Syllabus
HPM 967: Quality Improvement
Spring 2019
2 Credits | [Online]

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Course Overview

Course Description	HPM 967 provides an introduction and overview of quality improvement efforts in health care. It will explore the evidence for why quality improvements are needed and measurements of how health care quality is determined. Quality improvement techniques will be discussed with respect to how they are implemented, and the role of leaders in successful quality improvement programs. Examples covered in the course will include quality improvements in the workplace, in programs, in systems and in entire countries.
Prerequisites	Course restricted to DrPH Executive Doctoral Students in Health Leadership
Instructor(s)	Sandra B. Greene, DrPH Professor Department of Health Policy and Management 1101-E McGavran Greenberg Phone: 919-966-8930/919 966-0993 Email: SandraB_Greene@email.unc.edu
Teaching Assistant	TBD
Course Website	https://sakai.unc.edu/welcome/. Use your ONYEN and password. One of the primary websites we will be using this semester is the **Institute of Healthcare Improvement (IHI)** open school certificate courses. Go to the following website to sign in. http://www.ihi.org/education/ihiopenschool/courses/Pages/default.aspx The learning modules can be accessed at the following site: http://app.ihi.org/lms/onlinelearning.aspx **Once you complete each lesson, download certificate and post to Sakai under homework tab.**
Class Days, Times, Location	This course is a combination of residential and online sessions on various Wednesday evenings throughout the fall semester. The class schedule is listed below.
Office Hours	There are no set office hours for this course. Students may request an appointment by email. Virtual office hours may be conducted via phone, Skype, or Adobe Connect.
Course Texts	None Other readings are noted in the Course Schedule.

Course Format   The course format includes lectures, guest lectures, class discussion and presentations. Students are expected to complete the readings and review the slides before class and come to each class prepared to discuss the materials assigned.

Course Policies

Recognizing, Valuing and Encouraging Inclusion and Diversity in the Classroom

We share the School`s commitment to diversity. We are committed to ensuring that the School is a diverse, inclusive, civil and welcoming community. Diversity and inclusion are central to our mission — to improve public health, promote individual well-being and eliminate health inequities across North Carolina and around the world. Diversity and inclusion are assets that contribute to our strength, excellence and individual and institutional success. We welcome, value and learn from individual differences and perspectives. These include but are not limited to: cultural and racial/ethnic background; country of origin; gender; age; socioeconomic status; physical and learning abilities; physical appearance; religion; political perspective; sexual identity and veteran status. Diversity, inclusiveness and civility are core values we hold, as well as characteristics of the School that we intend to strengthen.

We are committed to expanding diversity and inclusiveness across the School— among faculty, staff, students, on advisory groups, and in our curricula, leadership, policies and practices. We measure diversity and inclusion not only in numbers, but also by the extent to which students, alumni, faculty and staff members perceive the School's environment as welcoming, valuing all individuals and supporting their development."
In this class, we practice these commitments in the following ways:
- Develop classroom participation approaches that acknowledge the diversity of ways of contributing in the classroom and foster participation and engagement of *all* students.
- Structure assessment approaches that acknowledge different methods for acquiring knowledge and demonstrating proficiency.
- Encourage and solicit feedback from students to continually improve inclusive practices.

As a student in the class, you are also expected to understand and uphold the following UNC policies:
- **Diversity and Inclusion at the Gillings School of Global Public Health**: http://sph.unc.edu/resource-pages/diversity/
- **UNC Non-Discrimination Policies**: http://policy.sites.unc.edu/files/2013/04/nondiscrim.pdf
- **Prohibited Discrimination, Harassment, and Related Misconduct at UNC**: https://deanofstudents.unc.edu/incident-reporting/prohibited-harassmentsexual-misconduct

Accessibility | 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), https://ars.unc.edu/; phone 919-962-8300; email ars@unc.edu. Students must document/register their need for accommodations with ARS before accommodations can be implemented.

