Te4Q Educational Project Review

Updating Neurology QI Training

Dr. Kurt Sieloff
Goal/Aim

1.) Culture of QI

2.) Practical Experience

3.) Graduation Surveys
Learning Objectives

1.) Participate in a QI project prior to graduation

2.) Present at a faculty meeting prior to graduation

3.) Complete standardized QI module prior to graduation
Te4Q Educational Project Review

Project Title: Quality Improvement Curriculum for Pediatric Emergency Medicine Fellows

Participant Name(s): Michele M. Carney, MD
The overall goal is to provide fellows an understanding of the tenets and tools for Quality Improvement and to use those tools to develop a systemized approach to rectifying errors and publish to advance quality and safety practices in our subspecialty.
Learning Objectives

• Fellows will gain a baseline understanding of quality improvement and of basic quality improvement methodology through didactic sessions, workshops and asynchronous opportunities.

• Fellows will identify a problem for improvement within the health system and implement a plan for improvement during fellowship.

• Fellows will submit a QI manuscript or present their work at a national meeting.
Te4Q Educational Project Review

Project Title: Enhancing the Internal Medicine Residency Patient Safety and Quality Improvement program

Participant Name(s): Tammy Ellies, MBA
Manager, Performance and Quality Improvement, Internal Medicine
Goal/Aim

Goal:
Increase competency of 2nd year residents across quality improvement (QI) learning domains through completion of a team-based QI project.

Dept of Internal Medicine Quality Improvement and Patient Safety Program ¹
- Demonstrates the use of scientific problem solving methods and uses data to guide improvement work.
- Contributes to the creation, dissemination, and application of QI knowledge.

ACGME Internal Medicine Milestones System-based Practice ²
- SBP1: Works effectively within an interprofessional team
- SBP2: Recognizes system error and advocates for system improvement.
- SBP3: Identifies forces that impact the cost of healthcare, and advocates for, and practices cost-effective care

ACGME Internal Medicine Milestones Practice-based Learning ²
- PBL1: Monitors practice with a goal for improvement.
- PBL2: Learns and improves via performance audit.

¹Department of Internal Medicine PSLP Competencies, 2nd year project experience, 4/2018 draft
²ACGME Milestones, Internal Medicine, Version 7/2014
Learning Objectives

After the 4-week project rotation, second year residents will be able to:

1. Articulate the importance and relevance of participating in quality improvement activities.
2. Identify a patient safety or quality problem that can be improved at a system-level, and develop a clear problem statement.
3. Engage effectively with relevant stakeholders and interprofessional team members to understand the current state situation.
4. Conduct a root cause analysis on the problem.
5. Identify appropriate measures and demonstrate how to use data to understand the baseline situation and measure improvement.
6. Recommend and prioritize changes for improvement, and develop a plan for implementation.
Te4Q Educational Project Review

Project Title:
Lean Thinking Overview Course Revision

Participant Name(s):
Patricia Craig, MSN, RN
Tom Frederick, MS, LSSBB
Goals/Aims

Teach foundational continuous improvement principles, methods and tools appropriate for all audiences

Impart specific recommendations for individual role in a continuous improvement culture at Michigan Medicine

Provide the opportunity engagement in experiential learning activities
Learning Objectives

After completing this session participants should be able to:

• Describe at least three elements of a continuous improvement workplace culture
• Identify at least three continuous improvement principles
• Outline the scientific problem solving steps
• Construct a basic problem statement
• Describe three methods used to understand a current situation
• Develop a SMART Target for a problem
• Describe the purpose and importance of a root cause analysis
• List at least one method for conducting a root cause analysis
• Devise cycles of improvement based on data
• Demonstrate planning and implementing an experiment
• Demonstrate using a PDSA Record
Te4Q Educational Project Review

Project Title: Assessment of Resident Education in QI

Joann I. Prisciandaro, PhD and Jean M. Moran, PhD
Goal/Aim

Residents receive training through:

- Annual QI lectures
- Periodic QI departmental discussions
- Involvement in RCA for significant events
- Participation through lean teams (QI focus)

How effective are these initiatives?

- We have not had any measures to date

Goal: Develop metrics to evaluate effectiveness of quality improvement educational initiatives
Learning Objectives

• Develop pre- and post-testing for medical physics and medical residents regarding QI knowledge

• Evaluate the test and results from UM Radiation Oncology to assess the effectiveness of a national resource specific to Radiation Oncology under development by the AAPM (American Association of Physicists in Medicine)
Te4Q Educational Project Review

Project Title:
Radiology residents: advanced quality training

Participant Name(s):
Matthew Davenport MD FSAR FSCBTMR
Goal/Aim

Gap:
Experience-based training in quality improvement and patient safety is rudimentary throughout medicine in general and radiology specifically.

