Alliance of Independent
Academic Medical Centers

The AIAMC National Initiative:
Improving Patient Care through Medical Education

PROCEEDINGS OF NATIONAL INITIATIVE IV

National Initiative

March 2015

New Orleans, LA

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National Initiative

OVERVIEW OF THE AIAMC NATIONAL INITIATIVE

Why a National Initiative?
Both the public and our profession acknowledge that quality and safety efforts are falling short, and many hospitals and healthcare systems are seeking rapid improvements in patient care. Those of us in academic medicine realize that residents play an important role in patient care at teaching institutions; however, residents are generally not visible in safety and quality efforts. The AIAMC recognized that resident quality improvement efforts – shared across multiple programs and systems – had the potential to improve care much more quickly and effectively.

Role of the AIAMC
The Alliance of Independent Academic Medical Centers was founded in 1989 as a national network of large academic medical centers. Membership in the association is unique in that AIAMC members are affiliated with medical schools but are independent of medical school ownership or governance. Seventy-five major medical centers across the United States are members, representing over 725 senior academic leaders.

Fifty-five hospitals and health systems and more than 450 individuals have participated in the AIAMC National Initiatives since 2007 and have driven change that resulted in meaningful and sustainable outcomes which improved the quality and safety of patient care.

National Initiative I
In early 2007, the Alliance of Independent Academic Medical Centers (AIAMC) launched *Improving Patient Care through GME: A National Initiative of Independent Academic Medical Centers*. The *National Initiative* (NI) featured five meetings over the course of 18 months which served as touchstones for ongoing quality improvement in 19 AIAMC participating organizations. These meetings, as well as the monthly collaborative calls held in-between, provided structure, discussion and networking opportunities around specific quality improvement initiatives. This 18-month "NI I" was supported by a grant from the foundation of HealthPartners Institute for Education & Research, an AIAMC member institution located in Minneapolis, Minnesota.

As a result of these efforts, we developed initial findings that demonstrated the efficacy of integrating GME into patient safety and quality improvement initiatives. These findings were organized into a series of articles that were published in the December 2009 issue of *Academic Medicine*.

National Initiative II
In 2009, we launched the National Initiative II and expanded participation to 35 AIAMC-member teaching hospitals from Seattle to Maine. Each participating hospital developed a quality improvement team led by a resident or faculty member. These teams met on-site four times and participated in monthly conference calls over an 18-month period. Quality improvement projects focused upon one of the following areas: Communication, Hand Offs, Infection Control, Readmissions and Transitions of Care.

Results from NI II were published in a variety of publications, including the February 2011 issue of the *AAMC Reporter*, and in the May/June 2012 special supplement issue of the *American Journal of Medical Quality*.

National Initiative III

NI III, launched in 2011 with 35 teams, built on the strengths of the first two phases of the AIAMC National Initiative, and moved beyond direct support of local quality improvement teams to the development of teaching leadership and changing organizational culture to support quality improvement initiatives. Graduate medical education *and* continuing medical education were emphasized as platforms for improving patient care. The focus of NI III was faculty/leadership development. We recognized that part of our responsibility as medical educators was to train the next generation of practicing physicians; thus, residents must be considered as junior faculty and were integral in this effort.

Results from NI III were published in a variety of publications, including the Spring 2014 issue of *The Ochsner Journal* and the *Journal of the American College of Surgeons*

National Initiative IV

NI IV: Achieving Mastery of CLER, launched in 2013 with 34 AIAMC-member and – for the first time – non-member teams, focused on navigating the ACGME's new CLER program. The CLER program was designed to evaluate the level of institutional responsibility for the quality and safety of the learning and patient care environment, and NI IV provided teams the training and guidance necessary to a) identify strengths and weaknesses across the six focus areas, b) prioritize areas for improvement, c) outline, streamline and implement improvement strategies, and, d) significantly and measurably advance the institutional level of preparedness.

In addition, three writing groups have been formed to capture the collective work and learning of the initiative. The writing groups are 1) Program Descriptions: focused on describing the purpose, structure, and progress of the overall initiative; 2) Initiative-wide Research: focused on projects that engage the participating institutions or entire initiative as a research project; 3) Resource Materials: focused on scholarly work that can be used as a future resource for others. During National Initiative IV a group of leaders published an article titled "Integrating Quality with Graduate Medical Education: Lessons Learned from the AIAMC National Initiatives in the American Journal of Medical Quality.

For more information on the AIAMC National Initiative, please visit our website at www.aiamc.org or contact Kimberly Pierce-Boggs, Executive Director via email at Kimberly@aiamc.org or phone 312.836.3712.

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Team: Advocate Lutheran General **Focus Area: Professionalism**

I.	Team Charter/Objectives ('needs statement,' project requirements, project assumptions, stakeholders, etc.; Teams should identify members and define responsibility/ purpose)	*Our goal was to investigate and improve how the ALGH clinical learning environment promotes and measures professionalism.* *The literature shows that lapses in professionalism behavior during Medical School have been associated with malpractice actions during practice. What we know about the 'hidden curriculum' teaches us that institutional culture is central to the formation of professional identity.* *Lapses and drifts in physician professionalism lead to deficiencies in safety, quality, associate satisfaction and patient satisfaction. In our institution, concerns about resident and attending professionalism have been raised and managed inconsistently. We have embarked upon a 'Just Culture' approach to peer review and desire to have a clear and consistent approach to dealing with concerns in the arena of professionalism as well as to raise-up stories of exemplars in professionalism.*
II.	Project Description	*To finalize our AIM statement and formalize our project, we developed a better understanding of observable and measurable behaviors that define or exemplify professionalism.* *A review of the literature pointed to a) definitions that tell us what is professionalism; b) observable and measurable behaviors; and c) measurement tools that have been used.* *We utilized process mapping to investigate our current reporting systems and data repositories in order to identify how we could report and track Physician Professionalism concerns and praises.* *We determined that the above developmental work was needed prior to attempting a research project.*
III.	Necessary Resources (staff, finances, etc.)	*Our team had access to the necessary experts and resources which include library services, MIDAS, Online reporting system (RDS), and Crimson.*
IV.	Measurement/Data Collection Plan (must partner/match with Milestone Markers)	*We learned about the strengths, flexibility, and limits of tour existing data repositories and tools available to assess and track Physician Professionalism.* *Educational interventions were developed to communicate how we define and assess Physician Professionalism in our Clinical Learning Environment* *Tools studied and used by others were reviewed for applicability to our site.*
V.	Communication Plan (may be helpful to draft a flow chart of team members & senior management, both internal & external)	*The following groups were informed and updated on our project:* *Senior Hospital Leadership, the System CAO, the elected Medical Staff leadership, Department Chairs,* *Program Directors, members of the GMEC, and one of our Affiliated Medical Schools.* *Presentations were made at the Medical Executive Committee, the GMEC, Resident Orientation, the semi-annual medical staff meeting.*

VI.	Accountability (list of team members and who is accountable for what)	*Dr. Leo Kelly – as VPMM and DIO was responsible for C-Suite communication and our Clinical Learning Environment and the CLER visit; his previous experience at a nonteaching hospital was invaluable in 'visioning' communication with physicians. Dr. Pam Hyziak – as Director of Quality and Patient Safety was responsible for helping us understand and access the available data and connect us with the appropriate personnel familiar with MIDAS. She was also instrumental in assisting with the development and (endless) revisions of our Fishbone Diagram and our Process Map. Cindy Simonsen – as Director of Medical Education ensured communication with the GMEC and the Program Directors and clarified GME processes pertinent to the project.Dr. Judi Gravdal – was accountable for managing the literature, presenting information sessions, communicating with the other Department Chairs, and representing the team on NI IV calls.*
VII	Potential Challenges (engagement, budget, time, skills gaps, etc)	*Time and priorities precluded developing and carrying out a formal research project.* *Competing urgencies prevented team members from attending the NI IV meetings.*
VIII.	Markers (project phases, progress checks, schedule, etc.; must partner/match measurement/data collection plan)	*By December 31, 2013 – Our literature review was robust; definitions were reviewed and operationalized.* *By March 2014 – We had begun to draft our Physician Commitment to Professionalism. We understood the ability of MIDAS to serve as a repository, a source of reports, and for accountability. We identified all the various sources of feedback reporting on physicians. We elected not to pursue a formal study/IRB. By July 2014, the Physician Commitment to Professionalism was finalized for both attending physicians and Residents/Fellows. Approval to use for new appointments immediately and for reappointment in the March 2015 cycle was obtained.* *By October 2014 the MIDAS flow and FYI letters were finalized.*
IX.	Vision Statement/Closing Plan (markers of success by March 2015)	*By March 2015, our team had clearly operationalized components of 'Physician Professionalism' for both residents, fellows and attending physicians. Partners and existing tools (our MIDAS database) were identified and tweaked. The Physician Commitment to Professionalism was rolled out. We now have the capability to investigate and improve how our ALGH learning environment promotes and measures physician professionalism at the medical staff level.* *Our products include:* *1- A literature review is in preparation to be submitted for publication* *2- Several educational sessions have taken place [Resident Orientation; Family Medicine Faculty Development Session; Medical Staff Semiannual Meeting] and more are planned.* *2- A study of Professionalism in our Clinical Learning Environment before and after an intervention was not carried out.* *3- The ALGH Physician Commitment to Professionalism has been incorporated into the Appointment, Reappointment and Resident Contract processes.* *4- We submitted to the 2015 ACGME conference but were not selected to present* *5- Five 'FYI' feedback letters were rolled out in Family Medicine and Internal Medicine. Education and spread to the other departments are planned.*

X.	Success Factors	*The most successful component of our work was…….* *Collaboration with multiple partners in Quality, Safety and Patient Experience as well as Medical Staff Leadership and GME leadership.* *We were inspired by……..* *York Wellspan's "Expectations on Professionalism."* *The enthusiastic reception by medical staff leadership and the Department Chairs who urged us to execute more quickly.*
XI.	Barriers	*The largest barrier we encountered was……..* *We worked to overcome this by……..* *Reporting by and about physicians (both attendings and residents) at our hospital is inconsistent and insufficient. Education and the inclusion of reporting exemplary behavior should improve the volume and variety of reports. A telephone hotline was initiated for physicians and residents/fellows to encourage and facilitate reporting.* *We have not yet identified a tracking mechanism for Residents/Fellows that is standardized across programs.*
XII.	Lessons Learned	*The single most important piece of advice to provide another team embarking on a similar initiative would be……* *Schedule regular (weekly or biweekly) meetings.* *Keep an open mind about who needs to be at the table and who has necessary expertise.* *Make assignments and collaborate to keep the team on track.* *Follow the monthly assignments* *Focus on the end goal.*
XIII	Expectations Versus Results	*On a scale of 1 to 10 (with "1" meaning nothing and "10" meaning everything), how much of what you set out to do was your team able to accomplish?* *1 2 3 4 5 6* ***7*** *8 9 10* *We had very high expectations but are proud of all we accomplishes*
XIV.	Satisfaction	*On a scale of 1 to 10 (with "1" meaning not at all satisfied and "10" meaning completely satisfied), how satisfied are you with what you were able to accomplish in your NI III work?* *1 2 3 4 5 6 7 8* ***9*** *10*
XV.	Project Impact	*What changes have you observed in your residency program(s), or at your institution, based upon your work?* *Greater clarity about what we mean by "Physician Professionalism"* *An expectation that all physicians are expected to meet standards of professionalism that align with the Advocate Behaviors of Excellence*
XVI.	Next Steps	*Describe next steps for your project, including plans for sustaining and spreading the changes made.* *We will next spread this to all clinical departments.* *We will monitor impact through our Medical Staff Peer Review and Appointment/Reappointment proceses.* *We will continue to work with GME to assess implementation and impact for residents and fellows.* *We plan to share our work with the other teaching and nonteaching hospitals in our system.*

Defining and Committing to Physician Professionalism

Gravdal J, Hyziak P, Kelly L, Simonsen C

Advocate Lutheran General Hospital Park Ridge, IL

Overall Goal/Abstract

Physician Professionalism is essential to achieving Safety, Quality and Service for every patient every time. Defining, teaching, measuring, and remediating professionalism remains a challenge in most organizations.

Our goal was to investigate the literature and to develop an objective definition of Physician Professionalism for the ALGH Clinical Learning Environment .

Background

Professionalism in medicine has had shifting meanings over the past century.

Problems with professionalism are well documented in the literature and are a concern of hospital and graduate medical education leadership. Lapses in professional behavior in medical school have been associated with increased rates of malpractice actions during practice.

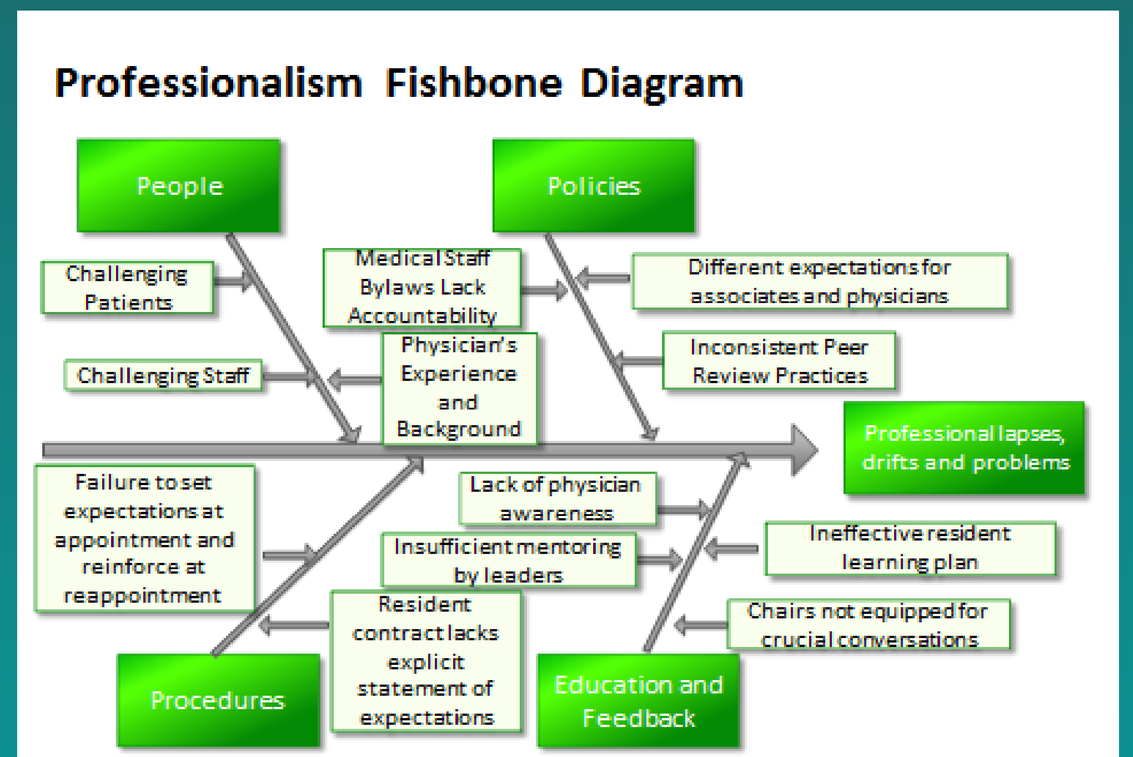
Concerns about resident and attending professionalism have been raised at ALGH but are identified and managed inconsistently and very little has been done to identify exemplars.

AIM Statement

- Understand and operationalize Medical Professionalism
- Communicate and create a commitment to Physician Professionalism

Materials/Methods

1- Literature review was undertaken utilizing Medline search and interrogation of references in identified literature.
2- Fishbone diagram aided in identifying problems.
3- "ALGH-Physician Commitment to Professionalism" was created which aligned with System Behaviors of Excellence.
--Attending Physicians sign at Application and Reappointment
--Residents and Fellows sign with annual contract



Success Factors and Lessons Learned

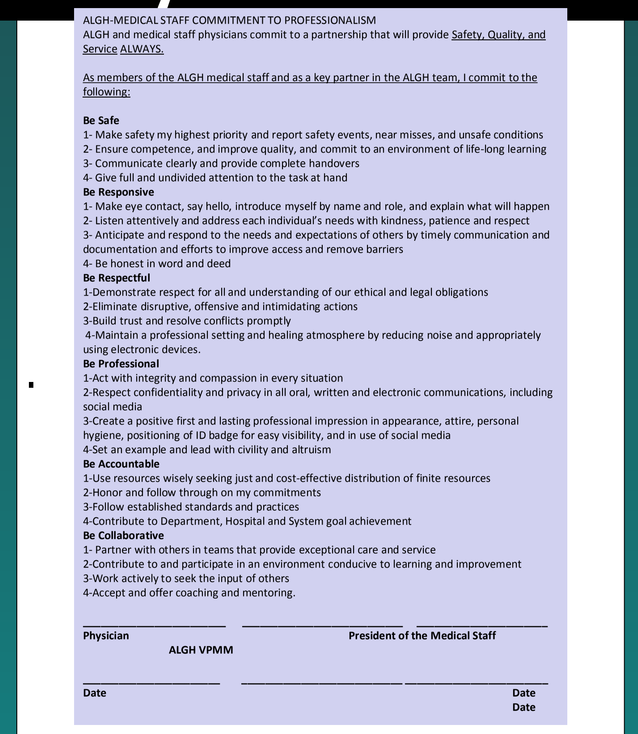
Engagement of a working team that met regularly and included the VPMM/Associate DIO, Director of Quality and Safety and the Director of Medical Education were crucial to success.

Learning from other organizations made the work more efficient and grounded

Early introduction of the project to the elected Medical Staff leadership was important and motivating

Results

Physician Commitment



ALGH-MEDICAL STAFF COMMITMENT TO PROFESSIONALISM
ALGH and medical staff physicians commit to a partnership that will provide Safety, Quality, and Service ALWAYS.

As members of the ALGH medical staff and as a key partner in the ALGH team, I commit to the following:

Be Safe
1- Make safety my highest priority and report safety events, near misses, and unsafe conditions
2- Ensure competence, and improve quality, and commit to an environment of life-long learning
3- Communicate clearly and provide complete handovers
4- Give full and undivided attention to the task at hand
Be Responsive
1- Make eye contact, say hello, introduce myself by name and role, and explain what will happen
2- Listen attentively and address each individual's needs with kindness, patience and respect
3- Anticipate and respond to the needs and expectations of others by timely communication and documentation and efforts to improve access and remove barriers
4- Be honest in word and deed
Be Respectful
1-Demonstrate respect for all and understanding of our ethical and legal obligations
2-Eliminate disruptive, offensive and intimidating actions
3-Build trust and resolve conflicts promptly
4-Maintain a professional setting and healing atmosphere by reducing noise and appropriately using electronic devices.
Be Professional
1-Act with integrity and compassion in every situation
2-Respect confidentiality and privacy in all oral, written and electronic communications, including social media
3-Create a positive first and lasting professional impression in appearance, attire, personal hygiene, positioning of ID badge for easy visibility, and in use of social media
4-Set an example and lead with civility and altruism
Be Accountable
1-Use resources wisely seeking just and cost-effective distribution of finite resources
2-Honor and follow through on my commitments
3-Follow established standards and practices
4-Contribute to Department, Hospital and System goal achievement
Be Collaborative
1- Partner with others in teams that provide exceptional care and service
2-Contribute to and participate in an environment conducive to learning and improvement
3-Work actively to seek the input of others
4-Accept and offer coaching and mentoring.

Physician _____ President of the Medical Staff _____
ALGH VPMM
Date _____ Date _____ Date _____
Date

Barriers Encountered/Limitations-

The literature is extensive but not always applicable.

The Physician Commitment to Professionalism has been well accepted but has not been in place long enough to evaluate impact.

Conclusions

Defining and making explicit expectations for Physician Professionalism is challenging, ongoing work which can and should be undertaken.

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Wynia MK, Papadakis MA, Sullivan WM, et.al. More than a list of values and desired behaviors: A foundational understanding of medical professionalism. Acad Med. 2014;89:712-14.

Physician Professionalism: Feed in and Feedback

Gravdal J, Hyziak P, Kelly L, Simonsen C

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Overall Goal/Abstract

Physician Professionalism is of utmost importance yet measuring and providing feedback for both problematic and exemplary has been challenging .

Our goal was to develop tools and processes for documenting and providing feedback to physicians about reported behavioral lapses, drifts and exemplars.

Background

Problems with professionalism abound in the literature and are a concern of hospital and GME leadership. Lapses in professional behavior have been associated with increased rates of malpractice actions, decreased patient satisfaction, and decreased associate satisfaction.

Incidents regarding medical professionalism have not been consistently identified and managed. Little has been done to identify exemplars.

AIM Statement

Develop tools and processes for documenting the outliers – both negative and positive – and providing feedback to physicians.

Materials/Methods

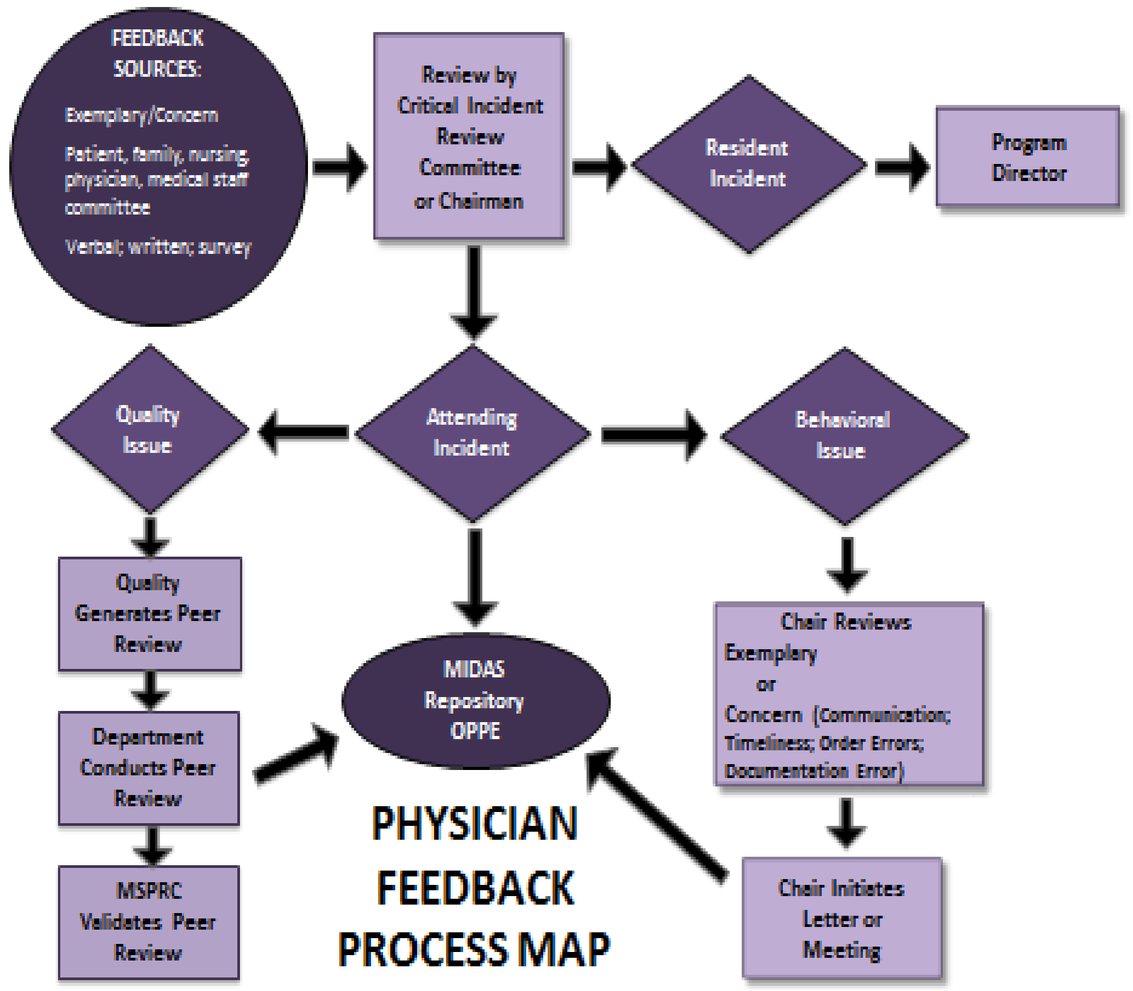
1- Process mapping of current and ideal process

2- Development and piloting of 'Feedback Memos'

3- Exploration of utilizing MIDAS QI software

4- Algorithm and System for documentation of lapses in and exemplars of professionalism

Results

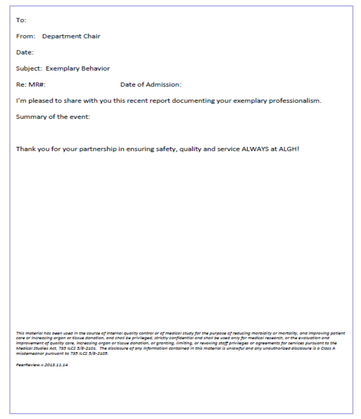


PHYSICIAN FEEDBACK LETTER TEMPLATES

EXEMPLAR

CONCERN

- Timeliness of response
- Documentation concern
- Medication error
- Other concerns



Barriers Encountered/Limitations-

Physician and Department Chair education must be ongoing.

A pilot study is underway.

Resident feedback process is being developed.

Success Factors and Lessons Learned

- Engagement of a working team that included the VPMM/Associate DIO, Director of Quality and Safety and the Director of Medical Education were crucial to success.
- Support and involvement from the C-Suite, Quality leaders, Patient Safety, Patient Experience Leaders .
- Understanding and employing existing Quality Management Tools (MIDAS) was essential to our success.
- Early introduction to, input from and support of the elected Medical Staff leadership was important.

Conclusions

Processes existed that could be used for documenting Physician Professionalism.

Physicians, with few exceptions, were receptive to the feedback letters.

Defining, measuring and improving a culture of Physician Professionalism is challenging, ongoing work which can and should be undertaken.

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Team: Akron General Medical Center **Focus Area: Transitions of Care – Emergency Medicine/Internal Medicine**

I.	Team Charter/Objectives ('needs statement,' project requirements, project assumptions, stakeholders, etc.; Teams should identify members and define responsibility/purpose)	Historically, there has been a perception of unnecessary transfers of patients admitted to the floor from the Emergency Department that required transfer to a critical care unit within 24 hours of admission. The objective of this project is to create a quality driven process of standardizing the transitions of care for patients from the Emergency Department to the inpatient setting. This will improve quality of care and patient safety as well as decrease length of stay by ensuring appropriate placement of patients upon admission.
II.	Project Description	Our project will focus on the transition of care for patients admitted through the ED to a medical floor that require transfer within 24 hours of admission to a critical care unit. The team will conduct a retrospective chart audit to identify factors related to the transfer and develop a possible intervention to reduce the number of transfers to improve the quality of care, increase patient safety and reduce costs by admitting the patient to the appropriate unit. The team will identify appropriate indicators that can be assessed with measurable outcomes within the scope of the 18 month project timeline.
III.	Necessary Resources (staff, finances, etc.)	The team felt nursing representation should be added to the NI IV team to obtain a more global perspective of the transition process. Electronic resources that will enable the team to gather patient transfer information and conduct retrospective chart audit. Resident team members will work with the IRRB for approval of the project and perform the chart audit.
IV.	Measurement/Data Collection Plan (must partner/match with Milestone Markers)	The resident team members conducted a retrospective chart audit January – March 2014 to determine the factors that contributed to the patient being transferred to a critical care unit within 24 hours of being admitted to a Medicine floor. Twenty two charts were manually reviewed to determine admitting diagnosis, reason for transfer, time to transfer and final disposition of the patient.
V.	Communication Plan (may be helpful to draft a flow chart of team members & senior management, both internal & external)	Team meetings were difficult to arrange, but team communication was ensured via email. Meetings took place to inform Department leadership and the C-Suite of the project.
VI.	Accountability (list of team members and who is accountable for what)	Titus Sheers, M.D., Co-Team Leader/IM Program Director/DIO Cheryl Goliath, M.D., Co-Team Leader/Executive Director, Medical Education and Research Larry Emmelhainz, PhD, Chief Quality Officer Ankit Anand, M.D., PGY-3 Internal Medicine Resident Zachary Robinson, M.D., PGY-2 Emergency Medicine

VII.	Potential Challenges (engagement, budget, time, skills gaps, etc)	Identifying transferred patients was difficult because of various record systems within the hospital. The EM resident who started on the team withdrew approximately half-way into the project. A new EM resident had to be identified which took some time. The nursing representation that was added took a position at another hospital and left the project.
VIII.	Markers (project phases, progress checks, schedule, etc.; must partner/match measurement/data collection plan)	Once the focus of the project was identified, it was time consuming finding an electronic resource that could capture the information that was needed to perform the chart audit. At the time the charts were identified, the EM resident on the team withdrew from the project and a new EM resident had to be identified which resulted in a two month delay before the audit could begin.
IX.	Vision Statement/Closing Plan (markers of success by March 2015)	Once the chart audit has been completed to determine the factors involved in the patient transfers from the floor to the critical care units within 24 hours, the project team can identify an appropriate intervention to decrease the number of transfers.
X.	Success Factors	*The most successful component of our work was working together with another Department, specifically, Internal Medicine and Emergency Medicine, two Departments that at times approach issues from a different vantage point.* *Despite early problems with finding a correct reporting mechanism to capture the information needed for the study, we were able to identify a program that produced patient information that previously we had not been able to obtain.* *Reports from residents of unnecessary transfers within 24 hours from admission seemed to be a somewhat pervasive problem. The study found the opposite to be the case and the number of transfers were much lower than expected.*
XI.	Barriers	*The most difficult barrier was finding an electronic mechanism to gather the patient information needed. This process delayed the study.* *Additionally, there were several changes of the team membership which negatively impacted our momentum. New members had to be identified and this delayed the process as well.*
XII.	Lessons Learned	*Schedule **regular** meetings at the beginning of the project for the duration of the Initiative to ensure ongoing communication. Scheduling as items come up for discussion made it extremely difficult to get members together. If a pre-set meeting is scheduled, it can always be cancelled.*

XIII.	Expectations Versus Results	*On a scale of 1 to 10 (with "1" meaning nothing and "10" meaning everything), how much of what you set out to do was your team able to accomplish?* *1 2 3 4 5 6 <u>7</u> 8 9 10*
XIV.	Satisfaction	*On a scale of 1 to 10 (with "1" meaning not at all satisfied and "10" meaning completely satisfied), how satisfied are you with what you were able to accomplish in your NI III work?* *1 2 3 4 5 <u>6</u> 7 8 9 10*
XV.	Project Impact	*Based upon our study, we have communicated to the leadership of each Department and the C-Suite the lower than anticipated transfer rate. There is a related study by nursing in the MICU and our findings have been shared with them as well.*
XVI.	Next Steps	*Now that an electronic mechanism was identified to gather this information, a more longitudinal study could be beneficial. We would like to create a more structured communication tool to solicit the appropriate information so patients are admitted to the correct unit upon admission.*

Floor to Unit Transfers within 24 hours of Admission from the ED

Zachary Robinson, MD; Ankit Anand, MD, Cheryl Goliath, PhD;

Titus Sheers, MD; Larry Emmelhainz, PhD

Akron General Medical Center, Akron, Ohio

Overall Goal/Abstract

Our project focused on transition of care for patients initially admitted through the ED to a medical floor requiring transfer within 24 hours of admission to a critical care unit. We conducted a retrospective chart audit to identify factors related to the transfer. We found that these patients were largely appropriately triaged and that, with only a few exceptions, they had status changes that could not have been anticipated.

Background

We are an approximately 500-bed community hospital with approximately 103,000 ED visits between four ED sites and approximately 25,000 annual admissions. We performed a chart review of all transfers of an admitted patient to an ICU bed during a 3-month period. We attempted to answer several questions, namely whether there was a change in the patient's status, whether this status change could have been anticipated, and whether the initial admission unit was appropriate.

Vision Statement

Once the chart audit has been completed to determine the factors involved in patient transfers from the floor to the critical care units within 24 hours, the project team can identify an appropriate intervention to decrease the number of transfers.

Barriers Encountered/Limitations

- Identifying transferred patients was difficult because of the records system used in our hospital.
- During the study there were several changes to the team membership, and meetings were often difficult to schedule.

Materials/Methods

A chart audit was performed of admissions from 1/1/14 through 3/31/14 to identify patients who were transferred to an ICU within 24 hours of admission. We identified 22 patients who met this criteria. We then manually reviewed these charts to determine admitting diagnosis, reason for transfer, time to transfer, and final disposition of the patient. Based on this data and review of the record, we determined whether the initial placement was appropriate and whether any status change could have been anticipated.

Results

Total transfers	Total admissions	Transfer rate
22	5302	0.41%

Inappropriate/questionable initial placement	6/22 (27%)
Average time to transfer	11:46 hr

Reason for Transfer	
Respiratory decompensation	11 (50%)
Cardiac (NSTEMI, arrhythmia, cardiogenic shock)	7 (32%)
Code Blue	2 (9%)
Alcohol withdrawal	1 (5%)
Persistent bleeding	1 (5%)

Final Disposition	
Home	11 (50%)
Hospice	6 (27%)
SNF/ECF	4 (18%)
LTAC	1 (5%)

Success Factors and Lessons Learned

- Patient decompensation is difficult to predict
- We largely do well with admitting patients to the appropriate level of care
- An interdepartmental team is useful in identifying possible improvements to care

Conclusions

Contrary to resident perceptions, the number of transfers was exceedingly low. In contrast to the literature, none of these patients expired while in the hospital, and half of them were discharged to home. Among these transfers, about 27% were felt to be due to questionable initial placement, however no clear pattern of cause was identified. 50% of the transfers were due to respiratory decompensation, identifying a high-risk group for early decompensation, however without data on the total number of patients admitted for respiratory diagnoses, it is impossible to quantify the risk. In the future we would like to explore standardized handoffs such as I-PASS to help admitting teams anticipate possible status changes.

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Team: Atlantic Health System **Focus Area:** Transitions of Care

I.	Team Charter/Objectives ('needs statement,' project requirements, project assumptions, stakeholders, etc.; Teams should identify members and define responsibility/purpose)	On the Goryeb Children's Hospital-Atlantic Health System's pediatric inpatient unit, a number of admissions arrive on the floor without formal physician to physician hand-off. Pilot data revealed that hand-offs, especially from the pediatric surgical service, were limited. The purpose of the current study was to develop a streamlined method of communication between multiple disciplines and the inpatient pediatric admitting resident to increase hand-off rate.
II.	Project Description	A team comprised of members of the pediatric and general pediatric surgical services will be formed. A new communication tool, a portable telephone to be carried by the admitting pediatric resident 24 hours a day, seven days a week will be introduced. Once the new portable telephone is obtained, instructions, both verbal and written, will be provided to all disciplines that admit to the inpatient unit (i.e., ER, surgical teams, subspecialists and outpatient general pediatricians). Data will be collected for a six-week period examining hand-off rate for pediatric inpatient admissions. After the initial six-week data collection, results will be analyzed and a second PDSA cycle will be performed. Data will be collected for an additional six week period; analyzed and future PDSA cycles will be planned.
III.	Necessary Resources (staff, finances, etc.)	New portable telephone, data collection tool, data analyst
IV.	Measurement/Data Collection Plan (must partner/match with Milestone Markers)	Percent of admissions to the pediatric unit where a formal hand-off occurred, from what service and by what method. Data will be collected over 6 week periods utilizing a PDSA model of intervention
V.	Communication Plan (may be helpful to draft a flow chart of team members & senior management, both internal & external)	All stakeholders in the admission process to the pediatric unit will be in-serviced via verbal and written communication as to the new process of contacting the admitting pediatric residents via the telephone.
VI.	Accountability (list of team members and who is accountable for what)	Dr Michael Pollaro – resident champion of project and responsible for coordinating data collection Dr Alan Meltzer – pediatric program director and faculty champion Dr Eric Lazar – surgical program director and surgical champion responsible for in-servicing the pediatric surgical services Pediatric and Surgical Chief residents to assist in communication of the new process to their respective residents Kiley Alpert – pediatric residency coordinator to provide administrative and IT support
VII.	Potential Challenges (engagement, budget, time, skills gaps, etc.	Buy-in by the surgeons as to the necessity of formal verbal hand-offs as opposed to a post-op note only method of hand-offs
VIII.	Markers (project phases, progress checks, schedule, etc.; must partner/match measurement/data collection plan)	Three phases of project 1. Pilot data collected prior to implementation of phone 2. In-service the medical, surgical and subspecialty faculty as to the new admission phone for hand-offs 3. Collect data for 6 weeks followed by analysis of results 4. Implement changes to process based on data 5. Collect data for 6 weeks followed by analysis of results

IX.	Vision Statement/Closing Plan (markers of success by March 2015)	Increase overall number of hand-offs Eliminate the admission pager which leads to delays in communication Full adoption of the direct line admission phone Enhanced communication to improve patient safety.
X.	Success Factors	The ED had full adoption of the telephone with 100% of admissions having a formal verbal hand-off via the telephone. Although the medical subspecialists did not use the phone to the extent we had desired, the number hand-offs via other methods of communication by the subspecialists reached 100%.
XI.	Barriers	Buy in to the process by non-employed surgical subspecialty faculty.
XII.	Lessons Learned	More frequent meetings with the surgical stakeholders to maintain pressure and focus on the project.
XIII.	Expectations Versus Results	*On a scale of 1 to 10 (with "1" meaning nothing and "10" meaning everything), how much of what you set out to do was your team able to accomplish?* *1 2 3 4 5* ***6*** *7 8 9 10*
XIV.	Satisfaction	*On a scale of 1 to 10 (with "1" meaning not at all satisfied and "10" meaning completely satisfied), how satisfied are you with what you were able to accomplish in your NI III work?* *1 2 3 4 5 6* ***7*** *8 9 10*
XV.	Project Impact	*What changes have you observed in your residency program(s), or at your institution, based upon your work?* 100% of ED and subspecialty admissions now have a formal hand-off.
XVI.	Next Steps	Continue to work on engagement of the surgeons, more specifically the non-employed surgical subspecialist.

How Simple Technology Can Improve Physician to Physician Patient Hand-off

Michael Pollaro DO, Alan Meltzer MD FAAP, Kiley Alpert C-TAGME
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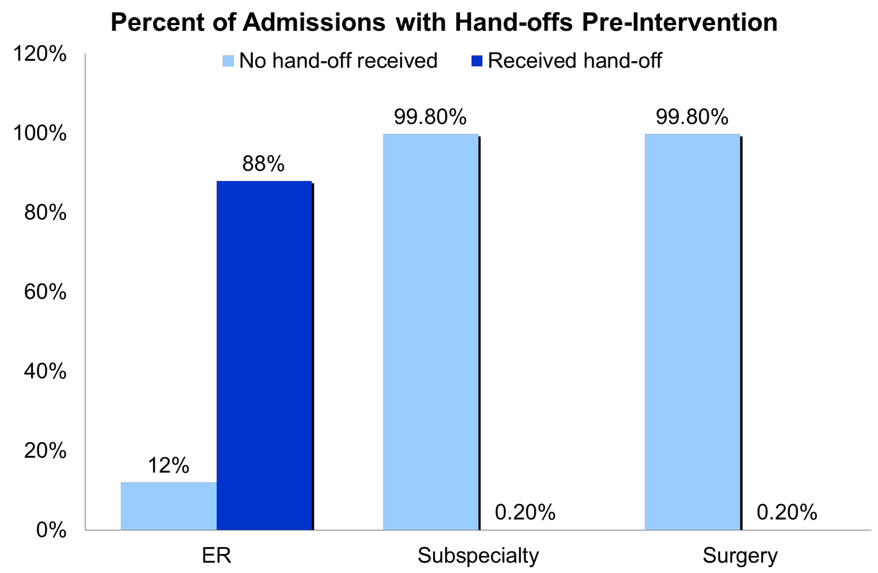
Project Aim

On our institution's pediatric inpatient unit, a number of admissions arrive on the floor without formal physician to physician hand-off. Pilot data revealed that hand-offs, especially from the pediatric surgical service, were limited. The purpose of the current study was to develop a streamlined method of communication between multiple disciplines and the inpatient pediatric admitting resident to increase hand-off rate.

