The University of Tennessee Graduate Medical Education (GME) Program is committed to the education and development of exemplary physicians who practice patient-centered health care, foster innovation in patient safety, and create strong inter-professional teams to promote quality, safety, and value in health care across the continuum.

**Requirement**

As of academic year 2020-2021, leadership of the UT College of Medicine Chattanooga has established a new requirement that,

“The Program Director must document that each Resident has been significantly involved in at least one Quality Improvement/Patient Safety (QIPS) Project during their training in Chattanooga in order to meet graduation requirements. Discretion is granted to Fellowship Program Directors regarding whether or not this will be required for fellows who may have completed a project in their core residency program.”

**Background**

In the Institute of Medicine publication, “Crossing the Quality Chasm,” six specific aims were identified in order for the health care system to deliver quality care. In this short video Dr. Don Berwick will explain the “STEEEP” principles which includes care that is: Safe, effective, efficient, timely, patient centered and equitable. [Click on the provided link to view a video by Don Berwick, MD, MPP, President and CEO, Institute for Healthcare Improvement (IHI): http://videomp4.ihi.org/IHIWebsite/OpenSchool-Coursera-DonBerwickJOM.mp4](http://videomp4.ihi.org/IHIWebsite/OpenSchool-Coursera-DonBerwickJOM.mp4)

**Quality Improvement and Patient Safety**

All physicians share responsibility for enhancing quality of patient care and promoting patient safety. 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. 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.
Culture of Safety and Education
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. 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, 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.

Residents must participate as team members in real and/or simulated inter-professional clinical patient safety activities, such as root cause analyses or other activities that include analysis, as well as formulation and implementation of actions.

Patient-centered care requires patients, and when appropriate families, to be apprised of clinical situations that affect them, including adverse events. This is an important skill for Faculty physicians to model, and for Residents to develop and apply.

All Residents must receive training in how to disclose adverse events to patients and families.

Quality Improvement: Education, Quality Metrics, and Engagement in QI Activities
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.

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.

Experiential learning is essential to developing the ability to identify and institute sustainable systems-based changes to improve patient care. Residents must have the opportunity to participate in interprofessional quality improvement activities.

IHI Open School Curriculum
The IHI Open School for Health Professions is an inter-professional educational community that gives healthcare students, Residents, Faculty, and hospital healthcare staff skills to become change agents in health care improvement. Skills include quality improvement, patient safety, teamwork, leadership, and patient-centered care. The leadership of the Chattanooga Campus and Erlanger believe that the IHI Open School Curriculum for Quality Improvement and Patient Safety education will be important components of our educational process as we work to meet ACGME accreditation. Medical Students, Residents,
Faculty, and hospital staff can register/login to the IHI website to access online modules and resources, go to: https://www.ihi.org/_layouts/ihi/login/login.aspx.

Login instructions to access the IHI Open School Courses are outlined in UT GME Policy #385. The modules are available without charge to our Faculty, Residents, and Students since we are registered as an IHI Open School Chapter. A list of all IHI Online Courses is available on the IHI website: www.ihi.org. The direct link for the available online courses is at: http://www.ihi.org/offerings/IHIOpenSchool/Courses/Pages/default.aspx

We recommend that Residents and Faculty review and complete these basic IHI Modules:

**Quality Improvement**
- QI 101: Introduction to Health Care Improvement*
- QI 102: How to Improve with the Model for Improvement*
- QI 103: Testing and Measuring Changes with PDSA Cycles*
- QI 104: Interpreting Data: Run Charts, Control Charts, and other Measurement Tools*
- QI 105: Leading Quality Improvement

**Patient Safety**
- PS 101: Introduction to Patient Safety*
- PS 102: From Error to Harm*
- PS 103: Human Factors and Safety*
- PS 104: Teamwork and Communication in a Culture of Safety*
- PS 105: Responding to Adverse Events*
- PS 201: Root Cause and Systems Analysis
- PS 202: Building a Culture of Safety

**Leadership**
L 101: Introduction to Health Care Leadership

We encourage Residents and Faculty to contact Erlanger’s Clinical Quality Improvement and Patient Safety leaders if you want to be part of an existing Quality Improvement or Patient Safety project and whom to contact for more information. The Erlanger Institutional Quality Improvement Committee meets the first Thursday of each month, and our program leadership, Faculty, and Residents are encouraged to attend these meetings. The Assistant Dean for Faculty Development continues working with designated QI leaders in each program to enhance our QIPS Curriculum and align more closely with the Erlanger QIPS initiatives.

