

University of Rochester Department of Ob/Gyn Patient Safety & Quality Improvement Science Curriculum

All physicians share responsibility for promoting patient safety and enhancing quality of patient care. Graduate medical education must prepare residents to provide the highest level of clinical care with continuous focus on the safety, individual needs, and humanity of their patients. It is the right of each patient to be cared for by residents who are appropriately supervised; possess the requisite knowledge, skills, and abilities; understand the limits of their knowledge and experience; and seek assistance as required to provide optimal patient care.

ACGME Common Core Requirement

Residents must demonstrate the ability to analyze the care they provide, understand their roles within health care teams, and play an active role in system improvement processes. Graduating residents will apply these skills to critique their future unsupervised practice and effect quality improvement measures. It is necessary for residents and faculty members to consistently work in a well-coordinated manner with other health care professionals to achieve organizational patient safety goals.

Patient Safety

Culture of Safety

A culture of safety requires continuous identification of vulnerabilities and a willingness to transparently deal with them. An effective organization has formal mechanisms to assess the knowledge, skills, and attitudes of its personnel toward safety in order to identify areas for improvement. The program, its faculty, residents, and fellows must actively participate in patient safety systems and contribute to a culture of safety. The program must have a structure that promotes safe, inter-professional, team-based care.

Education on Patient Safety

Programs must provide formal educational activities that promote patient safety-related goals, tools, and techniques.

Patient Safety Events

Reporting, investigation, and follow-up of adverse events, near misses, and unsafe conditions are pivotal mechanisms for improving patient safety, and are essential for the success of any patient safety program. Feedback and experiential learning are essential to developing true competence in the ability to identify causes and institute sustainable systems-based changes to ameliorate patient safety vulnerabilities.

Residents, fellows, faculty members, and other clinical staff members must:

- know their responsibilities in reporting patient safety events at the clinical site
- know how to report patient safety events, including near misses, at the clinical site
- be provided with summary information of their institution's patient safety reports.

Quality Improvement

Education in Quality Improvement

A cohesive model of health care includes quality-related goals, tools, and techniques that are necessary in order for health care professionals to achieve quality improvement goals. Residents must receive training and experience in quality improvement processes, including an understanding of health care disparities.

Quality Metrics

Access to data is essential to prioritizing activities for care improvement and evaluating success of improvement efforts. Residents and faculty members must receive data on quality metrics and benchmarks related to their patient populations.

Engagement in Quality Improvement Activities

Experiential learning is essential to developing the ability to identify and institute sustainable system-based changes to improve patient care. Residents must have the opportunity to participate in interprofessional quality improvement activities. This should include activities aimed at reducing health care disparities.

The University of Rochester Department of Obstetrics & Gynecology uses the following curriculum to address and meet the above needs of our residents and fellows to provide high quality care to our patients.

Didactics

Utilizing courses available from the Institute for Healthcare Improvement (IHI) and URMC content experts we plan to formally introduce quality improvement education to our residents & fellows.

Topics Include:

- Introduction to Health Care Improvement
- How to Improve with the Model for Improvement
- Testing and Measuring Changes with PDSA Cycles
- Interpreting Data: Run Charts, Control Charts, and Other Measurement Tools
- Leading Quality Improvement
- Addressing Small Problems to Build Safer, More Reliable Systems

Didactics will utilize the Flipped Classroom approach and require pre-work via IHI.

Morbidity & Mortality Conference (MMC)

Our resident run M&M conference runs for 9 out of 12 months of the year. Our MMC is a forum for the healthcare team to engage in an objective, non-judgmental case review. Each conference includes the review of one Obstetrical and one Gynecologic case. Each chief resident is expected to prepare and present one obstetrical and one gynecological case during their chief year.

These cases are chosen based on selected criteria that include either a poor or unintended outcome which might have been due to or worsened by a clinical error or system problem or "near-misses" where there was an error or misstep in care delivery that could have led to a poor patient outcome.

The analysis of each case is focused on causes and possible prevention and the emphasis is on factors other than the individual providers; e.g. patient, systems, equipment. Each case also identifies areas of ACGME core competency (patient care, medical knowledge, practice-based learning and improvement, interpersonal and communication skills, professionalism & systems-based practice) that relate to residency milestones.

The final MMC is utilized as forum for a QI science educational program and to provide departmental feedback on selected practice patterns that the department, hospital or state as deemed important for patient care and society as a whole.

Examples include:

- Rates of term primary cesarean section
- Rates of exclusive breastfeeding
- Shoulder dystocia documentation
- Postpartum depression screening
- Surgical site infection rates

In addition to the year-end departmental feedback, each MMC will start with a short "Metrics of the Month" slide that will identify an area for which we as a department are doing well and an area for which we will be focusing our efforts on for monthly improvement.