UNC Honor Code | As a student at UNC-Chapel Hill, you are bound by the university's Honor Code, through which UNC maintains standards of academic excellence and community values. It is your responsibility to learn about and abide by the code. All written assignments or presentations (including team projects) should be completed in a manner that demonstrates academic integrity and excellence. Work should be completed in your own words, but your ideas should be supported with well-cited evidence and theory. To ensure effective functioning of the Honor System at UNC, students are expected to:

a. Conduct all academic work within the letter and spirit of the Honor Code, which prohibits the giving or receiving of unauthorized aid in all academic processes.
b. Learn the recognized techniques of proper attribution of sources used in written work; and to identify allowable resource materials or aids to be used during completion of any graded work.
c. **Sign a pledge on all graded academic work certifying that no unauthorized assistance has been received or given in the completion of the work.**
d. Report any instance in which reasonable grounds exist to believe that a fellow student has violated the Honor Code.

Instructors are required to report suspected violations of the Honor Code, including inappropriate collaborative work or problematic use of secondary materials, to the Honor Court. Honor Court sanctions can include receiving a zero for the assignment, failing the course and/or suspension from the university. If you have any questions about your rights and responsibilities, please consult the Office of Student Conduct at https://studentconduct.unc.edu/, or consult these other resources:

- Honor system module.
- UNC library's plagiarism tutorial.
- UNC Writing Center handout on plagiarism.

Instructor Expectations
You are expected to be online and participate in all classes. If, in an unusual circumstance, you cannot be online, you must notify the faculty member in advance of the class. You are still responsible for

completing and turning in all class assignments in a timely fashion. Additionally, you are responsible for listening to the recording of the session that was missed. Students are expected to come to class prepared to participate in discussions and to provide constructive feedback to your fellow classmates. Failure to participate in class discussions can affect your final grade (ie, from H to a P). Also, freezing one's camera for extended periods of time can negatively impact your class participation grade, as the instructor does not know whether you are present.

Email
The instructor will typically respond to email within 24 hours or less if sent Monday through Friday. The instructor may respond to weekend emails, but it is not required of them. If you receive an out of office reply when emailing, it may take longer to receive a reply. The instructor will provide advance notice, if possible, when they will be out of the office.

Discussion Board
Not applicable.

Feedback
All graded assignments will receive feedback that coincides with the assessment rubric. Feedback is meant to be constructive and help the student continue to build upon their skills. Feedback is a tool that you as a learner can use to understand the areas that you are succeeding in and what you can do to improve in other areas.

Grading
Every effort will be made to provide grades and feedback within two weeks after the due date. Assignments that build on future assignments will be graded within one week of the final due date.

Syllabus Changes
The instructor reserves to right to make changes to the syllabus, including project due dates and test dates. These changes will be announced as early as possible.

Telephone Messages
Generally, emails are the best way to reach the instructor. The instructor will respond to telephone messages within 24 hours Monday through Thursday. Calls left on a Friday will be returned that day if possible; if not, they will be returned on Monday.

Student Expectations

Appropriate Use of Course Resources:
The materials used in this class, including, but not limited to, syllabus, exams, quizzes, and assignments are copyright protected works. Any unauthorized copying of the class materials is a violation of federal law and may result in disciplinary actions being taken against the student. Additionally, the sharing of class materials without the specific, express approval of the instructor may be a violation of the University's Student Honor Code and an act of academic dishonesty, which could result in further disciplinary action. This includes, among other things, uploading class materials to websites for the purpose of sharing those materials with other current or future students.

Assignments
Submit all assignments as directed by the instructor. These will either be through Sakai or as direct email attachments to the instructor.

Attendance/ Participation	Your attendance and active participation are an integral part of your learning experience in this course. If you are unavoidably absent, please notify the course instructor (and Teaching Assistant if one is assigned).
Communication	You are expected to follow common courtesy in all communication to include email, discussion boards, and face-to-face. All electronic communications sent should follow proper English grammar rules to include complete sentences. This is a professional course, and you are expected to communicate as a professional.
Contributions	You are expected to offer individual contributions in class and on individual assignments, and collaborate with fellow students on assignments for which students may work together, such as group assignments.
Discussion Board	Not applicable
Email	All email correspondence between student/instructor and peer/peer will be conducted in a professional manner following email etiquette. • View the following link for more information on email etiquette: http://metropolitanorganizing.com/etiquette-professional-organizing-services/essential-email-etiquette-tips/
Late Work	Late, missed, or rescheduled work: Assignments are due on their due dates. For extenuating circumstances, you may be able to get instructor permission to turn in your assignment late. However, permission will only be considered if you notify the instructor prior to the due date. Corrected submissions will not be accepted unless stated otherwise. You must inform the instructor on the first week of class if you cannot attend a presentation due to extenuating circumstances, such as medical procedures or professional travel. Attendance on the day of the presentation is otherwise required to receive points for those activities.
Readings	Readings for a particular class should be completed before the class session and before completing associated activities
Technical support	The UNC Information Technology Services (ITS) department provides technical support 24-hours per day, seven days per week. If you need computer help, please contact the ITS Help Desk by phone at +1-919-962-HELP (919-962-4357), or by email at help@unc.edu, or by visiting their website at http://help.unc.edu, or by UNC Live Chat at http://its.unc.edu/itrc/chat.