Background

Pilot Data



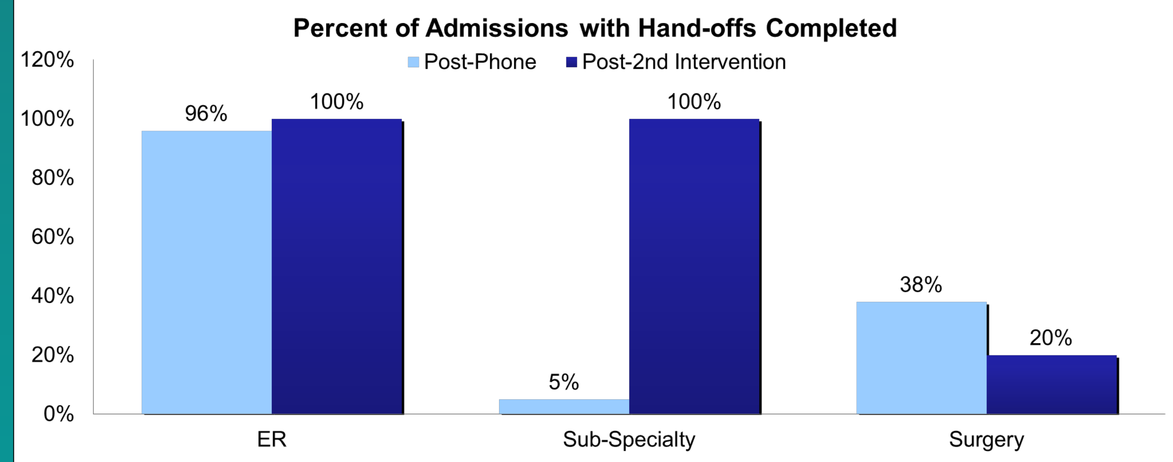
Vision

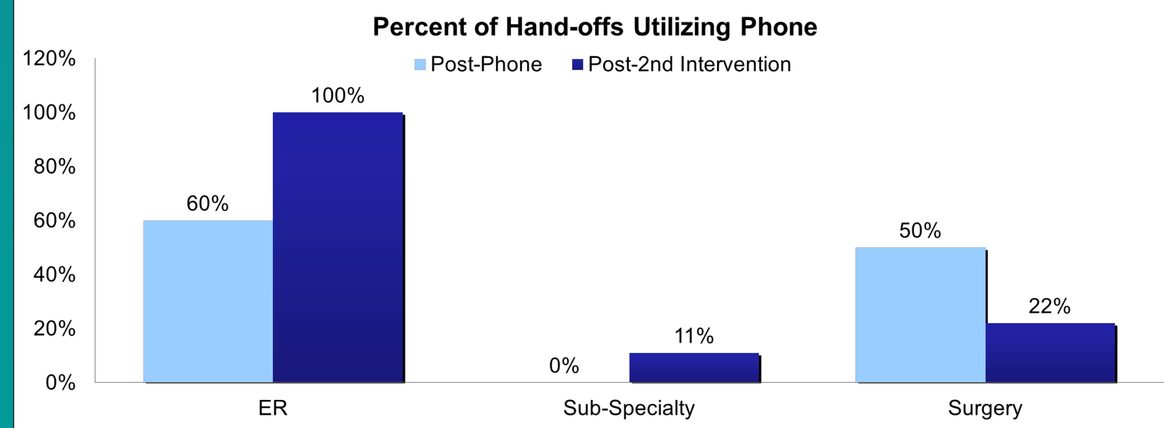
- Increase overall number of hand-offs
- Eliminate the admission pager which leads to delays in communication
- Adopt a direct line admission phone
- Enhance communication to improve patient safety

Methods

A team comprised of members of the pediatric and general pediatric surgical services was formed. A new communication tool was introduced, a portable telephone to be carried by the admitting pediatric resident 24 hours a day, seven days a week. Once the new portable telephone was obtained, instructions, both verbal and written, were provided to all disciplines that admit to the inpatient unit (i.e., ER, surgical teams, subspecialists and outpatient general pediatricians). Data was collected for a six-week period examining hand-off rate for pediatric inpatient admissions. After the initial six-week data collection, results were analyzed and a second intervention, a feedback session with the general pediatric surgical team was performed. Data was then collected for an additional six week period.

Results





Barriers and Limitations

- Adoption of process by all admitting disciplines
- Employed vs. non-employed physician buy-in
- Perceived burden by/on the surgical physicians
- Inability to fully capture all admissions

Conclusions and Future Directions

The literature has shown that there is a paramount importance to proper physician to physician hand-off (Arora & Johnson, 2006; Clark, Sindell, & Koehler, 2011; Kessler et al., 2013). By streamlining the process and ensuring that admitting residents are easily accessible, there should be more encouragement to hand-off patients when transferring or admitting them to the pediatric floor. Our data indicated an improved number of hand-offs from the subspecialists although the use the new phone was limited suggesting a halo effect of the project. The surgical teams however did not adopt the process. Future steps will seek to further engage the surgeons and more specifically the non-employed surgical subspecialists, in the hand-off process .

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Team: Aurora Health Care **Focus Area:** Patient Safety

I.	**Team Charter/Objectives** ('needs statement,' project requirements, project assumptions, stakeholders, etc.; Teams should identify members and define responsibility/purpose)	**AIM**: To pilot an approach/model that integrates and aligns AHC priorities (Quality & Safety) its existing committees/groups (Quality Committee/Council, CPC) and metrics with ACGME requirements (CLER, Common Requirements) **OBJECTIVES** 1. Create a Steering Committee responsible for overall project framing and achievement of project aim and objectives. 2. Design the model to integrate key elements including a. Utilize evidence-based approach b. Address Triple Health Care + AHC, Hospital priorities and Accreditation (ACGME-Common Requirements, Milestones and CLER) requirements 3. Obtain buy in and commitment regarding the model and implementation in additional programs from Resident Council and GMEC 4. Actively engage residents and faculty in 3 programs to pilot the model in Interdisciplinary team approach 5. Disseminate results internally and broadly in peer reviewed scholarly forums. ACTION PLAN SYNOPSIS: To engage resident council (and thereby residents and programs) in culture change focused on Patient Safety and Quality resulting in curriculum standardization that maximizes resident/fellow engagement. Commission the Resident Council members to engage their peer groups and increase awareness of existing measures in place. Charge three teams to implement a residency program specific safety/quality project using systematic process.
II.	**Project Description**	**RESIDENT COUNCIL** The resident council is charged with defining and standardizing methodology by which we engage residents in our system. The council will be engaged in resident driven dissemination of data to all residents and will be added trigger for program specific improvement projects and overall GME system change **NI-IV TEAMS:** Residents/Fellows and faculty from 3 participating programs (FM, Medicine, Ob/Gyn) will be active members their residency's team. Each team will perform a systematic needs assessment to identify potential project foci, identify 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, continuous evaluation based on participant evaluations and care management metrics. Team members will co-author abstract of internal/external dissemination highlighting methodology and key findings to meet, as appropriate, their scholarly project requirements. Each program will utilize proven approaches and tools (e.g., checklists) to address target patient safety and related CLER focal areas (e.g., error reporting, professionalism, transitions in care, quality improvement). Teams will have junior and senior residents, senior faculty, a non-physician health

		professional, a quality/safety/operations resource, and education resource. Active involvement of our senior medical education leaders, patient safety, and chief clinical officers will provide content and process expertise to support project initiatives and align with other CLER focus areas for maximal impact.
III.	**Necessary Resources** (staff, finances, etc.)	1. **Personnel:** Program specific team members, Resident Council, GME C, Academic Affairs and Quality/Safety Leadership in targeted specialty programs, IT/EPIC programmers, consultants as needed. 2. **Educational Resources** aligned with special project (e.g., IHI modules, GME shared noon conference opportunities). 3. **Data:** AHC & Hospital Safety Priorities and Metrics, ACGME Faculty/Resident Data 4. **Travel:** Stipends and time away for team members to attend NI IV meetings 5. **Communication:** Engage Educational & Quality Leaders to assure continuous, multi-method communication strategies are used to disseminate plans and progress throughout the GME programs, quality/safety leaders, and staff/caregivers.
IV.	**Measurement/Data Collection Plan** (must partner/match with Milestone Markers)	• AHC Metrics collected through Quality/Safety Committees, NI IV Project Teams, Triple Aims, etc. Steering Committee will review and evaluate progress. • DIO assessment • ACGME and AHC GME Annual Resident Survey results related to Patient Safety and QI • Perceptions of GMEC, Faculty, Residents and C-Suite
V.	**Communication Plan** (may be helpful to draft a flow chart of team members & senior management, both internal & external)	• Resident Driven Communication – Resident Council members to engage and distribute information discussed to peers at monthly resident program meetings. • NI IV Steering Committee – communicate with C-Suite, Academic Affairs leadership, GMEC, AHC Quality committee members and NI IV Program Charter teams. • NI IV Program Teams – communicate with faculty, other program personnel, clinic staff, etc. goals of NI IV Charter projects and CLER focus areas. • Residents and NI IV Program Teams will communicate results and feedback to the NI IV Steering Committee.
VI.	**Accountability** (list of team members and who is accountable for what)	• **NI IV STEERING COMMITTEE / C-SUITE:** Strategic planning, finance and resources, holding resident council and specialty teams accountable for meeting timelines and completing tasks. • **RESIDENT COUNCIL & THEIR NI IV SUBCOMMITTEE:** Reviewing data from quality/safety metrics and generating strategies for resident buy and accountability for improvement. Screening, identifying required IHI and assuring that modules are completed by all GME trainees. Monitor progress on NI IV 3 program teams and seek to generalize model to other programs. Co-design and teach as appropriate in the shared noon conferences and secure resident/fellow attendance. Responsible for providing updates to/from their residency/fellow programs on quality/safety data and NI IV initiatives related to CLER.

		• **NI IV Program Teams:** Attend regularly scheduled AHC Wide NI IV Program Team Meetings to share best practices, barriers and solution strategies across programs. Individual teams are responsible for identification of QI/Safety project that is aligned with AHC priorities using establishing metrics, CLER and RRC specific requirements for quality and safety y curriculum and scholarly activities. Systematically design, implement and evaluate project impact consistent with their RRC requirements for scholarly
VI.	**Accountability (cont)**	activities. Identify curriculum gaps associated with their project and provide education as appropriate to all program residents/faculty. Present their findings in AHC forums (e.g., Resident Council, GMEC, Scientific Day).
VII.	**Potential Challenges** (engagement, budget, time, skills gaps, etc.)	• Culture change including recognition that quality/safety is truly a team accountability (e.g., willing to question senior faculty) • Residents/Faculty/Caregivers Perceptions: Apparent lack of interest, time, not a priority among other duties, lack of support • Project Management: Multiple moving parts to our model (e.g., Resident council, noon shared conferences, 3 different program teams) may be difficult to track and monitor progress; keep projects aligned with AHC priorities and CLER focus areas. • Limited ability of participants to recognize what you don't know – attribute problems to others (I always wash my hands; recognition that there is a literature on effective quality/safety to drawn upon).
VIII.	**Markers** (project phases, progress checks, schedule, etc.; must partner/match measurement/data collection plan)	• Steering Committee has established a timeline by task grid that was presented to Resident Council for review and revision and then finalized by the AHC NI IV Program Teams. Steering committee and residency council will monitor progress with NI IV/AHC DIO Leader assuming ultimately responsible (i.e., Dr. Stearns). • All teams have been formed per the timeline and will identify specific project foci by January 1, 2013. • Steering Committee will design and circulate drafts of program team evaluation tools for finalization and manage data collection, analysis and reporting. Additional data collection will be tasked to each program as they will utilize established AHC metrics for quality/safety as baseline and post project evaluation.
IX.	**Vision Statement/Closing Plan** (markers of success by March 2015)	At the conclusion of the project, we will have demonstrated the impact of a sustainable 2-component model (Resident Council and Program Specific NI IV Teams) for engaging residents/faculty in quality improvement initiatives, aligned with AHC priorities, CLER and RRC requirements (e.g., curriculum in quality/safety, scholarly activity) to continuously improve our clinical learning environment and assure high quality/safe care for our patients.

X.	**Success Factors** (The most successful component of our work was; We were inspired by…)	**SUCCESS FACTORS PER RESIDENT LEADERS** • Active participation by dedicated Interdisciplinary/interprofessional working groups and providers around specific projects related to quality/safety. Residents report seeing increased provider quality/safety awareness and behavior changes, targeted improvements in patient care, and a "culture change" among residents and staff. • Ongoing, regular meetings and communication with other professionals. • Recognition about just "How terrifying the safety issue is" along with the need and ability to identify projects related to specific problems. • Project(s) selected revolved around a common theme/area so that the work can continue to evolve and benefit patients beyond the duration of any one resident. • Framework and resources at AHC to support scholarship.
XI.	**Barriers** (The largest barrier we encountered was; We worked to overcome this by…)	**BARRIERS PER RESIDENT LEADERS** • Logistics: Getting everyone at same meeting (competing schedules, duty hours). • EMR: Variability in provider EMR training and competence; limited options for modifying EMR; multiple and distinct EMR views impacting communication between providers (e.g., RN, Physicians, Pharmacists); difficulty obtaining/accessing EMR data for PDSA rapid cycle improvement. • Communication: Recognition that communication between providers and staff essential in change process; quickly revised strategy to routinely hold interdisciplinary meetings • Accountability: Limited accountability if providers choose not to participate; importance of sustained faculty champion(s)
XII.	**Lessons Learned** (The single most important piece of advice to provide another team embarking on a similar initiative would be…)	**LESSONS LEARNER PER RESIDENT LEADERS** • Begin change with yourself; look only at what you can change (focus on the system process); pilot work with a small engaged group (those with vested interest) before full roll out. • Have an open mind, persistence and patience when working on an improvement project: o Must understand the difficulties that each caregiver may see in certain situations and how different the approach might be; o Seek to incorporate all perspectives to yield collaborative final product as only then will the idea can translate into something that can be applied in the real life patient care situations; o Understand that assigning team member roles help in the achieving final goals; and o Be persistent: do not give up, no matter how daunting the project may seem. • Leadership & Participation: Have a leader and hold frequent, regularly scheduled meetings to ensure meetings yield results and goals are met. o Program director and associate faculty vital to project success. o Must have all key players, departments, disciplines actively involved and recognized for their involvement to ensure continued dedication. • Never doubt that a small group of *thoughtful* committed citizens can change the world; indeed, it's the only thing that ever has." - *Margaret Mead*
XIII.	Expectations Versus Results	*On a scale of 1 to 10 (with "1" meaning nothing and "10" meaning everything), how much of what you set out to do was your team able to accomplish?*

		1 2 3 4 5 6 **7** *8 9 10*
XIV.	Satisfaction	*On a scale of 1 to 10 (with "1" meaning not at all satisfied and "10" meaning completely satisfied), how satisfied are you with what you were able to accomplish in your NI III (presume mean NI IV) work?* *1 2 3 4 5* **6** *7 8 9 10*
XV.	Project Impact	*What changes have you observed in your residency program(s), or at your institution, based upon your work?* • L&D Checklists: Tremendous change in the culture and relationships among L&D caregivers and providers. Improvement in quality of care via checklists and associated smart phrases to standardize care. • Medication Reconciliation: Increased awareness from all providers regarding importance of having correct medical lists and importance of med-rec work flow has resulted in improved accuracy. Emphasis on medication reconciliation in our clinics by MA/residents and MAs is more uniform: each medication is reviewed compared to the faster alternative of asking "any changes to your medication list." We have carved out specific times to present at monthly resident/faculty meetings and all clinic meetings in order to reinforce the progress that we have made. • 30-Day Readmission: Awareness of the issue/changes in the discharge process. Earlier mobilization of resources in challenging patients. Increased ability of residents to identify patients at risk.
XVI.	Next Steps	*Describe next steps for your project, including plans for sustaining and spreading the changes made.* • L&D CHECKLISTS: To continue applications and improvement in current patient safety projects to standardize care and improve outcomes by: (1) Educating new upcoming residents and staff into the work flow; (2) Involving medical students into our daily workflow, safety groups, and projects. • **MEDICATION RECONCILIATION**: (1) Continue to reinforce steps taken/education already provided through Med Rec discussions at each clinic team meeting. (2) Finalize a "staffing list" for use by attending physicians to ensure that medications and other patient safety metrics are reviewed; (3) Expand our team to include current PGY1 so that we have continuity moving forward next year. • **30-DAY READMISSION**: (1) Complete chart audit and calibrate risk assessment tools to increase accuracy (LACE) followed by implementation of evidence-based interventions in identified high risk patients; (2) Continue early and on-going engagement of our multi-disciplinary work group including program directors/faculty while adding junior physicians (interns, medical students) to help carry on project goals; (3) Reassess project goals to assure alignment with health care system goals/processes.

Creating a Culture of Quality & Safety at Aurora Health Care

Loras Even DO, Lilia Sen MD, Indervir Mundh MD, Deborah Simpson, PhD, Tanya Martinez, Jeffrey A. Stearns, MD, Andy Anderson, MD
Aurora Health Care - Milwaukee, Wisconsin

Overall Goal/Abstract

AIM: To pilot an approach/model that integrates and aligns AHC priorities (Quality & Safety) its existing committees/groups (Quality Committee/Council, CPC) and metrics with ACGME requirements (CLER, Common Requirements)

OBJECTIVES

1. Create a Steering Committee responsible for overall project framing and achievement of project aim and objectives.
2. Design the model to integrate key elements including
   a. Utilize evidence-based approach
   b. Address Triple Health Care + AHC, Hospital priorities and Accreditation (ACGME-Common Requirements, Milestones and CLER) requirements
3. Obtain buy in and commitment regarding the model and implementation in additional programs from Resident Council and GMEC
4. Actively engage residents and faculty in 3 programs to pilot the model in Interdisciplinary team approach
5. Disseminate results internally and broadly in peer reviewed scholarly forums.

Background: Multi-Pronged Strategy

THREE RESIDENCY PROGRAM QUALITY/SAFETY PROJECTS

- Family Medicine, Internal Medicine, Ob/Gyn
- Create a work team that includes: residents (senior as leaders; juniors for sustainability) , a senior faculty member in the program, a non-physician health professional, a quality/safety/operations resource, and education resource
- Appoint resident leader to serve on NI-IV Steering Committee and represent program at NI-IV meetings/activities
- Apply systematic PDSA process and report findings

ENGAGE RESIDENCY COUNCIL

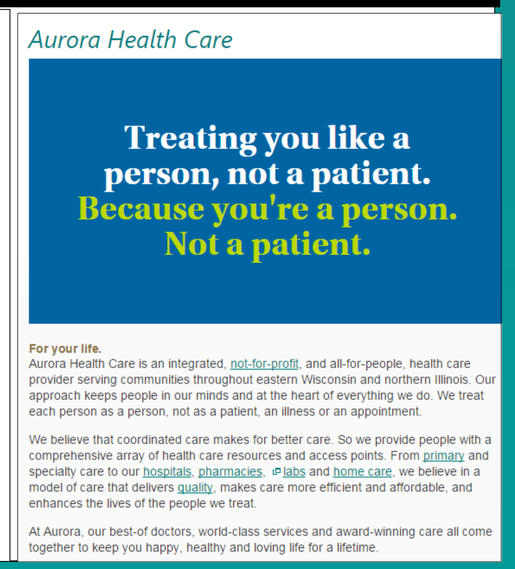
•Focus on curriculum standardization across programs to maximizes resident/fellow engagement
•RC members communicate and engage residents & programs in culture change focused on Patient Safety and Quality
•RC Members serve as triggers and accountable for program specific improvement projects and overall GME system change

Vision Statement

VISION:
Our residency programs will be models for a QUALITY AND SAFETY CULTURE that aligns with our health care system priorities to place the patient's health and well being first and foremost.

GUIDING PRINCIPLES

- Educational initiatives will be focus on:
  - Quality and safety principles
  - Deliberate Practice applying principles to address quality/safety gaps
- Quality and Safety projects will be data driven, aligned with patient needs and health care system priorities, and sustainable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Materials/Methods

THREE RESIDENCY PROGRAM QUALITY/SAFETY PROJECTS

1. Family Medicine – Medication Reconciliation in Primary Care Clinics

- Fishbone analysis to identity and prioritize contributing factors to errors in Med Rec
- Focus on accurate utilization of EHR/EPIC features by all providers
- Creation of Med Rec Provider Workflow
- (Re)Training and Pre-Post Quiz re: EPIC and Workflow

2. Internal Medicine - 30 day Readmissions

- Literature review to identify and select readmission risk tool (LACE): RCA tool for readmitted patients ; Patient Perspective Questionnaire (PPQ)
- Establish Workflow, develop training materials, training for team members
- Mid-project survey regarding tool utilization and perception of impact + chart audit

3. Ob/Gyn – Operative Checklists in L&D

- Literature review to identify and select checklists associated with quality care gaps
- Delineate team member roles and workflow
- Training faculty, residents, and students

RESIDENCY COUNCIL

- Define Residency Council roles related to Quality/Safety
- Curriculum: Review IHI Modules to identify core requirements for all incoming residents
  - Recommend Shared Noon Conferences (a common core curriculum session for all residents/fellows) be structured to require application of principles

Results

THREE RESIDENCY PROGRAM QUALITY/SAFETY PROJECTS

1. All programs have completed ≥ 1 PDSA project cycle
2. All teams have disseminated results: 2 Local Posters; 2 State/National Platforms ; 9 State/National Poster; 2 AIAMC "Poster Slam" Awards Platform presentations

RESIDENCY COUNCIL

1. Established a Charter with roles/responsibilities for Q&S – approved by GMEC
2. GMEC approved Residency Council recommended requirement: Residents and faculty complete 5 IHI modules
3. Co-sponsor GMEC wide Shared Noon Conference – using Hand Hygiene as required quality/safety application project; RC reps are accountable for program participation

Success Factors & Lessons Learned

SUCCESS FACTORS

- **RECOGNITION** "How terrifying the safety issue is" and the ability to identify projects related to specific problems in our field of work.
- **TEAMWORK:** Active participation and involvement by dedicated interprofessional providers on all projects (medical students, residents, nurses, pharmacists)
- **STRUCTURE:** Ongoing, regular meetings and communication with other professionals
- **PROJECT(S)** selection around a common theme/area so that the work can continue to evolve and benefit patients beyond the duration of any one resident

LESSONS LEARNED

- Begin change with yourself; look only at what you can change (focus on the system/process); pilot work with a small engaged group before full roll out
- Have an open mind, combine patience and persistence
- Leadership & Participation: Have a leader and hold frequent, regularly scheduled meetings to ensure goals are met and meetings yield results.
- Must have all key players, departments, disciplines actively involved and recognized

Barriers Encountered/Limitations

- **LOGISTICS:** Getting everyone at same meeting (competing schedules, duty hours)
- **EMR:** Variability in provider EMR training and competence; limited options for modifying EMR; multiple and distinct EMR views/communication by provider (e.g., RN, Physicians, Pharmacists); difficulty obtaining/accessing EMR data for PDSA rapid cycle improvement
- **COMMUNICATION:** Recognition that communication between providers and staff essential in change process; quickly revised strategy to routinely hold interdisciplinary meetings
- **ACCOUNTABILITY:** Limited accountability if providers choose not to participate; importance of sustained faculty champion(s)
- **CULTURE CHANGE:** Residents & Faculty now aware of requirements for quality/safety but engagement in teams/committees to initiate quality/safety an area for additional work

Conclusions & Next Steps

THREE RESIDENCY PROGRAM QUALITY/SAFETY PROJECTS

1. **Family Medicine~Medication Reconciliation**
   - Increased awareness from all providers regarding importance of having correct medical lists and importance of med-rec work flow has resulted in improved accuracy.
   - NEXT: Continue current safety projects to standardize care/improve outcomes by:
     - Reinforce workflow through Med Rec discussions at each clinic team meeting
     - Finalize a "staffing list" for use by attending physicians to ensure that medications and other patient safety metrics are reviewed
     - Expand team to include current PGY1 → continuity moving forward next year
2. **Medicine~30-Day Readmission:**
   - Awareness of the issue/changes in the discharge process/earlier mobilization of resources in challenging patients/increased ability of residents to identify patients at risk
   - NEXT: Continue readmission focus shifting to evidence driven interventions to ↓ readmits
     - Complete chart audit and calibrate risk assessment tools to increase accuracy (LACE)
     - Implement interventions in identified high risk patients;
     - Continue early and on-going multi-disciplinary work group including program directors/faculty and add junior physicians (interns, medical students)
     - Reassess project goals to assure continued alignment with health care system goals
3. **Ob/GYN ~L&D Checklists:**
   - Tremendous change in the culture and relationships among L&D caregiver & providers
   - Improved care quality via checklists & smart phrases created to standardize care
   - NEXT: Continue current safety projects to standardize care/improve outcomes by
     - Educate new upcoming residents and staff into the work flow
     - Involve medical students into our daily workflow, safety groups, and projects.

RESIDENCY COUNCIL

- NEXT: Sustain current roles and responsibilities as leadership transitions
  - Revise charter and seek protected time for resident Q/S leadership roles
  - IHI Curriculum and shared noon conference as forum for application Q/S principles
  - Support NI-V initiative

ALL NI-IV: Internal /External Dissemination of our improving care "success stories"

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Team: Bassett Medical Center Focus Area: Transitions in Care

I.	Team Charter/Objectives ('needs statement,' project requirements, project assumptions, stakeholders, etc.; Teams should identify members and define responsibility/purpose)	*Our goal was to develop a standardized hand-off tool within the electronic medical record for the medical and surgical residency hospital teams. Prior to the project, each of the residency teams had handoff tools that were not HIPAA compliant, that existed outside of the medical record, that were not retrievable and available for quality Improvement, and that were not available to other members of the hospital care teams. We convened a Steering Committee composed of senior administrative leadership in QI/Safety, IT, and Medical Education in order to support the residents and program directors in development of standardized hand off tools to be contained in the EMR. The residents and program directors were the front line developers of the tools and the Steering Committee provided support.*
II.	Project Description	*The Steering Committee met monthly. The residents in Medicine and Surgery met between meetings to develop the tools, using rapid cycle improvement techniques to modify the handoff tools. The resident and program directors met monthly with the Steering Committee with progress reports and requested support where needed.*
III.	Necessary Resources (staff, finances, etc.)	*IT leadership was the most critical support, given the necessity of working with the Epic software.*
IV.	Measurement/Data Collection Plan (must partner/match with Milestone Markers)	*After the tool was developed, the plan was to measure adherence with its use by the residents and its use by faculty and residents as a teaching tool. Secondary goals were to measure the satisfaction with the handoff tool as a communication method by residents and other members of the care teams.*
V.	Communication Plan (may be helpful to draft a flow chart of team members & senior management, both internal & external)	*Monthly or bimonthly meetings of the Steering Committee with meetings by the residents between. Effort was expected by both Medicine and Surgery teams to develop a tool that worked for them and to incorporate parts of the other's.*
VI.	Accountability (list of team members and who is accountable for what)	*Residents and their program directors would report at each Steering committee meeting their progress. Administrative and educational leaders would provide support wherever needed.*

VII.	Potential Challenges (engagement, budget, time, skills gaps, etc)	*Time is always a concern, for all members of the team. The residents found it difficult to meet with members of the other resident team with any frequency.* *Perhaps the biggest challenge was the difference in needs and expectations that faced the Medicine and Surgery resident teams. The handoffs of the Medicine team were all for primary inpatient responsibility, while the handoffs for the Surgery team were both primary inpatient responsibility and consultation – the electronic record made this latter group more difficult to track. The EHR also presented other technical barriers that were not easy to overcome.*
VIII.	Markers (project phases, progress checks, schedule, etc.; must partner/match measurement/data collection plan)	*We set timeline goals in the beginning of the project that had to be modified because of the inability of Epic to modify their software except in a yearly "version" update for some important requirements. We therefore had to extend our timeline beyond the original plan.*
IX.	Vision Statement/Closing Plan (markers of success by March 2015)	*In March of 2015, the Medicine and Surgery residents will have standardized handoff tools that are part of the electronic health record and it will be the expectation that these are used exclusively as the written communication tool at handoff. These will be supplemented by a verbal handoff. The faculty and program directors in each program will be aware of the handoff tools. There will be faculty development around the learning of high quality handoffs.*
X.	Success Factors	*The most successful component of our work was the development and implementation of the tools, though still somewhat clumsy for technical reasons and still without 100% adherence.* *We were inspired by the hard work of the residents in the development process.*
XI.	Barriers	*The largest barrier we encountered was the inability of Epic to accommodate the needs of the residents in several areas that would have made the use of the tools less clumsy.* *We will overcome most of these problems with the next iteration of Epic and have provided feedback to them through our Chief Medical Information Officer, who serves on the Steering Committee.*

XII.	Lessons Learned	*The single most important piece of advice to provide another team embarking on a similar initiative would be to spend enough time in the beginning to understand what the needs and requirements are of your care teams that will be developing the transition tools. We did so, but it was an ongoing process and collided with our IT tools in several areas.*
XIII.	Expectations Versus Results	*On a scale of 1 to 10 (with "1" meaning nothing and "10" meaning everything), how much of what you set out to do was your team able to accomplish?* *1 2 3 4 5 6 7 8 9 10*
XIV.	Satisfaction	*On a scale of 1 to 10 (with "1" meaning not at all satisfied and "10" meaning completely satisfied), how satisfied are you with what you were able to accomplish in your NI III work?* *1 2 3 4 5 6 7 8 9 10*
XV.	Project Impact	*What changes have you observed in your residency program(s), or at your institution, based upon your work?* *The culture is more attuned to transitions of care and the faculty is starting to see that this is an area where they need to assess the residents' competence.*
XVI.	Next Steps	*Describe next steps for your project, including plans for sustaining and spreading the changes made.* 1. *We will assess post implementation satisfaction with the handoff tool as a communication device among the residents and among the nurses, who have started to use it.* 2. *We will modify it when the institution rolls out the next version of Epic.* 3. *We will create a faculty development program around transitions in order to use these tools and the verbal handoff as educational events* 4. *After collecting data to support user satisfaction, we will bring non-resident hospital teams and clinic teams into the discussion to spread the use of standardized, EHR based handoff tools. At some point, we will turn the work of this Steering Committee over to the Medical Staff leadership.*

A Standardized EHR Handoff Tool for Medicine and Surgery

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Overall Goal/Abstract

It is well known that transitions in care can create risk for patient safety and quality care. It is also widely accepted that standardized tools for handoffs of patient care decrease the opportunity for risk. Bassett Medical Center has not had a standardized tool for handoffs in the hospital setting. Administrative and GME leadership were seeking such an instrument. The Joint Commission and the ACGME are encouraging hospitals and GME programs to pursue standardized handoff tools. Our goal was to gather educational and hospital leadership, along with resident leaders in Quality and Safety from Medicine and Surgery, and to create a standardized tool for handoffs in the Medicine and Surgery resident hospital teams.

Background

Bassett Medical Center began using the Epic EHR in 2012, with full deployment in both inpatient and outpatient areas in December 2013. Prior to that time, both Medicine and Surgery residents used a (different) Word-based handoff tool that was not part of the EHR, variably used in a printed form, not HIPAA compliant, and augmented by a verbal sign out.

This project to introduce an Epic-based, standardized electronic handoff tool in both Medicine and Surgery residency programs was designed as an iterative quality improvement project.

In the fall of 2013, we assembled a steering committee, chaired by the DIO, and composed of resident leaders, program directors , the COO and senior leadership administrators in Quality and Safety and IT. The group met monthly with progress reports from the resident work groups, which were under the direction of their respective program directors, and whose charter was to develop standardized handoff tools for transfer within the respective residency teams (day-night, night-day).

Vision Statement

Our vision was to see a standardized handoff tool for the Medicine and Surgery resident teams. Our hope was that this would provide improved, consistent transitions of hospital care and would be a tool which could be transferred to other clinical groups in the hospital.

Materials/Methods

1. Workgroups within the residencies created and modified handoff tools, using PDSA techniques.

2. Monthly or bimonthly meetings of the Steering Committee with the residents and program directors provided incentive and administrative support.

3. The Medicine residency workgroup created a resident survey pre and post implementation, assessing the value of the sign out tool

4. Adherence to use of the sign out tool was measured by the Medicine residents

Results (data gathered both quant & qual.)

An audit of medical inpatient charts showed 100% adherence by the Medicine residents in the use of EHR for sign out. 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 sign out was an effective communication device went from 58% pre EHR handoff tool to 83% post
Resident surveys revealed a feeling that sign out was more thorough, more accurate, and better organized after implementation of the handoff tool

Success Factors and Lessons Learned(Discussion)

The alignment of goals with the institution was critical. Inclusion of the COO and PI/IT leadership in the Steering Committee made several hurdles easier to overcome. One of these was a misconception by some of the faculty that having sign out in the EHR was a legal liability.

Adherence with use of the tool by the medical and surgical residents was a success. We are also hopeful that their enthusiasm for the sign out tool and recognition of improved communication will cause it to be embraced by other services.

Barriers Encountered/Limitations-

Our initial plan was that the Housestaff Quality Council would oversee this project. This did not happen and was a missed opportunity.

EHR (Epic) modifications are slower and less nimble than they might be. There is an awkward interface that promises to be corrected in the next version.

The Medicine surveys could have been offered to Surgery.

The initial pushback from faculty has lessened and we believe the hospitalists are ready to embrace the handoff tool.

Conclusions

The development of an EHR-based handoff tool at BMC has been a successful project that demonstrates the importance of goal alignment and teamwork. There is more to be done to expand this beyond the residencies.

