Title: Quality and Safety Track

Faculty advisor: Steven Thacker

Purpose: To provide MUSC pediatric fellows a longitudinal experience designed to fill gaps in knowledge and provide individualized training in patient safety, quality improvement, evidence-based practice, and quality and safety research.

Learning objectives:

After completion of this track, the fellow will be able to:

- -develop an understanding of MUSC's Quality and Safety processes and protocols
- -build connections with Quality and Safety leaders at the local, regional, and national level
- -understand the process of an RCA and how it leads to systems improvement
- -apply concepts of Quality and Safety to develop protocols within the Pediatric ED

Required Activities:

- 1. Attend at least one safety rounds and one RCA per year
- 2. Attend at least one event in each of the 5 Quality and Safety categories from the chart below. Please contact the activity leader 1-2 months in advance to schedule.
- 3. Take a pretest assessment of QI knowledge and skills (Dr. Thacker to provide)
- 4. Complete the <u>Institute for Healthcare Improvement (IHI) Open School Basic Certificate in Quality and Safety.</u> Includes 13 fundamental courses with embedded lessons and quizzes.
- 5. Read 5 landmark Quality and Safety research studies (choose from list below)
- 6. Complete a QI or safety project that demonstrates system improvement. May be combined with Fellow's research project.

Assessment:

1. Successful completion of a capstone QI/safety project and all required activities as determined by faculty advisor.

Articles

- Principles of Pediatric Patient Safety: Reducing Harm Due to Medical Care 2019 AAP Policy Statement https://publications.aap.org/pediatrics/article/143/2/e20183649/37320/Principles-of-Pediatric-Patient-Safety-Reducing?searchresult=1
- How to use an article about quality improvement. https://jamanetwork.com/journals/jama/fullarticle/186967
- Patient Safety in Ambulatory Pediatrics: https://pmc.ncbi.nlm.nih.gov/articles/PMC7553853/
- Disclosure of Adverse Events in Pediatrics: Policy Statement AAP 2025

 https://publications.aap.org/pediatrics/article/155/4/e2025070880/201289/Disclosure-of-Adverse-Events-in-Pediatrics-Policy

- The run chart: a simple analytical tool for learning from variation in healthcare processes. https://qualitysafety.bmj.com/content/20/1/46
- Interventions to Reduce Pediatric Medication Errors: A Systematic Review:
 https://publications.aap.org/pediatrics/article/134/2/338/32914/Interventions-to-Reduce-Pediatric-Medication?searchresult=1
- Residents' Suggestions for Reducing Medical Errors: https://www.nejm.org/doi/full/10.1056/NEJMc030775
- Choosing wisely in pediatric hospital medicine: five opportunities for improved healthcare value https://shmpublications.onlinelibrary.wiley.com/doi/10.1002/jhm.2064
- Process Metrics and Outcomes to Inform Quality Improvement in Pediatric Hospital Medicine https://www.sciencedirect.com/science/article/abs/pii/S003139551930029X?via%3Dihub

| | | Quality and Safety Categories | | | | |
|--|--|---|-----------------|--|---|-------------------------------|
| MUSC Activity, Group, or Process | Owner, frequency, day, location | Process Improvement and Quality Improvement Methodology | in a Culture of | Hospital Safety, including Event Reporting, Safety Huddles and Root Cause Analysis | Risk Identification and Management | Leadership and Strategy |
| Solutions for Patient Safety (SPS): MUSC is one of 130+ Children's Hospitals working together to help hospitals make progress to zero harm, SPS is divided into Hospital Acquired Conditions (HACs) and Culture Domains | Stephen Thacker and Hadassah Little, variable meeting times internally for different HACs, see newsletter for different meeting times, consider signing up for one HAC | ✓ | ~ | | | |
| Healthcare Acquired Conditions (HAC) Rounds: partner with front line, CPNE, QSM, IP for proactive safety | Hadassah Little, Janelle Tarrelton, Stephen Thacker; timing/location | ~ | ~ | | ~ | |