Competencies, Learning Objectives, and Assessment

Competencies

In this course, you will develop the following competencies.
DPH03. Explain the use and limitations of surveillance systems and national surveys in assessing, monitoring and evaluating policies and programs and to address a population's health.
DRPH24. Use quality improvement techniques to evaluate and improve health systems, programs and practices

Learning Objectives
By the end of this course, you will achieve the following learning objectives.
L1. Understand the recent history of quality improvement initiatives in healthcare
L2. Understand the role of medical errors in patient safety
L3. Understand how organizations and programs make quality improvements
L4. Understand how ACOs incentives translate into quality improvement among providers participating in ACOs
L5. Understand the role of primary care in developing country health systems in economic terms
L6. Understand how quality is measured
L7. Understand how to apply quality improvement principles to one's work environment

Map
Competencies addressed in this course, learning objectives mapped to these competencies, and assignments that assess these competencies.

Competencies	Learning Objectives	Assessment Assignments with brief descriptions
DPH03. Explain the use and limitations of surveillance systems and national surveys in assessing, monitoring and evaluating policies and programs and to address a population's health. DRPH24. Use quality improvement techniques to evaluate and improve health systems, programs and practices	L1. Understand the recent history of quality improvement initiatives in healthcare L2. Understand the role of medical errors in patient safety	Assignment 1. IHI Open School PS 101, PS 102
DPH03. Explain the use and limitations of surveillance systems and national surveys in assessing, monitoring and evaluating policies and programs and to address a population's health. DRPH24. Use quality improvement techniques to evaluate and	L3. Understand how organizations and programs make quality improvements	Assignment 2. IHI Open School PS 103, PS 104

improve health systems, programs and practices		
DPH03. Explain the use and limitations of surveillance systems and national surveys in assessing, monitoring and evaluating policies and programs and to address a population's health DRPH24. Use quality improvement techniques to evaluate and improve health systems, programs and practices	L4. Understand how ACOs incentives translate into quality improvement among providers participating in ACOs	Assignment 3. IHI Open School QI 101, QI 102, L 101
DPH03. Explain the use and limitations of surveillance systems and national surveys in assessing, monitoring and evaluating policies and programs and to address a population's health DRPH24. Use quality improvement techniques to evaluate and improve health systems, programs and practices	L5. Understand the role of primary care in developing country health systems in economic terms	Assignment 4 IHI Open School QI 105, QI 201
DPH03. Explain the use and limitations of surveillance systems and national surveys in assessing, monitoring and evaluating policies and programs and to address a population's health DRPH24 Use quality improvement techniques to evaluate and improve health systems, programs and practices	L6. Understand how quality is measured	Assignment 5. IHI Open School QI 202, TA 101
DPH03. Explain the use and limitations of surveillance systems and national surveys in assessing, monitoring and evaluating policies and programs and to address a population's health DRPH24. Use quality improvement techniques to evaluate and improve health systems, programs and practices	L7. Understand how to apply quality improvement principles to one's work environment	Assignment 6. Reflection paper on use of quality improvement at one's workplace

Course Assignments and Assessments

This course will include graded assignments and/or exams.

Assignments	Points/Percentages
1. PS 101, 102	15%
2. PS 103, 104	15%
3. QI 101, 102, L 101	15%
4. QI 105, 201	15%
5. QI 202, TA 101	15%
6. Reflection paper	15%
7. Class attendance/participation	10%
Total	100%

Grading
Grading Scale:

Final course grades will be determined using the following UNC Graduate School grading scale.