**Annual Patient Safety/Quality Improvement Day**
In May 2014, the IHI Open School leadership established an Annual Patient Safety/Quality Improvement Day during which posters and oral presentations can be presented and judged, similar to the Annual Research Day to highlight scholarly activity. The event has grown and takes place in May each year. Proposals are submitted using the PDSA model: Plan, Do, Study, Act. We have adopted the interactive Template for a QIPS Project found in the IHI Tool: Quality Improvement Project Charter at [http://www.comchattanooga.uthsc.edu/docs/2020FormIHITool_QI_Project_Charter.pdf](http://www.comchattanooga.uthsc.edu/docs/2020FormIHITool_QI_Project_Charter.pdf).
Projects are presented as oral presentations at an interdisciplinary half-day conference. Our Annual Quality Improvement/Patient Safety (QIPS) Day is usually conducted the second or third Friday in May.

1. **PLAN:** Plan a change or test of how something works.
2. **DO:** Carry out the plan.
3. **STUDY:** Look at the results. What did you find out?
4. **ACT:** Decide what actions should be taken to improve.

**Repeat as needed until the desired goal is achieved**

QIPS Data Resources
- [Hospital Compare at Medicare.gov](https://www.medicare.gov)
- [The Leapfrog group](https://www.leapfroggroup.org)

**Handoff Communication and Teamwork Resources**
- [Taking on Hand-off Communication by Joint Commission](https://www.jointcommission.org)
- [AHRQ TeamStepps®: Strategies and Tools](https://www.ahrq.gov)
- [IPASS and SBAR](https://www.ipass.org)
- [Resident to Resident Patient Handoff Video #1](https://www.youtube.com)
- [Resident to Resident Patient Handoff Video #2](https://www.youtube.com)
- [Resident to Resident Patient Handoff Video #3](https://www.youtube.com)

**Healthcare Disparities Resources**
- [AMA Eliminating Health Disparities](https://www.ama-assn.org)
- [AMA Toolkit](https://www.ama-assn.org)
- [Common Table Health Alliance (Health care disparities in Memphis and Shelby County)](https://www.commontablehealthalliance.org)
- [Common Table Health Reports](https://www.commontablehealthalliance.org)

**Human Factors Resources**
- [AHRQ](https://www.ahrq.gov)
- [Applied Ergonomics](https://www.appliedergonomics.org)
- [World Health Organization (WHO) Human Factors in Patient Safety Review of Topics and Tools](https://www.who.int)

**Infection Prevention Resources**
- [Center for Disease Control](https://www.cdc.gov)
- [Guide to Preventing CAUTI](https://www.cdc.gov)
- [Sterile Technique](https://www.cdc.gov)
- [Tennessee Healthcare Associated Infections (HAI)](https://www.tn.gov)
- [Wisconsin Department of Health Services: Infection control and Prevention](https://www.dhs.wi.gov)

**Patient Centered Care Resources**
- [Always Events from IHI](https://www.ihi.org)
- [I am a patient and I need to be heard (Morgan Gleason)](https://www.morgangleason.com)
- [IHI Patient and Family Centered Care](https://www.ihi.org)
- [The Values and Value of Patient-Centered Care](https://www.patientcenteredcare.org)
Patient Safety Resources
- American College of Physicians on Patient Safety
- American College of Surgeons on Patient Safety
- Agency for Healthcare Research and Quality (AHRQ)
- AHA on Quality and Patient Safety
- American Medical Association (AMA)
- AMA Patient Safety: An Overview
- Armstrong Institute for Patient Safety and Quality
- AAMC Association of American Medical Colleges Faculty Development Resources
- Association of Perioperative Registered Nurses
- Center for Disease Control
- Choosing Wisely
- Failure Modes and Effects Analysis (FMEA)
- FMEA Worksheet
- Free from Harm
- Healthcare Matrix
- Institute for Safe Medical Practices
- The Joint Commission on Patient Safety
- National Patient Safety Foundation
- Preventing a Failure Before Any Harm is Done
- Prevention of Perioperative Pressure Ulcers Toolkit
- Root Cause Analysis
- Universal Protocol (Timeout for Procedures)
- Using a Healthcare Matrix (Bingham)
- VA National Center for Patient Safety
- World Health Organization on Patient Safety
- WHO Surgical Safety Checklist

Quality Improvement Resources
- Clinical case studies for health professionals
- Institute for Healthcare Improvement (IHI)
- IHI (Quality Cost and Value)
- IHI (Triple Aim: Quality Improvement, Safety, Equity)
- Lean Enterprise Institute
- Michigan Hospital Association

Other QIPS Resources
- Accreditation Council for Graduate Medical Education (ACGME)
- National Collaborative for Improving the Clinical Learning Environment – The Role of Clinical Learning Environments in Preparing New Clinicians to Engage in Patient Safety 2017
- National Collaborative for Improving the Clinical Learning Environment in Preparing New Clinicians to Engage in Quality Improvement Efforts to Eliminate Health Care Disparities 2019
- Healthcare Matrix Form
- Plan Do Study Act (PDSA) Test of Change Worksheet
- Patient Safety Conference Cards

*The term “Resident” refers to both Resident and Fellow trainees.

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