| rounding on lines, devices; includes ad hoc event reviews as needed for ACAs | variable, but occurs daily Mon-Thurs; | | | | | |
|--|---|---|----------|----------|----------|---|
| Safety Rounds: multidisciplinary team conducting rounds to obtain safety concerns from front line staff REQUIRED ACTIVITY | Steve Thacker, 7 groups of patient care units, rotating every 7 weeks on Thursdays 9-10:30a, FYI night rounds occur 4x per year on Tuesday evenings | | ~ | ✓ | ~ | |
| Root Cause Analysis (RCA): systematic structured method used to analyze serious adverse events /. Can be replaced with Pediatric ACA for event reviews REQUIRED ACTIVITY | Sheila Scarbrough, Kathy Sloan, variable depending on the schedules of those involved in the event, approximately 1-2 RCAs per week | | ✓ | V | V | |
| Quality IMPROVE Meeting: working groups commissioned to improve process after RCA or sentinel event with quality improvement specialists in team setting. IMPROVE stands for Identify the Problem, Measure the Impact Problem Analysis, Remedy Critical Issue, Operationalize Solutions, Validate the Improvement, Evaluate Overtime Meeting | Danielle Scheurer, Tracie Porter, every Wednesday at 4pm, cases listed in advance | ✓ | ✓ | V | V | > |
| Children's Surgical PIPS: 3rd Tuesday of each month; multi- disc quality program around | Robert Cina and Tammy Churchill 3 rd Tuesday of each | ~ | ~ | ~ | | |

| pediatric surgical quality and safety | month at 4pm, virtual and in-person | | | | | |
|--|--|----------|----------|----------|----------|-------------|
| Quality Assessment Performance Improvement (QAPI): quality and safety leadership review and provide oversight for MUSC Children's Hospital | Steve Thacker and Hadassah Little, first Wednesday of the month 3-4p (Teams & SJCH 6003) | | ✓ | ✓ | | |
| Medication Safety Improvement Committee (MSIC): discussion about medication safety for entire MUSC enterprise | Jeff Brittan, PharmD second Tuesday from 11- 12p every month | | ✓ | | ✓ | |
| Quality Executive Committee: Quality and Safety Leaders discuss important issues for entire MUSC enterprise, summarize all RCAs since last meeting | Danielle Scheurer, 1 st and 3 rd Tuesday of the month (timing and day may change) | | ~ | | | > |
| Children's Hospital Operations: administrative review of recent policy changes, financial updates, operational discussions | Scott Russell, Amy Hauser, 3 rd Wednesday of the month at 3p (Teams) | | ~ | | | > |
| Risky Business: Risk Management Team reviewing complaints and patient safety issues, stratifying Serious Safety Events (SSEs) | Mark Lockett leads, Every Tuesday at 2p, topics identified in advance by Kathy Sloan | | | | ✓ | |
| Patient Safety Organization (PSO): children's hospitals working to prevent serious safety events (SSEs) | Stephen Thacker, Hadassah Little, and Janelle Tarrelton | V | ✓ | V | V | |

| | | | | | |
|-------------------------------|----------------------------------|----------|----------|------|--|
| | Weekly safety call every | | | | |
| | Wednesday at 4:10p, call | | | | |
| | with children's hospitals | | | | |
| | across the US reporting | | | | |
| | serious safety events | | | | |
| | (SSE) and safety threats, | | | | |
| | seeking input and | | | | |
| | feedback to fix the issue | | | | |
| | 1 | | | | |
| | Safe Table call: A | | | | |
| | specific children's | | | | |
| | hospital reviews two | | | | |
| | RCAs and panelists from | | | | |
| | other hospitals, occurs | | | | |
| | twice a month | | | | |
| AgileMD Implementations: | Stephen Thacker to | ✓ | ✓ | | |
| process identifying and | coordinate, variable | | | | |
| designing AgileMD care | meeting times | | | | |
| pathways across pediatric | 1 | | | | |
| care environments. | 1 | | | | |
| Patient & Family Advisory | Caroline Delongchamps, | | ✓ | | |
| Councils (PFAC): parents and | Betsy McMilllan, 3 rd | | | | |
| guardians of patients provide | Tuesday of the month at | | | | |
| input on improving patient | 6p | | | | |
| care | | | | | |

Additional Quality and Safety Resources:

MUSC Quality and Safety Trainings:

- Safety Coach Training (once a quarter, offered to GME trainees)
 - o Safety Coach Hybrid Training Program: https://www.myworkday.com/musc/d/inst/1\$23455/23455\$1143.htmld
 - Program Objectives
 - TeamSTEPPs concepts
 - Just Culture
 - Safety Behaviors
 - Science of Safety
 - Coaching
 - K-Cards
- Lean and Six Sigma (contact Jennifer Hooks)
- MUSC Just Culture Training: https://www.myworkday.com/musc/d/inst/1\$17815/17815\$724.htmld
- MUSC Value Institute: EBM Training, can ask a specific patient safety questions, Contact: Amanda Davis https://musc.libguides.com/c.php?g=107940&p=699600
- PHIS, Pediatric Health Information Systems (PHIS): comparative pediatric database, includes clinical and resource utilization data for inpatient, ambulatory surgery, emergency department and observation unit patients, ask question to get info, can review with Contact: Stephen Thacker

National Quality and Safety Organizations, Trainings, and Meetings

- Solutions for Patient Safety (SPS)
 - o Hospital Acquired Conditions (HACs): ADE, ASP, CAUTI, CLABSI, ESS, Falls, NAKI, PI/PU, PIVIE, RA, SSI, UE, VAE, VTE
 - Culture Domains: Cause Analysis, Culture Wave, Disclosure, Employee/Staff Safety, Error Prevention, Leadership Methods,
 Family Engagement, High Reliability Units, Human Factors and Ergonomics,
- Pediatric Academic Society Quality and Safety Conference (1 day before PAS)
- IHI Open-School Certification: https://www.ihi.org/education/ihi-open-school/ihi-open-school-students-and-residents
 - o Note: after May 1st 2025, training requires a different signup due to budgeted process
- Choosing Wisely
- Lean Six Sigma (including Six Sigma Black Belt certification)
- Intermountain Health

Webinars:

• SPS: ad hoc, contact Stephen Thacker or Hadassah Little

Quality and Safety Conferences

- IHI (December)
- International Diagnostic Errors in Medicine Conference (November)
- SPS (Spring and Fall)
- CHA IPSO (Spring and Fall)
- AAP NCE COQIPS Council on Quality Improvement and Patient Safety (Fall)
- PSO (Summer)
- MUSC Lean Six Sigma

Scholarship in Quality Improvement

• <u>SQUIRE 2.0</u> QI Reporting Guidelines

Journals:

Quality Improvement and Implementation Science

- American Journal of Medical Quality
- BMJ Quality & Safety
- BMJ Quality Improvement Reports
- Implementation Science
- Joint Commission Journal on Quality and Patient Safety
- Journal for Healthcare Quality
- Journal of Clinical Outcomes Management

Health Policy, Research, and Management

- BMC Family Practice
- Health Affairs
- Health Care Management Review
- Health Care: The Journal of Delivery Science and Innovation
- Health Services Research
- International Journal for Quality in Health Care

- Journal of Evaluation in Clinical Practice
- Medical Decision Making
- The Milbank Quarterly
- Quality Management in Health Care
- Journal of Healthcare Risk Management

Nursing

- American Journal of Nursing
- Journal of Nursing Care Quality
- Journal of Pediatric Nursing

Academic Medicine

- Academic Medicine
- Journal of Graduate Medical Education

Internal Medicine

- American Journal of Medicine
- Annals of Internal Medicine
- JAMA Internal Medicine
- Journal of General Internal Medicine

Specialty Practice

- American Journal of Critical Care
- BMC Family Practice
- Journal of Family Practice
- Quality in Primary Care

Informatics and Measurement

- Health and Quality of Life Outcomes
- Health Informatics Journal

Book List (title links to MUSC Library Resources)

- Managing the Unexpected Karl E. Weick and Kathleen M. Sutcliffe
- Checklist Manifesto by Atul Gawande (free with Prime)
- Dave's Subs by David Marx (Amazon Link)
- Beautiful Evidence Edward R. Tufte (Goodreads Link)
- Who Moved My Cheese? Spencer Johnson (Goodreads link)