H	92-100	High Pass: Clear excellence
P	75-91	Pass: Entirely satisfactory graduate work
L	60-74	Low Pass: Inadequate graduate work
F	Below 60	Fail

Assignment Descriptions (does not include readings)

Assignments are the Institute of Healthcare Improvement (IHI) open school certificate courses. Go to the following website to sign in.

http://www.ihi.org/education/ihiopenschool/courses/Pages/default.aspx

The learning modules can be accessed at the following site:

http://app.ihi.org/lms/onlinelearning.aspx

Once you complete each lesson, download certificate and post to Sakai under homework tab.

Descriptions of the assignments follow:

Assignment 1: Due Jan. 16, 2019:
 IHI Open School - Patient Safety PS 101 – Introduction to Patient Safety
                                PS 102 – From Error to Harm
Assignment 2: Due Jan. 30, 2019:
 IHI Open School – Patient Safety PS 103 – Human Factors and Safety
                                PS 104 – Teamwork and Communication in a Culture of Safety
Assignment 3: Due Feb. 13, 2019:
 IHI Open School - Improvement Capability QI 101 – Introduction to Health Care Improvement
                                QI 102 – How to Improve with the Model for
                                          Improvement
                                Leadership L 101 – Introduction to Health Care Leadership

Assignment 4: Due March 6, 2019:

IHI Open School – Improvement Capability QI 105 – Leading Quality Improvement
QI 201 – Planning for Spread: From Local
Improvements to System-Wide Change

Assignment 5: Due March 27, 2019:
IHI Open School - Improvement Capability QI 202 – Addressing small problems to build safer,
more reliable systems
Triple Aim for Populations TA101 – Introduction to the Triple Aim for
Populations

Assignment 6. Due May 6. Paper (3-5 pages) and class presentation (5 min.):
Prepare a 3-5 page paper and a 10 minute presentation that is a reflection on what you learned in this class and how it could be applied in your job. It could be a suggestion for a quality measurement or quality improvement project in your organization. Or it may be a reaction to data and information about errors, patient safety and quality improvement that made you think more about this topic.

Optional assignment

By completing the following 4 modules, in addition to the required modules above, you can earn a basic certificate in quality and safety:

QI 103: Testing and Measuring Changes with PDSA Cycles

QI 104: Interpreting data: Run Charts, Control Charts, and other Measurement Tools

PS 105: Responding to Adverse Events

PFC: Introduction to Person and Family-Centered Care

Course at a Glance

Date/Session/Week/Unit	Topic and Competency	Assignment Due
Session 1: January 5, 2019	Introduction and Overview of Quality	None
Session 2: January 16, 2019	Patient Safety and the Need for Quality Improvement	Assignment #1. IHI Open School Patient Safety PS 101, 102
Session 3: January 30, 2019	How Organizations Make Quality Improvements	Assignment #2. IHI Open School Patient Safety PS 103, 104
Session 4: February 13, 2019	Quality Improvement through ACOs	Assignment #3. IHI Open School

	Valerie Lewis, PhD	Improvement Capability QI 101, 102 Leadership L 101
Session 5: March 6, 2019	The Quality of Care in Low and Middle Income Countries	Assignment #4: IHI Open School Improvement Capability QI 105, 201
Session 6: March 27	How Quality is Measured	Assignment #5: IHI Open School Improvement Capability QI 202 Triple Aim for Populations TA 101
Session 7: on campus	Wrap-Up with Student Presentations	Assignment #6. Paper (3-5 pages) and class presentation (5 minutes)

Course Schedule

The instructor reserves to right to make changes to the syllabus, including project due dates and test dates. These changes will be announced as early as possible.

Jan. 5, 2019 (Session 1): Introduction and Overview of Quality Improvement

ON-CAMPUS SESSION SESSION 1	INTRODUCTION AND OVERVIEW OF QUALITY IMPROVEMENT
Topic	This session will occur while you are on campus. We will discuss the history of quality improvement in the US, with an emphasis on the work of the Institute of Medicine. You will be introduced to the IHI Open School platform for on-line sessions.
Competency	DPH03. Explain the use and limitations of surveillance systems and national surveys in assessing, monitoring and evaluating policies and programs and to address a population's health. DRPH24. Use quality improvement techniques to evaluate and improve health systems, programs and practices
Learning Objectives	L1. Understand the recent history of quality improvement initiatives in healthcare - Understand the blueprint for change that was developed by the IOM in its seminal publication on improving quality - Consider system changes that have occurred subsequently - Reflect on facilitators and challenges to continuous quality improvement

	• Introduction to IHI Open School
Readings	Institute of Medicine, *Crossing the Quality Chasm*. 2001. Executive summary, p.1-23.

