intervention, ED and the subspecialties had 100% admissions with completed handoffs, whereas surgery decreased to 20%. The percentage of handoffs done using the telephone during the first 6 weeks was 60% from the ED, 50% from surgery, and 0% from the subspecialties. After the second intervention, the ED made 100% of handoffs using the phone, the subspecialties had 11% of handoffs with the phone, and surgery had 22% of handoffs with the phone.

Conclusions: The literature has shown the paramount importance of proper physician-to-physician handoff. One hundred percent of ED and subspecialty admissions now have a formal handoff. Streamlining the process and ensuring that admitting residents are easily accessible should encourage more physicians to hand off their patients when transferring or admitting them to the pediatric floor. Our data indicated an improved number of handoffs from the subspecialists, although the use the new telephone was limited, suggesting a halo effect of the project. The surgical teams did not adopt the process. Future steps will seek to engage the surgeons—more specifically the nonemployed surgical subspecialists—in the handoff process.

FINAL WORK PLAN – Atlantic Health System–Goryeb Children's Hospital

Team Charter/Objectives	A number of admissions arrive on the pediatric inpatient unit without a formal physician-to-physician handoff. Pilot data revealed that handoffs, especially from the pediatric surgical service, were limited. The purpose of this study was to develop a streamlined method of communication between multiple disciplines and the inpatient pediatric admitting resident to increase the handoff rate.
Project Description	A new communication tool—a portable telephone to be carried by the admitting pediatric resident—will be introduced, and verbal and written instructions will be provided to all disciplines that admit to the inpatient unit. Data will be collected and analyzed during 2 consecutive 6-week PDSA cycles. Future PDSA cycles will be planned.
Vision Statement	Our goals are to increase the overall number of handoffs, eliminate the admission pager that leads to delays in communication, see full adoption of the direct line admission telephone, and enhance communication to improve patient safety.
Success Factors	The ED fully adopted the telephone handoff, with 100% of admissions having a formal verbal handoff via the telephone. Although the medical subspecialists did not use the telephone to the extent we desired, the number of handoffs via other methods of communication by the subspecialists reached 100%.
Barriers	The biggest barrier to success was buy-in to the process by the nonemployed surgical subspecialty faculty.
Lessons Learned What is the single most important piece of advice for another team embarking on a similar initiative?	Have frequent meetings with the surgical stakeholders to maintain pressure and focus on the project.

Aurora Health Care, Milwaukee, WI
Creating a Culture of Quality and Safety at Aurora Health Care

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Background: The aim of this project was to pilot an approach/model that integrates and aligns Aurora Health Care (AHC) priorities (quality and safety), its existing committees/groups (Quality Committee/Council), and metrics with ACGME requirements (CLER, Common Requirements). The Residency Council was engaged in the initiative, and 3 residency programs piloted sustainable, data-driven quality/safety projects.

Methods: The family medicine project was Medication Reconciliation in Primary Care Clinics and involved a fishbone analysis to identify factors contributing to error, a focus on accurate use of the EMR, creation of a medication reconciliation

workflow, training, and pre/post quizzes regarding the EMR and the workflow. The internal medicine project was 30-Day Readmissions and involved selection of a readmission risk tool and a patient perspective questionnaire, creation of a workflow and training materials, training for all team members, and a mid-project survey and medical record audit. The Ob/Gyn project was Operative Checklists in Labor and Delivery and involved the selection of checklists associated with quality care gap; delineation of team member roles and workflow; and training for faculty, residents, and students. The Residency Council was responsible for defining roles related to quality and safety, reviewing IHI modules to identify core requirements for all incoming residents, and recommending that shared noon conferences be structured to require application of quality/safety principles.

Results: All programs completed at least 1 PDSA project cycle, and all teams disseminated their results through posters and presentations. The family medicine project resulted in improved accuracy from all providers' increased awareness of the importance of the medication reconciliation workflow and of having correct medical lists. The internal medicine project increased the awareness of the 30-day readmission issue that led to changes in the discharge process, earlier mobilization of resources for challenging patients, and the increased ability of residents to identify patients at risk. The Ob/Gyn project resulted in a tremendous change in the culture and relationships among labor and delivery caregivers and providers, as well as improved care quality via checklists and smart phrases created to standardize care. The Residency Council established a charter with roles/responsibilities for quality and safety that was approved by the GMEC. The GMEC also approved the Residency Council–recommended requirement that residents and faculty complete 5 IHI modules and agreed to cosponsor a GMEC-wide shared noon conference on hand hygiene.

Conclusions: We demonstrated the impact of a sustainable 2-component model—Residency Council and program-specific NI IV teams—for engaging faculty in quality improvement initiatives aligned with AHC priorities, CLER, and RRC requirements. Next steps were identified for all 3 projects and for the Residency Council to continue to improve the clinical learning environment and ensure high quality and safe care for patients.