Team: Baylor University Medical Center GME **Focus Area:** Patient Safety

I.	Team Charter/Objectives ('needs statement,' project requirements, project assumptions, stakeholders, etc.; Teams should identify members and define responsibility/purpose)	This initiative is two-fold: 1) to assess the Internal Medicine Trainee's comfort level and confidence in various Code Blue scenarios before and after educational interventions including didactic sessions and simulation training, mock codes, dialogue and role play; and 2) to assess the impact of simulation training on the survival rate from code event to discharge for patients undergoing resuscitative efforts. The educational interventions have been determined to be a necessary addition to the Internal Medicine Residency Curriculum. Incorporating simulation training and mechanical and cognitive practices into the Code Blue educational training of the IM residents is essential to ensure ongoing cognitive analysis of resuscitative events and muscle memory of skills required in resuscitation. It is hypothesized that these simulation efforts and interactive educational sessions will allow the trainees to gain the confidence and experience to better analyze and manage resuscitation events, therefore increasing the post-code survival to discharge metric at BUMC. Team members include William L. Sutker, MD, DIO and Chief Patient Safety officer, Cristie Columbus, MD, Assistant Director, GME, Jennifer Duewall, MD, Associate Program Director, Internal Medicine, Adam Mora, MD, Critical Care faculty, Bijas Benjamin, MD, IM Resident Champion, and the internal medicine residents at BUMC.
II.	Project Description	This project assesses the impact on simulation training for Code Blue Teams on survival to discharge compared with historical and national data utilizing monthly simulation and educational sessions with the internal medicine resident Code Blue teams using a high fidelity simulation mannequin. Rapid response team nurses, respiratory therapists, other ancillary staff, and physician faculty will participate with the residents in simulated code situations, perform ongoing real-time assessments, provide support and education to the resident code teams in resuscitative techniques including intubation, rhythm recognition, identification of underlying causes of cardiorespiratory arrest, defibrillation, cardioversion, and pharmaceutical intervention. Trainees are required to obtain and maintain Basic and Advanced Life Support Certification throughout their training. The objectives of the simulation sessions include: timely delegation of roles, effective communication, familiarization with code supplies, recognition of rhythm abnormalities and underlying causes of cardiorespiratory arrest, proper use of equipment and administration of treatment.
III.	Necessary Resources (staff, finances, etc.)	Resources needed for this project include simulation facilities and simulation equipment, resuscitative equipment and supplies, instructors to teach the didactic sessions and the simulation scenarios, and nursing and ancillary staff to participate as part of the code blue team.
IV.	Measurement/Data Collection Plan (must partner/match with Milestone Markers)	Data gathered during the exercises assess both technical and non-technical skills, such as measuring CPR adequacy, the timing of medications, ventilation and intubation skills, and leadership and communication. Feedback on effectiveness of resuscitative efforts and leadership/communication skills will be provided to the residents by faculty in a debriefing session post simulation on observations during the session. Resident comfort levels with resuscitative algorithms and code situations will be assessed by pre and post education survey responses. Satisfactory performance will be linked to milestone performance/graduated levels of responsibility as intern's progress into

		residency and assumption of role as leader of the Code Team.
V.	Communication Plan (may be helpful to draft a flow chart of team members & senior management, both internal & external)	Project was communicated to program director, IM residency, Dr. Michael Emmett. Dr. Benjamin and Duewall communicated with the IM residents at didactic conference and by email apprising the residents of the project and the required code simulation educational sessions on a monthly basis. Dr. Duewall schedules the sessions, coordinates faculty support, and communicates the scheduled sessions to the residents.
VI.	Accountability (list of team members and who is accountable for what)	Cristie Columbus, MD – project design and oversight; assessment of survey results Emma Herio, RN – data collection and reporting Bijas Benjamin, MD – Internal Medicine resident champion; assistance with project design; survey administrator Jennifer Duewall, MD, Adam Mora, MD, Cristie Columbus, MD, physician faculty BUMC Administration/GMEC – William L. Sutker, MD – Administrative Support Program Director and Chief of Department of Internal Medicine – Michael Emmett, MD – Administrative Support Kim Graham, RN – Supervisor, Rapid Response Team, nurse faculty
VII.	Potential Challenges (engagement, budget, time, skills gaps, etc)	Potential Challenges include accuracy of data collection through the current EHR system verses the paper-based patient chart, communication including disclosure of adverse events, standardization of Code Blue simulation training, engagement of all physicians and nursing staff that are part of the code blue process.
VIII.	Markers (project phases, progress checks, schedule, etc.; must partner/match measurement/data collection plan)	Project Phases for this initiative include: Phase 1 includes a resident survey on perceptions of their previous code blue experience, prior training, and comfort level with resuscitation scenarios as relates to knowledge, team management, and difficult situations - completed 9/2013. Phase 2 includes implementation of educational experiences including simulations, mock codes and didactic sessions to improve knowledge and experience with unexpected code situations and complications - didactic session 9/2013; monthly mock code simulation sessions in simulation lab initiated 10/2013; codes moved in-situ to ICU involving ICU nurses/respiratory therapists/medical students 5/2014; to medical-surgical floors involving ICU nurses/nursing students/respiratory therapists 6/2014 - repeat sessions in simulation lab 6/2014 for new interns, ongoing in-situ monthly multidisciplinary training-most recent session 7/21/14. Phase 3 will include post surveys to evaluate resident comfort levels with resuscitative efforts, knowledge, communication and leadership abilities; and assess post-code survival to discharge outcomes, compared with historical and national averages - post-training surveys administered 5/2014; data analysis underway; to date comparative immediate post-code survival and survival to discharge data collected; analysis beginning 8/2014. It is anticipated this project will result in ongoing, continuous monthly interdisciplinary education for all trainees and code team members, expansion of process/model to other programs, floors and Baylor Health Care System facilities, poster presentations at local, state and/or national levels, and potentially the implementation of the model to other academic facilities throughout the nation. Anticipated submission of pre- and post-simulation training survey results to the Society of Critical Care

		Medicine's annual meeting.
IX.	Vision Statement/Closing Plan (markers of success by March 2015)	Vision Statement/Closing Plan – Utilization of simulation training in code situations will 1) Enhance patient safety by increasing post code survival to discharge statistics as compared with historical and national data 2) Increase IM resident resuscitation teams' comfort and confidence levels in various scenarios 3) Foster interdisciplinary teamwork and communication 4) Provide an innovative model to other training programs
X.	Success Factors	*The most successful components of our work were* 1. *Comfort level of residents to lead codes* 2. *Improved post code survival* *We were inspired by the cooperation and participation of multi-disciplinary teams.*
XI.	Barriers	*The largest barrier we encountered was scheduling mock codes in the ICU and floors in a busy hospital. We worked to overcome this by working with room control to find empty rooms and with clinical managers and nursing leadership to allow the mock codes.*
XII.	Lessons Learned	*The single most important piece of advice to provide another team embarking on a similar initiative would be to write the code scenarios before the project begins. It is important to continue to involve and train multi-disciplinary teams rather than just the residents.*
XIII.	Expectations Versus Results	*On a scale of 1 to 10 (with "1" meaning nothing and "10" meaning everything), how much of what you set out to do was your team able to accomplish?* *1 2 3 4 5 6 7 8 9 10*
XIV.	Satisfaction	*On a scale of 1 to 10 (with "1" meaning not at all satisfied and "10" meaning completely satisfied), how satisfied are you with what you were able to accomplish in your NI IV work?* *1 2 3 4 5 6 7 8 9 10*
XV.	Project Impact	*What changes have you observed in your residency program(s), or at your institution, based upon your work?* *More comfort leading codes* *More organization to the code team*
XVI.	Next Steps	*Describe next steps for your project, including plans for sustaining and spreading the changes made.* *Continue to roll out more multi-disciplinary teams.*

Resident Training in Code Blue Execution in a Simulation Lab Improves Immediate Post-Code Survival

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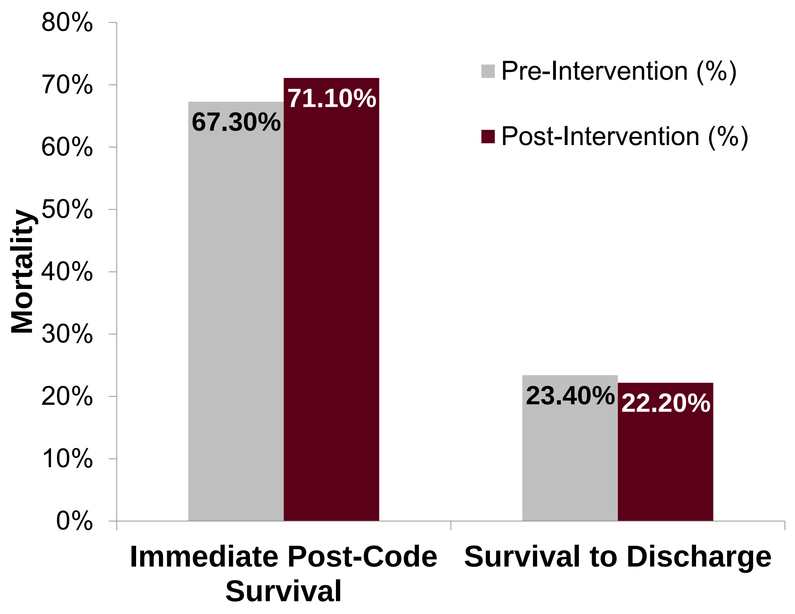
Abstract

Internal medicine residents at teaching institutions often lead emergency resuscitation attempts ("code blues") without formal instruction in the practical elements of leading and executing a code blue in the hospital setting. Simulation training has been shown to improve resident comfort but mortality benefit has been established only in the pediatric population[1,2]. We implemented a simulation-based code blue training program with a 3G SimMan at Baylor University Medical Center involving 21 internal medicine residents over a 10-month period. Comparison to a 12-month control period revealed a trend towards increased immediate post-code survival that did not translate to survival to discharge. Increased withdrawal of life-sustaining care was also noted. Our results indicate that simulation-based training can improve mortality in the adult population.

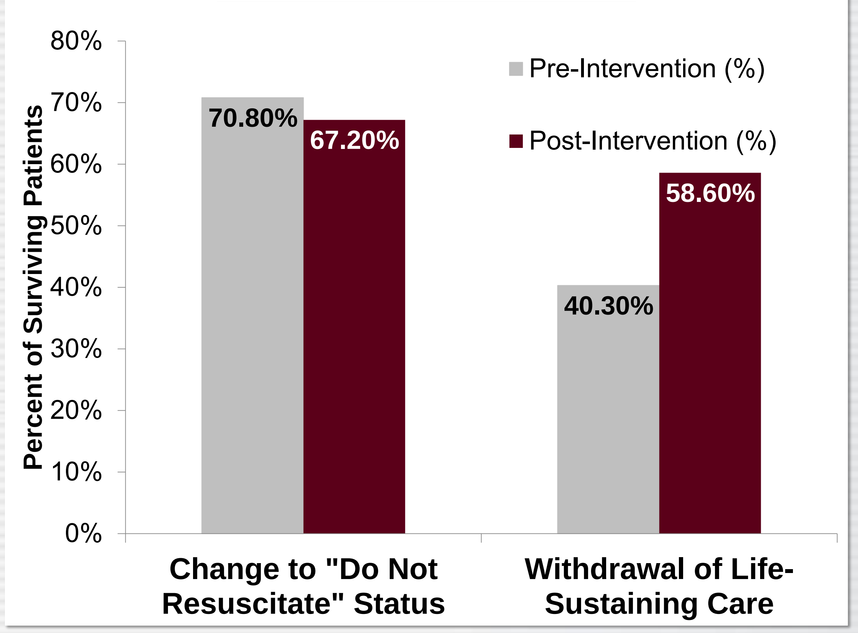
Methods

Internal medicine residents at Baylor University Medical Center who respond to all inpatient code blues were trained for a 10-month period in a simulation lab on a 3G version SimMan. Residents were given lectures outlining roles/responsibilities and exposed to progressively more challenging code scenarios in which ACLS was implemented. Internal medicine and critical care faculty provided critical feedback after each session with an emphasis on rapid EKG rhythm interpretation, implementation of ACLS, and team leadership skills. An internal review of Baylor University Medical Center's code blue data was conducted comparing code-related outcomes during the intervention period with a 12-month historical control. Primary outcomes measured were immediate post-code survival and survival to discharge. Secondary outcomes measured included post-code change to "do not resuscitate" status and post-code withdrawal of life-sustaining care.

Primary Analysis



Secondary Analysis



Results

There were a total of 287 emergency resuscitation attempts during the 22-month study period. There were 107 codes (8.9 per month) during the control period and 180 codes (16.4 per month) during the intervention period. No statistical significance was noted between the control and intervention groups with respect to age, gender, race, number of codes at night, or number of weekend codes. The hospital census was noted to be stable during the entire 22-month study period. The Mortality Probability Model II (MPM II), a tool that estimates risk of death during a hospitalization using 15 variables present at admission, was calculated for every patient in the study. The mean MPM II scores for the control and intervention periods were .323 and .343 respectively (p-value .460)[3].

In the primary analysis, there was *a trend towards increased immediate post-code survival in the intervention cohort. Immediate post-code survival occurred in 72 patients (67.3%) in the control group versus 128 (71.1%) in the intervention group (p-value .496).* This trend did not translate to increased survival to discharge, which occurred in 25 patients (23.4%) in the control group and 40 patients (22.2%) in the intervention group (p-value .823). The secondary analysis revealed *a significant increase (p-value .013) in the number of patients in whom life-sustaining care was withdrawn after successful resuscitation* between the control group (29 patients or 40.3%) and the intervention group (75 patients or 58.6%). No difference was found in the number of patients who changed their code status to "do not resuscitate" after successful resuscitation (p-value .594).

Discussion

Formal simulation-based code training of internal medicine residents with a 3G SimMan may increase immediate post-code survival of adult inpatients. The improvement in our study was not statistically significant, possibly due to insufficient power. No improvement was seen in survival to discharge, though the rates seen in both groups are in the top decile of national hospitals and may reflect the ceiling for adult resuscitation mortality outcomes[4]. The statistically significant increase in post-code withdrawal of life-sustaining care may reflect increased resident comfort in discussing end-of-life issues with patients' family members. This is supported by resident response to a pre- and post-intervention survey that showed increased comfort discussing palliative care after executing a code blue[5]. Potential weaknesses of our study include insufficient power, lack of measured resuscitation-centered endpoints, no simulation training of ancillary staff, and observational bias.

Future Direction

- Resuscitation simulation on hospital floors/ICUs to better approximate true code setting
- Observation of in-hospital code blue attempts in order to assess adherence to AHA resuscitation guidelines
- Extension of simulation training to ancillary staff

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Team: Baystate Health **Focus Area:** Patient Safety

I.	Team Charter/Objectives ('needs statement,' project requirements, project assumptions, stakeholders, etc.; Teams should identify members and define responsibility/purpose)	*Members: Heather Z. Sankey, MD (team leader), Reham Shaaban, DO, Aubrey Rauktys, MD, Satoko Igarashi, MD; Resident Quality Council members* *The Resident Quality Council identified a persistent problem with being able to quickly and efficiently identify the right person to contact when obtaining a consult outside of the department. Stakeholders: all*
II.	Project Description	There is a known challenge with correctly identifying the physician/provider to call when 1) obtaining a consult 2) following up on a consult after it has been done and 3) with the consultant contacting the care team - especially on nights and weekends when the original consulting physician/provider is not covering. The goal of this project is to assess the extent of the problem, put a solution in place and then measure its effectiveness.
III.	Necessary Resources (staff, finances, etc.)	Key players in the solution: Residents Nursing Information services (especially CIS) may be integral to the solution DHQ Medical Staff
IV.	Measurement/Data Collection Plan (must partner/match with Milestone Markers)	Need to determine and effective measurement: If we create a survey for residents and nurses regarding their assessment of how often this is a problem, then we can repeat it. In addition, or alternatively, we can perform a real-time measurement on a few nursing units
V.	Communication Plan (may be helpful to draft a flow chart of team members & senior management, both internal & external)	We need to make sure that the hospital knows that this is a problem and that we're fixing it. Consider: 1) present to medical staff (Med Exec) - fairly easy to get on agenda 2) present to Hospital Quality Council - need Evan Benjamin's okay to get on agenda, and may have to be after the solution is found 3) Submit for President's Quality Award - even the submission will get the project noticed
VI.	Accountability (list of team members and who is accountable for what)	Residents Quality Council is developing a set of subgroups to divide up the responsibilities.
VII.	Potential Challenges (engagement, budget, time, skills gaps, etc)	1. Effective measurement of the problem and the solution 2. If the assessment and/or solution requires resources such as someone to make changes in our electronic health record, then paying for it will be a challenge.
VIII.	Markers (project phases, progress checks, schedule, etc.; must partner/match measurement/data collection plan)	1. Pull the team together 2. Need to develop the assessment tool ASAP by Dec 13 3. Gather data through March 14? 4. Work on solutions through Sept 14 5. Remeasure November - December 14 (to match the time of year) 6. Tweak the solution and remeasure? 7. Create posters/ summary, etc. this can be going on simultaneously
IX.	Vision Statement/Closing Plan (markers of success by March 2015)	By March 2015, we will have at piloted solutions and gathered data on the success or lack thereof for determining who to communicate with regarding in hospital consults. We will ideally have a new system

		in place that works across all specialties.
X.	Success Factors	*The most successful component of our work was working with the Resident Quality Council as a group. They were very effective at giving input and gathering information to bring back to the group.* *We were able to identify a best practice and able to create a pilot for the best practice method.*
XI.	Barriers	*The largest barrier we encountered was scarce resources: on the part of the residents, lack of time was a roadblock. We also did not have funding support to help institute the pilot. We had identified an issue that was not on the hospital radar at all, and were not working with the Department of Healthcare Quality at this time.* *We worked to overcome this by keeping the pilot small and doing a lot of the work ourselves – but the contact we had in Information Systems left Baystate Health, and so we lost our ability to collect follow-up data.*
XII.	Lessons Learned	*The single most important piece of advice to provide another team embarking on a similar initiative would be* *1) The Resident Quality Council needs to align goals with the health system goals and work directly with the Department of Healthcare Quality* *2) Projects must be doable within a year's timeframe because members of the council rotate off or graduate and it is difficult for new members to pick up where the others left off.*
XIII.	Expectations Versus Results	*On a scale of 1 to 10 (with "1" meaning nothing and "10" meaning everything), how much of what you set out to do was your team able to accomplish?* *1 2 3 4 5* ***6*** *7 8 9 10*
XIV.	Satisfaction	*On a scale of 1 to 10 (with "1" meaning not at all satisfied and "10" meaning completely satisfied), how satisfied are you with what you were able to accomplish in your NI III work?* *1 2 3* ***4*** *5 6 7 8 9 10*
XV.	Project Impact	*What changes have you observed in your residency program(s), or at your institution, based upon your work?* *We do have a new consult order for internal medicine and Ob/gyn, which may actually help to alleviate the problem over time.*
XVI.	Next Steps	*Describe next steps for your project, including plans for sustaining and spreading the changes made.* *The Resident Quality Council is working to increase the number of "near-miss" reports in our SRS system.*

Resident Engagement in Quality Through an RQC

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Overall Goal/Abstract

Overall Goals:

- Engage Residents in identifying interdisciplinary quality improvement projects
- Utilize the Resident Quality council to gather data, identify barriers, limitations and opportunities in quality improvement initiatives.
- Identify one initiative that would have a wide impact

Background

Housestaff officers play a key role in patient care at academic medical centers. Being on the front line gives the housestaff unique insights into problems that occur within a hospital especially those that have the biggest impact on their daily work. Yet, housestaff have not traditionally been optimally involved in efforts to improve care. Frequently, hospital administrators, nurses, and attending physicians study the outcomes of care, assess root causes when adverse events occur, and develop improvements as necessary. Resident input may not always be included in policy changes and, as a result, residents may not be engaged in adopting these policy changes. Also, the housestaff concerns do not often go high enough up the chain to be able to influence changes despite the fact that the ACGME requires residents to "systematically analyze practice using quality improvement methods, and implement changes with the goal of practice improvement." We developed an interprofessional, interdisciplinary council made up of 16 housestaff officers representing 10 residencies and 3 fellowships.

Vision Statement

- Improve patient care and safety by engaging residents in a culture of quality improvement through didactics, dialogue and experiential learning.
- Provide a safe environment/venue for the housestaff to voice their opinions/concerns about system wide or patient safety concerns
- Encourage interdisciplinary dialogue and collaboration

Materials/Methods

- After initiation of the RQC, council members identified quality and patient safety issues across specialties. There was consensus that it was difficult to determine who to call for a consult in a department outside of one's own. This resulted in delays in care because it was often trial and error, with multiple efforts to reach the correct contact person that took precious time. The issue chosen for the inaugural project was to develop a simple, standardized method for obtaining a consultation across specialities.

- Once this problem was identified, the process for obtaining a consultation was separated into parts and key stakeholders in the pathway were identified. Each representative on the council convened with their program and outlined the steps to obtain a consultant within their individual departments. These methods were then reviewed with the council and a "best practice" was selected from the various processes.

- The group was subdivided to further investigate specific aspects of the problem. Group one contacted stakeholders along the consultation pathway including residents, unit clerks and secretaries and the hospital operators to identify their method of action in contacting a consulting service. Group two developed possible outcome measurement tools and survey options to evaluate future success of any changes implemented.

Success Factors and Lessons Learned(Discussion)

- The interdisciplinary group represented almost all specialties/subspecialities in our institution since we had a representative of each specialty and residents rotate through most subspecialties
- We were able to identify an opportunity for improvement that crossed multiple disciplines and affected patients on a daily basis but was not on the radar for the institution
- Data gathering worked well due to the broad representation and the fact that residents work at the front lines of patient care
- Excellent opportunity for experiential learning and interdisciplinary collaboration

Barriers Encountered/Limitations-

- Most residents are not familiar with the QI systems and processes in place in the institution, and may come up with solutions that appear deceptively simple to enact, but are actually complicated and resource-intensive
- The potential projects identified by the RQC may not have the necessary resources to make changes if they are not in alignment with the system-wide goals. The Department of Healthcare Quality was not initially engaged with the RQC, which contributed to a lack of alignment.
- Absence of protected time and access to (financial) resources for the RQC to meet and to work on a project resulted in slow progress towards implementation
- A large group of diverse people (different specialities, at different stages of training and with differing levels of knowledge) made it difficult to stay focused on task during discussions

Conclusions

We describe our experience with working through an interdisciplinary Resident Quality Council to identify a patient safety issue, gather data on the extent of the problem, and identify possible solutions to develop a pilot project based on the best practices identified by the group. The RQC functioned well in this capacity, and working with the Department of Healthcare Quality in the future will help to align the goals of the hospital system with the projects chosen by the RQC. Providing protected time and system resources for residents ($) to engage in meaningful improvement projects will benefit everyone ($$$$).

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Team: Beaumont Health System – Group #2 **Focus Area:** Quality Improvement/Medical Error Reporting

I.	Team Charter/Objectives ('needs statement,' project requirements, project assumptions, stakeholders, etc.; Teams should identify members and define responsibility/purpose)	To increase Resident/Fellow involvement in Quality Improvement/Patient Safety Projects at Beaumont Health System by identifying Quality Improvement projects through the PQSI process. At the end of this project, all residents/fellows should be comfortable in reporting patient safety concerns and should have reported at least once in the reporting system. The Graduate Medical Education team will work closely with the Quality Improvement Team to assure compliance with this objective.
II.	Project Description	The Quality Improvement Team (PSQI staff) will meet with all residency/fellowship programs on an individual basis to describe the PSQI reporting process and follow-up. Every resident/fellow in each program will be requested to identify a perceived patient safety concern and complete a report. For training purposes, these reports will be flagged as part of the Quality Improvement Project Group. PSQI staff will review and discuss these identified patient safety concerns will the individual residents/fellows and give them immediate feedback. This pilot project will begin with our Emergency Medicine residency program.
III.	Necessary Resources (staff, finances, etc.)	Quality Improvement/Patient Safety Staff Resident/Fellow Training Program Directors GME Staff
IV.	Measurement/Data Collection Plan (must partner/match with Milestone Markers)	After initial Pilot Program, anonymous PSQI reports will be reviewed on a quarterly basis. A minimum number of quality improvement projects will evolve based on Kaizens.
V.	Communication Plan (may be helpful to draft a flow chart of team members & senior management, both internal & external)	Monthly reporting at GMEC Monthly reporting at Resident/Fellow Council
VI.	Accountability (list of team members and who is accountable for what)	Jeffrey Devries – team leader Sharon Wilson – gather data Paula Levesque - Quality Resident Representative – report at Resident/Fellow Council Program Director (s)
VII.	Potential Challenges (engagement, budget, time, skills gaps, etc)	Scheduling initial meetings with Residency/Fellowship programs and QI Time Follow-up with PSQI reports that are anonymous Residents/Fellows currently not vested in PSQI reporting – how to change the perception
VIII.	Markers (project phases, progress checks, schedule, etc.; must partner/match measurement/data collection plan)	PSQI Meetings Quarterly Quality Data Number of new quality projects and what programs and/or individual residents are involved PSQI Projects are linked with scholarly activity
IX.	Vision Statement/Closing Plan (markers of success by March 2015)	At the end of this project, the number of residents/fellows actively reporting in the PSQI data system will be 25% and the number of residents/fellows creating Quality Improvement projects related to the data reported in the PSQI will be 10%.

X.	Success Factors	The most successful component of our work was the engagement of the Quality staff to assist in the timely feedback of the PSQI Reports to encourage the We were inspired by the medical error reports that were completed by the Residents.
XI.	Barriers	The largest barrier we encountered was the reporting system We worked to overcome this by utilizing Quality staff to manually pull reports. A new system is being purchased in the near future.
XII.	Lessons Learned	The single most important piece of advice to provide another team embarking on a similar initiative would be to get buy-in from the Quality Department and the Resident Leadership. Both groups need to be totally engaged to make this a success.
XIII.	Expectations Versus Results	*On a scale of 1 to 10 (with "1" meaning nothing and "10" meaning everything), how much of what you set out to do was your team able to accomplish?* *1 2 3 4 5 6* ***7*** *8 9 10*
XIV.	Satisfaction	*On a scale of 1 to 10 (with "1" meaning not at all satisfied and "10" meaning completely satisfied), how satisfied are you with what you were able to accomplish in your NI IV work?* *1 2 3* ***4*** *5 6 7 8 9 10*
XV.	Project Impact	*What changes have you observed in your residency program(s), or at your institution, based upon your work?* **The project encouraged discussion about medical error reporting and more involvement by residents in Quality committees.**
XVI.	Next Steps	*Describe next steps for your project, including plans for sustaining and spreading the changes made.* **A Medical Error Reporting System that allows for easier and more timely feedback and results**.

Promoting Medical Error Reporting by Residents

Sharon Wilson, MS and Jeffrey M. Devries, MD, MPH

Beaumont Health System

Royal Oak, Michigan

Vision Statement

- Residents will actively observe opportunities to improve health care quality and patient safety and be willing to document these observations on our system-wide incident reporting system.
- This information – whether resulting in patient harm or a "near-miss" will be used to inform each Department's Mortality and Morbidity conferences.
- Residents will use these findings to develop QI/PS Improvement Projects.

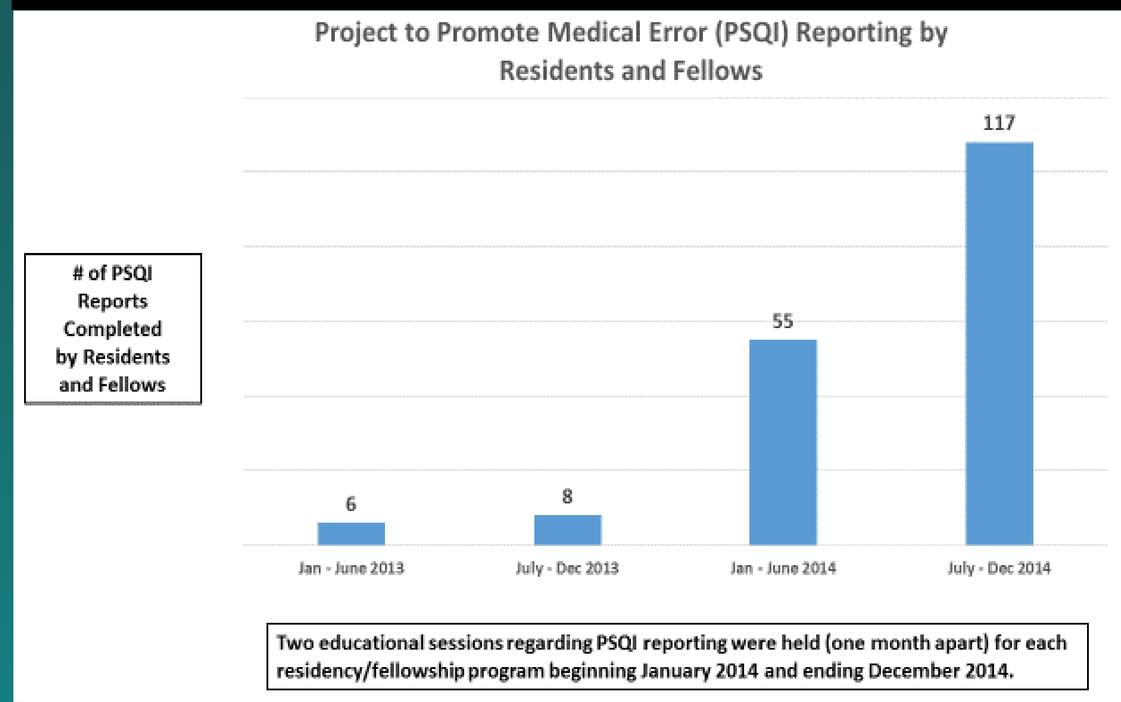
Goals

- To increase Resident/Fellow involvement in healthcare Quality and Patient Safety initiatives by identifying and reporting opportunities for improvement.
- Enhance Residents' attention to quality and safety lapses, whether resulting in patient harm or "near-misses".
- By the end of this project, all residents/fellows should be comfortable in reporting patient safety concerns and should have reported at least once in the reporting system.
- Promote collaboration GME and Quality/Patient Safety personnel.

Background

- The Quality Improvement Team met with all 40 residency and fellowship programs individually to educate them regarding the Patient Safety/Quality Improvement (PSQI) reporting process and incident follow-up.
- Every resident/fellow in each program was then requested to identify a perceived patient safety concern and complete a PSQI report.
- PSQI staff reviewed all submitted reports and provided feedback one month later at resident meetings.

Results



Success Factors and Lessons Learned

- In cooperation with the Quality Improvement Team, changes were made to the on-line PSQI Reporting Form to include an optional data field identifying the status of the individual submitting the report (resident, nurse, etc.) so that even when reporting anonymously, residents can be identified as residents.
- This educational intervention (one-hour sessions for each program) yielded a 12-fold increase in medical error reports submitted by the Residents!
- The interest and enthusiasm in quality and safety issues expressed by Residents in the follow-up sessions had not been seen before.
- The most successful component of our work was the engagement of the Quality Improvement Team to providing timely feedback of the PSQI Reports.
- Achieving buy-in from the Quality Department and the GME Leadership were critical factors in the success of this project.

Barriers Encountered/Limitations

- The largest barrier was the reporting system itself, which does not automatically provide feedback to the submitter. Staff members from the Quality Department manually retrieved the reports. A new system is being planned for the near future.
- There is only a small staff that reviews the over 8,000 PSQI Reports submitted annually by hospital staff (including Residents).
- We encountered inconsistent responses by the Program Directors when receiving reports regarding their Residents.
- Some nurses were perceived by Residents to use the PSQI reporting system to report what they subjectively defined as undesirable Resident behavior. These reports were viewed as punitive by the Residents, especially when reports were submitted anonymously, causing them hesitation to use the system.

Next Steps

- We have engaged the QI/Patient Safety Department & Nursing Services to work with us in an interdisciplinary effort to:

  1) develop a mechanism to ensure feedback Resident-generated PSQI reports;

  2) establish focus groups of Nurses & Residents to establish preferred means of identifying suboptimal performance;

  3) thoughtfully determine who should be copied on these reports, to ensure that distribution is limited to those who can act on the information;

  4) train Program Directors in the constructive and non-punitive manner in which these reports should be managed and documented.

Team: Carolinas HealthCare System **Focus Area:** Patient Safety

I.	Team Charter/Objectives ('needs statement,' project requirements, project assumptions, stakeholders, etc.; Teams should identify members and define responsibility/purpose)	**Residents in Patient Safety at Carolinas HealthCare System: A Collaborative Integrated Program for Enhanced Patient Outcomes** The current and increasingly complex healthcare environment calls for increased attention to achieving high quality safe patient care. The best patient outcomes require that all health care team members work collaboratively to make quality and safety a top priority. The *Resident in Patient Safety* program will build a culture of safety by integrating proven strategies into the education and training of new doctors, nurses, and advanced practitioners during their respective formal educational programs. The residents will gain expertise in system-based quality improvement and simulation education as applied to patient safety. The program will educate and prepare the next generation of quality improvement innovators and patient safety leaders. Draft Objectives of the 9-month Program include the following. By participating in the Program, all residents in patient safety will: 1. Identify system errors and opportunities for system safety improvement 2. Facilitate education of other healthcare professionals on patient safety goals and system improvements 3. Work collaboratively and actively in hospital committees and teams on safety initiatives 4. Serve as liaison between fellow trainees and CHS Quality & Patient Safety Division 5. Identify and demonstrate critical actions that contribute to error reduction and patient safety 6. Describe and discuss performance improvement methodology as applied to improving patient safety 7. Demonstrate the ability to communicate effectively with all members of a multidisciplinary team to gain buy-in and build consensus for system improvement 8. Facilitate safety training for other providers through organizing and structuring training scenarios via simulation that are aligned to system needs 9. Provide constructive feedback (debriefing) following safety simulation training events
II.	Project Description	The Resident in Patient Safety program will be launched in January 2015. The first academic year will be considered a pilot to assess effectiveness as we develop the program. Residents will be current CHS trainees in existing healthcare programs including: Center for Advanced Practice (CAP), Carolinas College of Health Sciences (CCHS), and Graduate Medical Education (GME). A maximum of 6 residents will be recruited for the inaugural pilot year. Trainees will be invited to apply to participate in the 9 month program. Minimum criteria to participate include: trainee in good standing at CHS medical or health sciences program; successful completion of one full year of post-graduate training; letter of recommendation from program director; strong desire to gain further knowledge and experience in patient safety; Strong interpersonal and teaching skills. Completion requirements will include: Average of 20 hours per month dedicated to the Program; Completion of WHO Patient Safety Curriculum

<table>
<tr><td></td><td></td><td>+ orientation to program (virtual and live); Facilitation of small group teaching sessions; Active participation in patient safety teams; Completion of patient safety improvement project. All residents who successfully complete the Program will receive a CHS certificate of completion at graduation.</td></tr>
<tr><td>II.</td><td>Project Description</td><td>The Resident in Patient Safety program will be launched in January 2015. The first academic year will be considered a pilot to assess effectiveness as we develop the program. Residents will be current CHS trainees in existing healthcare programs including: Center for Advanced Practice (CAP), Carolinas College of Health Sciences (CCHS), and Graduate Medical Education (GME). A maximum of 6 residents will be recruited for the inaugural pilot year.

Trainees will be invited to apply to participate in the 9 month program. Minimum criteria to participate include: trainee in good standing at CHS medical or health sciences program; successful completion of one full year of post-graduate training; letter of recommendation from program director; strong desire to gain further knowledge and experience in patient safety; Strong interpersonal and teaching skills.

Completion requirements will include: Average of 20 hours per month dedicated to the Program; Completion of WHO Patient Safety Curriculum + orientation to program (virtual and live); Facilitation of small group teaching sessions; Active participation in patient safety teams; Completion of patient safety improvement project. All residents who successfully complete the Program will receive a CHS certificate of completion at graduation.</td></tr>
<tr><td>III.</td><td>Necessary Resources
(staff, finances, etc.)</td><td>Program Director or Co-Directors (Med Ed + Quality)
Patient Safety Resident Mentors
Program Coordinator
Travel budget for residents to attend national AHRQ patient safety meeting
Stipend for Residents (?) Mentors (?)
Protected time from educational program to participate
Simulation resources (namely space)</td></tr>
<tr><td>IV.</td><td>Measurement/Data Collection Plan
(must partner/match
with Milestone Markers)</td><td>• CLER outcomes
• Patient Safety metrics or composite measure
• Resident cohort satisfaction
• Engagement of CHS trainees in patient safety
• Interprofessional perceptions & teamwork
• Patient safety metrics (relative to focus area)</td></tr>
<tr><td>V.</td><td>Communication Plan
(may be helpful to draft a flow chart of team members & senior management, both internal & external)</td><td>Q3 2014: – Nominations and selection of program mentors/advisors.
Q4 2014: E-Mail Communication to key stake holders for call for participants/advisees.
Interested learners will complete online application.
Q1 2015: The committee will review all applications and notify selected participants by February 17, 2015.
March 9, 2015 Program Orientation</td></tr>
<tr><td>VI.</td><td>Accountability
(list of team members and who is accountable for what)</td><td><table><tr><th>Name/Credentials
Proposed Roles</th><th>Position/Title</th></tr><tr><td>Mary N. Hall, M.D.
Role: Senior Lead & Outpatient</td><td>DIO, Interim Chief Academic Officer</td></tr></table></td></tr>
</table>

		Liaison	
		Lisa Howley, Ph.D. **Role:** Project Leader & Program Designer	Associate DIO, Assistant Vice President Medical Education
		Eric Anderson, M.Ed. **Role:** Program Director & Designer	Director, Graduate Medical Education
		Vu Nguyen, M.D. **Role:** Program Director	Program Director – PM&R
		Matthew Hanley, M.D. **Role:** Inpatient Liaison & Chief Medical Officer	Chief Medical Officer Carolinas Medical Center
		Suzette Caudle, M.D. **Role:** Communications & Program Design	Program Director Pediatrics Residency Program
		Danelle Higgins **Role:** Program Director & Designer	Assistant Vice President Patient Safety
		Pamela Beckwith **Role:** Chief Quality Officer	System Vice President Quality
		Ellen Sheppard, EdD **Role:** Nursing, Advanced Practice, Liaison	President, CCHS
		Elizabeth Diaz, M.D. **Role:** Resident Member	Resident, PG1 Pediatrics
		Lisa Hebert, PA-C **Role:** Ambulatory Quality Liaison	Vice President CHS Medical Group, Quality Improvement
		Cameron Davis **Role:** Program Manager	Program Manager, Vascular and Neurosurgery Residency Programs
		Mentors: Danelle Higgins Matt Hanley, M.D. Michael Ruhlen, M.D. Lisa Hebert, PA-C	 AVP Patient Safety Chief Medical Officer – CMC Chief Medical Officer – CMC-P VP CHSMG – Quality Improvement
VII.	Potential Challenges (engagement, budget, time, skills gaps, etc)	• Buy-In from Faculty, Residents • Funding • Protection of Time for Mentors & Residents • Coordination of Diverse Trainees as Residents • Integration of Residents into CHS Patient Safety Teams • Simulation Resources	
VIII.	Markers (project phases, progress checks, schedule, etc.; must partner/match measurement/data collection plan)	Q1 2014: Design Program Pilot Q2 2014 – Ongoing: Design Curriculum Q3 2014: Recruit Mentors Q4 2014: Recruit Pilot Participants Q1 2015: Launch Program Pilot Q1 2015 – Q4 2015: Administer & Assess Program Q4 2015: Graduation of Pilot Residents	
IX.	Vision Statement/Closing Plan (markers of success by March 2015)	The *Resident in Patient Safety* program will build a culture of safety by integrating proven strategies into the education and training of new doctors, nurses, and advanced practitioners during their respective	

		formal educational programs. Successful completion of the project will include: • Excellent inaugural Resident cohort satisfaction scores • Increased engagement of CHS trainees in patient safety • Improvement in CLER results in patient safety focus area • Enhanced interprofessional perceptions of Residents Improved patient safety metrics (relative to focus area)
X.	Success Factors	*The most successful component of our work was successful recruitment of the 8 participants in the Pilot Program. We recruited a diverse team that consisted of: 3 residents (OBGYN, Pediatrics, Neurosurgery), 2 nursing students, nurse – simulation center specialist, nurse – patient safety educator, advanced care practionier – trauma/surgical critical care.* *We were inspired by the energy of these learners and there excitement towards the program and becoming "experts" in patient safety as well as the diversity of the group.*
XI.	Barriers	*The largest barrier we encountered was time. While 18 months seems like a long time this will creep up on you quickly.* *We worked to overcome this by staying organized and setting milestones for our program development.*
XII.	Lessons Learned	*The single most important piece of advice to provide another team embarking on a similar initiative would be to put together a strong, diverse team. Our team of experts from Interprofessional areas within our system helped drive the success of our program development. This same group will ensure that our pilot program is successful.*
XIII.	Expectations Versus Results	*On a scale of 1 to 10 (with "1" meaning nothing and "10" meaning everything), how much of what you set out to do was your team able to accomplish?* *1 2 3 4 5 6 7 8 (9) 10*
XIV.	Satisfaction	*On a scale of 1 to 10 (with "1" meaning not at all satisfied and "10" meaning completely satisfied), how satisfied are you with what you were able to accomplish in your NI IV work?* *1 2 3 4 5 6 7 8 9 (10)*
XV.	Project Impact	*What changes have you observed in your residency program(s), or at your institution, based upon your work? – The pilot program will launch on March 9, 2015. We will be able to report out more in the changes and impact in late 2015.*
XVI.	Next Steps	*Describe next steps for your project, including plans for sustaining and spreading the changes made. We will be launching the pilot program on March 9, 2015. The next steps are the implantation and evaluation of the impact of the Certificate in Patient Safety program:* *Time Frame: Months 1 -4 – Orientation, skill building, needs assessments. Months 5 – 9 – Teaching, patient safety project implementation (PDSA) and presentations and program evaluation and assessment.*

Certification Program in Patient Safety: Planning & Curriculum Design

Eric Anderson MEd, Lisa Howley PhD, Mary Hall MD, Cameron Davis, Matthew Hanley MD, Suzette Caudle MD, Danelle Higgins, Pamela Beckwith FACHE, Elizabeth Diaz MD

Carolinas HealthCare System, Charlotte, North Carolina

Overview

The *CHS Certificate Program in Patient Safety* will build a culture of safety and prepare the next generation of patient safety leaders by integrating proven strategies into the education and training of resident physicians, nurses, and advanced practitioners. In order to meet this goal, we designed a 9-month interprofessional curriculum integrated within existing training programs. The program was developed over an 18 month period and launched March 2015.

Background

The current and increasingly complex healthcare environment calls for greater attention towards the achievement of quality safe patient care. The best patient outcomes are a result of healthcare team members working collaboratively to make quality and patient safety a top priority.

The ACGME Clinical Learning Environment as well as the Core Competencies for Interprofessional Collaborative Practice place emphasis on 6 areas which collectively require the sponsoring institution to practice differently and intentionally towards the achievement of high quality, safe and accessible care.

Interprofessional education is defined as:

"When students from two or more professions learn about, from and with each other to enable effective collaboration and improve health outcomes" -WHO, 2010

Timeline

Phase I: First 4 months

1. Orientation of Participants
2. Skill building: Patient Safety & Teaching
3. Needs assessment

Phase II: Months 5-9

1. Teaching
2. Patient Safety Project Implementation
3. Evaluation/ Presentation
4. Graduation

March - June July - December

Mission Objective

To build a culture of safety by integrating training and advisement into the education of new doctors, nurses, and advanced practitioners and then engaging these learners as ***agents of change***.

Back Row: Tyler Atkins, MD; Eric Anderson, MEd; Miles Nelson; Michael Ruhlen, MD. Middle Row: Lisa Hebert, PA; Liz Diaz, MD; Lisa Foster, RN; Crystal Bencken, RN; Kali Ellison; Ashley Eskew, MD. Front Row: Caroline Dana, PA; Pam Beckwith, FACHE; Danelle Higgins; Lisa Howley, PhD

Admission Process

Invitation to join the program was provided to all CHS trainees in graduate medical education, nursing, advanced clinical practice as well as nursing teammates interested in career advancement in patient safety.

- CHS trainee or teammate in good standing
- Letter of support by program director or supervisor
- Strong desire for gain further knowledge and experience in patient safety
- Strong interpersonal and communication skills
- Completion of simple 8-question online application

- ✓ Advisors selected based on experience in quality improvement and patient safety and desire to give back
- ✓ A total of 17 advisee applications received
- ✓ Review committee chose final 8 advisees
- ✓ Advisors assigned two advisees for 4 triads

Requirements

- Live Orientation + Kick Off Event
- Active Participation in Interprofessional Patient Safety Training Triad Team
- TeamSTEPPS Master Trainer Certification
- Completion of relevant WHO Patient Safety & Modules (Asynchronous, Self-Paced) followed by advisement from patient safety expert (triad teams)
- Completion of 10 live web-based educational sessions (Synchronous, Flexible Offerings)
- Facilitation of small group teaching sessions ("Lunch-n-Learn")
- Active supervised participation in patient safety RCA team
- Completion of patient safety improvement plan modeled after AHRQ Case
- Average of 10 hours per month dedicated to the program (total 90 hours required)

Metrics

- CLER Outcomes
- Satisfaction & Perceived Benefits: Advisors + Advisees + Expert Faculty
- Attendance + Evaluation of Extended Learners via Teaching Sessions
- Retention & Promotion Rates of Advisees
- IPE Perceptions (Luecht et al, JAH 1990)
- Knowledge in Patient Safety (Kerfoot et al, JGIM 2007)

Bibliography

Kerfoot BP, Conlin PR, Travison T, McMahon GT. Patient safety knowledge and its discriminants in medical trainees. JGIM 2007; 22(8): 1150-54.

Luetcht RM, Madsen MK, Taugher MP, Petterson BJ. Assessing professional perceptions: design and validation of an Interdisciplinary Education Perception Scale. J Allied Health. 1990 Spring: 19(2): 181-91.

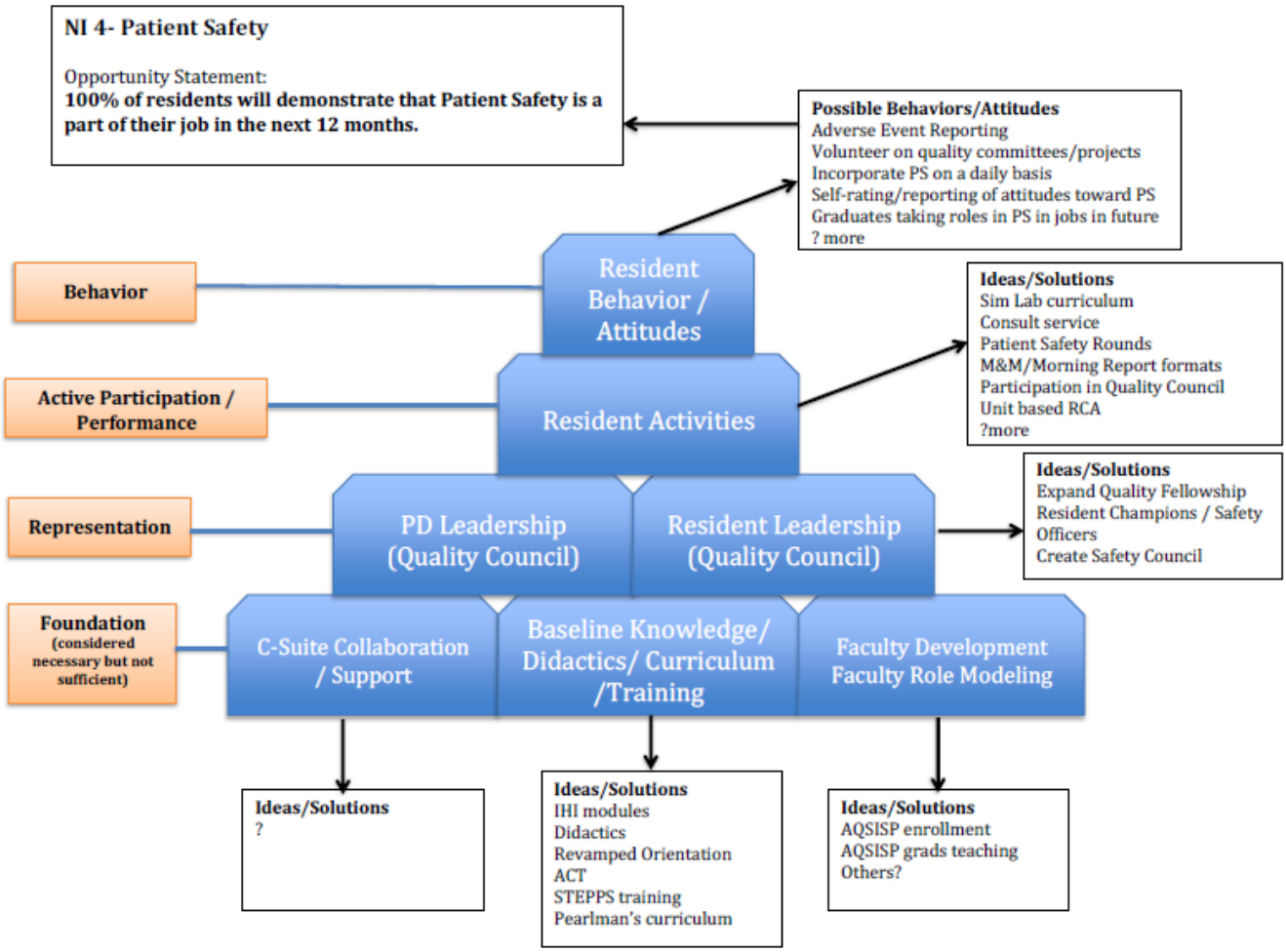
WHO Multi-professional Patient Safety Curriculum Guide, URL http://www.int/patientsafety/education/curriculum/en.index.html

Weiss KB, Bagian JP, Nasca TJ. The Clinical Learning Environment: The Foundation of Graduate Medical Education. JAMA. 2013;309:1687-1688.

Weiss KB, Wagner R, Nasca TJ. Development, testing, and implementation of the ACGME Clinical Learning Environment Review (CLER) program. J Grad Med Educ. 2012;4:396-398

Team: Christiana Care **Focus Area:** Patient Safety

I.	Team Charter/Objectives ('needs statement,' project requirements, project assumptions, stakeholders, etc.; Teams should identify members and define responsibility/purpose)	*Christiana Care is a Major Teaching hospital which provides a clinical learning environment for more than 270 residents and fellows within 13 residency programs. The willingness of residents to report safety events and participate in forums to prevent adverse events is often shaped by the beliefs, experiences and infrastructure of the organization in which they train. Our approach to teaching patient safety and quality for residents is that the principles of patient safety and team based care will become embedded so deeply that residents instinctively follow these best practices. Our opportunity statement is 100% of our residents will demonstrate that Patient Safety is a part of their job within the next 12 months.* *We organized a CLER Steer group consisting of our Institutional DIO and VP of Academic Affairs, Program Director of Family & Community Medicine, Associate Patient Safety Officer & Vice Chair of Dept of Medicine, Quality & Safety Education Specialists, and an Administrative Assistant. This group led the design, implementation and evaluation of our initiative. In addition, a NI IV CLER Operations group consisting of Program Directors, Residents, Risk Management, and Quality & Safety convened and provided guidance and feedback during our initial planning stage of the initiative. One/two members of our CLER Steer also participated in monthly AIAMC NI IV group calls and attended four scheduled National Initiative meetings in 2013-2015.*
II.	Project Description	*See diagram for a depiction of our infrastructure at beginning of the initiative, the gaps we aimed to address, and the ideas/ solutions considered.*

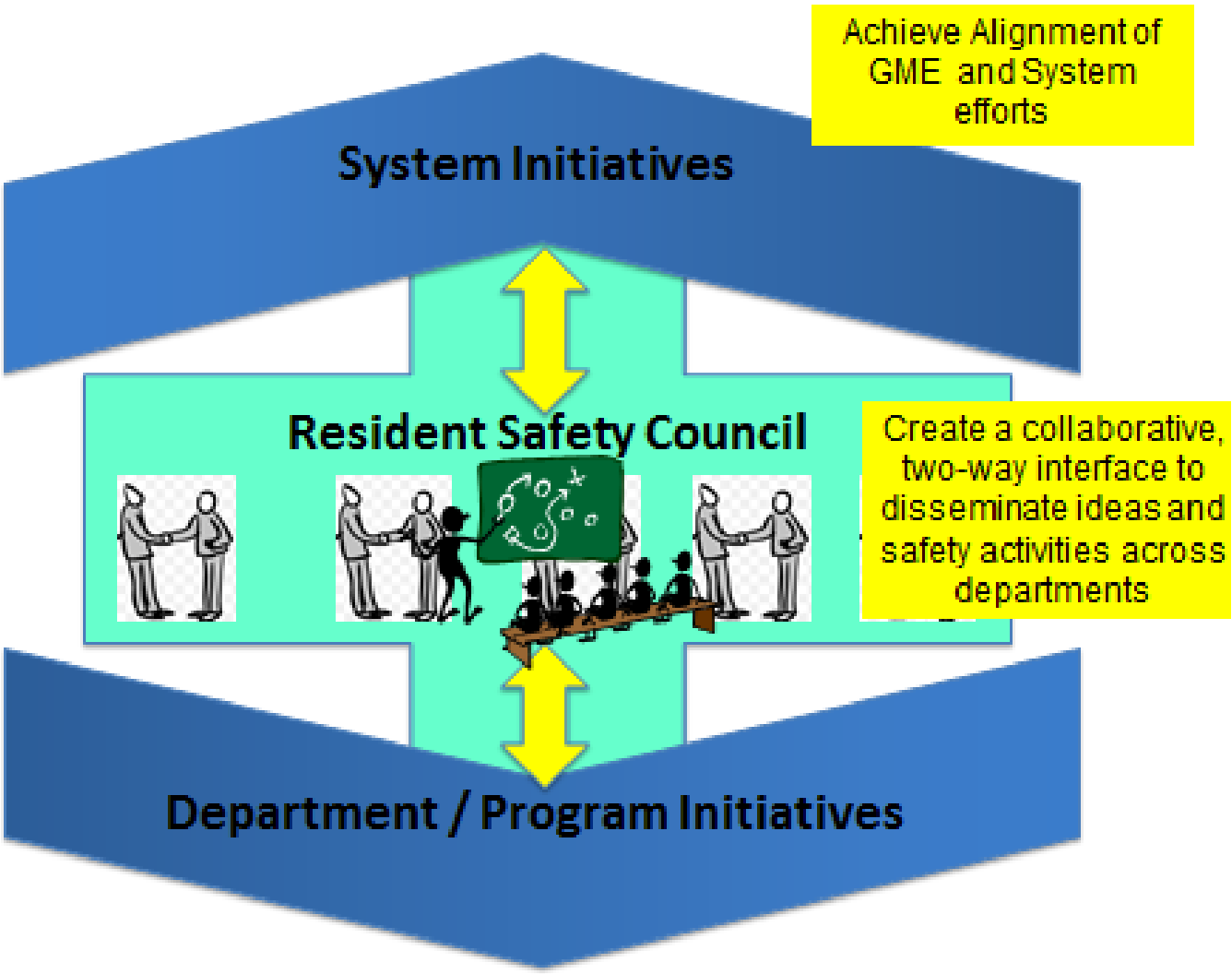


Project Description Continued…

Reporting data and a safety attitude assessment formed the basis for our effort and focus on the ACGME CLER area of Patient Safety. We found that many observe, few personally report (<1% of all events reported by electronic form). When events are reported they are communicated through various paths, making it difficult to capture trends and patterns. While reporting safety events was perceived as part of their professional responsibility, the time to report and senior colleagues reporting attitudes influenced decisions to report. Blame and fear were less prominent factors.

To increase resident engagement and participation in patient safety, we created a Resident Quality & Safety Council that consisted if faculty-resident dyads for all our residency programs. The Chairs and Programs Directors nominated the faculty –resident dyads participating in the council. The Council serves as a vehicle for enhancing communication between hospital committees and clinical departments, and provides a forum for teaching safety concepts, discussion/disseminating specific system efforts, developing new initiatives, collaboration across departments, participation in safety activities, data review, and providing feedback and solution generation for system level concerns.
Illustration below.

The council meets monthly for 1.5 hours with between session follow-up activities. Each council session typically includes a didactic portion, discussion of events/event reporting, report outs of dyad driven department Q&S activities/findings, and advisory or consult function for system level initiatives.



III.	Necessary Resources (staff, finances, etc.)	*Resources contributing to successful implementation included* • *Protected time for faculty-resident dyads' participation in council meetings & organizational committee meetings (time commitment of approximately 2-6 hours month)* • *SharePoint Collaboration site to support sharing documents and reference materials* • *Administrative support to schedule meetings , organize materials, prepare minutes, keep attendance log and level of participation data* • *Faculty for select curricula and educational topics* • *Toolkits (electronic versions) for RCA, 5 WHYs, Cause & Effect Diagrams, etc.* • *Access to data reports - event reports, intuitional safety performance indicators – No Harm report, safety climate assessment survey results, participation charts*
IV.	Measurement/Data Collection Plan (must partner/match with Milestone Markers)	*Key measures include:* • *Adverse Event Reporting rates by resident and programs* o *Tracking monthly, reported quarterly.*

		○ *2013-forward* • *Level of participation by residents in RCAs, Debriefs, Case Conferences, department and system level quality committees/projects* ○ *Chart. CCHS Residents Committee Activity – tracking monthly, reported twice/year* ○ *May 2013-forward* • *Percent change in resident self-reported attitudes about Patient Safety* ○ *Assessed annually* ○ *Baseline Feb-March 2014, re measure Feb 2015* • *Formation of a resident safety council/committee (level of participation by dyads)* ○ *Assessed monthly* • *# Resident led safety improvement initiatives/ activities implemented* ○ *Assessed annually, June 2015*
V.	Communication Plan (may be helpful to draft a flow chart of team members & senior management, both internal & external)	*The Council receives reports of activities from System level committees (Safety First, Clinical Excellence, Think of Yourself as a Patient, GMEC, Risk Management). In addition, reports from other related committees/forums (e.g., Root Cause Analysis teams, Debriefing teams, VNA Quality & Safety Committee, Clinical Advisory Group, other Program specific committees)* *A summary of this Council's activities are presented to the GMEC, Safety First, Chairs Leadership Council annually, as well as any others deemed appropriate.*
VI.	Accountability (list of team members and who is accountable for what)	*See Resident Quality & Safety Council Committee description.*
VII.	Potential Challenges (engagement, budget, time, skills gaps, etc)	*Challenges:* • *Resident and program leadership engagement, especially given the challenges of implementing the milestones in the NAS system.* • *Resident engagement for creating a resident safety council/committee.* • *Fiscal constraints for supporting these activities.* • *Addressing the skills gap for our faculty who will be tasked with the implementation and reinforcement of these concepts related to patient safety.* • *Time constraints for residents and faculty given the demands of residency training and balancing same with service and educational needs of the programs.*
VIII.	Markers (project phases, progress checks, schedule, etc.; must partner/match measurement/data collection plan)	*Milestone dates:* • *AIAMC NI IV Begins – Meeting One – October 2013* • *Steer CLER Committee formed – December 2013* • *ACGME CLER visit- January 2014*

		• *President Cabinet presentation – January 2014* • *Safety attitude assessment – Feb-Mar 2014* • *NI IV CLER Operations group convened – February 2014 – concluded April 2014* • *New resident orientation (Safety content revised)– June 2014;* • *Resident-Faculty dyads nominations received, approved by Chair – July-August 2014* • *Resident Quality & Safety Council formed – August 2014* • *GME Committee updates reported– January 2014, November 2014* • *Safety First Committee updates reported– November 2014, January 2015* • *Data milestones reflected in measurement plan above.*
IX.	Vision Statement/Closing Plan (markers of success by March 2015)	*Vision statement. Movement from Current State to Future State where,* • *PS is NOT considered "extra", but is considered "core" regarding resident's purpose/duty* • *PS is NOT project driven/not part of culture, but there is a culture of PS in daily work* • *PS is NOT someone else's job, but is coordinated PS efforts through system* • *Recognition that there are unsafe events but gross under-reporting, to events are recognized, reported and new safety practices and system designs emerge and there is obvious faculty role modeling* • *Lots of great PS initiatives across our system but not coordinated and many do not involve physicians, to a future state that when asked, all residents will be able to confidently speak about PS and acknowledge how it aligns with Christiana Care's goals* *During our study period, we were able to demonstrate more than a 2-fold increase in the total number of resident submitted SFLR reports. Safety attitudes remained relatively the same. It is unclear at this time whether quality and safety forums experienced during training shapes future participation and reporting as medical physician leaders. We believe that the culture within our residency programs, amongst our faculty, and within our institution needs to be aligned in order to create the highly reliable environment our patients and community deserves.*

Developing a Resident Quality & Safety Council: Integrating Reporting and Improvement Science into Daily Work

Lisa Maxwell, M.D., Neil Jasani, M.D., Robert Dressler, M.D.,
Loretta Consiglio-Ward, M.S.N., Carol Kerrigan Moore, M.S.
Christiana Care Health System, Newark-Wilmington, Delaware

Introduction

Physicians in training are exceptionally positioned to create a positive safety culture which results in the delivery of safer patient care. Willingness to report safety events and participate in forums to prevent adverse events is often shaped by the beliefs, experiences, and infrastructure of the organizations in which they train. Christiana Care, a major teaching hospital, provides the clinical learning environment for more than 270 residents/fellows within 13 residency programs. Our vision is that all residents will demonstrate that patient safety is a part of their profession. We aimed to increase resident engagement and participation in patient safety through the creation of a Resident Quality & Safety Council that consists of faculty –resident dyads from all our residency programs.

Methods

Reporting data, a safety attitude assessment[1,2] , and feedback from an ACGME CLER visit formed the basis for our effort and focus on Patient Safety. We found that while many residents observe safety events, few personally report them (<1% of all events reported by electronic form). And, if events are reported, they are communicated through various paths, making it difficult to capture trends and patterns.

To increase resident engagement and participation in patient safety, we created a Resident Quality & Safety (Q&S) Council that consists of faculty-resident dyads for all our residency programs. Chairs and Programs Directors nominated the participating faculty–resident dyads. The Council serves as a vehicle for enhancing communication between hospital committees and clinical departments, and provides a forum for teaching safety concepts, discussing/disseminating specific system efforts, developing new initiatives, collaboration across departments, participation in safety activities, data review, and providing feedback and solution generation for system level concerns (Figure-1). The council meets monthly for 1.5 hours with assignment of between session activities. Each session typically includes didactics, discussion of events/event reporting, report outs of dyad driven Q&S activities/ findings, and advice or consultation on system level initiatives. The Council reports activities to the system's GMEC and Safety Committees.

Key measures of effectiveness included reporting climate data (# resident submitted events reported sorted by department), resident participation in committees/councils, and percent change in self-reported attitudes about patient safety. (Figures 2-5.)

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[1] O'Leary, KJ et al. Hospital Quality and Patient Safety Competencies: Development, Description, and Recommendations for Use. Journal of Hospital Medicine. 2011:0(0):1-7.

[2] Boike, JR et al. Patient Safety Event Reporting Expectation: Does it Influence Residents' Attitudes and Reporting Behaviors? Journal of Patient Safety. 2013:9(2): 59-67.

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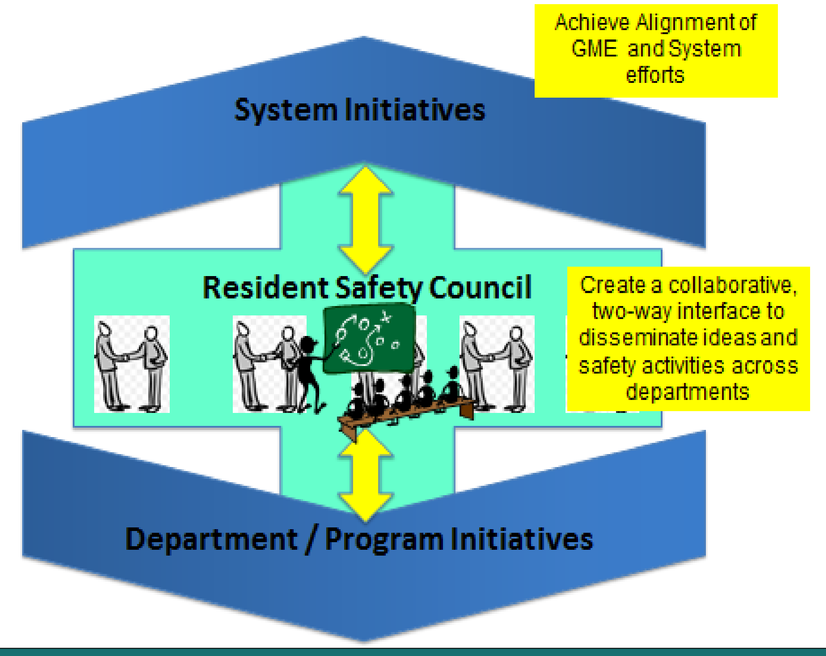
Figure-1.



Results

Figure-2. Resident reporting climate.

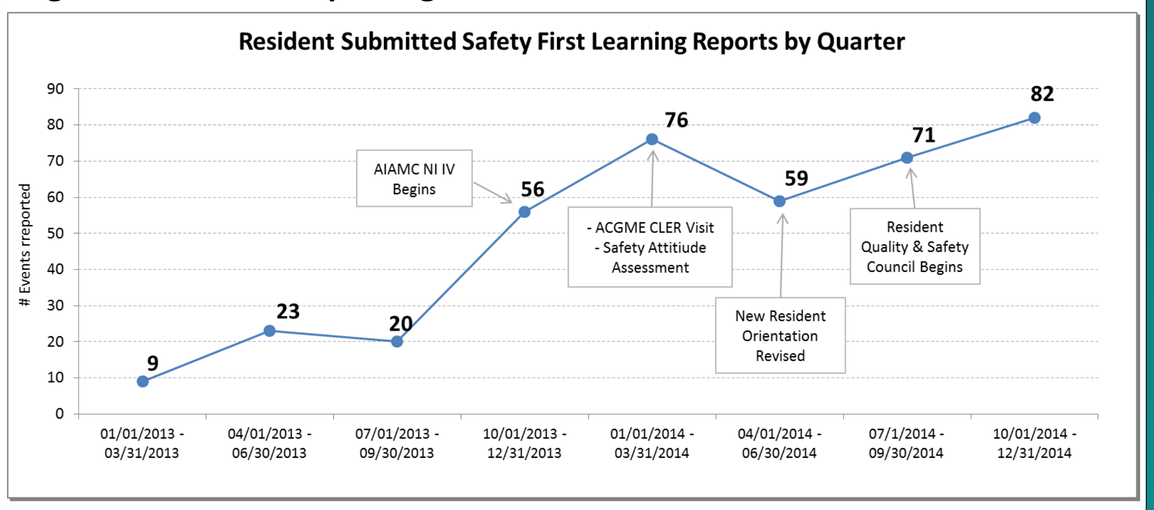


Figure-3. Reports submitted by program.

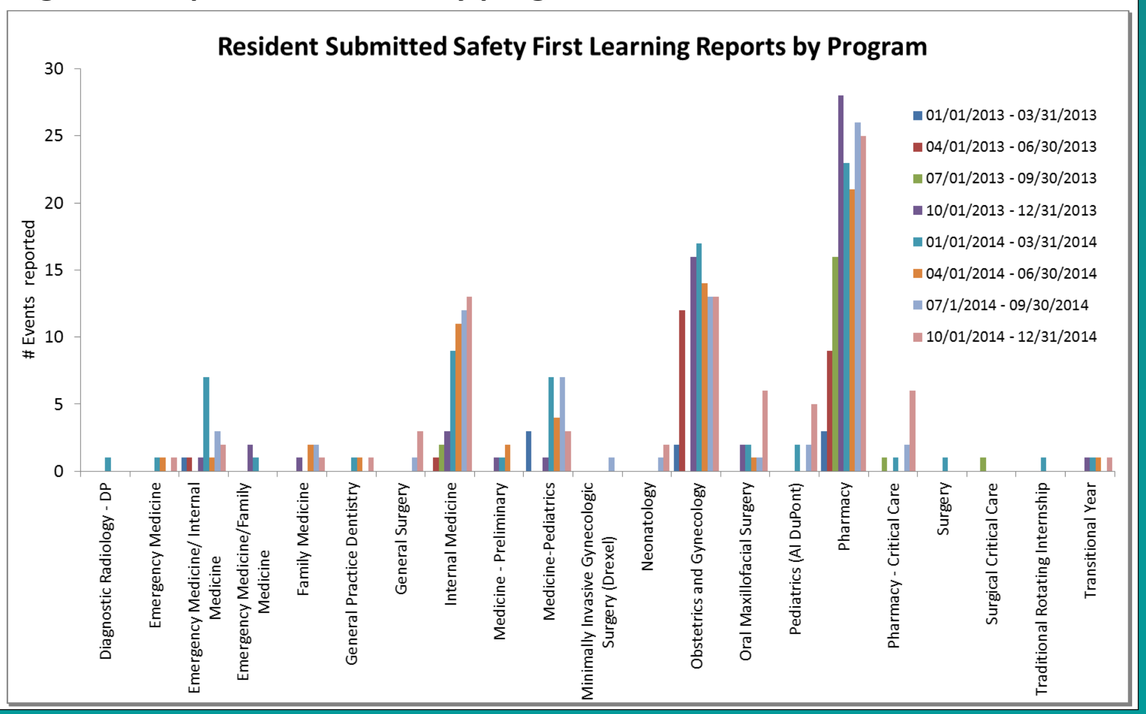


Figure-4. Resident participation in committees/councils.

Resident Participation in Committee/ Councils	# Committees	# Residents
RCA & Debriefs	46	91
Hospital Commitees	27	69
Departmental Committees	31	64
Data Source: GME log of resident participation in health system forums, 05/13-02/15.		

	M1	M2	% Change	Data Source/ Measure (M1, M2)
RCA & Debriefs	28	49	↑75%	GME log of resident participation in health system forums. 1st measure (06/13-2/14), 2nd measure (06/14-02/15)
# Resident Submitted Events	108	288	↑167%	Risk Mgt event reporting system. 1st measure (01/2013-12/2013), 2nd measure (01/2014-12/2014)

Figure-5. Safety attitudes.

Safety Climate Attitudes

	Disagree		Agree	
	2014	2015	2014	2015
Blame by colleagues influences my decision to report	**72%**	**76%**	28%	24%
Disciplinary action is a barrier to my decision to report	**75%**	**76%**	25%	24%
Risk of litigation is a barrier to reporting safety events	**76%**	**75%**	24%	25%
Legislated protection encourages reporting	20%	20%	**80%**	**80%**
Potential to improve patient care encourages reporting	3%	4%	**97%**	**96%**
Reporting safety events is my professional responsibility	3%	2%	**97%**	**98%**
I do NOT know which safety events to report	**85%**	**84%**	15%	16%
Reporting safety events is time consuming	**35%**	**30%**	65%	70%
Disclosing an error would negatively impact my relationship with a pt/ family	**82%**	**87%**	18%	13%
Senior colleagues influence my decision to report	**51%**	**53%**	49%	47%
Disclosing an error would damage my colleagues trust in my competence	**82%**	**83%**	18%	17%

Bolded results indicate belief or attitude that supports a positive safety climate.
Responses to Safety Climate Assessment performed February 2014 (n= 183) and February 2015 (n=170).

Discussion

- Faculty- resident dyad participation not only enabled effective dissemination of quality and safety initiatives within and between programs but also strengthened mentoring relationships.
- Providing protected time for participation in council meetings and organizational committee meetings was critical.
- Curricula were integrated to address the skills gap for implementation and reinforcement of fundamental patient safety concepts.
- Access to data reports and the availability of (electronic) toolkits for RCA, 5 WHYs, Cause & Effect Diagrams supported valuable council output.
- Enthusiasm to seek the Resident Quality & Safety Council's advice was unexpected, including specific requests from CEO/COO to help problem solve excessive capacity issues.

Conclusions

During our study period, we were able to demonstrate more than a 2-fold increase in the total number of resident submitted SFLR reports . Safety attitudes remained relatively the same. It is unclear at this time whether quality and safety forums experienced during training shapes future participation and reporting as medical physician leaders. We believe that the culture within our residency programs, amongst our faculty, and within our institution needs to be aligned in order to create the highly reliable environment our patients and community deserves.

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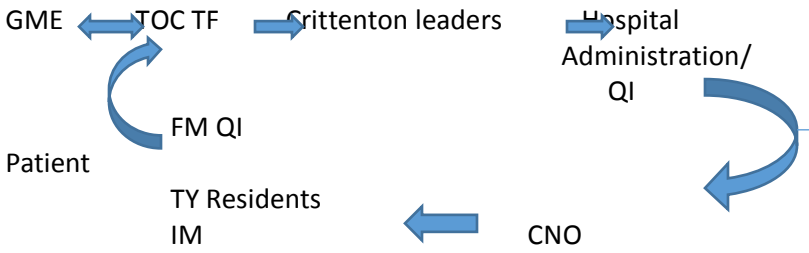
Team: CHMC **Focus Area: Transitions of Care**

I.	Team Charter/Objectives ('needs statement,' project requirements, project assumptions, stakeholders, etc.; Teams should identify members and define responsibility/purpose)	To apply the standardization of resident to resident hand-offs across all aspects of patient transfer within the hospital, services, outpatient and discharge. Requirements- OSHE- expanded/developed for each ToC setting Assumption- That OSHE applies across handoff settings (template) Members- residents, patients, attendings, medicare, et. cetera, ROI benefits, social workers, discharge nurses, ACGME regulation bodies
II.	Project Description	Using our QI projects, COPD, CHF, we identified that follow up appointments are critical in reducing readmission. This will serve as the topic for applying our template. We are interested in using OSHE to evaluate handoffs for all providers of care. Currently, we evaluate resident to resident handoffs, but other areas of transfer that need to be examined are inter-hospital, rehabilitation, nursing homes, et cetera.
III.	Necessary Resources (staff, finances, etc.)	We have a functioning leadership team that consists of GME and hospital and QI leaders. We have resident to resident hand-off development. We need a training program, specific definitions. OSHE- simulation center TOC Task Force support
IV.	Measurement/Data Collection Plan (must partner/match with Milestone Markers)	Analyze Resident 2Resident OSHE data first- make recommendations Qualitative data on COPD/CHF discharge instructions and follow up Analyze Qualitative data to identify TOC gaps for each aspect of care and to evaluate fit/utility of template Other data will be generated throughout: ROI data for financial impact Knowledge and impact on education through pre and post surveys Teamwork (SAQ)- to examine impact on the organization Resident satisfaction Clinical data on patient care
V.	Communication Plan (may be helpful to draft a flow chart of team members & senior management, both internal & external)	Residents have focus groups with patients (move to bottom of cell) 
VI.	Accountability (list of team members and who is accountable for what)	TOC TF report out monthly, finish project in 18 months GME-provide project leadership Programs—provide evaluation scenario

		Residents for participation
VII.	Potential Challenges (engagement, budget, time, skills gaps, etc)	Program engagement and attention to scheduling and debriefing needs. Activity requires dedicated administrative time over the course of the AY for planning, scheduling, and analysis.
VIII.	Markers (project phases, progress checks, schedule, etc.; must partner/match measurement/data collection plan)	2013-2014—Pilot was successful. All programs participated. Pre and post OSHE data were collected. Faculty champions debriefed residents. We concluded that a standard setting was needed and would host all programs at Kado Clinical Skills Center. Increased emphasis on resident feedback was noted and attended to for following academic year. 2014-2015—All programs participated and anticipated the activity. GME staff attended a didactic session to review the activity prior to the actual day. More instruction was provided to resident feedback. In addition to the typical duties, faculty champions wanted to edit their cases for the 2015-2016 year. This is in progress. Pre and post changes need to be examined further. Our institution also is looking to link the activity with our need for program monitoring of handoffs.
IX.	Vision Statement/Closing Plan (markers of success by March 2015)	*We were able to demonstrate that institution-wide Transitions of Care educational interventions were possible and sustainable while accounting for specialty variability.*

Implementing an Institutional Objective Simulated Handoff Evaluation (OSHE) for Assessing Resident Handoff Skill

Dillon, L, Markova, T., & Cottichia, J.
Wayne State University and Crittenton Hospital Medical Center, MI

Overall Goal/Abstract

- WSU GME set out to create an institutional intervention on Transitions of Care (ToC) education
- Formal education on delivering effective handoffs is a known need for residency programs
- The use of a standardized process saves time and permits collaboration among programs

Background

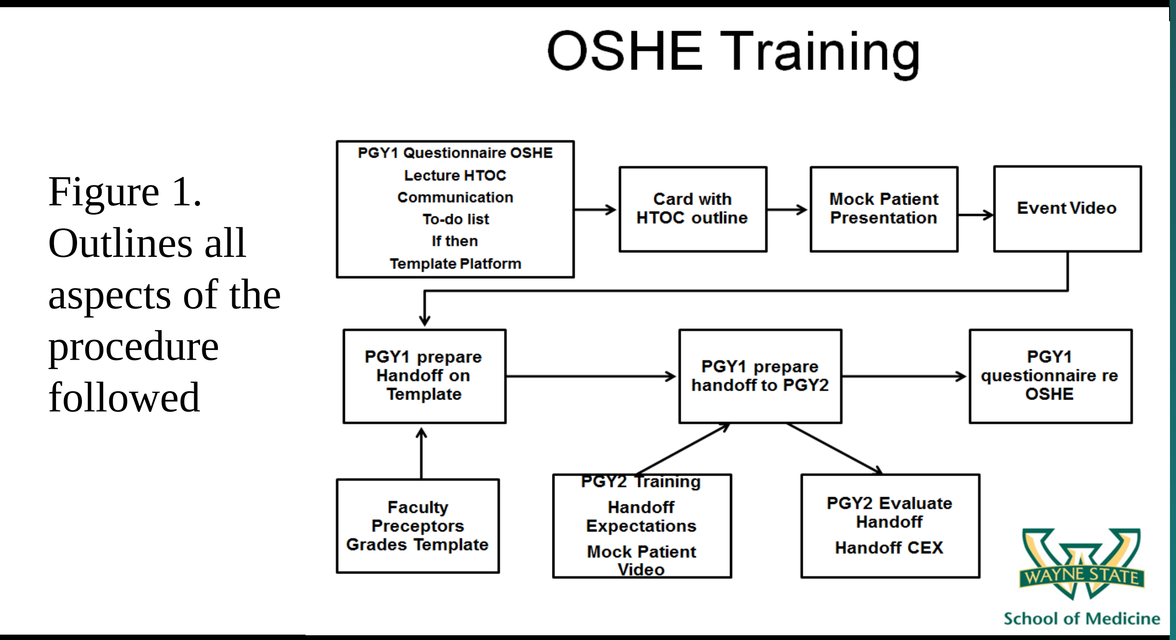
- After the implementation of our ToC institutional policy, ToC task force members identified a need for monitoring resident handoff quality
- The task force developed a standardized template to be used by all programs for written handoffs
- For 2012-2013, the task force voted to replicate Farnan et al. by requiring residents to complete an OSHE
- Each program designed a case and event that junior residents would handoff to senior residents.

Participants and Procedure

- A total of 82 residents completed the OSHE, which is a 91% participation rate
- Faculty champions hosted didactic session on ToC, secured resident availability, scored the written handoff, and provided resident feedback
- Senior residents scored the verbal handoff and gave feedback

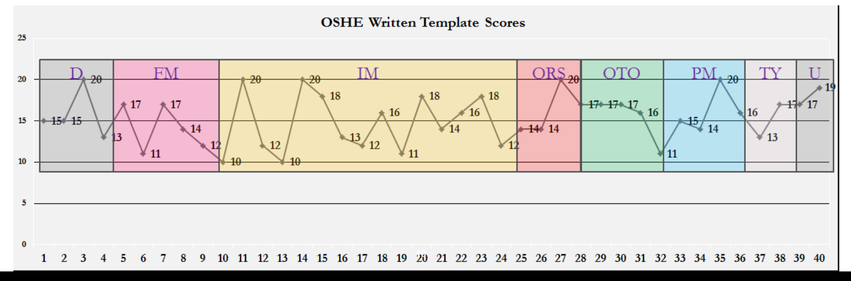
Materials/Methods

Figure 1. Outlines all aspects of the procedure followed



Results (data gathered both quant & qual.)

Survey results indicated resident confidence in picking up a new service significantly increased (, t = 2.12, (63), $p < .05$.), along with improved ability to make contingency plans, t = 2.00, (63), $p < .06$, how to perform a read back, t = 2.08, (63), $p < .05$, and when to perform a read-back, t = 2.78, (63), $p < .01$. Written template scores, varied by program (below).



Success Factors and Lessons Learned

- Faculty engagement from all programs through an institutional task force provided platform for OSHE implementation was key
- OSHE has become an annual monitoring tool for program compliance with the institutional ToC policy
- Senior residents reported difficulty in giving feedback to a fellow resident. As a result, feedback expectations were added to the didactic component

Barriers Encountered/Limitations-

- Collaborate with simulation center early on to establish a standardized procedure
- Link OSHE performance to direct observation of handoffs
- Track and compare resident performance over time
- Shape cases over time to accommodate changing program needs

Conclusions

- Institutional educational interventions accomplish several objectives simultaneously. It is a demonstration of GME engagement, permits policy monitoring that does not detract from its educational focus
- OSHE is a simple, but effective tool for sampling how faculty and residents deliver handoffs and provide an ongoing opportunity to refine handoff education

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Team: Florida Hospital **Focus Area: Patient Safety**

I.	Team Charter/Objectives ('needs statement,' project requirements, project assumptions, stakeholders, etc.; Teams should identify members and define responsibility/purpose)	The main focus of our project was to develop an effective patient safety curriculum for faculty and residents using as a framework a collaboration between the Graduate Medical Education and the Performance Improvement Department based on a comprehensive Mortality Learning Program for the Hospital.
II.	Project Description	Residents assigned to participate on a Morbidity and Mortality presentation for their program were included in this project. The curriculum was divided on four phases: 1) Three modules on the study of medical errors, the science of human error and principles of high reliability. 2) Review of training charts using a clinical triggers methodology. 3) Review of the real case using the tools and format of the Florida Hospital Mortality review Program 4) M & M presentation to Resident Group.
III.	Necessary Resources (staff, finances, etc.)	The Florida Hospital Mortality Review Program is funded by the Performance Improvement Department. Graduate Medical Education contributes with 0.25 FTE Faculty Support for expert review of cases as needed by the clinical analyst team and to support resident education related to M&M discussion and patient safety training.
IV.	Measurement/Data Collection Plan	The measurements are divided on process measures in terms of number of residents completing the patient safety curriculum, and outcomes measures directed at evaluating changes in behavior such as reporting of safety events and quality improvement projects in this area.
V.	Communication Plan (may be helpful to draft a flow chart of team members & senior management, both internal & external)	The structure of the project involves communication between senior leadership and faculty and residents on both the performance improvement department and graduate medical education. Dissemination of information for faculty and residents uses traditional methods. A description of the curriculum was presented as part of the faculty development series.
VI.	Accountability (list of team members and who is accountable for what)	Performance Improvement Clinical Analysts: Support operational needs of the mortality review program and provide feedback to rotating residents on the application of the clinical trigger methodology. Medical Director of the Program: 0.25 Faculty FTE . Support operational needs of the program. Supervise and guide rotating residents. Delivery of curriculum.

