalized, and offenses will be reported to the Office for Student Conduct and Academic Integrity (OSAI, <http://www.umn.edu/oscai>).

In addition, original work is expected in this course. It is unacceptable to hand in assignments for this course for which you receive credit in another course unless by prior agreement with the instructor. Building on a line of work begun in another course or leading to a thesis, dissertation, or final project is acceptable.

Within this course, a student responsible for scholastic dishonesty can be assigned a penalty up to and including an "F" or "N" for the course. If you have any questions regarding the expectations for a specific assignment or exam, ask the instructor.

Disability Statement

It is University policy to provide, on a flexible and individualized basis, reasonable accommodations to students who have a documented disability (e.g., physical, learning, psychiatric, vision, hearing, or systemic) that may affect their ability to participate in course activities or to meet course requirements. Students with disabilities are encouraged to contact Disability Services to have a confidential discussion of their individual

needs for accommodations. Disability Services is located in Suite 180 McNamara Alumni Center, 200 Oak Street. Staff can be reached by calling 612-626-1333 (voice or TTY).

Appendix to Syllabus
PubH 6570, Section 003, Leading Performance Improvement in Health Care
Spring Semester 2009

Guidelines for Assignment 1 (group presentation)

You will have two or three partners in doing this assignment. Together, identify a hospital, medical group, or public health organization that is engaged in performance improvement. In class, we will discuss the choices of organizations to be studied.

Obtain access to interview people who work in the organization and are familiar with performance improvement as it is pursued in the organization. Documents may also be available to you. Prior to interviewing, construct an interview guide to use in the interviews, based on course materials you have read. If at all possible, observe committees and teams doing the work of performance improvement. Direct observation is extremely helpful in understanding the organization's program.

Your assignment is to report to the rest of the class:

- a brief description of the organization you studied;
- the methods you used to collect information;
- how the performance improvement activities in the organization are organized;
- the role of leadership and the board in pursuing performance improvement;
- how patients and families are engaged in the performance improvement work;
- how performance is monitored in the organization;
- how projects for improvement are chosen;
- the methods used for improving processes and systems;
- the methods used for achieving behavior change or culture change or both

Prepare a presentation in which you present your findings clearly to the others in the class. Use visual aids, e.g., PowerPoint.

In your account of the organization's performance improvement program, make use of concepts in *The Healthcare Quality Book* and in at least three of the articles and other readings for the course. Refer to these concepts explicitly in your presentation and identify the sources clearly.

Your group will have 30 minutes to make its presentation, including time for questions. An evaluation form for the oral presentation is attached. Please review it and be guided by the details of the criteria for evaluation described in it. In particular, be sure to describe the organization and to present the method you used to gather the information included in your presentation. The criteria listed are the criteria the instructor will use in grading your presentation. All members of the group will be given the same grade.

Guidelines for Assignment 2 (group written report)

As a group, write a report on the performance improvement program you investigated for Assignment 1. Again, refer explicitly to course reading materials in your report. Explain why the readings are either exemplified or contradicted by your observations of the program you have studied. Each person in the group should take responsibility for writing a portion of the report. The group should take responsibility for assuring that the report is coherent and comprehensive.

The page limit for the assignment is eight double-spaced pages. (In counting pages, you may disregard appendices, if there are any.) An evaluation form for this written assignment is attached. Please review it and be guided by the details of the criteria for evaluation described in it. In particular, be sure to describe the organization and to present the methods you used to gather the information included in your report. The criteria listed in the form are the criteria the instructor will use in grading your paper. All authors for a given report will be given the same grade.

PubH 6570, Section 003, Spring Semester 2009
EVALUATION OF ASSIGNMENT 1 (group presentation)

Name:

Date:

<u>Elements of Evaluation</u>	Extent to Which Achieved:				
	Low				High
1. Provided a clear introductory description of the organization studied.	1	2	3	4	5
2. Provided an account of the methods used to gather information.	1	2	3	4	5
3. Provided a clear account of the performance improvement program in the organization.	1	2	3	4	5
4. Provided a clear account of the role of leadership and the board in the program.	1	2	3	4	5
5. Provided an account of how patients and families are engaged in the work of improvement.	1	2	3	4	5
6. Provided an account of how performance is monitored in the organization.	1	2	3	4	5
7. Provided an account of how projects for improvement are chosen.	1	2	3	4	5
8. Provided an account of the method or methods used for improving processes and systems.	1	2	3	4	5
9. Provided an account of the methods used for behavior change or culture change or both.	1	2	3	4	5
10. Demonstrated understanding of performance improvement concepts described in <i>The Healthcare Quality Book</i> and in at least three other readings for the course.	1	2	3	4	5
11. Presentation was clear, well-organized, and well-presented and made effective use of visual aids.	1	2	3	4	5

Comments and Grade:

PubH 6570, Section 003, Spring Semester 2009
EVALUATION OF ASSIGNMENT 2 (group written report)

Name:

Date:

<u>Elements of Evaluation</u>	Extent to Which Achieved:					
	Low				High	
1. Provides a succinct, clear description of the organization studied.	1	2	3	4	5	
2. Provides an account of the methods used to gather information.	1	2	3	4	5	
3. Provides a clear account of the performance improvement program of the organization.	1	2	3	4	5	
4. Provides a clear account of the role of leadership and the board in the program.		1	2	3	4	5
5. Provides an account of how patients and families are engaged in the work of improvement.	1	2	3	4	5	
6. Provides an account of how performance is monitored in the organization.	1	2	3	4	5	
7. Provides an account of how projects for improvement are chosen.	1	2	3	4	5	
8. Provides an account of the method or methods used for improving processes and systems.	1	2	3	4	5	
9. Provides an account of the methods used for behavior change or culture change or both.	1	2	3	4	5	
10. Makes explicit and accurate use of quality improvement concepts described in <i>The Healthcare Quality Book</i> and in at least three other readings for the course.	1	2	3	4	5	
11. The paper is clear, logically organized, and well written.	1	2	3	4	5	

Comments and Grade:

PubH 6570, Section 003, Spring Semester 2009
EVALUATION OF CLASS PREPARATION AND CONTRIBUTION

Name:

Date:

<u>Elements of Evaluation</u>	Extent to Which Achieved:				
	<u>Low</u>				<u>High</u>
1. Attended class sessions with rare exception and provided advance notice of any absences.	1	2	3	4	5
2. Generally appeared alert and engaged.	1	2	3	4	5
3. Appeared to do readings in advance of class.	1	2	3	4	5
4. Made insightful comments in discussion.	1	2	3	4	5
5. Made helpful responses to other students' questions and comments in discussion	1	2	3	4	5
6. Contributed to others' learning in discussion.	1	2	3	4	5
7. Monitored self for overparticipation and avoided dominating class discussions.	1	2	3	4	5
8. Prepared material for sessions as requested.	1	2	3	4	5

Comments and Grade: