# PHYSICIAN ENGAGEMENT IN QUALITY & SAFETY

March 2018

## About this Course

“Physician Engagement in Quality and Safety” is a one-day orientation to quality and safety for physicians (residents, fellows & faculty) at the University of North Carolina at Chapel Hill.

The course aims to

* Highlight the safety and quality challenges facing health care
* Explore physicians' role as leaders in improvement work
* Emphasize patient and family involvement in quality and safety work
* Build enthusiasm for participation in improvement work

The course also helps UNC meet institutional requirements for the ACGME Clinical Learning Environment Review (CLER) Program.

## Curriculum Development TEAM

Lead Developers

|  |  |
| --- | --- |
| Laura Brown, MPH | Executive Director, UNC Institute for Healthcare Quality Improvement |
| Tina Schade Willis, MD | Director, UNC Institute for Healthcare Quality Improvement  Associate Chief Medical Officer for Quality, UNC Hospitals  Associate Professor, UNC Pediatric Critical Care |

Contributors

|  |  |
| --- | --- |
| Andrew Banks | Former Sr. Quality and Organizational Excellence Leader, Dept of Operational Efficiency, UNC Medical Center |
| Loretta Muss | Coordinator, NC Cancer Hospital Patient & Family Advisory Board |
| Patience Leino | American Board of Pediatrics  Former Co-Chair, UNC Children’s Hospital Family Advisory Board |
| Sarah Kenney, MPH | March of Dimes NICU Family Support Specialist |
| Karen Clark | Family Advisory Board |
| Stacey Walters | Family Advisory Board |
| Larissa Muchnick | Chair, NC Children’s Hospital Family Advisory Board |
| Wallace Beeson | Patient Advisor |
| Mollie Beeson | Family Advisor |
| Jade David, RN, BSN | Former Nurse, UNC Practice Quality & Innovation |
| Larry Marks, MD | UNC Radiation/Oncology |
| Nick Potisek, MD | Former Co-Chief Resident, UNC Dept of Pediatrics |
| Chris Tignanelli, MD | Former Fellow, UNC Dept of Surgery |
| Celeste Mayer, PhD | Patient Safety Officer, UNC Medical Center |
| Samantha Meltzer-Brody, MD | Associate Professor, UNC Psychiatry  Director, UNC Perinatal Psychiatry Program  UNC Center for Women’s Mood Disorders |
| Claudia Christy, RN, MSN | Regulatory Specialist (IRB Expert), NC Translational and Clinical Sciences (NC TraCS) Institute |
| Jason Huckaby | NC Cancer Hospital Patient & Family Advisory Board |
| Susan Eder | NC Cancer Hospital Patient & Family Advisory Board |
| Bhisham Chera, MD | UNC Radiation/Oncology |
| Becky Smith, MD | UNC Pediatric Critical Care |
| Teddy Yip | UNC School of Medicine (4th year student) |
| Alex Toledo, MD | UNC Dept of Surgery |
| Mike Pignone, MD, MPH | Dell School of Medicine, University of Texas at Austin  (formerly UNC Institute for Healthcare Quality Improvement  General Internal Medicine) |
| Shana Ratner, MD | General Internal Medicine |
| Erin Eckert, MPA | TeamSTEPPS Coordinator, UNC Medical Center |
| Shelley Summerlin-Long, RN, MPH, MSW | Project Manager, UNC Institute for Healthcare Quality Improvement |

## AGENDA

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| **Minutes** | **Topic** |
| 15 | Course Objectives & Setting the Stage for the Day |
| 45 | Why is QI Needed in Healthcare? |
| 75 | Case Study Featuring Quality & Safety Project at UNC |
| ~~30~~ | ~~Leading QI Methods & Approaches~~ |
| ~~75~~ | ~~Case Study 2 Featuring Quality & Safety Project at UNC~~ |
| ~~30~~ | ~~QI, Patient Safety and Patient- & Family Advisor Resources at UNC~~ |
| 40 | Involving Patients & Families in Quality & Safety |
| 45 | Just Culture, Reporting Adverse Events & Peer Support |
| 40 | Preventing and Disclosing Adverse Events |
| 10 | How to Get Involved  Wrap Up, Feedback |

1. Teamwork (TeamSTEPPS) content incorporated in AY2016-2017.
2. Total content time = 4.5 hours

Total session time (with breaks & lunch) = 5 hours 35 minutes

1. Case study session will move more quickly depending on number of participants and small groups
2. In April 2016, we dropped the 2nd case study. Feedback from participants was that the day was too long and the “Just Culture, Adverse Events & Peer Support” session involves a patient safety-focused case study that was not part of the original course design. With the addition of the patient safety case study, we didn’t need the 2nd improvement case study.
3. Lunch – we tried having a working lunch with a short 15 minute break but found that a full 30 minutes and not asking participants to listen to a presenter is better
4. Breaks – at least 10 minutes after every 90 minutes of content
5. Order of sessions adjusted based on faculty availability
6. Strive for mix of interactive and didactic session
7. Small group sessions are held at flip charts positioned around the room which forces participants to stand up and move around and various points during the day in addition to breaks.
8. In the initial sessions of this course, we included “QI Methods & Approaches” and “Resources at UNC” as stand-alone topics. Over time, we have incorporated much of the content from those topics into other sessions throughout the day.

## Topic: course objectives & setting the stage for the day

**Learning Objective**

Get to know one another; create rapport and articulate reason for being here

Review agenda – set expectations for the day

**Duration:** 15 minutes

**Faculty:**

|  |  |
| --- | --- |
| Laura Brown | Executive Director, UNC Institute for Healthcare Quality Improvement |

**Process:**

All participants introduce themselves, their department and role.

Depending on size of group, break into smaller groups for the following exercise or do as a large group.

Slide or pre-written flipchart with:

1. Share an intriguing fact about yourself.
2. What is your goal for today?
3. How would you rate yourself on a scale of 1-10 as a “quality improvement aficionado/a” and why?

Review agenda & expectations for the day

Go over learning objectives explicitly and talk about the threads weave together.

**Materials (files, manipulatives, flip chart, etc.)**

Name tags

Slides

## Topic: Why is QI needed in healthcare?

**Learning Objective(s) – What can participants do as a result of this lesson?**

Understand the context of QI in healthcare. Understand where we are in the transformation of healthcare.

**Duration:** 45 minutes

**Faculty:**

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| --- | --- |
| Laura Brown | Executive Director, UNC Institute for Healthcare Quality Improvement |

**Process:**

1. Prior to session:
   1. Ask participants to bring examples from their own experience of quality and safety issues they are concerned about as physicians.
   2. View: “[An Illustrated Look at Quality Improvement in Health Care](http://www.ihi.org/resources/pages/audioandvideo/mikeevansvideoqihealthcare.aspx)” (8 minute video; Dr. Mike Evans, University of Toronto)
   3. Optional: read “[Basics of Quality Improvement in Health Care](http://www.med.unc.edu/cce/files/education-training/QI%20methods.pdf)” by Prathibha Varkey, MBBS , MPH; M. Katherine Reller, RN , BSN , CPHQ , CQM ; and Roger K. Resar, MD in Mayo Clinic Proceedings, June 2007
2. Introduce & play video: “[How to Heal Medicine](https://www.youtube.com/watch?v=L3QkaS249Bc)” – Atul Gawande (10 minutes)
3. Brief facilitated discussion about reactions to Gawande’s talk.
4. Small group activity:
   1. Participants share examples of quality and safety issues they are concerned about as physicians. Record on flip chart. Report out and discuss as large group.

**Materials (files, manipulatives, flip chart, etc.)**

Video

Flip charts – color coded so pre-assigned groups can easily find where they are supposed to be for the small group exercise

**Content to incorporate into future iterations of this session**

* 1999 ACGME and ABMS Six Core Competencies: patient care, medical knowledge, practice-based learning and improvement; professionalism; interpersonal and communication skills; and system-based practice
* 2001 IOM “Crossing the Quality Chasm” -- Elements of care: safe, effective, patient-centered, efficient, equitable -- IHI Open School video “Defining Quality: Aiming for a Better Health Care System” (4:35) covers the six dimensions of quality very nicely.

## Topic: quality & safety initiatives at UNC

**Learning Objective(s) – What can participants do as a result of this lesson?**

1. Articulate knowledge of a mature quality and safety initiatives at UNC
2. Recognize the application of basic QI tools and methods.

**Duration:** 75 minutes

**Faculty:** QI Project Leaders (Rotating)

|  |  |  |
| --- | --- | --- |
| Faculty | Role | Project |
| Bhisham Chera | Assistant Professor, Clinical Division  Dept of Radiation/Oncology | 3 P’s of Radiation: Pregnancy, Pacemaker, Prior Radiation |
| Becky Smith | Assistant Professor, Pediatric Critical Care | Pediatric Rapid Response System |
| Alex Toledo | Assistant Professor, Abdominal Transplant Surgery | Reducing LOS for Liver Transplant Patients |
| Sam Weir | Associate Professor, Family Medicine  Director of Continuous Improvement  Director, Fellowship Programs | Open Access Scheduling |
| Shana Ratner | Assistant Professor, General Internal Medicine | Improving Colorectal Cancer Screening |
| Jamie Cavanaugh | Assistant Professor, General Internal Medicine | Outpatient Care Transitions |
| Mark Gwynne | Assistant Professor  Director, UNC Family Medicine Center | Outpatient Care Transitions |
| Chris Walsh-Kelly | Clinical Professor  Pediatric Emergency Medicine | Pediatric Asthma Care in the ED |
| Will Stoudemire | Fellow  Pediatrics | Pediatric Asthma Care in the ED |
| John Stephens | Associate Professor  General Internal Medicine  General Pediatrics & Adolescent Medicine  Internal Medicine Pediatrics | Standardized Care for ED Patients Requesting Detoxification |
| Tom Bice | Clinical Instructor  Pulmonary Diseases & Critical Care Medicine | Lung Protective Ventilation |

**Process:**

1. Leaders of UNC initiatives present clinical improvement projects highlighting key elements of successful QI projects (e.g., project charter, adequately-resourced project team, appropriate measurement strategy, etc.).
2. Explain the gap the initiative addresses.
3. Working in small groups, participants analyze the quality problem presented and brainstorm possible changes that may result in improvement.
4. Small groups report out.
5. Project leader shares how the gap is being addressed and results-to-date from the initiative.
6. Working in small groups, participants analyze an implementation issue the project leader shares that the project team faced. Participants brainstorm ideas to address the implementation issue.
7. Presenter addresses sustaining improvement.
8. As part of the presentation & discussion, presenter specifically features the application of several of the following QI tools and methods:
9. Project charter and/or A3
10. Cause and effect diagram
11. Flow chart
12. PDSA
13. Run & control chart
14. Voice of the customer
15. Opportunity/Impact
16. Pareto chart

**Materials (files, manipulatives, flip chart, etc.)**

Flip charts

Links to articles or reports for later reference; for example:

**“Successful Implementation of Standardized Multidisciplinary Bedside Rounds, Including Daily Goals, in a Pediatric ICU**” by Jonathan Seigel, MD; Lesta Whalen, MD; Erin Burgess, BA; Benny L. Joyner Jr., MD, MPH; Ashley Purdy, MHA; Roger Saunders, RN, MSN, NEA-BC; Lindsay Thompson Munn, RN, MSN; Theodore Yip, BS; Tina Schade Willis, MD in The Joint Commission Journal on Quality and Patient Safety, Feb 2014

**“Reducing Liver Transplant Length of Stay: a Lean Six Sigma Approach”** by Alexander H. Toledo, MD, Tracy Carroll, RN, BSN, CMSRN, Emily Arnold, RN, BSN, CNN, Zeynep Tulu, MS, MEMP, Tom Caffey, MBA, CSSBB, CQE, Lauren E. Kearns, RN-BC, MSN, David A. Gerber, MD in Progress in Transplantation, 2013

**“Improving Quality of Patient Care by Improving Daily Practice in Radiation Oncology”** by Bhishamjit S. Chera, MD, Marianne Jackson, MD, MPH, Lukasz M. Mazur, PhD, Robert Adams, EdD, CMD, Sha Chang, PhD, Kathy Deschesne, MS, Timothy Cullip, MS, and Lawrence B. Marks, MD in Seminars in Radiation Oncology, Jan 2012

**“Implementation Science Workshop: Primary Care-Based: Multidisciplinary Readmission Prevention Program”** by Jamie Jurkiewicz Cavanaugh, PharmD, Christine D. Jones, MD, MS, Genevieve Embree, MD, Katy Tsai, MD, Thomas Miller, MD, Betsy Bryant Shilliday, PharmD, Brooke McGuirt, MBA, Robin Roche, MSW, Michael Pignone, MD, MPH, Darren A. DeWalt, MD, MPH and Shana Ratner, MD in Journal of General Internal Medicine, Apr 2014

**“Using quality improvement techniques to increase colon cancer screening”** by Michael P. Pignone, MD, MPH and Carmen L Lewis, MD, MPH in American Journal of Medicine, May 2009

**“Who Needs Inpatient Detox? Development and Implementation of a Hospitalist Protocol for the Evaluation of Patients for Alcohol Detoxification”** John R. Stephens, MD, E. Allen Liles, MD, Ria Dancel, MD, Michael Gilchrist, MD, MPH, Jonathan Kirsch, MD, and Darren A. DeWalt, MD, MPH in Journal of General Internal Medicine, Jan 2014

## Topic: engaging patients & families in quality & safety

**Learning Objective(s) – What can participants do as a result of this lesson?**

1. Define patient- and family-centered care
2. Explore the connection between patient- and family-centered care and patient safety
3. Understand important aspects of involving patient & family advisors in quality & safety initiatives

**Duration:** 50 minutes

**Faculty:**

|  |  |
| --- | --- |
| Patience Leino | Patient and Family Advisor, UNC Hospitals &  MOC Specialist, American Board of Pediatrics |
| Lori Lee | Patient & Family Advisor, UNC Hospitals &  Founder, Me Fine Foundation |
| Joey Powell | Patient & Family Advisor, UNC Hospitals &  Executive Director, Me Fine Foundation |

**Process:**

1. Define patient- and family-centered care
   1. Discuss six principles of building strong partnerships (respect, flexibility, sharing info, family rounding, support, and empowerment)
   2. Describe QI initiatives that involve family advisors

**Materials (files, manipulatives, flip chart, etc.)**

Presentation

Facilitated Discussion

## Topic: Just Culture, TEAMWORK, reporting & DISCLOSING adverse events & peer support

**Learning Objective(s) – What can participants do as a result of this lesson?**

1. Understand concept of “Just Culture”
2. Understand TeamSTEPPs strategies and tools
3. Report an adverse event following UNC Medical Center policies and procedures

**Duration:** 80 minutes

**Faculty:**

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| --- | --- |
| Tina Schade Willis | Professor, Pediatric Critical Care  Director, UNC Institute for Healthcare Quality Improvement  Chief Medical Officer for Quality, UNC Medical Center |
| Jenny Boyd | Assistant Professor Pediatrics and Anesthesiology, UNC |
| Celeste Mayer | Patient Safety Officer, UNC Medical Center |
| Stephenie Fenton-Wilhelm, | Associate Vice President, UNC Health Care |
| Lori Nash | Director of Clinical Risk Management and Accreditation, UNC Health Care |

**Process (describe flow of the lesson):**

1. Prior to session: To help tailor the content for the training's “Patient Occurrence Reporting System & Adverse Event” session, please complete a brief (< 5 minutes) [3-question survey](https://unc.az1.qualtrics.com/SE/?SID=SV_8kVIXSnhElkorel) by 2 days before session. Responses are anonymous. – add question – have you participated in formal team training such as TeamSTEPPs – list examples – VA crew resource management team training
2. Describe the culture of organizations that are willing to expose areas of weakness.
3. Discuss the tenets of a “Fair and Just Culture” (per Frankel et al article).
4. Walk through Kaiser Permanente’s 4 Questions for a Just Culture.
5. Highlight UNC Disclosure Policy.
6. Instruct participants about how to use Patient Occurrence Reporting System (PORS) (live link).
7. Discuss second victim, self care & peer support
8. TeamSTEPPs tools and approaches. Didactic session followed by game to reinforce concepts.
9. ~~View~~ [~~The Patient and the Anesthesiologist~~](https://www.youtube.com/watch?v=fAt1Dt1BhRg) ~~video clip (30 minutes total) (Pt 1 6:22)~~
10. Emphasize the importance of the discussion with the patient and family. View “[Medical Error: A Case-Based Approach to Apology and Disclosure Video – Brigham & Women’s Hospital](https://www.youtube.com/watch?v=3OsA0z7j4WM)” (only show from 9:52-14:18)
11. Participants read adverse event case study
12. ~~Explain 5 Why’s to entire group & explain breakout instructions to entire group~~
13. ~~5 Why’s – 1-2 groups~~
14. Role play – preventing an adverse event using TeamSTEPPs and disclosing an adverse event
15. Large group report out and discussion
16. Reinforce teamwork tools and elements that can be used immediately – what can you take away from today and use tomorrow

**Materials (files, manipulatives, flip chart, etc.)**

Presentation

White board & dry erase markers

Printed copies of adverse event case study for each participant

Printed copies of UNC Disclosure Policy

Role play instructions

Noise makers for TeamSTEPPs game