QI Participation

Baseline teaching in Improvement Science

As an introduction to lifelong learning and practice improvement, our interns are responsible for completing a RISE matrix assessment and will be assigned IHI (Institute for Healthcare Improvement) modules. These modules will be assigned through the GME office and must be completed for promotion to the R2 year. At the completion of this on-line didactic training, residents will receive IHI Certification in Basic Quality & Safety. Free access to this training and certification will be provided by the GME office.

Perinatal Peer Review at Highland Hospital (HH)

This conference occurs on the 2nd Tuesday of every month from 7:30-9 am in the Gleason Room. This conference is used to review perinatal events from our community hospital. Resident involvement includes an R2, usually the HH "deck-boss."

Gyn QA at Strong Memoral Hospital (SMH)

This conference occurs on the 2nd Monday of odd months (Jan, Mar, May, July, Sept, Nov) from 7:30-8:30 am in the Thiede room. The conference includes physician, nursing, fellow (MIGS/FPMRS) and resident participants. Cases selected for this conference are obtained from a running list of events that our department, hospital or state has deemed important to review. An example of this would be an unplanned hysterectomy after a hysteroscopy. 2 cases are selected each month and are assigned by the head of the committee to a R2 and R4. The residents are responsible for preparing and presenting these cases to the committee.

Ob QA (SMH)

This conference occurs on the 2nd Monday of even months (Feb, April, June, Aug, Oct, Dec) from 7:30-8:30 am in the Thiede room. The conference includes physician, nursing, fellow (MFM) and resident participants. Cases selected for this conference are obtained from a running list of events that our department, hospital or state has deemed important to review. An example of this would be an unplanned cesarean hysterectomy. 6-7 cases are selected each month and are assigned by the head of the committee. 2 of these are assigned to the R2 and R4. The residents are responsible for preparing and presenting these cases to the committee. While the R4 will be assigned a previously un-reviewed case, the R2 will be assigned an MMC case to write up in QA format as a stepped approach to learning.

Ob/Gyn Clinical Counsel (SMH)

This conference occurs on the 4th Tuesday of every month from 7:30-8:30 in the Thiede room. This conference is used to review departmental protocols (Amnioinfusion, Backfill Voiding Trial Checklist, Guidelines for Initiating an Obstetric Team Page, etc.). Every year, a protocol is assigned to each R3 to provide the initial review, research and revisions.

HH Family Maternal Child Clinical Service Quality Committee (CSQC)

This conference occurs on the 4^{th} Monday at 12:00-1300 in the Loder Conference room. This conference provides the structure for review of system and process opportunities, analysis of service or unit-specific data, and assures compliance with regulatory requirements.

The following functions are performed:

Annual development of unit/service specific objectives and measures.

- Assure compliance with all regulatory agencies.
- Review and act on quality, safety, patient/family satisfaction and resource utilization data and performance measures.
- Develop and approve of unit specific clinical practice guidelines and standards.
- Review events and develop appropriate action plans to minimize event recurrence.

R3 residents rotating at HH are invited to participate.

In addition, residents are invited and encouraged to participate all <u>Root Cause Analysis</u> (RCA) events and Unit Based Performance Programs (UPP).

Experiential Projects

Starting with the 2017-2018 entering interns, as a requirement for graduation, each resident must participate in a meaningful, inter-professional, real-work experience in improvement science project aligned with URMC and our department's goals. This can be done individually or as a group. It must include one full PDSA (Plan \rightarrow Do \rightarrow Study \rightarrow Assess) cycle and must be signed off on by a URMC faculty member.

Projects currently in process:

- o Decreasing patient time spent in triage
- Decreasing the transfer of patients from clinic to triage for work up of mild PreE
- o Implementation of ACOGs Opiate Use Disorder Bundle
- o Implementation of ACOGs Hypertension Bundle

Patient Safety

As part of our commitment to maintaining and improvement patient safety, residents participate in a variety of mandatory activities over the course of each year.

These include:

- GNOSIS modules
 - a data-driven virtual coach that identifies areas for knowledge and judgment improvement, weights them by error risk, maps out personalized content delivered in 2-5 minute segments, and delivers an administrative dashboard with analytics on performance
 - Postpartum Hemorrhage
 - o Shoulder Dystocia
 - o Fetal Monitoring

TeamSTEPPS

- o Provides higher quality, safer patient care
- o Increases team awareness and clarifying team roles and responsibilities
- Includes conflict resolution and improves information sharing

- Helps eliminate barriers to quality and safety
- Quarterly Resident Simulation
 - Mock oral exams
 - Laparoscopic cystectomy
 - o Breech vaginal delivery
- Ambulatory Simulation
 - L/S box training
 - o FLS practical training
 - o Robotic simulator training
- Center for Ob/Gyn Simulation (COGs) team training
 - o Mock codes
 - o Shoulder dystocia
 - o Postpartum Hemorrhage

Residents also required to participate in yearly GME based training sessions on Quality & Patient safety, Patient/Family centered care and Infection Prevention. Every resident and fellow is required to enter at least one event into RL Solutions (our event reporting system) yearly.