VII.	Potential Challenges (engagement, budget, time, skills gaps, etc)	Get buy in from participating residents on the importance of a patient safety curriculum Time constraints created by competing responsibilities for faculty and residents
VIII.	Markers	The project and curriculum was divided on four phases: 1) Three modules on the study of medical errors, the science of human error and principles of high reliability. 2) Review of training charts using a clinical triggers methodology. 3) Review of the real case using the tools and format of the Florida Hospital Mortality review Program 4) M & M presentation to Resident Group.
IX.	Vision Statement/Closing Plan	Residents at Florida hospital will participate on a patient safety curriculum that engages them on a culture of high reliability and system redesign approach to the mitigation of medical errors.
X.	Success Factors	The most successful component of our work was…….Engaging Faculty and residents on a patient safety curriculum We were inspired by……..Institutional commitment to advancing a culture of patient safety and high reliability.
XI.	Barriers	The largest barrier we encountered was, lack of familiarity with the implications of patient safety for the medical profession. We worked to overcome this by: Discussing implications of Patient Safety not only at the patient level but also for the healthcare system and individual doctor practice.
XII.	Lessons Learned	The single most important piece of advice to provide another team embarking on a similar initiative would be: Importance of institution support, getting buy in from residents and faculty.
XIII.	Expectations Versus Results	*8*
XIV.	Satisfaction	*8*
XV.	Project Impact	Increased competencies related to curriculum development in patient safety. Promotion of a high reliability culture that moves from a punitive to a system redesign focus when thinking about patient safety events.
XVI.	Next Steps	The initial focus has been the IM residency program. We plan to expand curriculum to other residency program and support their M&M presentations.

ADVANCING PATIENT SAFETY EDUCATION THROUGH A SYSTEMATIC MORTALITY LEARNING PROGRAM

Victor Herrera, MD, Joseph Portoghese,MD, Department of Graduate Medical Education, Florida Hospital, Orlando, Florida

Overall Goal/Abstract

This project describes the development and implementation of an structured patient safety curriculum in graduate medical education based on the Florida Hospital Mortality Learning Program.

Background

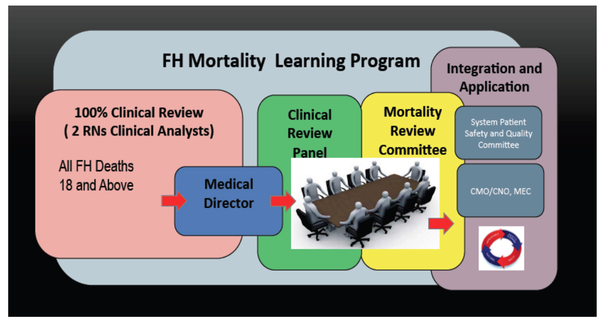
There is a need to improve the teaching of Patient Safety in Graduate Medical Education. Traditional formats such as lectures have not been effective on engaging residents on a patient safety culture. Case based and experiential learning have demonstrated to advance skills and change behaviors.

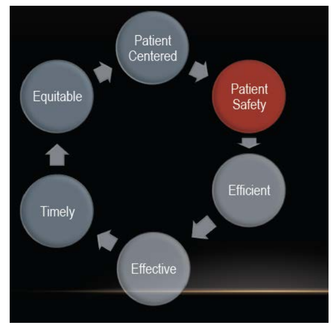
Vision Statement

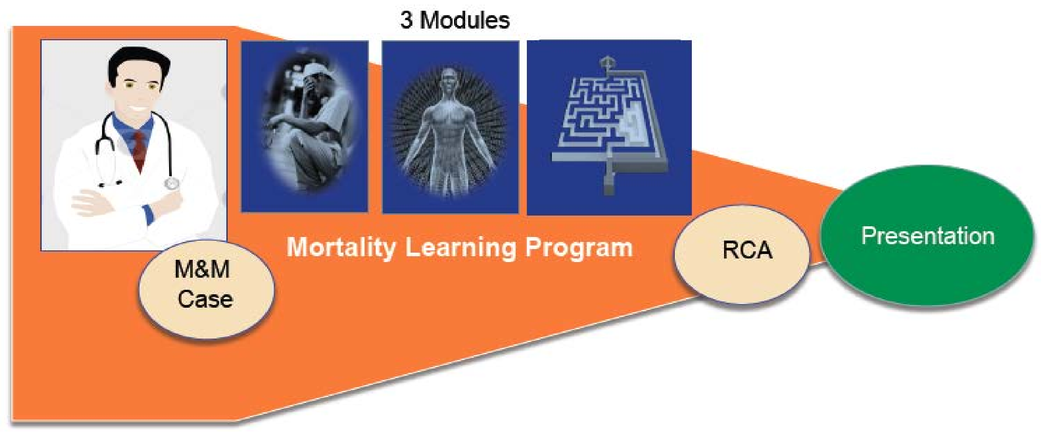
Residents will acquire the skills, knowledge and attitudes necessary to become leaders in the development and implementation of initiatives that mitigate patient harm and advance a culture of high reliability in healthcare.

Materials/Methods/Results

An structured curriculum using case based exercises and interactive delivery of content was developed using as a framework the Florida Hospital Mortality Learning Program. Residents assigned to plan a Mortality and Morbidity presentation participated on a two phases training under faculty supervision, with emphasis on patient safety education and learning of the IHI Global Tigger Methodology as it relates to Mortality Reviews.







Success Factors

Resident engagement was facilitated by using real morbidity and mortality cases

An structured evidence-based methodology based on the hospital mortality review program provided an effective framework to teach patient safety

Conclusions

Mortality Review Programs offer an opportunity to train residents on principles of patient safety and high reliability. An adverse event measuring and tracking clinical triggers methodology provides a framework to deliver the content using a case based and interactive format.

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www.ihi.org

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Team: Regions Hospital/HealthPartners **Focus Area:** Quality Improvement /Patient Safety

I.	Team Charter/Objectives ('needs statement,' project requirements, project assumptions, stakeholders, etc.; Teams should identify members and define responsibility/purpose)	*A video explaining NI IV and CLER was created and sent to team members prior to the first meeting on December 5, 2013.* *Team Members:* *Kelly Frisch – Project Co-Leader, Assistant DIO* *Josh Peltier – Project Co-Leader, G2 Emergency Medicine Resident* *Julie Cole – GME Accreditation Manager* *Felix Ankel - DIO* *Jen Augustson – Sr. Director Ed Administration* *Brad Gordon – Med Informatics* *Beth Heinz – VP Operations, Chief Quality Officer* *Julibeth Lauren – Dir. of Nursing Practice/Education/Research* *Willie Braziel – GME Manager of Operations* *Heidi Conrad – CFO, Regions* *Scott Oakman – Psychiatry Program Director* *Terry Crowson – Assoc. Med Director, HP* *Deb Friend – Director, Patient Safety/Corporate Compliance* *Michelle Island – Pt. Safety Program Manager*
II.	Project Description	*Regions Hospital and the Institute for Education and Research conducted a gap analysis to identify innovative solutions to be fully prepared for a CLER visit. The vision is to align operations with Graduate Medical Education. The team decided to focus on two areas: Error Reporting and Integrating Residents into Hospital Quality Initiatives.*
III.	Necessary Resources (staff, finances, etc.)	*Financial resources are available to cover NI expenses: AIAMC fee, meeting registration fees, travel expenses, etc. Team meets face-to-face nearly every other month. The team collaborated with HP Institute for Education and Research E-Learning Team to develop "Good Catch" Video.*
IV.	Measurement/Data Collection Plan (must partner/match with Milestone Markers)	*Not applicable at this stage in the project*
V.	Communication Plan (may be helpful to draft a flow chart of team members & senior management, both internal & external)	*Almost all communication for these projects was done via email or during in-person meetings. No major plan was necessary for the project team itself.* *Communication to the residents was done via GME office emails or at presentations at GMEC. The Good Catch Reporting video is the main communication tool used to inform residents of the process. The QI integration project was primarily done through hospital leadership and GME program leadership. Two quality summits were created to bring the stakeholders to the table. Additional communication was sent via email.*
VI.	Accountability (list of team members and who is accountable for what)	***Error Reporting:*** *Hospital Leadership (Patient Safety, Informatics, etc) – Responsible for changes to the error reporting tool and process. Provide reporting data to inform the team. Create video content via script writing; participate on camera in the video.* *GME Leadership – Develop processes to relay video and other communications to all trainees at Regions Hospital. Work with Program Directors and Coordinators to ensure they are making it a priority with their trainees. Create video content via script writing; participate on camera in the video.* ***Quality Integration:*** *Hospital Leadership – Update Quality web site to include new QI training curriculum and create and update a QI project registry.*

		GME Leadership – Understand hospital QI process, resources, etc. Help establish a process for residents (and faculty assisting residents) to follow when creating a new project or participating in an existing project and utilizing hospital QI resources.
VII.	Potential Challenges (engagement, budget, time, skills gaps, etc)	*We feel we have the right expertise and talent. Time commitment is always an issue in every organization, but we'll work on making this project a priority and mitigating any potential engagement challenges. The team leaders created a video and sent it to team members prior to the first meeting. This was intended to motivate them and obtain their support.*
VIII.	Markers (project phases, progress checks, schedule, etc.; must partner/match measurement/data collection plan)	*<u>Error Reporting:</u>* • *Determine new method of reporting errors - COMPLETE* • *Develop teaching tool and communication plan* • *New reporting available in EPIC – called Good Catch - COMPLETE* • *Training tool to be a video (collaborating with the E-Learning team) - COMPLETE* • *Write script, assign video roles, film video - COMPLETE* • *Develop survey to send to trainees pre and post-video - COMPLETE* • *Determine how to send out video – to RGHP trainees and affiliates - COMPLETE* • *Send out pre-video survey - COMPLETE* • *Send out video - COMPLETE* • *Send out post-video survey - COMPLETE* *<u>Aligning Residents with Hospital Quality Initiatives:</u>* • *Work with hospital Performance Improvement Coordinator on the development of training modules and a QI project database, and other tools to align hospital quality initiatives with training programs. – COMPLETE* • *Quality officer new member of GMEC - May 2014 - COMPLETE* • *Quality Summit – November 2, 2014 – QI curriculum and updated database now available online - COMPLETE* • *Quality Summit – February 9, 2015 – Determined need for program or resident-initiated QI project database. This database is currently in creation and will be added as a separate link on the QI registry web site. Additionally, faculty mentors were named as resources for program faculty who work with trainee projects.*
IX.	Vision Statement/Closing Plan (markers of success by March 2015)	*By March 2015-* • *Video has been released, surveys indicate increase in awareness and error reporting. Roll out to faculty and other members of the health care team.* • *Database of hospital and resident quality improvement projects created, training modules developed and available, QI resources (statistician) available to residents leading to increased resident involvement in hospital QI initiatives. GME leaders will also present resident QI statistics at quarterly hospital leadership meetings.* *Upon completion of the NI IV project, this project team will merged into Learning Environment Committee – to assess CLER focus areas in an ongoing manner. Both of these projects will be monitored under this new committee.*

X.	Success Factors	*The most successful component of our work was achieving full collaboration with our hospital operations partners. This project allowed each party to benefit from the results; it wasn't just a GME project with hospital operations members participating.* *We were inspired by how willing every individual was to carry this out. And how willing they are to continue participating by joining our Learning Environment Committee.*
XI.	Barriers	*The largest barrier we encountered was engaging our affiliate residents. They make up two-thirds of the trainees at our institution and may only spend one or two months at our hospital.* *We worked to overcome this by engaging the site coordinators, site directors and by working with their sponsoring institution to help increase awareness.*
XII.	Lessons Learned	*The single most important piece of advice to provide another team embarking on a similar initiative would be to engage hospital leadership early, prior to the project starting. Our DIO and Assistant DIO did a lot of work to ensure that GME was on the radar of hospital leaders, to ensure that GME leaders were at the table with hospital leadership. In this project, GME leadership also made it a point of listening to ideas, incorporating ideas and making sure everyone invited to the table feels like this is going to benefit their patients, institution and organization in one way or another. This all helped pave the way for collaboration on this project (and will help for future projects as well).*
XIII.	Expectations Versus Results	*On a scale of 1 to 10 (with "1" meaning nothing and "10" meaning everything), how much of what you set out to do was your team able to accomplish?* *1 2 3 4 5 6 7 8 9 10* *Ultimately, learning tools for error reporting were created and QI resources and databases are now in place. Resident results are still ongoing and we cannot yet say how effective we were.*
XIV.	Satisfaction	*On a scale of 1 to 10 (with "1" meaning not at all satisfied and "10" meaning completely satisfied), how satisfied are you with what you were able to accomplish in your NI III work?* *1 2 3 4 5 6 7 8 9 10* *We were able to create a solid infrastructure for GME and Hospital Operations alignment that will continue well beyond this project.*
XV.	Project Impact	*Our NI IV projects were successful in their attempt to align GME with Hospital Operations and now, nearing the end, there is still a lot of energy around this type of work. Therefore, it will continue through a new, ongoing committee called the "Learning Environment Committee." This committee will include many of the same individuals, but will open up membership to more trainees and more program representatives. We have also seen greater resident interest in participating in institution-wide projects. The resident participants for the Learning Environment Committee have increased from the number on the Good Catch Project. Additionally, the Performance Improvement team from the hospital will now list resident QI projects next to their QI database to ensure that both educators and hospital administrators have an understanding of the full extent of QI scholarly work at our institution. GME Leadership will now present resident scholarly work at quarterly hospital leadership meetings.*
XVI.	Next Steps	*Error Reporting: We plan to incorporate the Good Catch video into New Resident Orientation from now on. Also, we will work with our GME*

		partners across the region to develop Twin-Cities-wide curriculum around error reporting focusing on what types of events constitute a report. *Quality Integration: Faculty QI leaders have been assigned to assist program directors and faculty mentors on managing trainees' QI projects. Additionally, a database of hospital QI projects and a resident QI database will be established to inform mentors/residents/faculty of the possible available projects/support.*

"Good Catch" Safety Event Reporting

Josh Peltier MD[1], Julie Cole MPP[2], Kelly Frisch MD[2], Felix Ankel MD[1,2]

1. Regions Hospital Emergency Medicine Residency, St. Paul, MN 2. HealthPartners Institute for Education and Research, St. Paul, MN

Introduction

One of the six focus areas of the CLER Program is Patient Safety, specifically patient error reporting[1]. Teaching institutions need to ensure that residents have the opportunity to report errors, unsafe conditions and near misses, and then participate in safety event analysis, action plan development and follow-up. Unfortunately, early reports from ACGME CLER visits have shown that many institutions fail to engage residents in this process[2]. At the same time, residents may not be aware of why or how to report patient care errors. Even if they are aware, they may be hesitant to report errors for fear of retribution or due to time constraints. Increasing awareness and the importance of safety events and error reporting among resident physicians is the first step in improving this process.

Objective

Increase awareness of safety events and the number of safety events being reported by resident physicians.

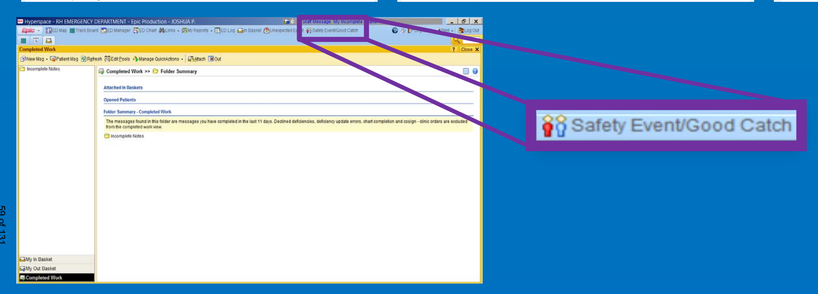
Materials

https://www.youtube.com/watch?v=gvYfl9Fc5A8

Event Reporting: Good Catch Video

Event Reporting: Good Catch Video

Event Reporting: Good Catch Video



Integration of Midas+® event reporting system into Epic® EMR

Methods

- Creation of a multi-disciplinary workgroup involving key Regions Hospital leaders in nursing, QI, patient safety, finance, informatics, GME and residency programs.
- Integration of event reporting system into our EMR.
- Pre-survey of residents to obtain baseline levels of awareness, ease and comfort of safety event reporting.
- Development of a 14 minute "Good Catch" event reporting video to explain why we need to report, how to report and what happens after we report errors.
- Video was distributed among all 6 primary residency and fellowship programs at our institution and all 17 affiliated programs in October 2014.
- Post-survey of residents after three months to assess understanding of safety event reporting and to quantify how many times they have reported an event.

Results

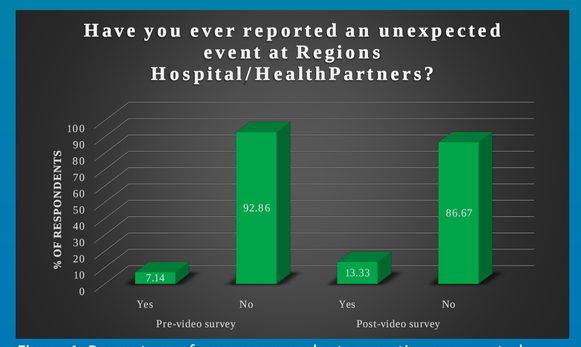


Figure 1. Percentage of survey respondents reporting unexpected events at HealthPartners.

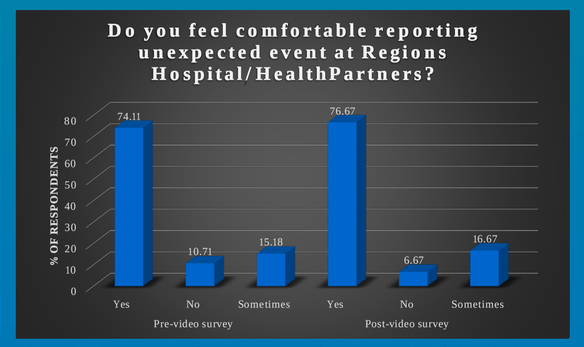


Figure 2. Percentage of survey respondents reporting if they feel comfortable reporting unexpected events at HealthPartners.

- 7% (8 of 112) had reported an unexpected event at our institution prior to implementation compared with almost 13% after.
- 59% (66 of 112) were unsure if the reporting process was anonymous prior to implementation compared with 23% after.
- 7% of residents still don't feel comfortable reporting unexpected events at our institution, compared with 11% prior to implementation.

Results

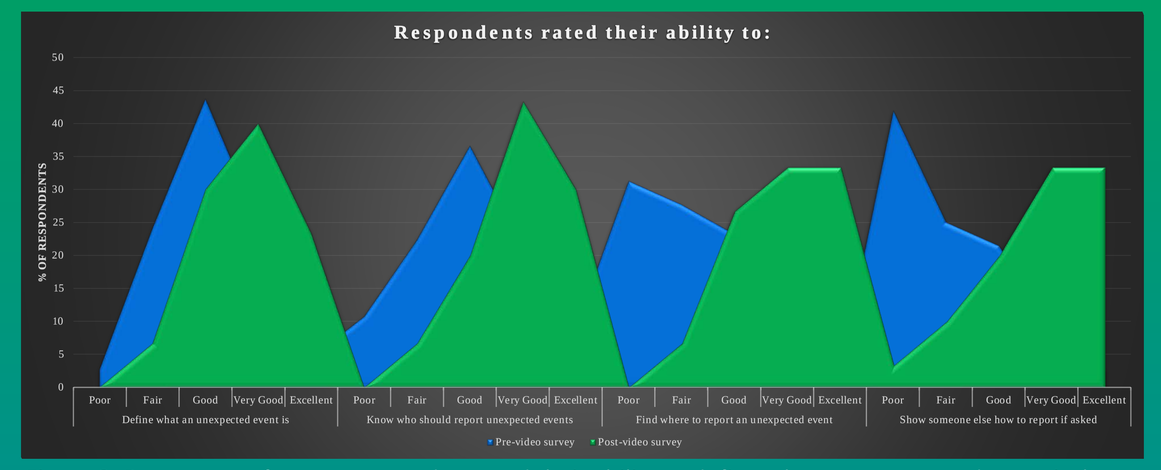


Figure 3. Percentage of survey respondents and their ability to define what an unexpected event is, know who should report an event, find where to report an event and show someone else how to report if asked.

- 93% of residents felt good about how to report after implementation compared with 41% prior
- The most common reasons cited for not reporting were not knowing how to report, not wanting to take the time to report and uncertainty regarding anonymity.

Conclusion

- Resident physicians are more likely to report safety events after integrating reporting systems into the EMR and educating residents on why we need to report, how to report and what happens after we report errors.
- Short, online instructional videos can be effective tools in educating residents about event reporting.

Future

- Re-inforce anonymous nature of reporting.
- Continue to survey residents on quarterly basis.
- Creation of a universal error reporting curriculum among all Twin Cities based teaching hospitals.

References

1. Weiss KB, Wagner R, Nasca TJ. Development, Testing, and Implementation of the ACGME Clinical Learning Environment Review (CLER) Program. J Grad Med Educ. 2012;4(3):396-398.
2. Weiss KB, Wagner R, Bagian JP, Newton RC, Patow CA, Nasca TJ. Advances in the ACGME Clinical Learning Environment Review (CLER) Program. J Grad Med Educ. 2013;5(4):718-721.

Team: Jersey Shore University Medical Center, Neptune, NJ **Focus Area: Quality Improvement**

<table>
<tr><td>I.</td><td>Team Charter/Objectives ('needs statement,' project requirements, project assumptions, stakeholders, etc.; Teams should identify members and define responsibility/ purpose)</td><td><u>Needs Statement:</u>
All categorical residents at Jersey Shore University Medical Center (JSUMC: Jersey Shore) need to participate in formal training in Quality Improvement (QI) as well as take on a practical experience to be prepared for the healthcare environment of the future.
<u>Project Requirements and Assumptions:</u>
These objectives need to be met through a combination of on-line learning and engagement with process improvement and clinical mentors who can offer guidance as they design and lead their own hands-on QI project.
<u>Stakeholders:</u>
All residency training programs sponsored by Jersey Shore, Outcomes Management, and Clinical Effectiveness
<u>Team Members and Responsibilities:</u>
David Kountz, MD – DIO; overall project oversight
Andrew Blechman, MD – Program Director, Ob Gyn – project implementation in Obstetrics and Gynecology
Mayer Ezer, MD – Program Director, Internal Medicine – project implementation in Internal Medicine
Paul Schwartzberg, DO – Program Director, Pediatrics – project implementation in Pediatrics
Rachael Polis, DO – Resident, Ob Gyn – resident perspective and liaison with JSUMC residents to support project implementation
Brenda Capuano – Outcomes Management – identify potential teams for residents to join and identify individual projects; assist in identifying clinical mentors
Carol Russell – Medical Management – coordination of PI Projects; delivery of the didactic curriculum</td></tr>
<tr><td>II.</td><td>Project Description</td><td>In 2012-2013 Dr. Blechman, in conjunction with a coach from Medical Management, championed a pilot PI course for selected residents at JSUMC ("Agent of Change") which included didactic sessions and participation in a PI project. Our team will evaluate this pilot experience (written feedback; interviewers with participating residents and mentors), as well as best practices from other institutions, to generalize the program to meet the needs of the entire resident community at Jersey Shore.</td></tr>
<tr><td>III.</td><td>Necessary Resources (staff, finances, etc.)</td><td>1. Administrative staff to support meeting coordination
2. Mentors/coaches/facilitators for PI curriculum and didactic sessions
3. Classrooms and laptops with AV capabilities

Subscription to IHI Open School to monitor resident completion of modules</td></tr>
<tr><td>IV.</td><td>Measurement/ Data Collection Plan (must partner/match with Milestone Markers)</td><td>Data Collection Plan
<table>
<tr><th>Task</th><th>Source(s)</th><th>Steps to Accomplish</th><th>Schedule</th></tr>
<tr><td>Review PI Pilot</td><td>PI Faculty, residents</td><td>1. Set up meeting
2. Review evaluations
3. Conduct resident interviews</td><td>Q3 2013
Q1 2014</td></tr>
<tr><td>Create 2014 Curriculum</td><td>Project Team, Medical Management</td><td>1. Review pilot and other PI Curricula
2. Develop JSUMC Curriculum
3. Identify Projects/Mentors</td><td>Q2 2014
Q3 2014</td></tr>
<tr><td>Monitor Curriculum</td><td>Project Team</td><td>1. Match mentors</td><td>Q3 2014</td></tr>
</table></td></tr>
</table>

		with Start of New Academic Year		*or projects with residents* *2. Create schedule for didactic sessions* *3. Finalize policies for non-completers*	*Q4 2014* *Q1 2015*

V. Communication Plan (may be helpful to draft a flow chart of team members & senior management, both internal & external)

Communications Plan

Communication Type	*Objective*	*Medium*	*Frequency*	*Audience*	*Owner*	*Deliverable*
Kickoff Meeting	*Review Project Objectives*	*Face to Face*	*Once*	*Project Team*	*Project Leader*	*Agenda; Meeting Minutes*
Project Team Meetings	*Review Status of Project*	*Face to Face*	*Q6 weeks*	*Project Team*	*Project Leader*	*Agenda; Meeting Minutes*
GME Update	*Review Status of Project*	*Face to Face*	*Quarterly*	*GME Committee*	*Project Leader or Team Member*	*Meeting Minutes*
Project Summary at Research Day, June 2015	*Inform of Project*	*Face to Face*	*Once at Project Conclusion*	*Graduating Residents and Faculty*	*Project Leader*	*Written summary in Research Day proceedings*

VI. Accountability (list of team members and who is accountable for what)

See section I above re: stakeholders

VII. Potential Challenges (engagement, budget, time, skills gaps, etc)

1. *Competing priorities of potential mentors*
2. *Identifying enough mentors for all categorical residents*
3. *Time challenges adding residents to existing PI/QI teams*
4. *Disciplinary steps if a resident/fellow fails to complete the project requirements*
5. *Resident inertia to complete projects given intensity of clinical rotations, on-call, etc*

VIII. Markers (project phases, progress checks, schedule, etc.; must partner/match measurement/data collection plan)

Timeline	*Q3 2013*	*Q42 013*	*Q1 2014*	*Q2 2014*	*Q3 2014*	*Q4 2014*	*Q1 20*
Complete Pilot	*XXXX*						
Analyze Pilot		*XXXX*	*XXXX*				
Develop PI Curriculum				*XXXX*	*XXXX*		
Identify Mentors				*XXXX*	*XXXX*		
Monitor Resident Engagement and Outcomes of Projects						*XXXX*	*XXXX*
Report to GME	*XXXX*	*XXXX*	*XXXX*	*XXXX*	*XXXX*	*XXXX*	*XXXX*

		Committee
IX.	Vision Statement/Closing Plan (markers of success by March 2015)	*Every categorical resident at Jersey Shore understands the principles of performance improvement, and has or is working on a project to improve some aspect of the care that they see around them. They will be confident in making meaningful contributions to their fellowship program or practice to improve patient safety and quality.*
X.	Success Factors	*The most successful component of our work was the enthusiasm of our resident champion and PI/QI leader who drove the process at our institution. They were constant cheerleaders for the importance of the project. It was also gratifying to share our project with our site visitors during our CLER visit this fall.* *We were inspired by the growing recognition of near-misses and safety events, and the need to not just assign blame but work through processes to understand what happened and how to prevent it in the future. I am confident that our residents will be effective change agents for both safety and quality/process improvement issues in the future.*
XI.	Barriers	*The largest barrier we encountered was limited engagement and involvement by several of our Program Directors which limited the residents' participation in those programs. We worked to overcome this by significant engagement with senior/chief residents who were passionate about the project.*
XII.	Lessons Learned	*The single most important piece of advice to provide another team embarking on a similar initiative would be to have explicit expectations of the responsibilities of all members of the project team, and hold them accountable to their original commitment!*
XIII.	Expectations Versus Results	*On a scale of 1 to 10 (with "1" meaning nothing and "10" meaning everything), how much of what you set out to do was your team able to accomplish?* *1 2 3 4 5 6 7 (8) 9 10*
XIV.	Satisfaction	*On a scale of 1 to 10 (with "1" meaning not at all satisfied and "10" meaning completely satisfied), how satisfied are you with what you were able to accomplish in your NI III work?* *1 2 3 4 5 6 7 8 (9) 10*
XV.	Project Impact	*One of our other needs in e program was for more mentors for residents involved in the curriculum. Based on this observation as well as the residents' satisfaction with the IHI Open School classes, we hope to make completion of IHI modules a faculty expectation in 2015. I doubt that we would have seen this step taken by our C-Suite without participation in the Initiative.*
XVI.	Next Steps	*We have a final post-test and report out from the resident teams in March/April. We are writing a poster for our Resident Research Day in June 2015 to highlight the program as well.*

Process Improvement Training In Resident Education

Rachael L Polis, DO, Carol Russell, MS, Brenda Capoano, RN,
Meghan I Rattigan, DO, David S Kountz, MD
Jersey Shore University Medical Center, Neptune, New Jersey

Overall Goal/Abstract

Process Improvement (PI) curriculum involving didactic sessions, independent online learning, and multidisciplinary practical application will increase resident PI knowledge and application into their future practices

Background

- Patient safety and quality have become the major focus in healthcare
- Residents are provided with little-to-no PI training
- The Accreditation Council for Graduate Medical Education (ACGME) requires residency programs to include patient safety and healthcare quality as 2 of the 6 core competencies
- Teaching institutions left to develop and incorporate structured Process Improvement (PI) training programs into the resident educational tract.
- Standardized measurement tools for effectiveness of training programs limited

Vision Statement

Incorporation of a PI training program into the resident educational tract will provide residents with an understanding of basic PI methodology and tools, and the ability to effect change and improvement in a standardized approach

Materials/Methods

- Process improvement curriculum entitled *Becoming an Agent of Change* was developed
- Training includes:
  - Institute of Healthcare Improvement (IHI) Open School (Patient Safety & Improvement modules)
  - 8 classroom sessions over six months
  - Team/individual coaching,
  - Group/independent activities to develop PI projects
- Implemented in Obstetrics & Gynecology and Pediatric residency programs in fall term of 2014
- QAIC Toolkit 12 question pre-test to measure self perception of 12 core PI/QI skills (Oyer 2010) administered
- Two scoring models utilized for benchmarking/control groups:
  - Oyer from University of Chicago (2010)
  - ONeill from Northwestern University Feinberg School of Medicine (2013)
- At completion of training program (April 2015) QAIC Toolkit post-test will be administered; results analyzed

Table 1: Pre-test Results Compared Control Groups

	UChicago Scoring: % > "slightly comfortable"		NW Feinberg Scoring: Mean (1-5 comfort scale)	
QI LEARNING OBJECTIVE	JSUMC Pre-test %	UC Pre-test %	JSUMC Pre-test Mean	NW Pre-test Mean
Write a clear aim	44	71	2.5	2.5
Apply the best professional knowledge	56	53	2.5	2.3
Use measurement to improve	44	41	2.4	2.3
Study the process	50	21	2.4	2.2
Make changes in a system	60	24	2	2
Identify if a change leads to improvement	56	32	2.6	2.2
Use small cycles of change	40	11	2.3	2
Identify best practice/ compare local practice	53	44	2.7	2.2
Implement structured plan to test a change	19	18	1.8	2.1
Use PDSA cycle	19	9	1.9	1.5
Identify how data is linked to processes	19	18	2	2
Build next improvement	60	26	2.2	2.2

Pre-Test Results

- JSUMC and ONeill demonstrate similar baseline self-assessment of 12 core QI skills
- JSUMC demonstrated a higher comfort level in 11 of 12 QI skills when compared to Oyer.
- Pre-test results indicate residents possess only **slight to moderate** comfort with QI skills with the lowest comfort assessed in PDCA methodology

Success Factors/Lessons Learned

- Commitment from department leaders to implement PI program into educational curriculum
- Curriculum trialed previously by Department of Pediatrics Physicians
- On-site PI expert/coach

Barriers Encountered/Limitations

- Resident session attendance limited secondary to off-site rotations, vacation, post-call or having other clinical responsibilities
- Difficult to engage enough department clinical champions with multiple simultaneous projects
- Group vs. individual projects limits hands-on experience and project ownership

Conclusions/Next Steps

- A structured PI training program built into resident education:
  - Increases comfort with PI methodology/tools
  - Facilitates awareness and involvement in future PI initiatives
- Next Step: Resident quality improvement council for training and project oversight

Work Cited: 1) O'Neill S, Henschen B, Unger E, Jansson P, Unti K, Bortoletto P, Gleason K, Woods D, Evans D (2013). Educating future physicians to track health care quality: feasibility and perceived impact of a health care quality report card for medical students. Academic Medicine; Vol 88, No. 10. 2) Quality Assessment and Improvement Curriculum (QAIC) Toolkit – Oyler, J. Vinci, L. Johnson, J. , Arora, V., University of Chicago Medical Center 3) Vinci LM, Oyler J, Johnson JK, Arora VM (2010). Effect of a quality improvement curriculum on resident knowledge and skills in improvement. Qual Saf Health Care; 19(4): 351-4.

Team: JPS Health Network **Focus Area:** Quality and Patient Safety Education

I.	Team Charter/Objectives ('needs statement,' project requirements, project assumptions, stakeholders, etc.; Teams should identify members and define responsibility/purpose)	The team will collaborate with the quality and patient safety experts to create an institutional program that engages residents and faculty in experiential and interprofessional education. Assumption: (1) Faculty have limited involvement in PI, quality and patient safety initiates and have had limited training. (2) Residents and Faculty lag behind in initial training begun on the institutional level (3) Interprofessional Education is limited in the institution.
II.	Project Description	The overall goal of this project is to increase quality and patient safety in GME through experiential learning with program directors, faculty, and residents. Our team recognizes that a major barrier to moving forward is limited knowledge of standardized process methods among residents and faculty. The preliminary stages of this project include identifying the best method for training residents and faculty given the time constraints and mandates of programs and participants. the aim of the investigators is to develop a sustainable program that is systems-based.
III.	Necessary Resources (Staff, finances, etc.)	Faculty- quality, patient safety, metrics, academic faculty Finances to hold meeting – covers meals, any literature reproduction, honorariums for speakers Administrative support Research staff to assist with projects
IV.	Measurement/Data Collection Plan (must partner/match with Milestone Markers)	**Program Evaluation Metrics**: Attendance Trends Increasing Number of faculty participants Increasing number of interprofessional activities Pre and Post surveys # attendants participating in PI, Quality and Patient Safety initiatives # imitative completed # projects leading to transformation or improvement # Barriers addressed Impact factor ** All metrics selected for projects are aligned with nation al or hospital benchmarks
V.	Communication Plan (may be helpful to draft a flow chart of team members & senior management, both internal & external)	Information regarding AIAMC projects and activities are discussed at each GMEC and discussed with individual departments involved. Reports are given to Medical Executive Team, C-Suite as a part of annual reports and Board sub-committee reports.
VI.	Accountability (list of team members and who is accountable for what)	**J. Fowler Team Lead**- Coordinate lead team as we develop curriculum materials, identify faculty, and approving funding from general academic budgets **Lead Team members**- responsible for all curriculum and faculty selection for training programs related to project as a collective voice. **T. Sanders**- VP of Patient Care Services,metrics, recruitment of nursing participants, survey development **B. Estment-** Resident recruitment to team (Dr. Estment left our institution in January) **L. Hadley**- resident recruitment and oversight of fellows on project **A. Augustus**- Sr. VP of Quality- select and recommend faculty from quality and patient safety team for course **Resident team members**- recruit other residents and attendees to

		educational activities- assist with IRB, initiate resident run projects (experiential learning) – ambassadors to C-suite and GMEC to discuss project **Rick Edwards – Welcome clinic expert- (**no longer at institution **)– many of the individual projects were about transition of care from hospitalization to primary care** **Reporting-** all are responsible for meeting attendance and assisting with reports
VII.	Potential Challenges (engagement, budget, time, skills gaps, etc)	**Time management** is a challenge with so many people changing schedules often. Working in a clinical environment, there is a lot of impromptu meetings and unplanned cancellations. **Engagement of residents**- Residents are engaged but are met with much conflict due to clinical responsibilities and duty hour requirements.
VIII.	Markers (project phases, progress checks, schedule, etc.; must partner/match measurement/data collection plan)	**Abbreviated courses**: First attempt was to meet educational gals at orientation, resident lectures, and individual course. [Surveys were collected during course or course evaluation sent after meeting]Attendance and professional demographics of attendees were collected. Recommendations for Department level courses stemmed from comments in first phase. **Department Pilot training –** The largest residency program was determined to be the pilot department with 7 sessions developed by the quality team for learning. **Moderate Sedation Training**: Participants and nursing who had been trained in the abbreviated learning reported a risk with residents performing Moderate Sedation in the clinical setting. Prior training had been internal online training. **Marker**- 100% of residents doing rotations that require moderate sedation must complete live course and do testing followed by Anesthesia sign-off. **Quality and Patient Safety Institute – Improve Quality and Patient Safety in the Clinical Environment through Interprofessional Education and Initiatives.**
IX.	Vision Statement/Closing Plan (markers of success by March 2015)	The aims of this project are (1) to identify the best method for training residents and faculty in performance improvement, quality and patient in an interprofessional learning forum; (2) To introduce a sustainable program that is integrated into the clinical learning environment; and (3) to identify barriers and competing assignments that impact participation of residents and faculty in institutional and program initiatives that promote interprofessional problem solving and education. The closing plan is to measure impact of this training on transformation and change in the institution that results in improved quality and patient safety.

X.	Success Factors	The most successful component of our work was…….. We were inspired by…….. In this program demonstration project attendance is more positively affected when a certificate is awarded at the end of training or the course is required to perform a service. Increasing the number of programs resulting in more learners educated. Interdepartmental and interprofessional courses appear to increase feedback and interaction. The full day course appears to provide a greater opportunity for team building and problem solving. Interprofessional education improved the understanding of roles and how the health care team can function collaboratively. We were inspired by the apparent desire to be involved in hospital issues expressed in our sessions. Feedback from residents and providers was helpful in identifying provider issues and also in helping us to leverage their role on the team.
XI.	Barriers	The largest barrier we encountered was multiple small sessions outside of program lecture days or time. Competing schedules and responsibilities impacted attracting a broader audience. We worked to overcome this by following the recommendation of resident and nurse training. They stated it was better to have an all-day event and have small groups and rotate cohorts. The services would support missing one or two people every 90 days. **Unexpected challenges (and solutions)** • Timing of training - Solution: decided on a Full day event/ 2 sessions 90 days apart
XII.	Lessons Learned	The single most important piece of advice to provide another team embarking on a similar initiative would be…… Be flexible and build upon challenges and identified needs. If the project/ course is to impact the institution, then use the organization as the lab.
XIII.	Expectations Versus Results	On a scale of 1 to 10 (with "1" meaning nothing and "10" meaning everything), how much of what you set out to do was your team able to accomplish? 1 2 3 4 5 6 7 8 9 10
XIV.	Satisfaction	On a scale of 1 to 10 (with "1" meaning not at all satisfied and "10" meaning completely satisfied), how satisfied are you with what you were able to accomplish in your NI III work? 1 2 3 4 5 6 7 8 9 10
XV.	Project Impact	What changes have you observed in your residency program(s), or at your institution, based upon your work? Increase in the interest in Quality and Patient Safety training and projects
XVI.	Next Steps	Describe next steps for your project, including plans for sustaining and spreading the changes made. Continue building Quality and Patient Safety Institute; Improving project management and establish a means to showcase resident and faculty involvement. Get the program officially certified, e.g. an official certificate program.

Teaching Process Improvement, Quality and Patient Safety to Adult Learners in GME

J. Fowler, MD MSc; B. Estment MD, T. Sanders RN PHD; L. Hadley, MD;
A. Augustus, RN; R. Edwards MD; A. Peddle, MD; Z. Merchant, MD
JPS Health Network, Fort Worth, TX

Overall Goal/Abstract

The overall goal of this project is to teach performance improvement, quality, and patient safety in GME through experiential learning with program directors, faculty, and residents and other professionals on the healthcare team. Our team recognizes that a major barrier to moving forward is limited knowledge of standardized process methods among leaders, residents, faculty and other health care team members in the context of interprofessional education and participation.

Background

Traditional Medical Education curriculum provides limited training in quality, performance improvement and patient safety. In 2009, the World Health Organization (WHO) introduced and evaluated medical school curriculum for teaching on patient safety across nine countries and six WHO regions. By 2010, within 18 months of release, the curriculum had been taught across the world and participants reported that the information would be useful in the future. Faculty reported that the tool was helpful and would be used in their institution. Subsequently, many US organizations and academic institutions have developed curriculum tools to improve patient safety and the quality of healthcare. The goal of this project is to increase knowledge in quality, performance improvement and patient safety in GME through experiential learning introducing residents and faculty to interdepartmental and interprofessional education. When discussing quality and patient safety with new residents, 100% reported they had no prior training in this subject area. Residents were interested in expanding the basic training given during orientation. In the initial needs assessment session done with new residents, they reported a desire to participate in projects but stated they would need guidance on the logistics of developing projects and initiatives given the work requirements and time constraints. Further reports from accreditation visits also reported a need to develop this area for trainees and faculty empowering them to lead team in improving quality and patient safety. The WHO and accrediting agencies also advise on the need for interprofessional education.

Vision Statement

The aims of this project are (1) to identify the best method for training residents and faculty in performance improvement, quality and patient in an interprofessional learning forum; (2) To introduce a sustainable program that is integrated into the clinical learning environment; and (3) to identify barriers and competing assignments that impact participation of residents and faculty in institutional and program initiatives that promote interprofessional problem solving and education.

Materials/Methods

In the abbreviated version, the targeted participants were new residents. The investigative team chose to use a pre and post intervention evaluation method for assessment of the quality of the training and the assessment of the projects of the trainees. During the orientation session, 74 participants attended a 2-hour workshop on quality metrics, an overview of the Plan-Do-Study-Act method (PDSA), and information about the importance of this training to long-term performance improvement and patient safety. In the Quality and Patient Safety Institute(QPSI), 30 participants were set as maximum attendance to foster interactive feedback and discussion. 15 participants were nominated to attend and enroll by their program directors or department leader. The course consisted of 2 full days , 90 days apart. Ten focused areas were chosen based on CLER or Quality requirements. Faculty consisted of members of the faculty, institutional leaders, quality and patient safety leaders. At the end of the program, each participant was given assignments to complete based on the QPSI sessions. The FM program directed sessions were coordinated and given by a member for the quality team. Sessions were given during their weekly conference time. The remaining trainings were covered at various forums including Teach the teacher, faculty development, resident core sessions and special scheduled educational sessions. Faculty included specialist trained in the topic given.

Results

Program Type	Duration	# Participants	Interprofessional Learning	Attendance Rate rate
Abbreviated Version	2 hrs.	74	No	100%
Institute Training	15 hrs. 2 day course	15	Yes	Session 1- 100% Session 2- 87% *certificate course
Program Directed (FM Pilot)	1hr. (Monthly – 7 Sessions)	225	Yes	Avg. resident Attendance 51.5% ± 25.7%
Moderate Sedation Training	2 hrs.	116	No	77% *certificate course
Lean Six Sigma (White Belt)	1 hr.	219	Yes	100% *certificate course

Success Factors and Lessons Learned (Discussion)

In this program demonstration project attendance is more positively affected when a certificate is awarded at the end of training or the course is required to perform a service. Increasing the number of programs resulting in more learners educated. Interdepartmental and interprofessional courses appear to increase feedback and interaction. The full day course appears to provide a greater opportunity for team building and problem solving. Interprofessional education improved the understanding of roles and how the health care team can function collaboratively.

Barriers Encountered/Limitations-

Resident Barriers
- Variable Schedules
- Duty Hour Limitations

Faculty Barriers
- Clinical Responsibilities
- Variable Schedules
- Multiple Practice Sites

Institutional Barriers
- Location of Training
- Selection process for non-GME participants
- Limited number of Faculty participate in PI, Quality and Patient Safety initiatives

Unexpected challenges (and solutions)
- Timing of training - Solution: decided on a Full day event/ 2 sessions 90 days apart
- Meeting space logistics

Limitations
- Course standardization in process
- GME and Institutional impact metrics too preliminary

Conclusions

Interdepartmental and interprofessional education is underutilized in the medical education curriculum and health care setting. Integrating interprofessional education into GME is necessary to improving health care quality and patient safety. This mode of education is core to teaching communication skills and team work in the healthcare setting. In alignment with the governing bodies and accrediting agencies, interprofessional and interdepartmental education can assist with removing barriers. Overall, the training has a positive outcome on motivating programs to initiate quality and patient safety education into the curriculum in a more expanded fashion. The 2nd cohort of the QPSI is scheduled in 2015 with plans for offering more interim in depth educational opportunities throughout the year.

Bibliography

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I.	Team Charter/Objectives ('needs statement,' project requirements, project assumptions, stakeholders, etc.; Teams should identify members and define responsibility/purpose)	**Needs statement**, improve awareness and accelerated involvement in Quality and Process Improvement at local hospitals. Standardize the process wherein institution's teaching sites actively involve residents in PI and QI and reporting. **Project requirements** local and regional buy-in to adapt the current variable QI/ PI process to increase resident involvement. Residents were marginalized from the current process due to lack of awareness of need for resident involvement. Provide a standardized way for residents to contribute to the QI/PI process, while also increasing the visibility of GME and the accreditation requirements (CLER). **Project assumptions** Time constraints for everyone involved Physical space to conduct QI/PI sessions, leading to development of an electronic QI/PI platform Resident's limited prior knowledge of QI/PI process and ongoing projects Cross collaboration between multiple departments Collective situational awareness and process ownership, reducing individual need to drive all initiatives Foster peer collaboration Residency uniquely need to balance service with education, thereby initiatives must have academic value **Stakeholders** - Local Quality and administration PI leadership, Local GME leadership, Regional leadership, Residents Support staff
II.	Project Description	The eVisual Board is a single shared scalable platform the residents can use to contribute, learn, and disseminate, QI/ PI projects.
III.	Necessary Resources (staff, finances, etc.)	Staff and Technology Time of dedicated staff at local and regional level to implement and manage the eVisual Board Technology use was Microsoft SharePoint institutional license to collaborate in a electronically secure, HIPAA compliant online tool, accessible securely anytime anywhere. Allows for page specific user obfuscation of ongoing projects allowing it to be a program management and document repository with patient PHI on the same platform. (all other commercial tools including our residency management suite MEDHUB lacked the functionality)

<table>
<tr><td></td><td></td><td>Financial commitment of technology is unknown since electronic tools are part of an institutional license
And the human capital was pulled from existing roles from patient safety fellow, faculty, and GME admins.</td></tr>
<tr><td>IV.</td><td>Measurement/Data Collection Plan
(must partner/match with Milestone Markers)</td><td>1. Pre Assessment of residents knowledge of QI/PI and concepts going to be taught through the use of eVisual Board Project
2. Volume of ideas suggested and worked on
o Total Number and % of submissions in CLER Categories
o Total number and % of ideas Suggested, Completed and Sustained
o Qualitative is residents perception
3. Space for Results of Mock CLER Visit March 13th</td></tr>
<tr><td>V.</td><td>Communication Plan
(may be helpful to draft a flow chart of team members & senior management, both internal & external)</td><td>● C suite
● Institutional Graduate Medical Education Committee
● The Permanente Medical Group Board of Directors
● Quality Oversight Committee
○ Regional Quality Leadership
● Local Hospital Administration Leadership
● Local Improvement Advisors
● Program Committees
○ Program Directors Obstetrics Gynecology
○ Program Directors Internal Medicine
● Program Directors from KP sponsored residency programs
○ Cardiovascular Disease
○ Internal Medicine
o ObGyn
○ Otolaryngology
○ Pediatrics
○ Podiatry
○ Family Medicine</td></tr>
<tr><td>VI.</td><td>Accountability
(list of team members and who
is accountable for what)</td><td><table>
<tr><td>Team Lead Alex Dummett, MD, CPPS</td><td>Primary Driver of the project, Developed conceptual framework and implementation of of multiple iterations of eVisual board</td></tr>
<tr><td>Associate Institutional Director (DIO) Theresa Azevedo</td><td>Developed conceptual framework communicated plan and overall authorized and supported using eVisual board as one vessel to involve residents in QI/PI</td></tr>
<tr><td>Lead Improvement Advisor Consultant Kimber Brown</td><td>Advising QI/PI ongoing projects once identified</td></tr>
</table></td></tr>
</table>

		Project Manager Michelle Loaiza: Develop and ongoing support of the the eVisual board using SharePoint maintaining master access to different functionality Area Quality Director Darshan Grewal: Permission and provided local Quality projects and committees Former GME Coordinator Atlantis Cooper: Purchased and organized physical visual board and then developed with input from Alex the original eVisual board using Google Sheets Research Project Manager EJ Song: Lead role in developing KP SCL Resident SharePoint Research site that is now serving as a template and the next version of the eVisual board for QI/PI projects Program Director Danny Sam, MD: Overall approval and oversight of SCL residents Associate Program Director Ryan Kneuppel, MD: Final approval of residents at SCL QI/PI projects and supervision of QI/PI process at SCL Approval of concurrent QI/PI projects including charting lecture series and holds residents accountable for being part of QI/PI at SCL Resident Representative Emilie Muelly, MD: Enthusiastic early supporter and user of eVisual Board for testing and vetting from end user perspective Chief Residents, Jennifer Nissly, MD; Roopam Sirohi, MD: Assisted residents with QI/PI when applicable to residency personal, and IT issues Director of Office and Strategy Management Debra Ruckert: Overall approval for QI/PI locally at SCL
VII.	Potential Challenges (engagement, budget, time, skills gaps, etc)	Engagement - resident involvement and active meaningful participation QI/PI projects ● Process - develop pathways for consistent reporting ● Budget - allocating Quality and GME staff time for QI/PI work ● Capacity: Time ○ GME to develop and maintain the infrastructure ○ Faculty to support and teach QI PI principles ○ Quality leaders to include residents into the process ○ Resident time to improve the suggested QI/PI areas ● Capability: Skills gap ○ Training on Sharepoint for the administrators

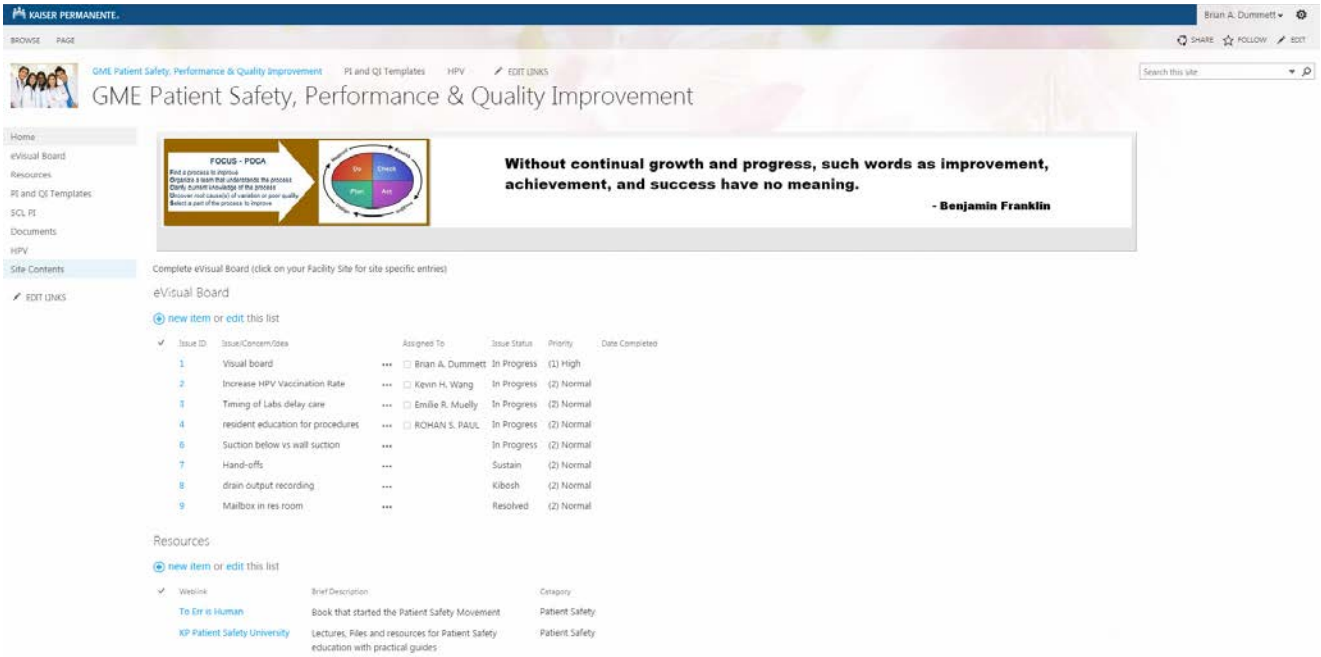
		○ access to Sharpoint site inside kaiser and outside ○ Physician faculty does not have the training that quality and PI QI leads have
VIII.	Markers (project phases, progress checks, schedule, etc.; must partner/match measurement/data collection plan)	Discovery - Idea generation discovering local Bright spots of QIPI process. Came across a Visual Board at both Walnut Creek and Santa Teresa. 1. Planning 2. Consensus building 3. Implementation 4. Adaptation a. physical visual board b. Google c. Evitask d. SharePoint 5. Spread
IX.	Vision Statement / Closing Plan (markers of success by March 2015)	Standardize the solicitation of resident improvement ideas and aid and embed them into the facilities QI/PI process, using HIPAA compliant institution-supported resources. Also, huddle frequently to discuss current progress and explore new projects.
X.	Success Factors	*Top success factors of the NI-IV KP project:* ● Soliciting ideas for overall improvement ● Identifying opportunities for improvement and/or change within a current process (i.e . Improve discharge workflow) ● empowerment of individuals resolving non-PI issues that were burdensome (IT, ergonomics, resident wellness concerns) ● Improve inter-departmental communication by housing resources in one location ● Providing the opportunity for open communication between residents and local administration ● Observant about identify safety issues in their daily workflow: ○ Identified inconsistencies with ordering blood labs and what was reported ○ Identified safety concerns about change in mental status not being escalated for non-stroke patients ○ medication delay in administration impacting care ○ inconsistent am CXR requiring repeat ● improved resident wellness by improving their space fostering buy in and appreciation *We were inspired by:* ● Inspiration by residents eagerness to share ideas ● Wanting to make a difference ● Residents commitment to safety (i.e. OTO residents collaborating to find a solution which allows for non-ENT to

		provide necessary care for airway management after hours)

XI.	Barriers	*Barriers we encountered were:*
		● Identifying Technology for our needs
		  ○ Security
		  ○ Scalability
		  ○ Functionality
		● Resident, faculty and hospital administration acceptance
		● Resident and faculty time for meetings and implementation
		● Alignment of institutional initiatives and priorities
		● The time it takes to get the approval necessary to complete a project from a resident time frame is sometimes incompatible with the amount of time they have. Specifically any changes to Health Connect.
		
		We overcame barriers by:
		● Persistence
		  ○ trying multiple tools from physical board to different non kaiser to kaiser approved programs ending up with sharepoint
		  ○ Worked with local IT support to establish a secure file sharing server/database that will be utilized across all programs and facilities.
		● Region wide push to shed light and educate about QI/PI and residents are now much more aware of the problem and the Kaiser process and are more willing to get engaged.
		● Resident/faculty acceptance is a work in progress. Our newest system using sharepoint is still in development and has not been implemented yet.

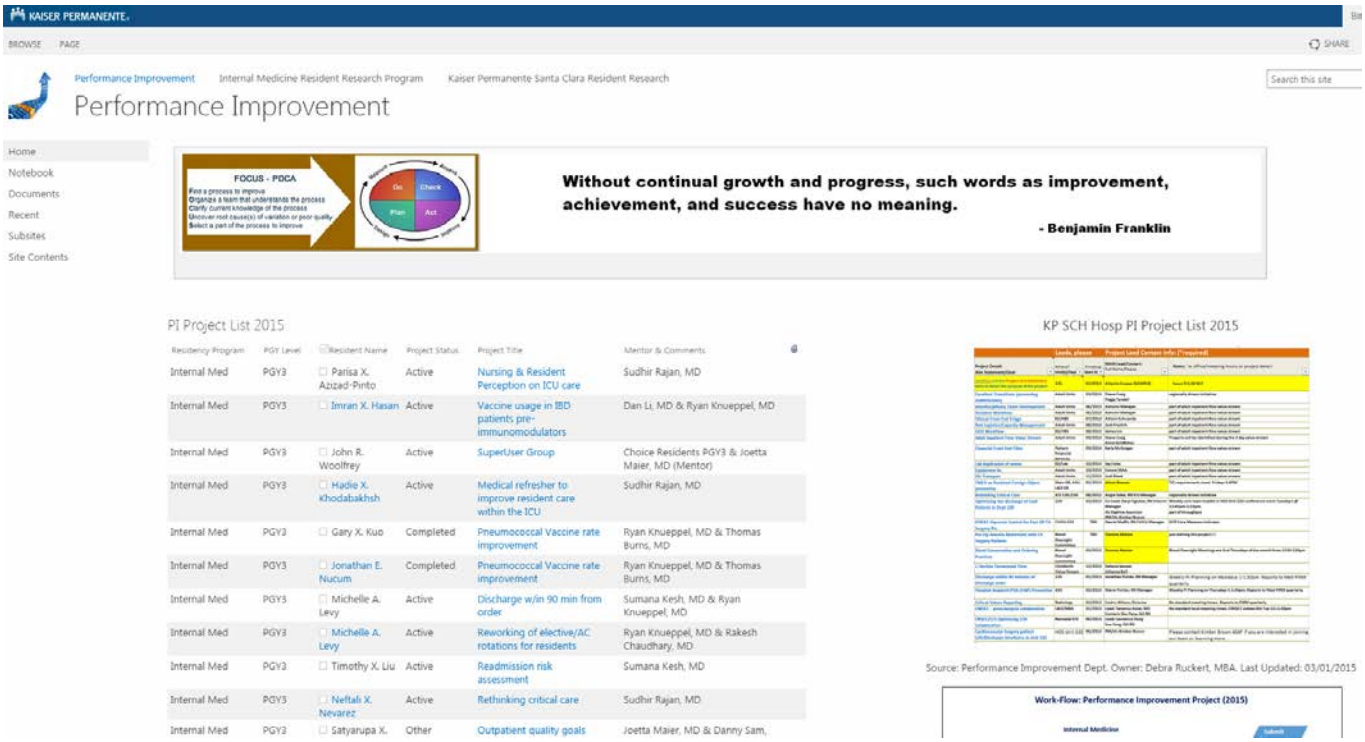
XII.	Lessons Learned	*The two most important pieces of advice to provide another team embarking on a similar initiative would be*
		1. Persistence
		  ○ residents will treat the any opportunity to air their grievances. They may be residency specific like ran out of coffee cups, or profound like EHR functionality that faculty take for granted is not available to the residents.
		  ○ Start with small easy projects, ensure they get done and provide ample support. As the small wins snowball and the you make process more ideas will be generated, the process will be accepted, and the projects scope will increase. This only happens with shorter frequent huddles discussing identified problems rather than monthly long meetings
		2. Ok to change technology mid stream just focus on the

		process. We suggest a Wiki like functionality so many people can edit and add to the site rather than on single point of entry. a single point of updating and entry = a single point of failure and missing the opportunity for collaboration. Ideas are generated on the fly in the midst of work on the go, at any time day or night. Having to wait until morning to jot down the idea or worse yet when the person is physically in their presence misses countless opportunities.
XIII.	Expectations Versus Results	*On a scale of 1 to 10 (with "1" meaning nothing and "10" meaning everything), how much of what you set out to do was your team able to accomplish?* *1 2 3 4 5 6 7 8 9* ***10***
XIV.	Satisfaction	*On a scale of 1 to 10 (with "1" meaning not at all satisfied and "10" meaning completely satisfied), how satisfied are you with what you were able to accomplish in your NIV work?* *1 2 3 4 5 6* ***7*** *8 9 10*
XV.	Project Impact	*What changes have you observed in your residency program(s), or at your institution, based upon your work?* Heightened awareness and eagerness to point out QI/PI Closer involvement and communication with Quality Departments GME initiated projects changed the awareness culture
XVI.	Next Steps	*Describe next steps for your project, including plans for sustaining and spreading the changes made.* *Step 1: Scale visual board project to other KP-sponsored residency program sites (Oakland, San Francisco, and Vallejo).* *Step 2: Scale visual board project to KP teaching sites who receive affiliate sponsored residents (additional 16 KP medical centers in Northern California.*



Suggested workflow

Residents suggest issues



Patient Safety, Performance & Quality Improvement

Alex Dummett, MD, Theresa Azevedo, Michelle Loaiza

Kaiser Permanente Northern California

Overall Goal/Abstract

Improve QI/PI awareness, standardize the process for PI/QI idea generation and participation.
Alignment of GME and Quality in QI/PI.
Provide resources and templates to aid in QI/PI.
Preparation for CLER.
Gaps identified were residents limited prior knowledge of QI/PI, lack of interest, and competing priorities.

Background

We wanted to develop a consistent process for identifying QI/PI projects as well as share progress.

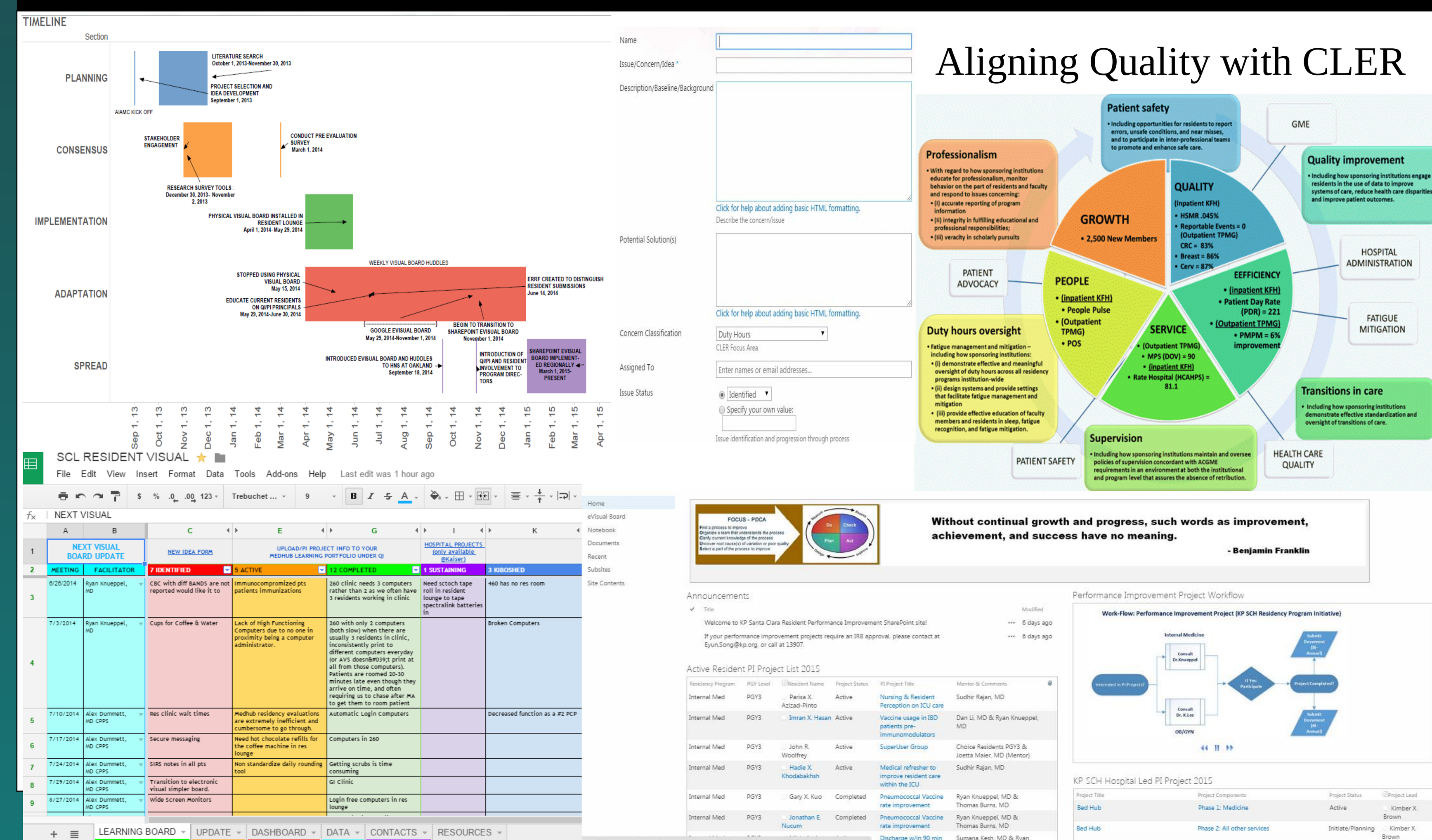
Assumptions: Lack of time, lack of designated space, need for cross collaboration, foster peer collaboration, limited prior knowledge in practical applications of QI/PI.

The eVisual Board is a single shared scalable platform the residents can use to contribute, learn, and disseminate, Quality and Performance Improvement projects. Coupled with frequent short huddles, the eVisual Board improves visibility of resident and facility improvement goals.

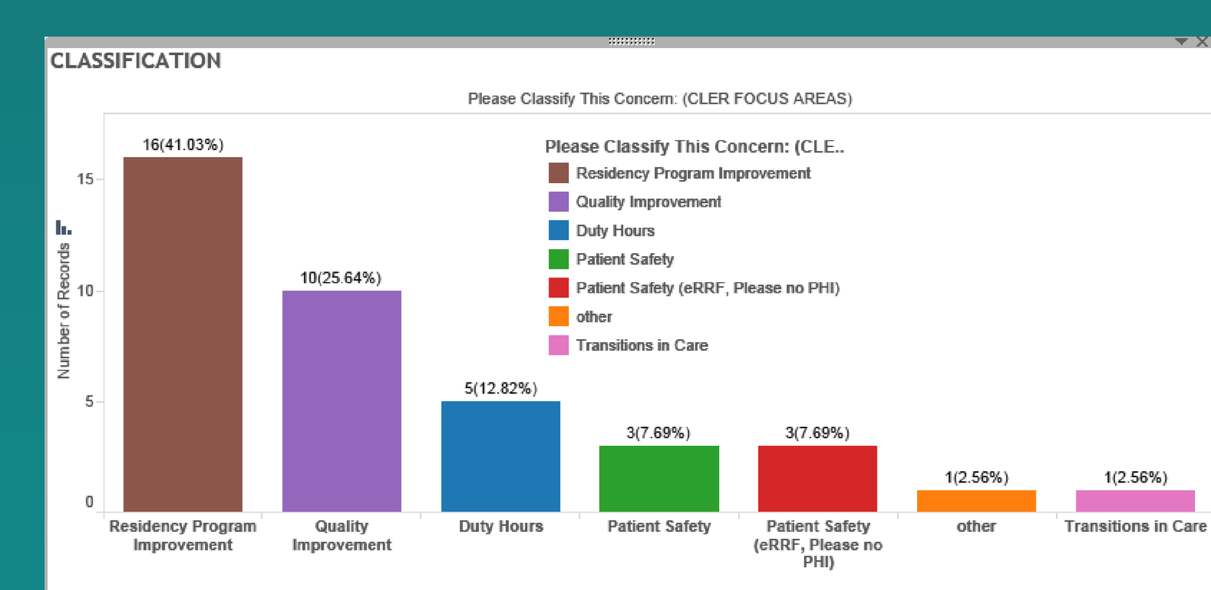
Vision Statement

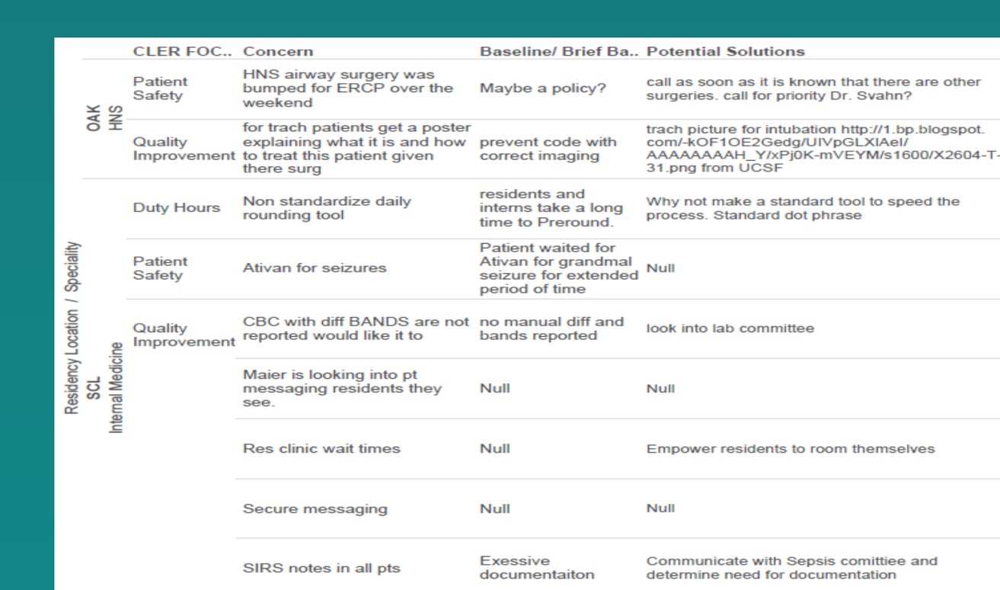
Standardize the solicitation of resident improvement ideas and aid and embed them into the facilities QI/PI process using HIPAA compliant institution-supported resources. Also, huddle frequently to discuss current progress and explore new projects.

Materials/Methods



Results and Examples





Success Factors and Lessons Learned (Discussion)

Cultural- We successfully solicited many improvement ideas and empowering residents to escalate and resolve their own problems through use of established pathways. ie, IT, ergonomics, resident wellness concerns. Social - We improved the communication of institutional goals by strengthen collaboration between residents and QI/PI project leads.
Technical - We identified that patient safety event reporting was underutilized so we created a pathway for better feedback while maintain anonymity , ie Residency eRRF. After many iterations, we identified and customized a secure yet widely accessible, eVisual Board in Microsoft SharePoint.
Characteristics–document and template repository, QI/PI resource to get ideas from both internal and external projects. Idea capture for QI/PI opportunities that can be shared interdepartmentally and inter facility, and has project management capabilities

Barriers Encountered/Limitations

What could you have done differently? Opportunities for improvement? Getting buy in and acceptance to the process.

Unexpected challenges (and solutions)? Identifying technology, time of resident faculty and administration.

Lessons learned persistence and adaptability

Conclusions

Heightened awareness and engagement to point out QI/PI projects. Closer engagement with quality department. GME driven projected changed the awareness culture.

Work still needs to be done to have a stable standardized technical solution in SharePoint that facility shareholders reference when looking for resident involvement in QI/PI. Improve the feedback.

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Team: Main Line Health System **Focus Area:** Patient Safety

I.	Team Charter/Objectives ('needs statement,' project requirements, project assumptions, stakeholders, etc.; Teams should identify members and define responsibility/purpose)	1. *Improve the culture of Patient Safety at Main Line Health System* 2. *Better Train qualified physician leaders in Patient Safety Competencies.* 3. *Provide an interface between residents and administration surrounding Patient Safety concerns* 4. *Identify and close the gaps between system level and residency/fellowship program level patient safety initiatives.* 5. *Provide a forum for interdisciplinary collaboration among residencies and fellowships* 6. *Create a standing Core Curriculum series at the institutional and program level which is both informational and hands on for the trainees.*
II.	Project Description	*Main Line Health System will establish a Resident Patient Safety Council. The council will be comprised of a resident or Fellow member from each program in the system. Residents currently encounter and often solve patient safety concerns on a local level but would benefit from system level collaboration to identify problems and provide practical solutions. The council will participate in development of core curriculum and a "Walk the Talk" for Patient Safety Event. The council will facilitate the six charter/objectives listed above.*
III.	Necessary Resources (staff, finances, etc.)	*Protected time for Steering Committee, Resident Council and Core Lecture Series* *Administration support financially for NI IV tuition and offsite collaborative meetings.* *Administrative liaisons for Patient Safety and Quality Initiatives.*
IV.	Measurement/Data Collection Plan (must partner/match with Milestone Markers)	*Needs analysis (knowledge of trainees and faculty) in Patient Safety Language, Event Recognition and Reporting* *Tracking of resident and program Patient Safety Initiatives and Scholarly activity* *Creation of "Great Catch" Award restricted to resident/fellow recipient.* *Pre and Post Culture of Patient Safety Survey Responses* *Pre and Post "Walk the Talk" Resident Surveys*
V.	Communication Plan (may be helpful to draft a flow chart of team members & senior management, both internal & external)	*National Initiative IV project description and goals are presented at <u>local</u> GMEC meetings, program faculty meetings, at <u>system level</u> GME Steering Committee and at the Research and Education Committee. Updates will follow on meeting agendas in an ongoing fashion.* *The project will be present verbally and in written format to the Medical Executive Committee during annual GME report.* *Chair (resident or fellow) of the Resident Patient Safety Council will sit on system Patient Safety and Quality Committee.* *Chief Academic Officer, both DIOs, the Chief Medical Officer and the VP of Quality and Patient Safety will serve as liaisons to the resident council.*
VI.	Accountability (list of team members and who is accountable for what)	*Dr. Greco and Sharon Iannucci will take the lead on overall project* *Resident Patient Safety Council Chair (TBD) will Chair meetings and coordinate resident pt safety initiatives.* *Drs. Greco, Burke and Mann will serve as mentors to resident council*

		and to communicate needs and accomplishments to administration Denise Murphy/Laura Thompson and Dr. Norton will refine team goals and secure resources to further align missions of GME and the Hospital Administration. *Judy Spahr, Lankenau Institute of Medical Research will head the scholarly writing subgroup.*
VII.	Potential Challenges (engagement, budget, time, skills gaps, etc)	*Two geographically distinct campuses make gathering residents across the system a logistical challenge.* *Faculty Development Needed* *Time must be protected for Dr. Greco and Sharon Iannucci, for local work, conference calls and regional collaborative meetings.* *Resident turnover (graduation) and keeping momentum*
VIII.	Markers (project phases, progress checks, schedule, etc.; must partner/match measurement/data collection plan)	*Completion of resident/faculty needs assessment.* *Monthly Meetings of the Resident Patient Safety Council* *Resident/Fellow involvement in the "Walk the Talk" event Fall 2014* *Resident and Fellow membership on the System Patient Safety and Quality Committee* *Connecting one Resident Patient Safety Council driven Patient Safety Project to the system level Patient Safety and Quality Committee*
IX.	Vision Statement/Closing Plan (markers of success by March 2015)	*Senior Management and Residents/Fellows with the support of GME mentoring and interfacing will align initiatives and resources to improve the Patient Safety Culture at Main Line Health System.* *Ongoing projects will stimulate Faculty/Trainee engagement in event recognition and reporting as well as improved standardized curricula elements for Patient Safety.* *Scholarly activities surrounding Patient Safety will occur at local, regional and national forums.*

Walk the Talk for Patient Safety:
Integrating Residents in the Organization's Patient Safety Culture

Joseph A. Greco, MD; Jad Sfeir , MD; Allen Dimino, MD; Sharon Iannucci; Judy Spahr
Main Line Health System, Wynnewood, PA

Overall Goal

To integrate residents into the Main Line Health (MLH) culture of Patient Safety with the goal of learning Error Prevention Tools and teaching these tools to others.

Background

Patient safety training at MLH has evolved over time. Error prevention tools now focus on verbal communication tools that enhance best safety behaviors. Main Line Health created "Walk the Talk (WTT) for Patient Safety".

This event promoted patient safety learning through hands-on, engaging activities with carnival-like booths teaching patient safety goals, tools, and procedures.

In addition, the CLER visit had highlighted the need for medical residents at MLH to both learn and become integrated in the culture of patient safety at this organization.

Vision

Staffing the WTT booths provided an opportunity for residents to teach other residents and attendees about error reporting processes and procedures. This activity was designed to created visibility for residents as active participants in patient safety leadership while compelling residents to become completely familiar with the language of patient safety and the MLH patient safety structure.

