

**Methods:** Using EMRs in 2 primary care practice sites, we defined the sign time as the time between the responsible healthcare provider receiving an email notice of test results and signing off on the results. Before the intervention, the study was announced at 2 departmentwide conferences and providers received 4 weekly emails. All providers received weekly pager reminders to check their EMR inboxes during the intervention period (March 2, 2012-June 30, 2012), and EMR data was extracted to measure the response time.

**Results:** Compared to the preintervention control period of July 1, 2011 to January 31, 2012, we saw a shorter response time during the intervention. Preintervention, the sites had 8,390 laboratory tests with a mean sign time of 1.41 (standard deviation 1.61). During the intervention, the sites had 4,257 tests with a mean sign time of 1.20 (standard deviation 1.56).

**Conclusion:** Our brief intervention showed that a simple weekly reminder to providers to check their inboxes resulted in shorter viewing and signing times. Further study is needed to determine if other forms of reminders, such as cell phone texts, would produce similar results and to extend the intervention beyond 16 weeks. Our study did not determine if medical errors were prevented or if patients received higher quality of care. Further, the study was completed at 1 medical center, so the results may not be applicable to other settings.

#### FINAL WORK PLAN – MedStar Franklin Square Medical Center

Overall Goal for NI III/Elevator Speech	Our team's goal was to establish a project that addressed outpatient-based patient safety, specifically indirect patient care.
Needs Statement	This goal was important because little is known or written about patient safety with outpatient indirect care, but the bulk of medical care takes place when the patient is not in the office.
Vision Statement	In March 2013, we will see the outcomes of our success through a study showing that provider response times to laboratory results can be influenced by a reminder system.
Measures	We determined the success of meeting our goal by measuring pre- and postintervention provider response times.
Success Factors	The most successful component of our work was gathering data through our Centricity EMR system. We were inspired by our small but successful result.
Barriers	The largest barrier we encountered was leadership buy-in. We worked to overcome this by compromising on our acceptable time frame for signing laboratory results.
Lessons Learned What is the single most important piece of advice for another team embarking on a similar initiative?	Pick something small and attainable in the time frame given.

## MedStar Georgetown University Hospital, Washington, DC

### Quality and Safety in the Balance: An Integrated and Comprehensive Approach to Education on Patient Safety for UME & GME

Avram H. Mack, MD; Eileen S. Moore, MD

**Background:** At the inception of this project, neither Georgetown University Hospital (GUH) nor Georgetown University School of Medicine (GUSOM) had a full, tested plan for education in PS/QI at the GME or UME level. We hoped to generate a campuswide plan for teaching and learning PS/QI that would integrate GUH and GUSOM residents and faculty. GUH is operated by MedStar, an independent nonprofit, and GUSOM's curriculum did not match the PS/QI emphasis that MedStar stressed at GUH. A collaborative project would allow the students and hospital to interact throughout the program and form a cohesive relationship.

**Methods:** We interviewed key stakeholders, developed education activities for third- and fourth-year medical students (MS3, MS4), visited other hospitals, attended conferences (AAMC, IHI, AIAMC), held check-in meetings, participated in hospital PS/QI leadership, and assessed students at the end of their fourth year.

**Results:** The intervention was sporadic in 2009-2010, was piloted in 2010-2011, established a baseline for MS3 and MS4 in 2011-2012, and continued for MS3 and MS4 in 2012-2013. The simulation score baseline was established in 2011-2012 and was pending for 2012-2013. The patient safety culture score baseline was established in 2010-2011 and no results were reported in following years. We met with great success in participant openness to collaboration but learned that many additional parallel collaborations were necessary across the system. We did not create an agreed-upon measurement or intervention for student or resident safety culture, but we made tremendous progress toward this goal.

**Conclusions:** Engineering a campus plan is hard enough when the 2 components are a single unit; it is uniquely challenging in an independent academic medical center. Many enterprises within the overall project must align to drive the program. The presence of many collaborators taught us that we have to keep abreast of all developments, not just our particular specialization.

### FINAL WORK PLAN – MedStar Georgetown University Hospital

Overall Goal for NI III/Elevator Speech	Our team's goal was to build a plan for teaching patient safety throughout the medical center campus.
Needs Statement	This goal was important because building a patient safety culture at an academic hospital required all elements of the campus to be aware of and to appreciate patient safety.
Vision Statement	In March 2013, we will see the outcomes of our success by seeing improved acceptance of the patient safety culture and improved knowledge in patient safety issues.
Measures	We determined the success of meeting our goal by measuring improvements in student actions in simulations and by student and resident participation in occurrence reporting.
Success Factors	The most successful component of our work was collaboration across disciplines and across institutions. We were inspired by other institutions.
Barriers	The largest barrier we encountered was alterations in leadership. We worked to overcome this by being prepared.
Lessons Learned What is the single most important piece of advice for another team embarking on a similar initiative?	Be alert to and ready to acknowledge/incorporate any parallel collaborations across the system or campus.

## Guthrie Clinic / Robert Packer Hospital, Sayre, PA Promoting QI & Enhancing Patient Safety Through Graduate Medical Education: The Next Step?

A Kulkarni, MD; N Pease; D Stapleton, MD

**Background:** Given the changing paradigm in healthcare and GME that emphasizes the importance of QI projects to enhance PS, we felt the need to incorporate this theory into resident education. We hoped to integrate PS/QI into the existing residency curriculum, increase the yield of QI projects, and have publications of resident-initiated QI projects.

**Methods:** We determined the success of our program by measuring the increase in resident QI activities as calculated on our new QI process scale. The scale has a score for each level of completion as follows: (1) conceptualization of project (no formal proposal), (2) formal hypothesis generated and submitted for review, (3) hypothesis approved by faculty mentor/QI supervisor after changes, (4) formal IRB proposal and IRB application completed, (5) IRB approval granted, (6) data collection underway, (7) preliminary manuscript developed and submitted for review, (8) manuscript finalized/submitted/under review, (9) manuscript accepted, and (10) project published/presented.

**Results:** We have seen a greater than 100% increase in resident-initiated QI projects since the beginning of this process. We worked to achieve resident buy-in and active contribution by discussing the significance of the program and its goals with residents. The most successful component of our work was generating interest from the faculty and increasing awareness of the significance of QI initiatives in practice and GME. We also established a streamlined procedure for seeking IRB review specifically for QI projects.