Jan. 16, 2019 (Session 2): Patient Safety and the Need for Quality Improvement

SESSION 2	PATIENT SAFETY AND THE NEED FOR QUALITY IMPROVEMENT
Topic	This session will provide a foundation for the study of patient safety, including the measurement and reporting of medical errors, and how this drives the need for quality improvement.
Competency	DPH03. Explain the use and limitations of surveillance systems and national surveys in assessing, monitoring and evaluating policies and programs and to address a population's health. DRPH24. Use quality improvement techniques to evaluate and improve health systems, programs and practices
Learning Objectives	L2. Understand the role of medical errors in patient safety • Understand the role of medical errors in patient safety • What are the techniques for addressing medical errors, unintended events and harm to patients • How do you change systems to reduce medical error • The NC Medication Error Quality Initiative (MEQI) as a sample patient safety initiative • A culture of safety and why it is critical for improvement initiatives
Readings	Bates DW, Singh H, Two Decades Since *To Err Is Human:* An Assessment Of Progress And Emerging Priorities In Patient Safety. Health Affairs, November 2018. 37:11.

Assignments/Deadlines	Assignment 1: IHI Open School
	    Patient Safety PS 101 – Introduction of Patient Safety
	    Patient Safety PS 102 – From Error to Harm

Jan. 30, 2019 (Session 3): How Organizations Make Quality Improvements

SESSION 3	HOW ORGANIZATIONS MAKE QUALITY IMPROVEMENTS
Topic	This session will focus on healthcare organizations and programs and how the principles of quality improvement are applied.
Competency	DPH03. Explain the use and limitations of surveillance systems and national surveys in assessing, monitoring and evaluating policies and programs and to address a population's health. DRPH24. Use quality improvement techniques to evaluate and improve health systems, programs and practices
Learning Objectives	L5. Understand how organizations and programs make quality improvements

	- How and why do errors occur in the health care system - Why does the design of our health care system make it so prone to errors - How to make changes to processes to reduce error - The Business Case for Quality (BCQ) Project as sample QI projects in Medicaid organizations - Do quality improvement projects pay? - PCOR and other national QI initiatives

Assignments/Deadlines	Assignment 2: IHI Open School
	    Patient Safety PS 103 – Human Factors and Safety
	    Patient Safety PS 104 – Teamwork and Communication in a
	                      Culture of Safety

Feb. 13, 2019 (Session 4): Quality Improvement through ACOs

SESSION 4	Quality Improvement through ACOs Guest speaker: Valerie Lewis, PhD
Topic	This session will explore the use of ACOs and how they relate to quality improvement among participating providers.
Competency	DPH03. Explain the use and limitations of surveillance systems and national surveys in assessing, monitoring and evaluating policies and programs and to address a population's health. DRPH24. Use quality improvement techniques to evaluate and improve health systems, programs and practices
Learning Objectives	To understand how ACOs incentives translate into quality improvement among providers participating in ACOs, as well as the barriers and facilitators for quality improvement within the ACO context.
Readings	Lewis, Valerie A., Katherine I. Tierney, Taressa Fraze, and Genevra F. Murray. "Care Transformation Strategies and Approaches of Accountable Care Organizations." *Medical Care Research and Review*, November 1, 2017, 1077558717737841. https://doi.org/10.1177/1077558717737841. Lewis, Valerie A., Carrie H. Colla, Katherine Tierney, Arica D. Van Citters, Elliott S. Fisher, and Ellen Meara. "Few ACOs Pursue Innovative Models That Integrate Care For Mental Illness And Substance Abuse With Primary Care." *Health Affairs* 33, no. 10 (October 1, 2014): 1808–16. https://doi.org/10.1377/hlthaff.2014.0353. Lewis, Valerie A., Taressa Fraze, Elliott S. Fisher, Stephen M. Shortell, and Carrie H. Colla. "ACOs Serving High Proportions Of Racial And Ethnic Minorities Lag In Quality Performance." *Health Affairs (Project Hope)* 36, no. 1 (January 1, 2017): 57–66. https://doi.org/10.1377/hlthaff.2016.0626.