Goal:
Develop future radiology leaders capable of designing, implementing, analyzing, presenting, and publishing successful quality improvement ventures.
Learning Objectives

Learning objectives:

1. Design and conduct a quality improvement project in radiology to be complete within 2 years.

2. Use data from your QI project to influence local or national policy within 2 years.

3. Publish and present your QI project within 2 years.
Te4Q Educational Project Review

Project Title: Faculty QI Mentor Orientation

Participant Name(s): Kelly McClean MD
Debra Burke Paliani
Purpose: To give faculty QI mentors a clear understanding of QI course objectives, their role, and available outside resources for the GME QI curriculum.

Aim: Improving overall engagement and effectiveness of the faculty QI mentors.
Learning Objectives

• Course overview and dates
• Basic QI principles that will be taught in the course
• Faculty mentor role and expectations in the course and with their student team
• Outside QI resources available
Te4Q Educational Project Review

Creating a Longitudinal QI Curriculum for Family Medicine Residents

Anna Laurie, MD
Jenna Greenberg, MD
Christina Chiang, MD

Department of Family Medicine
Goal/Aim

Leading Improvement in Family Medicine (LIFM)

• Create a new, longitudinal experience for residents in Family Medicine to learn and practice Quality Improvement as part of patient and population health

• Re-envision the format for M&M into a resident-led Quality Conference

• Through a variety of practical experiences underscored by leadership exercises, including a team QI project, integration into the department Quality Conference, and involvement in clinic site and departmental administrative operations, residents will be well prepared to practice in a transforming clinical environment upon completion of their residency.
Learning Objectives

• Learn the basic principles of quality improvement including PDSA cycles
• Recognize what existing routine practices fall within the spectrum of QI/PS efforts by the end of your rotation
• Apply your knowledge of QI by participating in a longitudinal quality improvement project
• Demonstrate the ability to identify patient safety or systemic quality issues in patient care and produce a "short list" on required inpatient rotations
• Employ your ability to perform a RCA on a specific case and present it at quality conference at the end of the month
• Synthesize your knowledge and application skills to suggest a specific intervention to improve patient care based on the case you presented at quality conference, and report to the department Quality Improvement Committee
• Residents will feel comfortable with recognizing and improving patient safety issues in their own patient panel
• Otherwise learn and apply team-based care, population health, and leadership skills to accomplish these objectives
Te4Q Educational Project Review

Implementation of a Standardized Transfer of Care Tool for the Emergency Department

Emily M. Mills, MD
Brendan W. Munzer, MD
Goal/Aim

- In the ED, miscommunication is found to be the root cause of 70% of sentinel events and 84% of delays in appropriate treatment.
  - 62% of these events are linked to changes in shift and sign out.

- Our goal is to implement a standardized tool for hand-off and sign-out processes for residents to utilize during shift change.

- QI/PS Competencies:
  - Effectively work with inter-professional team
  - Adaptation to variety of work environments
  - Minimize adverse patient events


Teaching for Quality (Te4Q)
Learning Objectives

- By the end of the implementation period:
  - 100% of residents will be able to describe to components of the hand-off tool to medical students, other residents, and faculty
  - 75% of residents will be using the hand-off tool on a regular basis
Increasing Staff Education to Increase Patient Safety

Stacy Haverstick, RN, BSN, PCCN
Goal/Aim

• Increase the quality of patient care for those with a Ventricular Assist Device
• Increase staff critical thinking
• Standardization of teaching
• Regional resource for the community
Learning Objectives

Define the use and maintenance of HeartMate II, HeartMate 3, and HeartWare

Demonstrate

- Patient care
- Alarm trouble shooting
- Care during a code
- Driveline Dressing Application
Te4Q Educational Project Review

Umbilical/Placental Blood for Culture

Sarah Poley
Goal/Aim

Ultimately the goal is to save the babies from comorbidities and morbidity associated with sepsis!

Direct Aims:

- Identify and appropriately treat early onset sepsis for at-risk neonates
- Reduce unnecessary antibiotic therapy
- Prevent the cessation of antibiotics in the neonate with positive umbilical/placental blood cultures
- Decrease the current contamination rate of cultures from 5% to less than 1%
Learning Objectives

• All infants born in the OB OR <35 weeks will have cord/placental blood culture drawn
• Expectation to preform blood collection appropriately
• Ability to identify infants at risk for early onset sepsis and communicate with OB OR staff need for specimen collection