FINAL WORK PLAN – Aurora Health Care

Team Charter/Objectives	This project was designed to engage the Residency Council in culture change focused on patient safety and quality, resulting in curriculum standardization that maximizes resident/fellow engagement; to commission the Residency Council members to engage their peer groups and increase awareness of existing measures; and to charge 3 teams to implement a residency program–specific safety/quality project using systematic process.
Project Description	The Residency Council is charged with defining and standardizing the methodology by which residents are engaged, disseminating data to all residents, and being a trigger for program-specific improvement projects and overall GME system change. Residents/fellows and faculty from 3 participating programs (family medicine, internal medicine, and Ob/Gyn) will be active members of their residency's team. Each team will perform a systematic needs assessment to identify potential project foci and identify a project based on its alignment with AHC/hospital/clinical quality/safety priorities and ACGME standards and requirements. Project work will include identification of education gaps, opportunities for workplace learning, and continuous evaluation based on participant evaluations and care management metrics.
Vision Statement	At the conclusion of the project, we will have demonstrated the impact of a sustainable 2-component model (Residency Council and program-specific NI IV teams) for engaging residents/faculty in quality improvement initiatives aligned with AHC priorities, CLER, and RRC requirements (eg, curriculum in quality and safety, scholarly activity) to continuously improve our clinical learning environment and ensure high quality/safe patient care.
Success Factors	Dedicated interdisciplinary/interprofessional working groups and providers actively participated in specific projects related to quality and safety. Residents reported seeing increased provider quality and safety awareness and behavior changes, targeted improvements in patient care, and a culture change among residents and staff. Ongoing, regular meetings facilitated communication with other professionals. Providers recognized just "how terrifying the safety issue is" along with the need and ability to identify projects related to specific problems. The selected projects revolved around a common theme/area so the work can continue to evolve and benefit patients beyond the tenure of any one resident. Framework and resources at AHC support scholarship.

Barriers	The main logistical barrier was getting everyone at same meeting (competing schedules, duty hours). Other barriers included issues with the EMR, communication, and accountability. Residents and faculty are now aware of requirements for quality/safety, but engagement of teams/committees to initiate quality/safety is an area for additional work.
Lessons Learned What is the single most important piece of advice for another team embarking on a similar initiative?	Look only at what you can change (focus on the system process) and pilot work with a small engaged group before full rollout. Have an open mind, persistence, and patience when working on an improvement project. Have a leader and hold frequent, regularly scheduled meetings to ensure meetings yield results and goals are met.

Bassett Medical Center, Cooperstown, NY
A Standardized EHR Handoff Tool for Medicine and Surgery

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Background: Bassett Medical Center did not have a standardized tool for handoffs in the hospital setting, and administrative and GME leadership were seeking such an instrument. Prior to full deployment of Epic EHR in December 2013, medicine and surgery residents used Word-based handoff tools that were not part of the EHR, not HIPAA compliant, and augmented by a verbal handoff. Our goal was to create a standardized tool for handoffs in the medicine and surgery resident hospital teams.

Methods: In fall 2013, we assembled a steering committee composed of senior administrative leadership in quality improvement/safety, information technology, and medical education to support the development of standardized handoff tools. Workgroups in the residencies created and modified handoff tools using PDSA techniques. Monthly or bimonthly meetings of the steering committee with the residents and program directors provided incentive and administrative support. The medicine residency workgroup created a pre/post implementation survey to assess the value of the handoff tool.

Results: An audit of medical inpatient medical records showed 100% adherence by the medicine residents in the use of the EHR for handoff. Strict adherence to the method prescribed in the program was 65%. This lower rate was likely due to the technical need of moving information from one area of the EHR to another. The percentage of residents who felt that the written handoff was an effective communication device increased from 58% pre-EHR handoff tool to 83% post.

Conclusions: The development of an EHR-based handoff tool at Bassett Medical Center was a successful project that demonstrates the importance of goal alignment and teamwork. Surveys revealed that residents considered handoffs to be more thorough, more accurate, and better organized after implementation of the handoff tool. In addition, the culture is more attuned to transitions of care, and the faculty is beginning to understand that they need to assess resident competency in this area.

FINAL WORK PLAN – Bassett Medical Center

Team Charter/Objectives	Our goal was to develop a standardized handoff tool within the EHR for the medicine and surgery residency hospital teams. Prior to the project, each of the residency teams had handoff tools that were not HIPAA compliant, existed outside of the medical record, were not retrievable and available for quality improvement, and were not available to other members of the hospital care teams.
Project Description	We designed an iterative quality improvement project to introduce an Epic-based, standardized electronic handoff tool in the medicine and surgery residency programs. Residents and program directors were the front-line developers of the tools, and a steering committee—composed of senior administrative leadership in quality improvement/safety, information technology, and medical education—provided support. The steering committee met monthly. Residents met between meetings to develop the tools, using rapid cycle improvement techniques to modify the handoff tools. Residents and program directors met monthly with the steering committee to provide progress reports and request support when needed.