Assignments/Deadlines	Assignment 3. IHI Open School
	Improvement Capability QI 101 – Introduction to Health Care Improvement
	Improvement Capability QI 102 – How to Improve with the Model For Improvement
	Leadership L 101 – Introduction to Health Care Leadership

March 6 (Session 5): The Quality of Primary Care in Low and Middle-Income Countries

SESSION 5	The Quality of Primary Care in Low and Middle-Income Countries Guest speaker: Sean Sylvia, PhD
Topic	This lecture reviews recent evidence on the quality of primary care in low and middle income countries. Emphasis is on the role of primary care from an economic perspective, recent approaches to measuring quality, and evidence on quality improvement strategies.
Readings	Das, J., Hammer, J., 2014. Quality of Primary Care in Low-Income Countries: Facts and Economics. Annu. Rev. Econ. 6, 525–553. https://doi.org/10.1146/annurev-economics-080213-041350
Learning Objectives	• Distinguish access and quality of primary care • Understand the role of primary care in developing country health systems in economic terms • Be able to describe different approaches to measuring the quality of primary care in developing country settings • Understand determinants of variation in practice quality and implications for quality improvement strategies
Assignments/Deadlines	Assignment 4: IHI Open School Improvement Capability QI 105 – Leading Quality Improvement Improvement Capability QI 201 – Planning for Spread

March 27, 2019 (Session 6): How Quality is Measured

SESSION 6	HOW QUALITY IS MEASURED
Topic	This session provides an overview of how quality is measured, and the challenges in finding and using data for this purpose.
Competency	DPH03. Explain the use and limitations of surveillance systems and national surveys in assessing, monitoring and evaluating policies and programs and to address a population's health. DRPH24. Use quality improvement techniques to evaluate and improve health systems, programs and practices
Learning Objectives	L6. Understand how quality is measured • What measures are commonly used to assess quality • What are the data challenges in measuring quality

	• Learn about AHRQ initiatives with discharge data • How CMS is measuring quality for hospitals, nursing homes and physician care • Quality improvement in public health
Readings	Riley WJ, Moran JW, Corso LC, Beitsch LM, Bialek R, Cofsky A, *Defining Quality Improvement in Public Health.* J Public Health Management Practice, 2010, 16(1) McLees, AW, Nawaz S, Thomas C, Young A. *Defining and Assessing Quality Improvement Outcomes: Framework for Public Health.* American Journal of Public Health, Supplement 2, 2015, Vol.105, No. S2 American Public Health Association, *Quality Improvement in Public Health: It Works!* Iowa Public Health Association. https://www.iowapha.org/Resources/Documents/APHA%20QI%20in%20PH-It%20Works.pdf

Assignments	Assignment 5. IHI Open School
	    Improvement Capability QI 202 – Addressing small problems to build
	                            safer, more reliable systems
	
	Triple Aim for Populations TA101 – Introduction to the Triple Aim for
	                            Populations

May XX (Session 7): Wrap-Up with Student Presentations

SESSION 7	WRAP-UP WITH STUDENT PRESENTATIONS
Topic	Each student will offer a 10-minute presentation to reflect on the discipline of quality improvement, how it relates to your work, and how you might use what you learned moving forward.
Competency	DPH03. Explain the use and limitations of surveillance systems and national surveys in assessing, monitoring and evaluating policies and programs and to address a population's health. DRPH24. Use quality improvement techniques to evaluate and improve health systems, programs and practices
Learning Objectives	L7. Understand how to apply quality improvement principles to one's work environment
Assignments/Deadlines	Assignment 6: **Paper** (3-5 pages) and **class presentation** (10 min.): Prepare a 3-5 page paper and a 10 minute presentation that is a reflection on what you learned in this class and how it could be applied in your job. It could be a suggestion for a quality measurement or quality improvement project in your organization. Or it may be a reaction to data and information about errors, patient safety and quality improvement that made you think more about this topic.