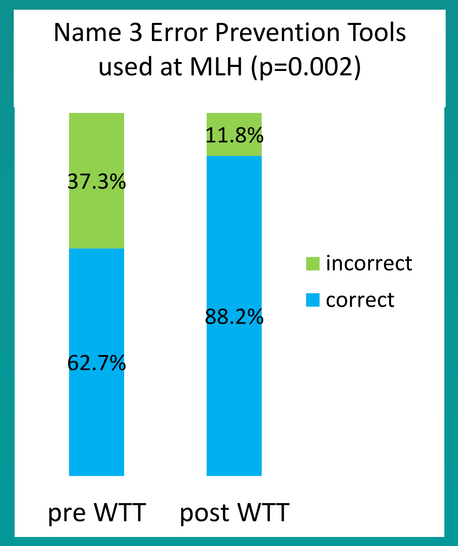
Materials/Methods

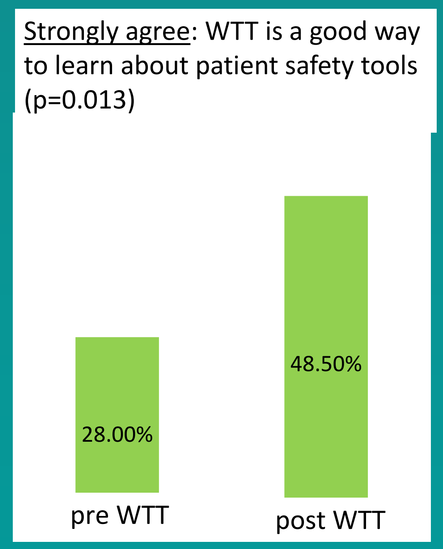
Residents were invited to staff the booths at this year's WTT event at our major teaching hospital, Lankenau Medical Center. Error Prevention Tools included:

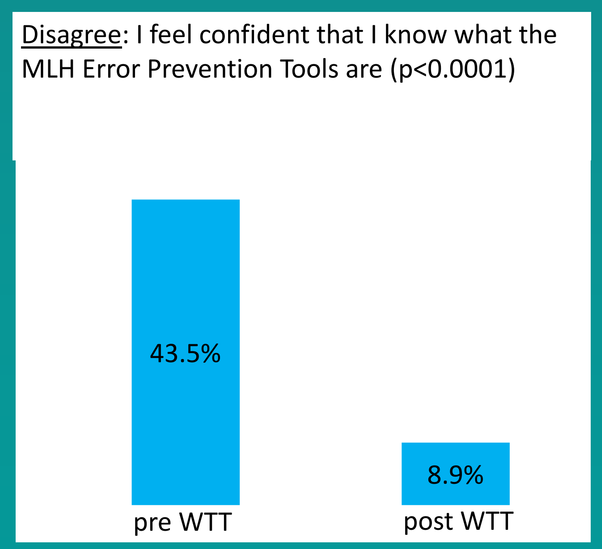
Error Prevention Tool	Purpose
"STAR" (Stop – Think – Act – Review)	**focuses on attention to detail**
"SBAR" (Situation – Background – Assessment – Recommendation)	**promotes effective handoffs**
"ARCC" (Ask a question -- make a Request -- voice a Concern) and "Stop the Line"	**empowers those lower in the power gradient to speak up for safety**
"Got your Back"	**Encourages appropriately checking and coaching peers**
"3-way repeat back and read back"	**encourages clear communication**

Residents were asked to complete an anonymous questionnaire to assess knowledge about patient safety and opinions about WTT before and after the WTT event.

Results







Success Factors

Residents showed statistically significant improvement in their knowledge of patient safety tools from pre- to post- intervention. They statistically significantly felt confident that they knew the MLH error prevention tools post-intervention, and agreed that WTT was a good way to learn about patient safety.

Administration was excited to have resident involvement and is eager to actively include GME in planning future similar events.

Challenges/Recommendations

Resident schedules and multiple campus sites created challenges for scheduling and attending the event.

Early involvement with the interdisciplinary WTT Planning Committee likely would facilitate resident involvement and provide more meaningful leadership roles.

A booth at the event conceived by the residents would further enhance teaching and GME visibility in Main Line Health's Patient Safety Culture.

Conclusions

Both taking a leadership role and attending WTT for Patient Safety led to increased knowledge of patient safety topics and demonstrated that residents are involved in the patient safety culture of MLH.

In addition, the event provided an enjoyable and entertaining experience for all attendees.

Team: Maricopa Integrated Health System Focus Area: Quality education and resident participation

I.	Team Charter/Objectives ('needs statement,' project requirements, project assumptions, stakeholders, etc.; Teams should identify members and define responsibility/purpose)	*To identify those areas that have created significant gaps in knowledge and lack of participation of both our residents and many faculty*
II.	Project Description	*Using the REPORT from our CLER visit we were able to identify a critical lack of information dissemination leading to demonstration of gaps in knowledge and performance in Quality and Patient Safety initiatives*
III.	Necessary Resources (staff, finances, etc.)	*Ability to gain access to adverse event reporting, cooperation with Quality and Safety departments and other patient care oriented departments as identified*
IV.	Measurement/Data Collection Plan (must partner/match with Milestone Markers)	*Determine level of knowledge and level of engagement of our residents in these two areas by direct quiz or encounter. utilizing educational conferences determine the preferred method of learning* *Likewise establish bench mark of attending physician involvement* *Use of PDCA cycle to test educational tools that lead to most improved performance* *Document resident adverse event reporting before educational intervention* *Record resident reporting these events post education anticipating 50% increase*
%	Communication Plan (may be helpful to draft a flow chart of team members & senior management, both internal & external)	*Direct contact with principles, contact via existing hospital wide committees* *Resident communication via resident leadership council, program directors , GMEC*
VI.	Accountability (list of team members and who is accountable for what)	*Major weak spot as ownership of this project dwindled precipitously due to significant external hospital driven processes.* *Original volunteer members included 4 faculty from 3 programs, the CMO and the director of GME along with one program director and the V.P. Academic Affairs* *Attrition lowered these numbers to the program director, Director of GME and VPAA* *The DGME and PD established and implemented the institutional curriculum*
VII.	Potential Challenges (engagement, budget, time, skills gaps, etc)	*Budget constraints, time and other work demands*
VIII.	Markers (project phases, progress checks, schedule, etc.; must partner/match measurement/data collection plan)	*Project did get underway and as we progressed we discovered outside markers which have significant potential impact on present learning and future educational and experiential required activities the* *Adverse event recording exceeded expectations by significant percentage*
IX.	Vision Statement/Closing Plan (markers of success by March 2015)	*To develop a systematic educational and evaluation process to assure all residents understood institutional Quality and patient safety initiatives leading to their full engagement in the processes.* *We envisioned the adoption of quality and safety parameters measuring continuous improvement in performance or knowledge gaps*

X.	Success Factors	*The most successful component of our work was the willing collaboration of several independent departments to design and test educational modalities and track outcomes of education as well as identifiable resident responses……..* *We were inspired by…the ability of these teams to work within the frame of our developing institutional curriculum and how this team interacted with our residents……..*
XI.	Barriers	*The largest barrier we encountered was…difficulty to find otherwise committed individuals with adequate time and resources to work with us…..* *We worked to overcome this by probably pure luck. The departments who did cooperate were thorough and dedicated to developing meaningful data and measurable performance outcomes……..*
XII.	Lessons Learned	*The single most important piece of advice to provide another team embarking on a similar initiative would be to have clarity in your expectations and recruit your associates carefully recognizing their other demands……*
XIII.	Expectations Versus Results	*On a scale of 1 to 10 (with "1" meaning nothing and "10" meaning everything), how much of what you set out to do was your team able to accomplish?* *1 2 3 4 5 6 7 8 9 10*
XIV.	Satisfaction	*On a scale of 1 to 10 (with "1" meaning not at all satisfied and "10" meaning completely satisfied), how satisfied are you with what you were able to accomplish in your NI III work?* *1 2 3 4 5 6 7 8 9 10*
XV.	Project Impact	*What changes have you observed in your residency program(s), or at your institution, based upon your work? Residents now clearly understand and can identify an adverse event , including the concept of a "near miss"* *Likewise they are now more prone to report these events through our reporting system (Kronos)* *Thirdly we have identified and tested the more efficient tools and processes for teaching and demonstrating the didactic portions of our curriculum.*
XVI.	Next Steps	*Describe next steps for your project, including plans for sustaining and spreading the changes made. There remains more and in depth development for more involvement by the residents in our quality and safety initiatives* *WE need to assure that the program is sustainable and productive by continuously measuring the quality outcomes* *Ultimately we are hopeful that the resident adopt these measures as their own processes* *Finally we need to improve the timeliness and follow up of feed- back to residents to complete loop of their MIDAS (event) Reporting*

Team: Marshfield Clinic **Focus Area: Quality Improvement "My Health Care Team" Pictorial**

I.	Team Charter/Objectives ('needs statement,' project requirements, project assumptions, stakeholders, etc.; Teams should identify members and define responsibility/purpose)	• *Team charter and project goal: to enhance effective communications between provider and patient as well as fellow providers. Subsequent review of the current listing of related projects with the Medical Director for Accreditations and Standards (Lisa Benson) did not identify another project that met this need.* • *Intended to benefit patient care and quality improvement among the internal medicine resident medical ward teams; further expansion to be determined by project success* • *Project requirements: pictorial development including scheduling, photos; pictorial distribution with program coordinator, volunteer services and internal medicine resident ward teams; data collection*
II.	Project Description	• *Creation of "My Health Care Team" pictorials by internal medicine program coordinator (Nicole Kumm) at the first of the month.* • *Volunteer services distribute these documents to a main floor of the hospital.* • *Internal medicine resident teams then distribute these pictorials to patients admitted to their service ideally within 24 hours of admission.* • *Referenced by the patient, nurses and consultants for coordination of care.*
III.	Necessary Resources (staff, finances, etc.)	• *Internal medicine resident, attending physician, and medical student photos.* • *Time of program coordinator and volunteer services for document creation and distribution of pictorials* • *Resources related to printing of the pictorials*
IV.	Measurement/Data Collection Plan (must partner/match with Milestone Markers)	• *Review of HCAHPS data regarding patient satisfaction* • *Pictorial creation and distribution; study design* • *Cohort study of internal medicine resident ward team patients chart review and subsequent survey performed by project leader* • *Exclusion criteria: documented altered mental status or delirium; failure of orientation questions; positive CAM score.* • *Data collected: patient age; confirmation of orientation/CAM; admitting diagnosis; recall of provider names; pictorial receipt – given to patients if not received; thoughts on pictorial; understanding of care plan; overall satisfaction score (1-5)* • *Initial data analysis* • *Future considerations, new study design, project expansion*
V.	Communication Plan (may be helpful to draft a flow chart of team members & senior management, both internal & external)	• *Discussion of project leader with program coordinator and director of ward team scheduling and subsequent pictorial creation* • *Program coordinator facilitates pictorial distribution with volunteer services* • *Program leadership and project leader encourages residents to distribute pictorials to patients on their teams* • *Project leader discusses project progress with program director on a periodic basis* • *Project leader analyzes initial data along with team members to*

		be presented to the internal medicine residency program and subsequently the NI IV group. • *Communication with the Director of Graduate Medical Education (Matthew Jansen, MD) for future considerations and project expansion*
VI.	Accountability (list of team members and who is accountable for what)	• *This has been discussed in previous sections.*
VII.	Potential Challenges (engagement, budget, time, skills gaps, etc)	• *Project scope: is it too large or narrow?* • *Do we receive benefit?* • *How do we get internal medicine residents to buy in?* • *Identification of point(s) of contact at various steps along the way.* • *Who would be the distributor at the point of care (likely the intern)?* • *Data collection of patient satisfaction* • *Keeping it up to date. Project fatigue plays a role.*
VIII.	Markers (project phases, progress checks, schedule, etc.; must partner/match measurement/data collection plan)	• *Prior patient satisfaction survey results review* • *Pictorial creation and development* • *Enlist participants/team members* • *Discussion with Dr. Remeika, Internal Medicine Residency Director, project pioneer* • *Data collection survey (see above)* • *Initial data analysis* • *Future considerations and expansion of project*
IX.	Vision Statement/Closing Plan (markers of success by March 2015)	• *Our vision is that the "My Health Care Team" pictorial will provide a more positive patient experience by aiding in the identification of providers and coordination of care.* • *As the project continues, we plan to obtain additional data – including randomization of patients - and expand the project to other departments.*
X.	Success Factors	• *The creation of a user-friendly team pictorial and subsequent distribution system to the hospital wards is achievable with the right support system.* • *All patients reported positive impressions of the pictorial. Allied providers also anecdotally agree that it is a helpful tool.* • *There was an observed trend towards improved name recall, patient satisfaction and care plan understanding.*
XI.	Barriers	• *Distribution process and points of contact. Lack of compliance of pictorial distribution by the ward teams.* • *Data collection: we would like more patients and more data to achieve statistical significance. Patients were selected retrospectively and not randomized. Official data from other members of the care team has yet to be gathered.* • *Project scope likely too narrow. The plan is to include other programs in the future.* • *As a jointly sponsored residency program (Marshfield Clinic and Ministry Saint Joseph's Hospital), there is no seamless approach in*

		terms of project management since both institutions – while merged as a training program – operate independently from one another.
XII.	Lessons Learned	*The single most important piece of advice to provide another team embarking on a similar initiative would be……* • *Ensuring a good support system and project team that can fulfill all roles as defined by said project. Education of all team members is very important. Identification of key contacts is critical.*
XIII.	Expectations Versus Results	*On a scale of 1 to 10 (with "1" meaning nothing and "10" meaning everything), how much of what you set out to do was your team able to accomplish?* *1 2 3 4 5 6* ***7*** *8 9 10*
XIV.	Satisfaction	*On a scale of 1 to 10 (with "1" meaning not at all satisfied and "10" meaning completely satisfied), how satisfied are you with what you were able to accomplish in your NI III work?* *1 2 3 4 5 6 7 8* ***9*** *10*
XV.	Project Impact	*What changes have you observed in your residency program(s), or at your institution, based upon your work?* • *No immediate changes have been observed with our program. The patients that received the pictorial found it helpful.*
XVI.	Next Steps	*Describe next steps for your project, including plans for sustaining and spreading the changes made.* • *Identification of a new project leader from the internal medicine residency program is ongoing. As noted, we plan to include other residency programs with this project. In addition, we are looking into ways to provide incentives to the residents in distributing these pictorials in order to provide a culture of provider identification with patients.*

Delivering a Positive Patient Experience: Internal Medicine Residency Provider Pictorial

Matthew D'Costa, MD, Matthew Jansen, MD, Lisa Benson, MD, Lori Remeika, MD, Michael Roherty, Nicole Kumm
Marshfield Clinic, Marshfield, Wisconsin

Marshfield Clinic
Division of Education

National Initiative

Background

- Patient satisfaction data from Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) revealed poor performance by internal medicine residents.
- Two recent prospective, cohort studies showed improvement in provider identification with 'face sheets' or 'face cards' and a trend towards improved patient satisfaction but no statistical significance.

Vision Statement

- Our hypothesis is that knowledge of provider names and their roles via team pictorials will improve patient satisfaction scores by enhancing effective communication between patients and providers as well as among other members of the care team.

Project Description

- Creation of "My Health Care Team" pictorials is performed by internal medicine program coordinator at the first of the month.
- Volunteer services distribute these documents to a main floor of the hospital.
- Internal medicine resident teams then distribute these pictorials to patients admitted to their service ideally within 24 hours of admission.
- These pictorials are then referenced by the patient, nurses and consultants for coordination of care.

Materials/Methods

- Cohort study of internal medicine resident ward team patients, chart review and subsequent survey performed by project leader.
- Exclusion criteria: documented altered mental status or delirium; disorientation; positive Confusion Assessment Method (CAM) score.
- Data collected: 25 patients were surveyed after 40 chart reviews performed; patient age; confirmation of orientation/CAM; admitting diagnosis; recall of provider names; pictorial receipt – given to patients if not received; thoughts on pictorial; understanding of care plan; overall satisfaction score (1-5).

Initial Results

Pictorial Survey Compliance	Average Age	Name Recall	Understanding of Care Plan	Average Satisfaction Score
Received (4/25)	65.75	2/4 or 50%	4/4 or 100%	5.0
Did not receive (21/25)	64.19	5/21 or 23.8%	19/21 or 90.47%	4.57

Success Factors and Lessons Learned

- The creation of a user-friendly team pictorial and subsequent distribution system to the hospital wards.
- All patients reported positive impressions of the pictorial. Allied providers also anecdotally agree that it is a helpful tool.
- Observed trend towards improved name recall, patient satisfaction and care plan understanding.

Barriers Encountered/Limitations

- Distribution process and points of contact .
- Lack of compliance of pictorial distribution by the ward teams.
- Data collection - need for more patients and more data to achieve statistical significance. Patients were selected retrospectively and not randomized. Official data from other members of the care team has yet to be gathered.
- Project scope – the plan is to include other programs in the future.

Conclusions

- Creation of a pictorial for provider identification is achievable with the right support system.
- Team pictorials are well received by patients and other members of the care team.
- Distribution by ward teams is a major challenge; potential remedies are in the planning stages.
- Further data collection and patient randomization along with expansion to other departments may provide more insight.

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Simmons et al. "Effect of a face sheet tool on medical provider identification and family satisfaction." 2014 J. Hosp. Med., 9: 137–141. doi: 10.1002/jhm.2100

Unaka et al "The impact of facecards on patients' knowledge, satisfaction, trust and agreement with hospital physicians: a pilot study"2014 J. Hosp. Med., 9: 186–188. doi: 10.1002/jhm.2114

Team: Monmouth Medical Center **Focus Area: Error reporting**

I.	Team Charter/Objectives ('needs statement,' project requirements, project assumptions, stakeholders, etc.; Teams should identify members and define responsibility/purpose)	• ACGME CLER site visit revealed issues with patient safety, quality, and health disparities. • Core curriculum development team to include Joseph Jaeger, DrPH; Beth Baratz, MS, MPH, CCLS; Alex Puma, BA. • Key stakeholders include (1) Program directors; (2) Residents; (3) Faculty; (4) Community/Patients; (5) C-Suite; (6) Payors.
II.	Project Description	• Project to improve patient safety reporting and education, performance and quality improvement practices, health disparities interventions, and cultural competency. • Goal was to infuse the CLE with public health principles and practices. • Delivered a comprehensive public health curriculum for GME. • Identified and addressed barriers to patient safety reporting.
III.	Necessary Resources (staff, finances, etc.)	• Preceptor • Public health intern • Assessment specialist • Performance Improvement/Quality Improvement representative • Program directors
IV.	Measurement/Data Collection Plan (must partner/match with Milestone Markers)	• Outcome: curriculum and resource list applicable to professionalism, practice based learning and improvement, and systems based practice competencies across all specialties.
V.	Communication Plan (may be helpful to draft a flow chart of team members & senior management, both internal & external)	• Kick off/announcement to program directors and C-Suite by DIO • Regular meetings with GMEC (bimonthly) • Regular meetings with public health intern (x1 weekly)
VI.	Accountability (list of team members and who is accountable for what)	• Team leader (DIO) – responsible for overall direction and vision; public health expertise. • Public health intern – conduct needs assessment, identify public health educational resources, draft public health GME curriculum, present to GMEC. • Assessment specialist – review public health GME curriculum, develop scholarly products (poster), develop implementation plan
VII.	Potential Challenges (engagement, budget, time, skills gaps, etc)	• Curriculum development demands new skills. • Developing public health curriculum champions: Who will teach? • Incorporating curricular materials into already full graduate medical education programs.
VIII.	Markers (project phases, progress checks, schedule, etc.; must partner/match measurement/data collection plan)	• Phase 1 (Completed) : Development/kick off • Phase 2 (Completed) : Needs assessment, includes literature review and program director interviews • Phase 3 (Completed) : Curriculum development • Phase 4 (Completed) : Assessment by GMEC

		• Phase 5 (Ongoing) : Implementation
IX.	Vision Statement/Closing Plan (markers of success by March 2015)	• Monmouth Medical Center will provide its medical staff and students with a clinical learning environment that prioritizes quality-driven, safe, and responsive health care services. • Future efforts should target the translation of knowledge to physician strategy, physician performance, and improved patient outcomes.
X.	Success Factors	• Needs assessment helped staff and students recognize opportunities for learning. • Dedicated person prepared to search for and provide resources for learning. • Peer review encouraged staff and students to provide feedback on translational potential.
XI.	Barriers	• "The way *we* do things": Challenging institutional and program culture.
XII.	Lessons Learned	• The single most important piece of advice to provide another team embarking on a similar initiative would be to engage its learners in the full scope of curriculum development.
XIII.	Expectations Versus Results	*On a scale of 1 to 10 (with "1" meaning nothing and "10" meaning everything), how much of what you set out to do was your team able to accomplish?*
XIV.	Satisfaction	*On a scale of 1 to 10 (with "1" meaning not at all satisfied and "10" meaning completely satisfied), how satisfied are you with what you were able to accomplish in your NI III work? 8*
XV.	Project Impact	• Increased awareness regarding public health, disparities and inequities. • Greater awareness of patient safety and error reporting.
XVI.	Next Steps	• Develop implementation plan to incorporate new curricular elements into each residency's standard curriculum.

A Hospital Public Health Response to CLER

Beth Baratz, MS, MPH, CCLS; Alex Puma, BA; Joseph Jaeger, DrPH, MPH

Monmouth Medical Center, Long Branch, New Jersey

Overall Goal/Abstract

- Project to improve patient safety reporting and education, performance and quality improvement practices, health disparities interventions, and cultural competency.
- Goal was to infuse the clinical learning environment (CLE) with public health principles and practices.
- Delivered a comprehensive public health curriculum for graduate medical education (GME).
- Identified and addressed barriers to patient safety reporting.

Background

- ACGME CLER site visit revealed issues with patient safety, quality, and health disparities.
- The Office of Academic Affairs and an MPH candidate developed a public health curriculum for residency programs.
- Desired outcomes included the identification and reduction of public health related knowledge gaps.

Vision Statement

Monmouth Medical Center will provide its medical staff and students with a clinical learning environment that prioritizes quality-driven, safe, and responsive health care services.

Materials/Methods

- Methods included a literature search, a needs assessment of program directors and residents, a curricular audit, presentation, and peer review.
- Intended changes included the design of a public health curriculum.
- Success dependent upon the approval or rejection issued by Monmouth Medical Center's Graduate Medical Education Committee (GMEC).

Results

- *Public Health Curriculum for Graduate Medical Education Program at Monmouth Medical Center* completed on time and within project budget.
- GMEC committee approved. Adopted by program directors.
- Core curriculum addresses patient safety, health care improvement, error reporting, and health disparities.
- Program-specific curriculum found to be responsive to the needs of seven residency programs.

Success Factors and Lessons Learned

- Needs assessment helped staff and students recognize opportunities for learning.
- Dedicated person prepared to search for and provide resources for learning.
- Peer review encouraged staff and students to provide feedback on translational potential.

Barriers Encountered/Limitations

- Curriculum development demands new skills.
- Developing public health curriculum champions: Who will teach?
- Incorporating curricular materials into already full graduate medical education programs.

Conclusions

- Monmouth Medical Center appreciates a public health curriculum's potential to engender clinical excellence.
- Educators and trainees now have access to a complete set of concepts, terms, and activities that make up the public health domain.
- Future efforts should target the translation of knowledge to physician strategy, physician performance, and improved patient outcomes.

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Team: Ochsner Clinic Foundation : NI IV **Focus Area:** Transitions of Care

I.	Team Charter/Objectives ('needs statement,' project requirements, project assumptions, stakeholders, etc.; Teams should identify members and define responsibility/purpose)	***I.*** ***Needs Statement:*** Based on findings from internal and external, formal and informal, clinical and operational metrics, we have identified a significant need to formalize a process for transitions of care between inpatient care settings, hospital based and primary care as well as hospital based and external care providers(i.e. SNF, Rehab, LTC, and Home Health). The results of this lack of continuity are found in patient safety metrics (medication and treatment compliance) readmissions and patients lost to follow up with unknown outcomes. Based on these findings the focus of transitions of care was identified as a primary area of focus for this project. ***II.*** ***Team Charter****:* implement a standardized approach to transitions of care at Ochsner based on a integrated multidisciplinary approach to care . ***III.*** ***Objectives:*** a) Identify and engage key stakeholders and champions to include executive sponsorship, clinical dyads, IT and decision support, program directors and key house staff. *b)* Explore and define best practices for implementation *c)* Hardwire solutions to assure sustainability of efforts *d)* Overall improvement of defined metrics. *e)* ***IV.*** ***Project Assumptions*** a) Team and Institutional commitment to the Proposed Outcome b) There will be support from clinical and operational leaders c) Solutions will be "hardwired" for sustainability ***V.*** **Team:** a) Ron Amedee, MD DIO b) Rob Wolterman , CEO, OMC c) Robin Stedman, MD , PD Anesthesiology d) Janice Piazza, AVP , GME e) Roneshia McClendon Alexander, MD CA-2 President of OMC House Staff Association *f)* Jacob Breaux, MD PGY-2 Internal Medicine
II.	Project Description	**I.** ✓Initial Assessment of the tools, practices and policies currently in use to facilitate Transitions in Care (TOC) [P] **II.** ✓Determine best practices currently in place internally as well as assessment of the literature for demonstrated best practices.[P](add lean) **III.** ✓Assess EMR (EPIC) functionality that could support defined practice(s)[P] **IV.** Identify metrics (measures of success) and available date sources [P] **V.** ✓Identify Pilot areas for initial assessment of best practice [D] **VI.** Review Outcomes of Pilot / impact on defined metrics [S] **VII.** Refine metrics and data collection **VIII.** ✓Define accountabilities for implementation [P] **IX.** ✓Implement education plan, go live with EMR support, implement metric performance reporting process [D].....

		Develop plan to spread and sustain - December 2014
III.	Necessary Resources (staff, finances, etc.)	I. Time and commitment II. Survey III. Literature search IV. Funding allocated IT development *V.* Decision Support to establishment metric reporting
IV.	Measurement/Data Collection Plan (must partner/match with Milestone Markers)	*Initial Survey assessment completed* Follow up survey : September 15-30, 2014 Observation data (how long / # of observations Quality data tie in ? – LOS / adverse events / Inter-professional integration - who else will use Bundle development/ customization
V.	Communication Plan (may be helpful to draft a flow chart of team members & senior management, both internal & external)	To faculty : PD meeting(s) To House Staff: presentations to individual programs July / August 2014 Continue through Quality Council / quarterly To Patient Safety Executive Committee with quarterly follow starting in August 2014 To Executive Team: July 30th during Operating Review
VI.	Accountability (list of team members and who is accountable for what)	Shared – we each do what needs to be done at the time the issue presents itself RA / RS– Communication and education of faculty JP – operational logistics Residents: Scholarly production, peer support for implementation
VII.	Potential Challenges (engagement, budget, time, skills gaps, etc)	IT resource availability for development and optimization Team Time for appropriate implementation, follow up and monitoring Integration into practice Faculty support for mentoring component
VIII.	Markers (project phases, progress checks, schedule, etc.; must partner/match measurement/data collection plan)	*Initial Survey completion* *Repeat Survey completion* *Initial Observation Data Analysis* *Ongoing Observation Data Analysis : Frequency* *Like to Quality data (CAUTI, CLABSI, LOS, Adverse Pt Outcomes* *Interprofessional Integration*
IX.	Vision Statement/Closing Plan (markers of success by March 2015)	*By March of 2015 a standardized tool and process for facilitating TOC will be in use throughout OMC in an effort to ensure quality patient care in the safest of environments*
X.	Success Factors	*The most successful component of our work was…….*was the level of institutional support provided in the form of unlimited assistance/ dedication from GME and department heads. Also significant buy – in and support from Health Information management team, IS security and technical staff, EPIC developers and executive administration. *We were inspired by……..*Our CLER visit and an evident need to formalize a process that have become an instrumental aspect of healthcare

XI.	Barriers	*The largest barrier we encountered was*……..buy-in from individual residents and overcoming historical perspective and tendencies *We worked to overcome this by……..* holding interactive sessions describing not only the process, but also the research supporting the essential nature of such an endeavor . Additionally, we employed resident and faculty champions to assist in dissemination of the process and help drive the change in culture we will need to have continued success
XII.	Lessons Learned	*The single most important piece of advice to provide another team embarking on a similar initiative would be……* 1. Plan and anticipate 2. Maintain flexibility in all aspects of the process 3. Be realistic in determining attainable measures , with consideration of the timeframe and scope of the project – think small cycles of change 4. Start the project with the end in mind 5. Solicit feedback early in the process from key stakeholders to anticipate problems / issues that can slow implementation / publication 6. Be aware of tools / systems currently in place that can facilitate the process. 7. Create and early abstract / draft of the project to serve as a guide and foundation for milestone and final paper publication *8.* Utilization of PDSA cycles throughout implementation , can serve as basis for publications
XIII.	Expectations Versus Results	*On a scale of 1 to 10 (with "1" meaning nothing and "10" meaning everything), how much of what you set out to do was your team able to accomplish?* *1 2 3 4 5 6 7 8 9 10*
XIV.	Satisfaction	*On a scale of 1 to 10 (with "1" meaning not at all satisfied and "10" meaning completely satisfied), how satisfied are you with what you were able to accomplish in your NI IV work?* *1 2 3 4 5 6 7 8 9 10*
XV.	Project Impact	*What changes have you observed in your residency program(s), or at your institution, based upon your work?* There have been cultural shifts and practice based shifts toward more efficient and effective patient safety practices in the form of standardized handoffs. The original scope of the project was to facilitate the resident to resident handoff process, however in the later stages of the project we have observed increase interest and utilization by staff in some sub-specialties as well as well as the engagement of advanced practice clinicians and utilization of the tool for transitions between levels of care.
XVI.	Next Steps	*Describe next steps for your project, including plans for sustaining and spreading the changes made.* Next steps will include : 1) Modification of the tool for greater utility across specialty disciplines 2) Further integration to procedural specialties 3) Adaptation of the tool to support discharge planning 4) Continue to evaluate and track meaningful metrics to further document the impact of this improvement *5)* Engage the next resident team to begin Phase 2

We use a standardized hand over process on my service

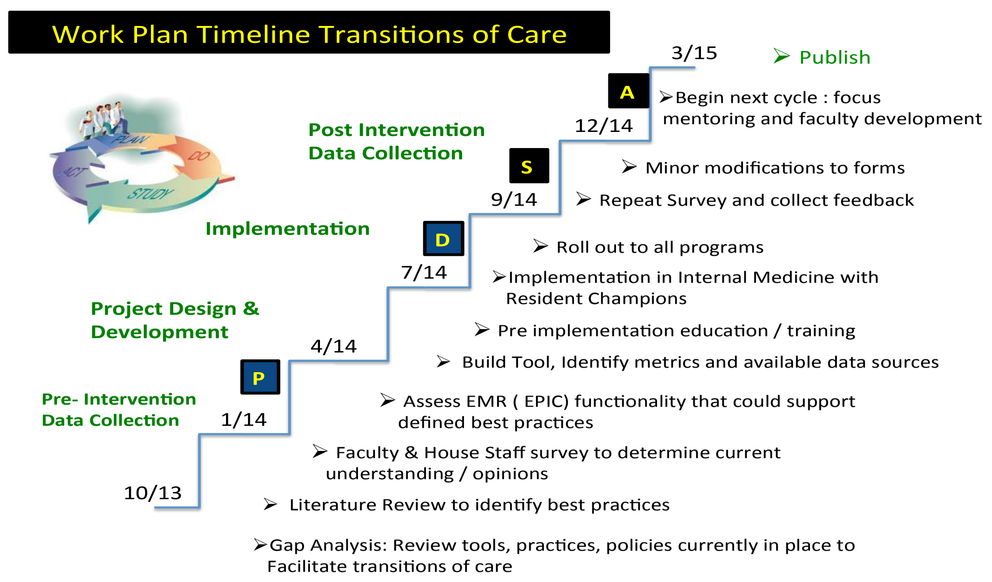
Implementing a Standardized and Sustainable Resident Sign-Out Process at Ochsner Clinic Foundation: An AIAMC National Initiative IV Project

Jacob Breaux, MD, Roneisha McLendon, MD, Robin Stedman, MD, Navita Gupta, MD, Kelly Shum, MD, Mannan Khan, MD, Elizabeth Ellent, MD, Ronald Amedee, MD, Janice Piazza, MSN, MBA, Robert Wolterman, MHA

Overall Goal/Abstract

Duty hour restrictions imposed upon training physicians have led to increased handoffs and the potential for discontinuity in patient care. Therefore, it is no surprise that groups governing medical practices have recommended the measurement and guarantee of patient safety, with a key emphasis on handoff communication standardization. (1,2) At our institution, we identified a significant need to formalize a process for transitions of care between inpatient settings. Specifically, we focused our efforts on creating, implementing, and evaluating a standardized approach to transitions of care at Ochsner Clinic Foundation. Through the implementation of a standardized handoff process at our institution we aim to improve resident confidence and competency in this area while also improving accuracy of information resulting in a safer environment for our patients.

Background

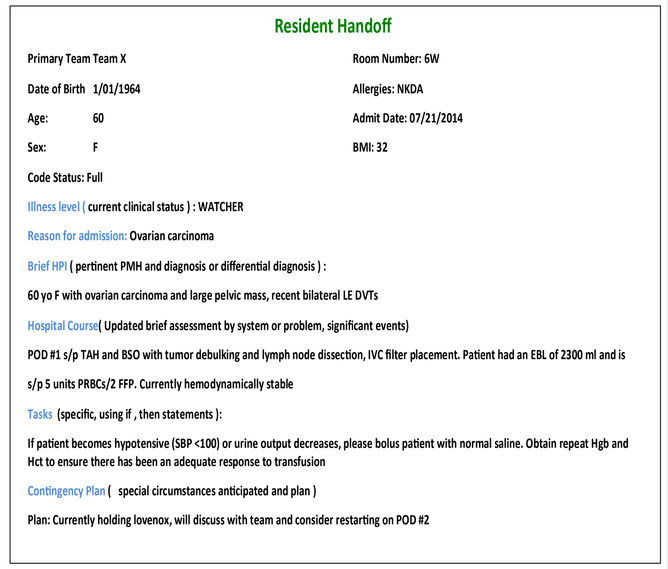


Vision Statement

By March of 2015 a standardized tool and process for facilitating transitions of care will be in use throughout Ochsner Medical Center in an effort to ensure quality patient care in the safest of environments

Materials/Methods

- Project reviewed by the Ochsner Institutional Review Board and received a qualifying exemption
- Assessed the tools, practices, and policies currently in use to facilitate transitions of care at our institution
- Distributed survey to residents and faculty in order to assess current perceptions and practices surrounding transitions of care. (3, 6, 9)
- Met with program directors and residents from multiple specialties to review the published importance of sign-out standardization and our goals at the institutional level
- Designed written sign-out template utilizing elements from the pneumonic ANTICipate
- Programmed the written document within the EMR; piloted as a standardized and up-to-date sign-out tool accessible via computers and iPads
- Defined a verbal sign-out modeled after the pneumonic I-PASS, which was developed at Boston Children's Hospital (9)
- Printed tables for both the written and verbal handoff process on note cards and distributed to all staff and residents within our institution
- Held interactive didactic sessions introducing the documents and training in their use
- Facilitated feedback and discussion surrounding specialty specific requirements and considerations for the hand-off process
- Repeated survey to quantify improvement; plan later survey to evaluate sustainability
- Identified stakeholders to ensure sustainability of the project and continued improvement



Resident Handoff

Primary Team Team X	Room Number: 6W
Date of Birth 1/01/1964	Allergies: NKDA
Age: 60	Admit Date: 07/21/2014
Sex: F	BMI: 32

Code Status: Full

Illness level (current clinical status) : WATCHER

Reason for admission: Ovarian carcinoma

Brief HPI (pertinent PMH and diagnosis or differential diagnosis) :

60 yo F with ovarian carcinoma and large pelvic mass, recent bilateral LE DVTs

Hospital Course(Updated brief assessment by system or problem, significant events)

POD #1 s/p TAH and BSO with tumor debulking and lymph node dissection, IVC filter placement. Patient had an EBL of 2300 ml and is s/p 5 units PRBCs/2 FFP. Currently hemodynamically stable

Tasks (specific, using if , then statements):

If patient becomes hypotensive (SBP <100) or urine output decreases, please bolus patient with normal saline. Obtain repeat Hgb and Hct to ensure there has been an adequate response to transfusion

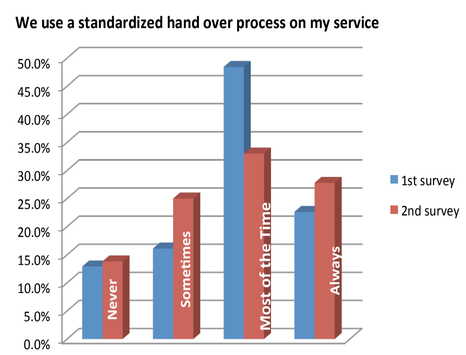
Contingency Plan (special circumstances anticipated and plan)

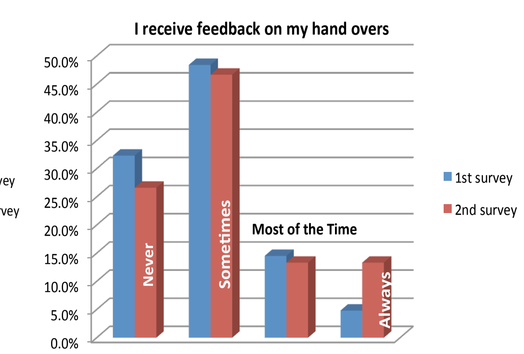
Plan: Currently holding lovenox, will discuss with team and consider restarting on POD #2

Results

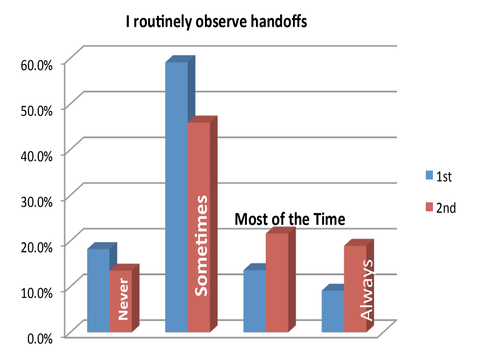
Repeat survey results were obtained from 45 faculty and 63 residents representing multiple specialties. Comparing the initial results to the repeat survey, there remained variability in process perception. Seventy-two percent of faculty reported at least once identifying a patient safety issue occurring as a result of the handoff process, which was consistent with the initial survey results. There was an increase from 82% to 86% of faculty reporting supervision of the handoff process. In the initial survey 80% of residents reported sometimes or never receiving feedback on their handoffs, and that number decreased to 70% in the repeat survey. There was also an increase in the percentage of residents reporting use of a standardized process for handoffs.

Resident Survey





Faculty Survey



Barriers Encountered/ Limitations

- The most significant barrier encountered was gaining acceptance and buy-in from individual residents and faculty as well as overcoming historical perspectives and tendencies.
- A second barrier was the access to data to establish success and impact of the project through all phases, to include planning, implementing and evaluating post implementation impact.

Discussion

Fueled by an opportunity to optimize resident training and patient safety, we developed a plan to standardize, implement, and evaluate handoff systems within our system. We administered a survey prior to and after the dissemination of the handoff model to compare perceived performance with handoffs. Results indicated a modest increase in feedback with respect to and supervision of handoffs. As we progress with system-wide implementation, we plan to incorporate objective metrics such as numbers of laboratory tests ordered by residents, changes in hospital length of stay, and medication occurrences. These parameters complement subjective data from observer evaluations and survey results.

