Innovative Teaching Strategies in Quality Improvement & Patient Safety: The Halifax Health Model

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AMERICAN ACADEMY OF FAMILY PHYSICIANS

Objectives

- Understand successful approaches to incorporating a curricular model for Patient Safety and Quality Improvement in their institution or program.
- Distinguish various components of a QI/PS curricular model which serve different purposes.
- Create strategies for teaching Patient Safety and Quality Improvement in both the inpatient and outpatient setting.

Outline

- Discuss the ACGME vision as it pertains to QI/PS
- Review curricular development in Quality and Safety
- Identify barriers to teaching QI/PS and approaches to overcome these challenges
- Describe innovative teaching strategies in QI/PS
- Review methods to engage residents and faculty in QI/PS topics

Why Teach Quality Improvement?

Patients expect physicians to provide safe, effective, and high value care

Regulatory agencies (ACGME) are requiring that residency programs integrate safety and quality training into the curriculum

Residents are interested in learning and acquiring tools to provide high quality, cost effective care that will be necessary to their future practice

Background

- ACGME Clinical Learning Environment Review (CLER)

- Focus Areas
  - Patient Safety
  - Health Care Quality
  - Care Transitions
  - Supervision
  - Clinical Experience, Education and Fatigue Management
  - Professionalism

CLER Pathways to Excellence
Patient Safety

1. Reporting of adverse events, close calls
2. Education on patient safety
3. Culture of safety
4. Resident/fellow experience in patient safety investigations & F/U
5. Monitoring of resident/fellow engagement in patient safety
6. Monitoring of faculty member engagement in patient safety
7. Resident/fellow education and experience in disclosure of events

CLER Pathways to Excellence
Health Care Quality

1. Education on quality improvement
2. Resident/fellow engagement in quality improvement activities
3. Residents/fellows receive data on quality metrics
4. Resident/fellow engagement in planning for quality improvement
5. Resident/fellow and faculty member education on reducing health care disparities
6. Resident/fellow engagement in initiatives to address health care disparities

Audience Poll

Are you are involved in teaching residents and medical students?

A. Yes
B. No

Poll: Are you are involved in teaching residents and medical students?

Audience Poll

Do you participate in faculty development?

A. Yes
B. No

Poll: Do you participate in faculty development?

Audience Poll

Are you involved in teaching Quality Improvement/Patient Safety?

A. Yes
B. No

Poll: Are you involved in teaching Quality Improvement/Patient Safety?

Audience Poll

Have you participated in the development of QI/PS curricula at your institution or program?

A. Yes
B. No

Poll: Have you participated in the development of QI/PS curricula at your institution or program?

Audience Poll

Do you feel confident teaching QI/PS?

A. Yes
B. No

Poll: Do you feel confident teaching QI/PS?

Goals and Objectives of the Quality & Safety Curriculum

- Prepare physicians to be ***stewards*** of safe, high quality, high value, patient centered care
- Teach key ***principles*** of quality improvement, patient safety, and systems innovation to all residents in our training programs
- Develop a ***culture*** of safety and quality that trainees will carry with them throughout their career
- Cultivate future ***leaders*** in healthcare quality and systems innovation

Barriers to Teaching Quality Improvement?

- Brainstorming exercise.

Barriers

- Time
- Culture
- Maintaining balance with clinical and current curricular responsibilities
- Lack of QIPS-trained faculty
- Engagement of residents and faculty

7 Rules for Engaging Clinicians in Quality Improvement

- One of the biggest challenges of improving quality within health care is engaging clinicians in the work.
- Clinicians have demanding schedules, high stress levels, and numerous pressures
- How can you engage these busy colleagues to join your improvement work?

7 Rules for Engaging Clinicians in Quality Improvement

1. Emphasize *improvement* not *assurance*
2. Avoid 'mystical' language
3. Relate improvement work to what matters to clinicians
4. Accommodate clinicians' workload and schedule
5. Be upfront about fiscal agenda
6. Provide relevant data
7. Highlight academic case for quality improvement

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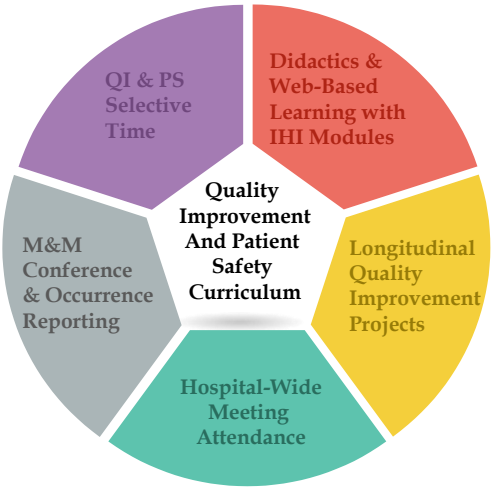
Framework : The Halifax Health Model for Quality Improvement & Patient Safety

- The curriculum is **longitudinal** and strives to develop resident competencies in QI and PS skills over **three years** of training.
- All residents are expected to develop a set of core competencies, while more advanced training is available for those with interest.
- Education takes place through a series of:
  - Core Didactic Lessons
  - Case Based Discussions
  - QI and PS components incorporated into existing curricular structure/rotations
  - Longitudinal QI projects
  - Involvement in hospital-wide initiatives and hospital-wide meetings
  - Electives and pathways for those with deeper interests

The Halifax Health Model



Foundational/Core Curricular Components

- Didactics
  - Noon conferences covering quality topics
  - Risk Management and Quality Department speaking at resident noon conference
  - M&M/QI Case Conferences
    - Resident-led
    - 1/rotation throughout year in final week of inpt med rotation
- Web-based Lectures utilizing IHI
  - Basic Certificate of Completion in Patient Safety
  - Supplemental web-based lectures to be completed during NF, Community Medicine, Behavioral Medicine, Procedures and PGY3 hospitalist rotation (Family Practice Teaching Service)

Didactics & Web-Based Learning with IHI Modules

The Basic Certificate of Completion in Patient Safety, through the IHI, serves as an online resource with web-based learning modules assigned on various rotations throughout residency. General concepts are covered in early modules and broaden to more complex QI/PS topics as the resident approaches graduation.

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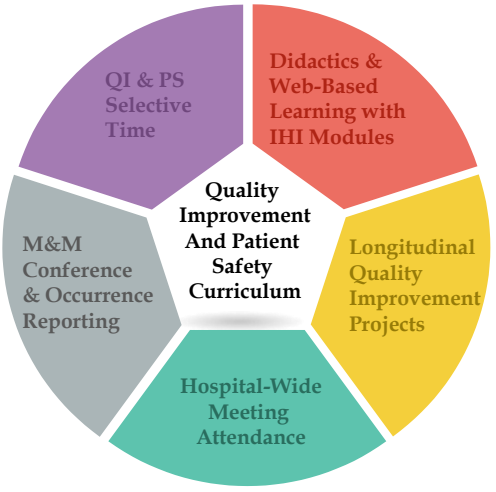
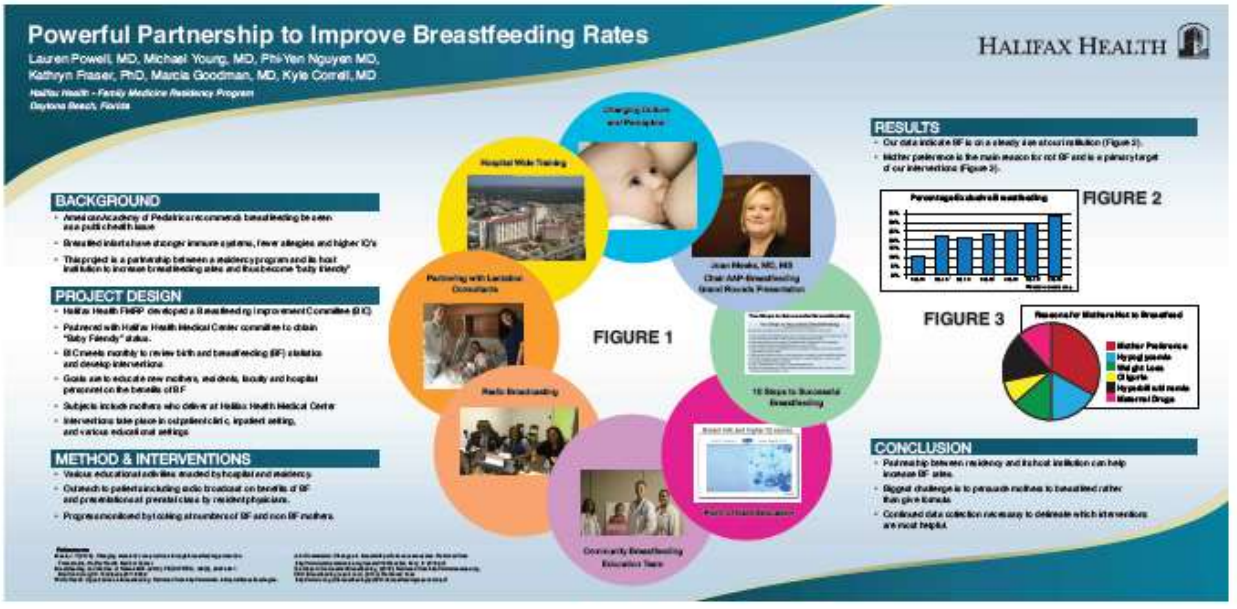
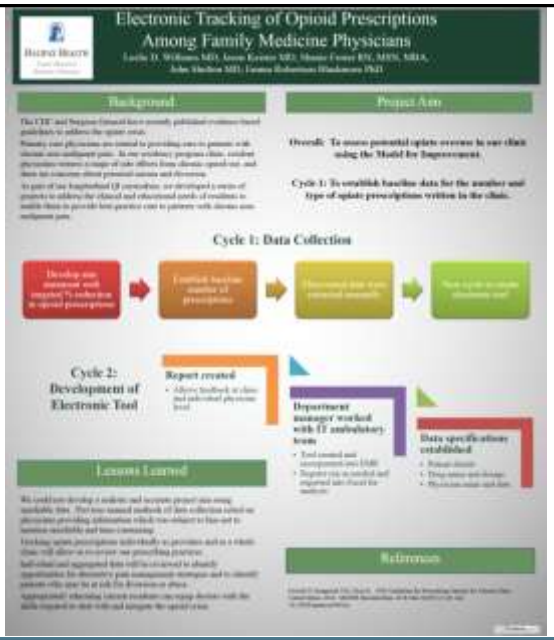


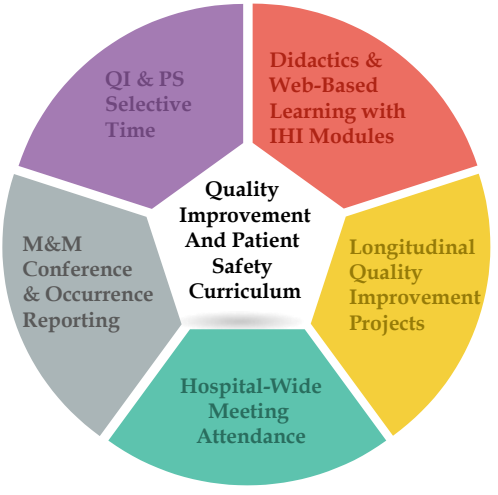
Longitudinal QI Projects

Faculty and residents are divided into three groups and participate in three simultaneous longitudinal quality improvement projects– one inpatient, one outpatient, and one population health project. Matriculating residents assume the spots of the graduating residents to ensure project continuity.


Powerful Partnership to Improve Breastfeeding Rates
Lauren Powell, MD, Michael Young, MD, Phi-Yen Nguyen MD,
Kathryn Fraser, PhD, Marcia Goodman, MD, Kyle Correll, MD
Halifax Health - Family Medicine Residency Program
Daytona Beach, Florida
HALIFAX HEALTH
BACKGROUND
PROJECT DESIGN
METHOD & INTERVENTIONS
FIGURE 1
RESULTS
FIGURE 2
FIGURE 3
CONCLUSION


Electronic Tracking of Opioid Prescriptions
Among Family Medicine Physicians
Background
Project Aim
Cycle 1: Data Collection
Cycle 2:
Development of
Electronic Tool
Report created
Department
manager worked
with IT ambulatory
team
Data specifications
established
Lessons Learned
References

The Halifax Health Model



Hospital-Wide Meeting Attendance

Rotation-based assignments at the PGY3 level allow residents to participate in hospital-wide meetings, including RCAs, Patient Safety, Risk Management, Infection Control, and the Quality Council. This occurs after basic topics have been established through the IHI modules and exposes the resident to institution-specific system analysis.

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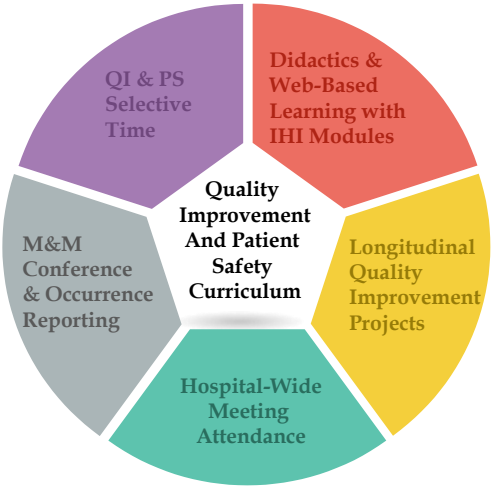
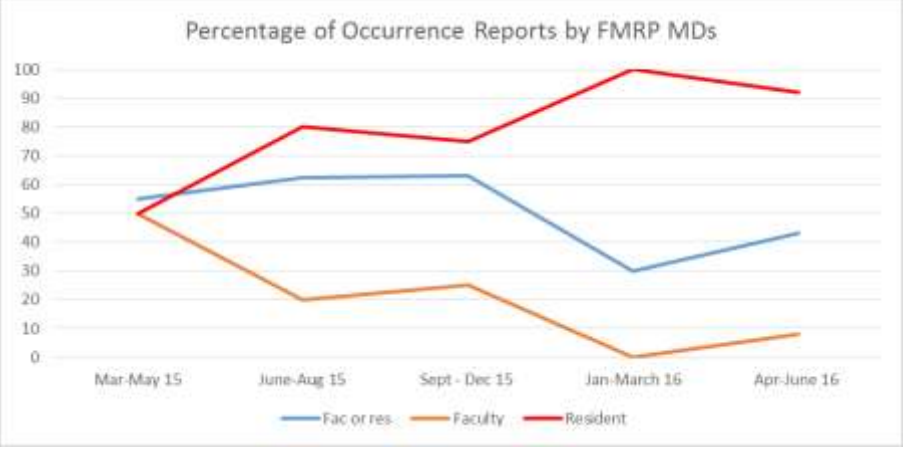
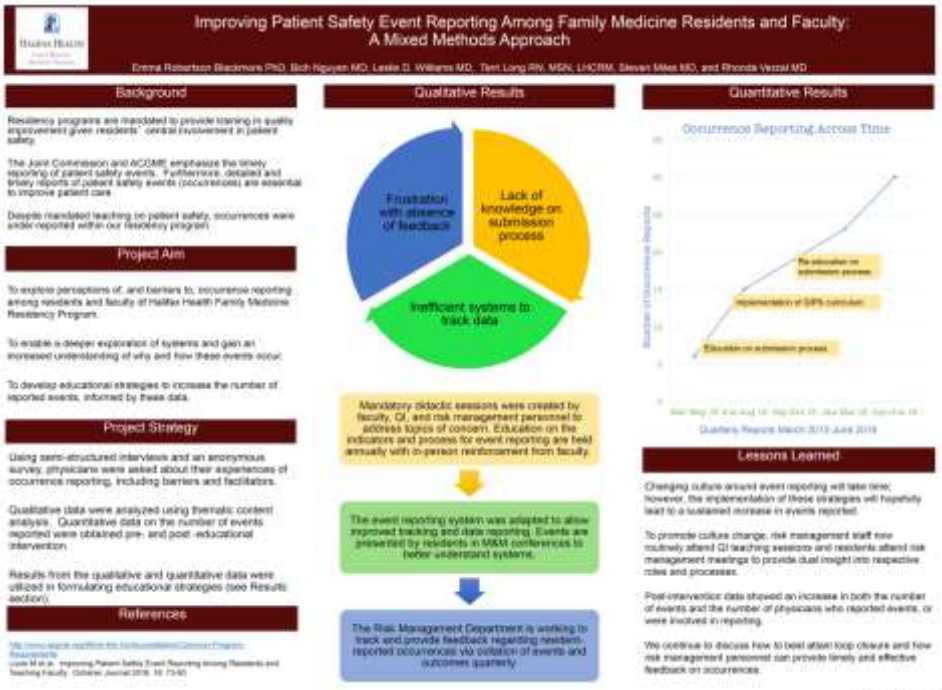


M&M Conference & Occurrence Reporting

Residents receive an annual didactic session with the Risk Management Department on the importance of occurrence reporting, and all faculty and resident reporting is tracked. An event can be explored in more detail with resident-led M&M conferences each inpatient rotation.

Occurrence Reporting





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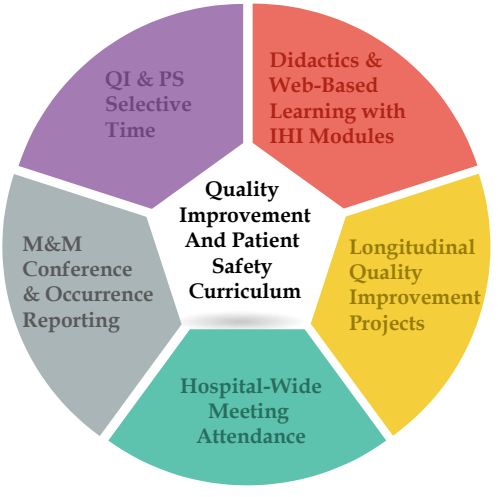

QI & PS Selective Time

Residents have a scheduled half-day within certain rotations providing allocated time to work on their Quality Improvement Projects, complete IHI modules, or design and work on a quality and/or safety topic of their choosing.

Longitudinal QI Project

- 3 teams focused on 3 healthcare populations/systems
  - Outpatient/FHC
  - Inpatient
  - Healthcare disparities/population health
- Projects are physician/clinician driven
- Time frame: 1 project/6-12 months/team
  - Can carry over as residents graduate and/or matriculate residency

Innovative Teaching Methods

- Interactive Session
- Using Mr. Potato Head to Teach Quality Improvement and Patient Safety
- Handouts/descriptions will be available following the session

Mr. Potato Head

- An interactive way to demonstrate the basics of quality improvement including:
  - Quality Improvement concepts
    - PDSA Cycle (Plan-Do-Study-Act)
  - Patient Safety/Medical Errors
  - Teamwork
  - Communication
- Can include learners of varying levels of background education in quality

The situation…

- A tour bus transporting several potato head family members is in an unfortunate accident
- EMS arrives at the scene to find potato body parts scattered about the scene of the accident
- Fortunately, there is an EMR (photo) depicting what each family member looks like.
- Teams work together to correctly assemble (or 'save') the potato head family members
- Through rapid-fire PDSA cycles, the goal of this exercise is to improve quality, accuracy and efficiency

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Accuracy Points

- 3 = all pieces are on and positioned correctly
- 2 = all pieces are on but one or more is out of place
- 1 = one or more pieces are not on

Timing

- Designate a time keeper
- Record the time accurately (using phone)
- Points awarded for which team finishes first, second, third, etc.

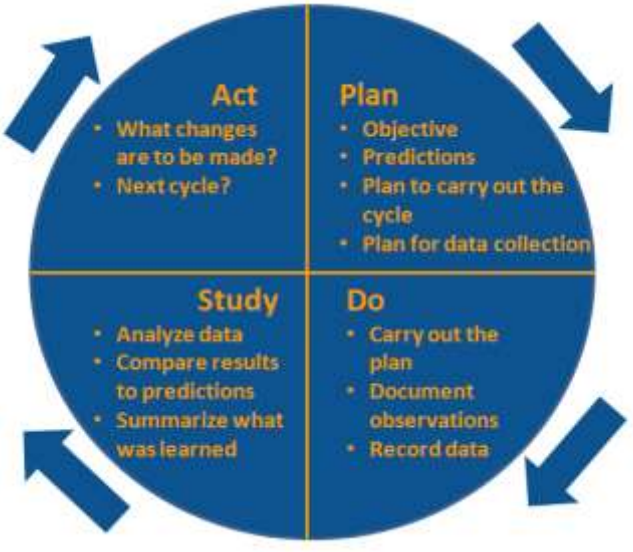
Quality Inspectors Examine "Patients" for Medical Errors

- How many medical errors did your team have?
- Did your team correctly assemble your patient in a timely manner?

PDSA Cycle #1

Mr. Potato Head's Identity Crisis.

- Describe your team's AIM Statement.
  - (Describe specifics of AIM)
- Describe your team's measures.
  - (Outcome, Process, Balancing)
- What would your team change for the next PDSA cycle?
- How would you plot your team's data?



The Introduction…

Teams in action…

PDSA Cycle #3

- Video Demonstration

MEDICINE IS A TEAM SPORT

Lessons learned from Mr. Potato Head

- Team work is essential for high quality and safe patient care
- The system is a critical determinant of performance
- Good communication is essential for a high-functioning team
- Any team member can offer great improvement ideas
- With minimal modifications to a system, both quality and efficiency can be improved
- Quality improvement can be fun!

Conclusions

- A successful curricular model for Patient Safety and Quality Improvement includes:
  - The incorporation of multiple components of a QI/PS curricular model which can lead to a comprehensive education model.
  - The integration of residents and faculty into quality initiatives which proves to be an engaging and successful method for knowledge application while promoting culture change in the clinical setting.
  - Creative strategies and familiarity with innovative tools for teaching Patient Safety and Quality Improvement may lead to increased resident and faculty engagement.

Poll Question:

Enter your email address to be included in any follow-up communication from the presenter(s).

Poll: Enter your email address to be included in any follow-up communication from the presenter(s).

Please…

Complete the session evaluation.

Thank you.

References

Innovative Ideas for Integrating Patient Safety and Quality Improvement into Medical Student Curriculum. SGIM National Conference. Orlando, FL. 2012.

7 Rules for Engaging Clinicians in Quality Improvement. Goldman, D. IHI Open School.

Mr. PotatoHead Plan, Do, Study, Act (PDSA). TrueSimple. 2015.

Institute for Healthcare Improvement
Duke University Medical Center Department of Community and Family Medicine
UCSF Quality Improvement and Patient Safety Curriculum
The Mayo Clinic Quality Academy
Johns Hopkins Medicine Armstrong Institute for Patient Safety and Quality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