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Team: Orlando Health
Focus Area: Patient Safety – Improving Hand-Hygiene Compliance to Reduce Healthcare Associated Infections

I.	Team Charter/Objectives ('needs statement,' project requirements, project assumptions, stakeholders, etc.; Teams should identify members and define responsibility/purpose)	• A baseline evaluation of hand hygiene compliance at ORMC revealed that the Department of Internal Medicine performed hand hygiene techniques 8% and 12% of the time for Attendings and Residents, respectively. • Data from the Infection Control Department at ORMC showed that 45% of individuals washed their hands with soap and water after leaving a patient's room, which has a sign identifying C. difficile isolation. Statistics also showed 72% individuals entering a C. difficile isolation room wore gowns and 45% of them washed their hands after exiting the room. • With these startling numbers, the need to delve into investigating the overall HH compliance rate and figuring out the best strategy for positive change within our institution became self-evident.
II.	Project Description	• Our aim is to develop an innovative and feasible approach to impact hand hygiene that will help align the GME and institutional goals, which will in turn help reduce healthcare associated infections. • To re-evaluate hand hygiene (HH) compliance at Orlando Health (OH) after education and demonstration of proper hand hygiene
III.	Necessary Resources (staff, finances, etc.)	• IHI Hand Hygiene Expedition Webinar • Team leader and members • Staff – residents, medical students, nurses, attendings • Patients • Department of Infection Prevention and Control • Succinct power points teaching about hand hygiene • Hand washing demonstration tools (Black light, gloves, timer)
IV.	Measurement/Data Collection Plan (must partner/match with Milestone Markers)	• Collect data of the opportunities for handwashing on Internal Medicine Residency Program teams via secret selected member of the team; in this case medical students • Approach Infection prevention and control department for secret observers to evaluate all GME programs
V.	Communication Plan (may be helpful to draft a flow chart of team members & senior management, both internal & external)	• Plans will be communicated to team members through short team meetings and emails • Short meetings with medical students on Internal Medicine Residency program teams explaining surveillance process • Short meeting with Infection Prevention and Control Department • Discuss and provide planned interventions to the resident quality advisory committee and obtain feedback
VI.	Accountability (list of team members and who is accountable for what)	Dr. Madruga – DIO Dr. Clark – Chief Quality Officer of OHPG Dr. Kelley– Chief Quality Officer for Hospital Division/Advisor Dr. Ayesu – Team Leader Drs. Agard and Toms – Project Coordinators
VII.	Potential Challenges (engagement, budget, time, skills gaps, etc)	• Time management as residents have obligations and time consuming schedules • Limited resources for monitoring handwashing opportunities (Secret Observers) • Discordance between the interventions occurring by infection control and GME • Decline in enthusiasm to receive education and facilitate hand hygiene tools

VIII.	Markers (project phases, progress checks, schedule, etc.; must partner/match measurement/data collection plan)	• Short PDSA cycles (August- December 2014) • Provide education on hand hygiene with power points (August – September 2014) • Distribute power points to other GME programs and encourage teaching (September 2014- December 2014) • Meet with representative from Infection Prevention and Control Department to discuss interventions (November- December 2014) • Collect comprehensive data via surveillance of handwashing opportunities (January 2015)
IX.	Vision Statement/Closing Plan (markers of success by March 2015)	• Improve hand hygiene compliance to 50% compared to baseline for the Internal Medicine Program (Attendings, Residents, Medical Students) in 6 months, then distribute effective strategies to all GME programs
X.	Success Factors	• Continued collaboration with the Department of Infection Prevention and Control as well as the Chief Quality Officer • Continuing to engage the C-suite • Residents are more conscientious of performing hand hygiene
XI.	Barriers	• Difficulty in gathering HH compliance data from all GME programs due to limitation of monitoring resources • Discordance between the interventions occurring by infection control and GME • Decline in enthusiasm to receive education and facilitate hand hygiene tools • Surveillance was performed by medical student present on Internal Medicine teams
XII.	Lessons Learned	• The most important part of the process is to form a good relationship with Infection control at the institution with open communication so that efforts are collaborated creating a bigger impact. • Establishing champions is key to continual education and promotion of proper practice
XIII.	Expectations Versus Results	*On a scale of 1 to 10 (with "1" meaning nothing and "10" meaning everything), how much of what you set out to do was your team able to accomplish?* *1 2 3 4 5 6* ***7*** *8 9 10*
XIV.	Satisfaction	*On a scale of 1 to 10 (with "1" meaning not at all satisfied and "10" meaning completely satisfied), how satisfied are you with what you were able to accomplish in your NI III work?* *1 2 3 4 5 6* ***7*** *8 9 10*
XV.	Project Impact	• Improved hand hygiene compliance in the Internal Medicine Residency Program from baseline after education and demonstrations
XVI.	Next Steps	• Involve the patients and their families in the practice and encouragement of proper hand hygiene to further improve compliance, therefore decreasing HAI

Hand Hygiene Compliance at Orlando Health

Malisa Agard MD, Martha Toms MD, Caroline Nguyen-Min MD, Kwabena Ayesu MD

Orlando Health, Orlando FL

Overall Goal/Abstract

•To evaluate hand hygiene (HH) compliance at Orlando Health (OH) after education and demonstration of proper hand hygiene
•To develop an innovative and feasible approach to impact HH compliance and reduce hospital acquired infection

Background

Hand hygiene is an essential human behavior that can help reduce healthcare acquired infections (HAI). HAI prolongs hospital stay, increase resistance of microorganisms to antimicrobials, additional financial burden, and excess deaths. The risk of HAI is universal and the global burden is unknown secondary to the difficulty of gathering reliable data. The CDC estimates that each year nearly 2 million patients in the US gets an infection in hospitals, and about 90,000 of these patients die as a result of their infection.

Here at Orlando Health, the Director of Infection Prevention and Control has provided thought provoking statistics which showed that 72% individuals entering a C. difficile isolation room wore gowns and 45% of them washed their hands after exiting the room. With these startling numbers, the need to delve into investigating the overall HH compliance rate and figuring out the best strategy for positive change within our institution became self evident.

Vision Statement

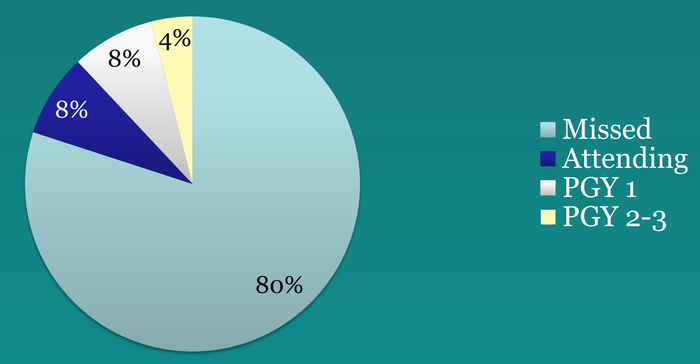
- To improve HH compliance to at least 50% in 6 months at Orlando Health

Materials/Methods

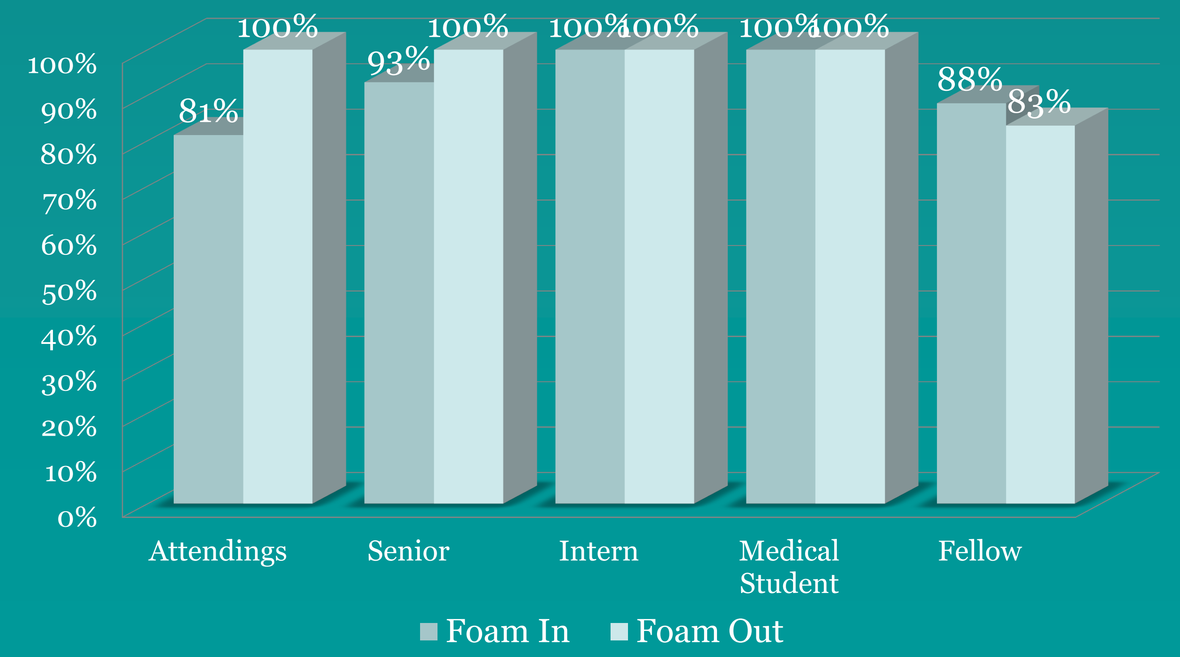
- Develop succinct power points to teach about hand hygiene importance and techniques that take no longer than 5 minutes to communicate
- Administer power points to residents in Internal Medicine Residency Program
- Re-evaluate HH compliance within Internal Medicine Program (Attendings, Residents, Medical Students)

Results

Internal Medicine Baseline Hand Hygiene Compliance Rate



Internal Medicine Hand Hygiene Compliance Reassessment



Success Factors

- Residents are more conscientious of performing proper hand hygiene resulting in improved compliance
- Continued collaboration with the Department of Infection Prevention and Control as well as the Chief Quality Officer
- Continuing to engage the C-suite

Barriers Encountered/Limitations

- Difficulty in gathering HH compliance data from all GME programs due to limitation of monitoring resources
- Discordance between the interventions occurring by infection control and GME
- Decline in enthusiasm to receive education and facilitate hand hygiene tools
- Surveillance was performed by medical students present on Internal Medicine teams

Conclusions

- Hand hygiene remains the single most effective measure to prevent healthcare acquired infections
- Our study revealed that through teachings with succinct power points to promote awareness and hand washing demonstrations, compliance improves
- Although compliance has improved, to optimize safety it is necessary to include the patient in the practice

Bibliography

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Team: Orlando Health Focus Area: Patient Safety- Resident QI Core Curriculum Development Revisited

I.	Team Charter/Objectives ('needs statement,' project requirements, project assumptions, stakeholders, etc.; Teams should identify members and define responsibility/purpose)	• Following the landmark report " To Err is Human" many institutions incorporated QI into GME curriculum. However formal training was lacking, therefore a curriculum using IHI Open School Modules was developed to enhance the resident's ability to effectively carry out their quality improvement projects. • With more than a year passed, a reassessment of the residents QI knowledge since completing formal training was prudent
II.	Project Description	• Evaluate the retention of the knowledge obtained from the curriculum developed previously in National Initiative III after completion of formal training • Evaluate effectiveness of the QI core curriculum and possible need for continued training
III.	Necessary Resources (staff, finances, etc.)	• Residents and Team Leader • Clinical coordinators and Chief Residents of the GME programs at Orlando Health (IM, General Surgery, Orthopedic surgery, Pediatrics, Pathology, OB/GYN) • Literature survey to identify available questionnaires • Creation of a baseline questionnaire • IHI QI training provided • Post-test assessment results to compare with maintenance results
IV.	Measurement/Data Collection Plan (must partner/match with Milestone Markers)	• Administer questionnaire/surveys provided on IHI website to all the GME residency programs • Aim will be to have baseline measurement of the knowledge retained to evaluate effectiveness of the developed curriculum
V.	Communication Plan (may be helpful to draft a flow chart of team members & senior management, both internal & external)	• Plans will be communicated to clinical coordinators/secretaries and chief residents of the residency programs through emails and short meetings • Will deliver the surveys to the designated representative of each program that will administer it • Inform and evaluate the Resident Quality Advisory Council (collaboration of champions of the different GME programs) of the plans to evaluate the need for maintenance of QI knowledge
VI.	Accountability (list of team members and who is accountable for what)	Dr. Madruga – DIO Dr. Clark- Chief Quality Advisor Dr. Kwabena Ayesu- Team Leader Dr. Malisa Agard and Dr. Caroline Nguyen- Project coordinators
VII.	Potential Challenges (engagement, budget, time, skills gaps, etc)	• Time management especially with the resident's busy schedule • Ensuring proper administration of the surveys
VIII.	Markers (project phases, progress checks, schedule, etc.; must partner/match measurement/data collection plan)	• Obtain IHI questionnaire/survey and eliminate unnecessary parts • Administer Maintenance questionnaire/survey to Resident Quality Advisory Council champions (September 2014) • Collect comprehensive data (January 2015)
IX.	Vision Statement/Closing Plan (markers of success by March 2015)	• To maintain a QI Curriculum that is simple, yet effective and adaptable to all GME programs at Orlando Health that will help residents better facilitate QI Projects

X.	Success Factors	• The most successful component of our work was we were able to collaborate with all the other GME programs representatives to administer the questionnaire/survey to the residents. Now we have an idea of how much the residents are retaining from the developed curriculum • We were inspired by the level of retention (percentage) as illustrated in the data collected to find ways to ensure that resident education of Quality improvement core concepts is more effective as well as sustainable.
XI.	Barrier	• The largest barrier we encountered was resistance and lack of eagerness to participate. • Time management is another issue most related to the busy schedules and responsibilities of the residents • We worked to overcome this by reaching out to chief residents and clinical coordinators of the residency programs so that the task of collecting the data could be completed.
XII.	Lessons Learned	• Have a realistic time frame to collect the data • Frequent communication with clinical coordinators and chief residents of the respective programs is important for success • Having a representative on the corporate level is helpful in recruiting excitement about the project
XIII.	Expectations Versus Results	*On a scale of 1 to 10 (with "1" meaning nothing and "10" meaning everything), how much of what you set out to do was your team able to accomplish?* *1 2 3 4 5 6 7 8* ***9*** *10*
XIV.	Satisfaction	*On a scale of 1 to 10 (with "1" meaning not at all satisfied and "10" meaning completely satisfied), how satisfied are you with what you were able to accomplish in your NI III work?* *1 2 3 4 5 6 7 8* ***9*** *10*
XV.	Project Impact	• The residents have a better knowledge of the process and necessary steps to implement change with their respective quality improvement projects. • However it may be necessary to provide maintenance teachings so that the core concepts are retained, therefore ensuring that the projects are carried out effectively
XVI.	Next Steps	• The next step is devising a way to help the residents with maintenance of the knowledge whether that be brief power points, noon conferences, small laminated • cards that they can carry around, etc • Re-evaluate retention with the surveys after the these teaching tools

Quality Improvement – A Humbling Experience Triggering Change in Resident Education Revisited

Malisa Agard MD, Caroline Nguyen-Min MD, and Kwabena Ayesu MD

Orlando Health, Orlando FL

Overall Goal

- To evaluate residents' retention of QI knowledge after formal training
- To evaluate effectiveness of QI core curriculum and possible need for continued training

Background

Quality Improvement (QI) has become an essential part of all aspects of clinical medicine. With the Institute of Medicine's landmark report "To Err Is Human" in 1999, many institutions have incorporated QI into their GME curriculum, likewise Orlando Health Residency Programs. Lacking formal QI training we decided to implement the IHI Open School training modules as a core training curriculum for residents. With more than a year among us, a reassessment of residents QI knowledge after IHI training was deemed prudent.

Vision Statement

To maintain a QI curriculum that is simple, yet effective and adaptable to all residency programs at ORMC to facilitate QI projects

Materials/Methods

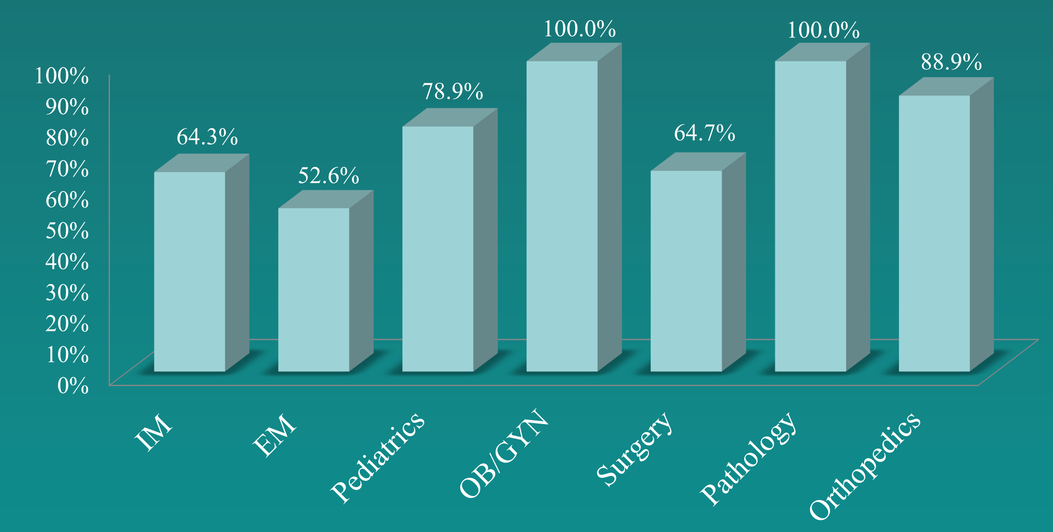
- Literature survey to identify available questionnaires
- Creation of a baseline questionnaire
- Administration of questionnaire to residents of IM
- IHI QI training provided
- Administration of Maintenance questionnaire
- Post-test assessment compared with maintenance results

Success Factors

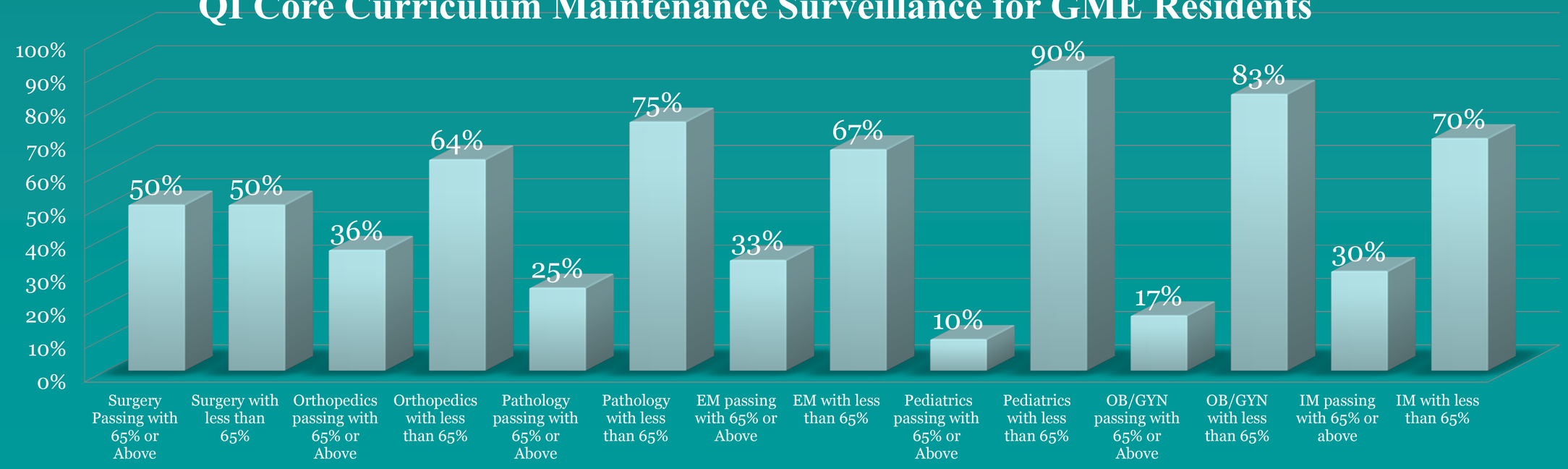
- Greater than 70% respondents on maintenance questionnaire among all GME programs
- Collaboration with other GME programs to facilitate completion of maintenance questionnaire

Results

Post- test Passing Rate by Departments after QI Curriculum Training



QI Core Curriculum Maintenance Surveillance for GME Residents



Barriers Encountered/Limitations

- Time management
- Different stakeholders
- Resident resistance to completing QI curriculum despite tailored modules
- Difficulty conveying importance of maintaining QI knowledge
- Lack of data from residents who have completed curriculum due to matriculation

Conclusions

- NAS and CLER have elevated quality improvement to the forefront of all residency training
- Residents have a profound lack of retention in the QI knowledge despite formal training
- Maintenance questionnaire results forces us to re-evaluate the effectiveness of our core curriculum and whether the lack of retention requires ongoing QI training

Bibliography

- Institute for Healthcare Improvement. *Understanding Medical Error and Patient Safety*.

Team: OSF **Focus Area:** Transitions in care

I.	Team Charter/Objectives ('needs statement,' project requirements, project assumptions, stakeholders, etc.; Teams should identify members and define responsibility/purpose)	Objectives-Embedding IPASS Resident hand off in programs Team members- Dr Beekman, Dr McBeeOrzulak, Crystal Coan, Kristin Crawford, Dr. Santoro, Dr. Miller, IPASS Program Champions, Hannah Wang, Mindy Reeter, Carmen Kirkness
II.	Project Description	Further embedding IPASS Resident Hand off in programs through IPASS program champions and simulation.
III.	Necessary Resources (staff, finances, etc.)	Simulation Center and resources to develop curriculum. Resources to do re-assessments of PEDs and Internal Medicine and ED. Resources to support research.
IV.	Measurement/Data Collection Plan (must partner/match with Milestone Markers)	Reassessment of Resident satisfaction via survey. We will be assessing the verbal and written accuracy of the hand off tool. Reassessment of PEDs, Internal Medicine and ED hand off to compare to baseline. Report out on any resident hand off issues via Peminic. (online reporting tool) Chart audit to determine accuracy of written hand off.
V.	Communication Plan (may be helpful to draft a flow chart of team members & senior management, both internal & external)	Dr. Santoro and Dr Miller Programs Directors Program IPASS Champions Residents UICOMP resources
VI.	Accountability (list of team members and who is accountable for what)	Dr. Santoro, Dr. Miller Dr Beekman & Dr McBeeOrzulak IPASS Program champions Dr Wolford Crystal Coan& Kristin Crawford Hannah Wang Mindy Reeter Carmen Kirkness
VII.	Potential Challenges (engagement, budget, time, skills gaps, etc)	Lack of ability for interdisciplinary teams to view hand off Attending availability at resident hand off
VIII.	Markers (project phases, progress checks, schedule, etc.; must partner/match measurement/data collection plan)	Refine assessment tool 11/3013 Refine Resident Survey 12/15/13 Reassessment of programs by 2/14/14 ✓ Med/Peds- 1/14 ✓ Medicine-2/14 ✓ Peds-12/13 ✓ ED 2/14 Resurvey residents in PEDs, Internal Medicine and ED on satisfaction 3/14 Simulation Pilot ?

		Simulation ✓ Med/Peds-? ✓ Medicine-? ✓ Peds-? Team Steps tied into ED simulation with adding resident hand off 4/14- Dr Wolford has approved and meeting with TK next week to discuss
IX.	Vision Statement/Closing Plan (markers of success by March 2015)	Reduction in Peminic reports for resident hand off issues Improved resident hand off post go live of Epic integrated tool Improved resident satisfaction on resident hand off via survey Reassessment Chart audit for hand off errors by resident resources

For your final work plan, please update sections I thru IX as needed and add your responses to sections X thru XVI. The collective data from all of the teams' completed plans will be invaluable as we learn and publish from this collaborative experience.

Team: _____ **Focus Area:** _____

I.	Team Charter/Objectives ('needs statement,' project requirements, project assumptions, stakeholders, etc.; Teams should identify members and define responsibility/purpose)	The objective of this project is to implement IPASS in adult ICU setting and to evaluate handoff pre and post educational intervention. Resident handoff was previously studied in Peds medical/surgical only. This is an opportunity to understand adult ICU. This project will increase our understanding of adverse events, near misses and good catches in an adult ICU. This will standardize the handoff in order to create a concise product with an increased safety for patients.
II.	Project Description	This project will allow us to see an improved resident handoff in a controlled environment (verbally and electronically) and more reporting to our electronic event reporting system. This process will create a concise and standardized resident handoff tool using the IPASS to improve patient safety by enhancing communication and satisfaction among residents rotating through the adult ICU.
III.	Necessary Resources (staff, finances, etc.)	Staff to do rounding with RNs and Residents every day. Providers to do education and do baseline and follow up on hand off.
IV.	Measurement/Data Collection Plan (must partner/match with Milestone Markers)	
V.	Communication Plan (may be helpful to draft a flow chart of team members & senior management, both internal & external)	*We will be doing texting and e-mailing updates. Get up a sign up page for Providers to sign up for interventions and grading hand off first of month and last 2 weeks after intervention*

VI.	Accountability (list of team members and who is accountable for what)	*Attached is the implementation plan*
VII.	Potential Challenges (engagement, budget, time, skills gaps, etc)	*The daily RN and Resident survey was more labor intensive than we thought. Observations were assigned to dedicated non-clinical team member to provide consistency but needed more round the clock vigilance to obtain true picture. In addition, more work is needed to get communication and transparency of good catches and near misses to staff and residents. A future opportunity in change management could include removal of the stigmatism associated with reporting and retribution*
VIII.	Markers (project phases, progress checks, schedule, etc.; must partner/match measurement/data collection plan)	
IX.	Vision Statement/Closing Plan (markers of success by March 2015)	*This project will allow us to see an improved resident handoff in a controlled environment (verbally and electronically) and more reporting to our electronic event reporting system. This process will create a concise and standardized resident handoff tool using the IPASS to improve patient safety by enhancing communication and satisfaction among residents rotating through the adult ICU.*
X.	Success Factors	*The most successful component of our work was…….* *We were inspired by……..* *Increased event reporting and reduced hand off errors*
XI.	Barriers	*The largest barrier we encountered was……..* *We worked to overcome this by……..* *The resident intervention was difficult due to clinical schedules. Timing of the verbal handoff was not always consistent and a future opportunity could include a standard provider observer with familiarity to the ICU patients. In addition, having one dedicated attending champion would be helpful to lead the research.*
XII.	Lessons Learned	*The single most important piece of advice to provide another team embarking on a similar initiative would be……* *We underestimated the resources to do this project. Make sure you have backups to all of the tasked needed.*
XIII.	Expectations Versus Results	*On a scale of 1 to 10 (with "1" meaning nothing and "10" meaning everything), how much of what you set out to do was your team able to accomplish?* *1 2 3 4 5 6 **7** 8 9 10*

XIV.	Satisfaction	*On a scale of 1 to 10 (with "1" meaning not at all satisfied and "10" meaning completely satisfied), how satisfied are you with what you were able to accomplish in your NI III work?* *1 2 3 4 5 6 7 8* ***9*** *10*
XV.	Project Impact	*What changes have you observed in your residency program(s), or at your institution, based upon your work? Hand off have improved and are more transparent.*
XVI.	Next Steps	*Describe next steps for your project, including plans for sustaining and spreading the changes made.* Spread to other non-ICU *Establish a Attending Provider Champion*

Rates of Medical Errors and Adverse Events in a Medical ICU following implementation of a standardized computerized handoff system,

Crystal Davis-Coan, Kristin Crawford, Dr. Teresa Lynch,

Dr Rachael Davis, Dr Tim Miller, Dr Santoro - all from OSF or UICOMP, Peoria, IL

Overall Goal/Abstract

The objective of this project is to implement IPASS in adult ICU setting and to evaluate handoff pre and post educational intervention. Resident handoff was previously studied in Peds medical/surgical only. This is an opportunity to understand adult ICU. This project will increase our understanding of adverse events, near misses and good catches in an adult ICU. This will standardize the handoff in order to create a concise product with an increased safety for patients.

Background

This project will evaluate the effectiveness and staff satisfaction of resident handoffs in the OSF SFMC Medical Intensive Care Unit (adult ICU) utilizing the I-PASS hand-off system (integrated with EPIC) at baseline and then post intervention. We provided a controlled and quiet environment for hand-offs, an integrated hand-off tool (I-PASS plus EPIC) and a robust educational bundle with simulation/role playing, didactics, and small group work. The current process in the adult ICU does not include a controlled environment or a consistent process for delivering hand-offs or standardized time. This will be analyzed on a monthly basis over a 6 month period.

Vision Statement

I-PASS BETTER HANDOFFS. SAFER CARE.

I	Illness Severity	• Stable, "watcher," unstable
P	Patient Summary	• Summary statement • Events leading up to admission • Hospital course • Ongoing assessment • Plan
A	Action List	• To do list • Time line and ownership
S	Situation Awareness and Contingency Planning	• Know what's going on • Plan for what might happen
S	Synthesis by Receiver	• Receiver summarizes what was heard • Asks questions • Restates key action/to do items

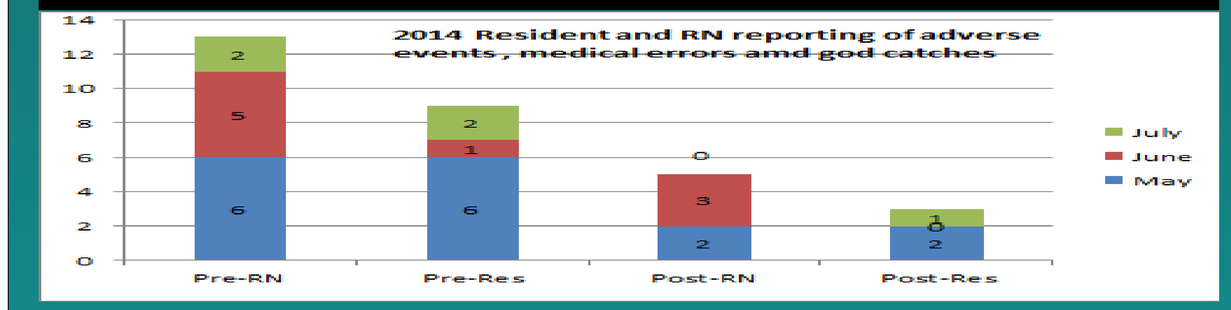
This project will allow us to see an improved resident handoff in a controlled environment (verbally and electronically) and more reporting to our electronic event reporting system. This process will create a concise and standardized resident handoff tool using the IPASS to improve patient safety by enhancing communication and satisfaction among residents rotating through the adult ICU.

Materials/Methods

There is a monthly rotation of Residents in the adult ICU. We observe hand off, complete intervention education and finally observe hand off again (verbally and electronically). Staff and providers complete a daily RN or Resident survey for unreported events, good catches and near misses. These are compared to the electronic event reporting system for transparency.

Intervention consists of a 3-4 hour training seminar consisting of a standardized didactic component, sample videos of appropriate and inappropriate hand-offs, and interactive simulation training on proper hand-offs and event reporting followed by a debriefing period.

Results (data gathered both quant & qual.)



Success Factors and Lessons Learned(Discussion)

The project was both successful and opportunity for future improvements. Dr. Lynch was a strong leader but not dedicated to the MICU for observations and daily resident interactions.
What worked? We brought awareness and increased communication about failure points in the process. There has been no significant change in depth of hand off.
This project brought strong leadership commitment to the hand-off. Residents enjoyed simulation in intervention.
Adding "good catch" to Resident Survey was a quick win so the focus was not negative.

Bibliography

Boston Children's: I-Pass

Barriers Encountered/Limitations

The resident intervention was difficult due to clinical schedules. Timing of the verbal handoff was not always consistent and a future opportunity could include a standard provider observer with familiarity to the ICU patients. In addition, having one dedicated attending champion would be helpful to lead the research.

The daily RN and Resident survey was more labor intensive than we thought. Observations were assigned to dedicated non-clinical team member to provide consistency but needed more round the clock vigilance to obtain true picture. In addition, more work is needed to get communication and transparency of good catches and near misses to staff and residents. A future opportunity in change management could include removal of the stigmatism associated with reporting and retribution.

Conclusions

Final thoughts- We have data for discussion but lack the depth needed to show significance in the intervention month to month.

Overall experience-There is more transparency of the hand off process on adult ICU. However, we lack one true owner of the ICU residents which has made physician championing difficult because attending providers rotate weekly.

Was it a transformative/worthwhile experience? Yes for knowledge and ability to grow. We are learning to understand how to communicate with residents in a more meaningful way.

What do you want to share with the audience? There is more work to do in standardizing the monthly calendar in advance in terms of timing of education and observations.

Team: Our Lady of the Lake Regional Medical Center **Focus Area:** Patient Safety

I.	Team Charter/Objectives ('needs statement,' project requirements, project assumptions, stakeholders, etc.; Teams should identify members and define responsibility/purpose)	Our Lady of the Lake Regional Medical Center (OLOL) is the sponsoring institution for a pediatric program and has recently become the primary clinical site for 4 LSU residency programs and a major participating site for 13 additional LSU residency programs. Currently, there is variability in the QI curriculum offered in each of the residency programs and there is limited resident integration to hospital QI/Patient Safety initiatives. Our objective is to develop a standardized educational intervention, focused on patient safety, across the 4 residency programs. Representatives from each of the residency programs, patient safety officers, QI directors and C-Suite leaders are included in the AIAMC Patient Safety Team. Members include: Laurinda Calongne, Ed.D. – Chief Academic Officer/DIO Keith Rhynes, M.D., MBA – OLOL GME Medical Director, Associate Program Director, LSU General Surgery Residency Program Stephen Hosea, M.D. , FACS – Associate Medical Director of Quality and Patient Safety Christi Pierce, M.B.A.,M.S.H.A. – Senior Director of Quality Michael Bolton, M.D. – Assistant Director of Quality and Patient Safety, Children's Hospital Trey Dunbar, M.D. – Program Director, OLOL Pediatric Residency Program Bear Caffery, M.D. – Program Director, LSU Emergency Medicine Residency Program Savarra Mantzor, M.D. – PGY3 Pediatric Resident (incoming chief) Deborah Ford, RN, MSN – Chief Nursing Officer Lauren Rabalais, MPA – Director of GME Mandi Musso, PhD – Academic Research Director, LSU Emergency Medicine Residency Rich Vath, M.Ed – Academic Research Director, LSU Psychiatry and OLOL Pediatrics Banhsen Miller, M.D. – PGY 3 Internal Medicine Resident (incoming chief) Angela Johnson, M.D. – Associate Program Director, LSU Internal Medicine Residency Program Lee Tynes, M.D., PH.D. – Faculty, LSU Psychiatry
II.	Project Description	I. Phase 1: Baseline a. anonymously survey (using de-identified codes) residents rotating on inpatient rotations using the modified AHRQ survey b. key faculty members brainstormed a standardized educational intervention and determined that weekly text reminders to faculty, asking them to incorporate patient safety discussions on rounds, would be beneficial.

		c. Faculty asked for additional faculty development opportunities i. We offered a video that demonstrated leading patient safety discussions on rounds ii. The associate medical directors of quality and patient safety were available for additional tips and discussions II. Phase 2: Implement Standardized Educational Intervention a. Each week, faculty members were texted a prompt, reminding them to incorporate patient safety discussions on rounds b. Faculty asked to notify investigators that patient safety discussions took place, and were invited to share patient safety discussions c. When significant patient safety issues arose, they were passed up the chain and faculty members were notified of solutions, closing the feedback loop III. Phase 3: Post-intervention Assessment a. anonymously survey (using de-identified codes) residents and faculty to determine their perceptions of the hospital's patient safety culture after completing the intervention.
III.	Necessary Resources (staff, finances, etc.)	a. Team members have dedicated one hour per month to participate on the workgroup b. Faculty members dedicated time weekly during rounds to incorporate patient safety discussions. c. A subset of co-investigators dedicated time to send text reminders weekly and close feedback loops at every opportunity
IV.	Measurement/Data Collection Plan (must partner/match with Milestone Markers)	a. Phase 1 i. Pre-intervention data was collected at baseline, using the modified AHRQ survey. b. Phase 2 i. Faculty were required to respond that patient safety discussions had taken place. They were encouraged to share de-identified information about what type of discussion took place. c. Phase 3 i. Post-intervention data was collected, using the modified AHRQ survey
V.	Communication Plan (may be helpful to draft a flow chart of team members & senior management, both internal & external)	a. The workgroup met monthly to discuss the progress of the project b. Team members were assigned to give presentations about the project to stakeholder groups

		c. The DIO reported to the CEO and CMO monthly
VI.	Accountability (list of team members and who is accountable for what)	• Team Leader - Laurinda Calongne, Ed.D. – Chief Academic Officer/DIO • Project Manager - Lauren Rabalais, MPA – Director of GME Keith Rhynes, M.D., MBA – OLOL GME Medical Director, Associate Program Director, LSU General Surgery Residency Program *(responsible for implementation within Surgery Residency Program)* Stephen Hosea, M.D. , FACS – Associate Medical Director of Quality and Patient Safety *(responsible for keeping project on course with hospital quality and safety goals and core values)* Christi Pierce, M.B.A.,M.S.H.A. – Senior Director of Quality *(responsible for keeping project on course with hospital quality and safety goals and core values)* Michael Bolton, M.D. – Assistant Director of Quality and Patient Safety, Children's Hospital *(responsible for keeping project on course with quality and safety goals and core values for Children's Hospital; implementation for Pediatric Residency Program)* Trey Dunbar, M.D. – Program Director, OLOL Pediatric Residency Program *(responsible for implementation within Pediatric Residency Program)* Bear Caffery, M.D. – Program Director, LSU Emergency Medicine Residency Program *(responsible for implementation within Emergency Medicine Residency Program)* Savarra Mantzor, M.D. – PGY3 Pediatric Resident (incoming chief) *(responsible for implementation within Pediatric Residency Program and resident focus groups)* Deborah Ford, RN, MSN – Chief Nursing Officer *(responsible for keeping project on course with hospital quality and safety goals and core values; communication with nursing staff)* Mandi Musso, PhD – Academic Research Director, LSU Emergency Medicine Residency *(responsible for IRB proposal and research pertaining to project)* Rich Vath, M.Ed – Academic Research Director, LSU Psychiatry and OLOL Pediatrics *(responsible for IRB proposal and research pertaining to project)* Banhsen Miller, M.D. – PGY 3 Internal Medicine Resident (incoming chief) *(responsible for implementation within Internal Medicine Residency Program and resident focus groups)*

		Angela Johnson, M.D. – Associate Program Director, LSU Internal Medicine Residency Program *(responsible for implementation within Internal Medicine Residency Program)* Lee Tynes, M.D., Ph.D. – Faculty, LSU Psychiatry *(responsible for implementation within Psychiatry Residency Program)*
VII.	Potential Challenges (engagement, budget, time, skills gaps, etc)	a. Engagement of all faculty, particularly members were not participating in the workgroup b. Variability in residents' and faculty members' QI and patient safety skills and knowledge
VIII.	Markers (project phases, progress checks, schedule, etc.; must partner/match measurement/data collection plan)	a. Baseline – February-March 2014 b. Intervention – April – May 2014 c. Post-intervention assessment – June – July 2014
IX.	Vision Statement/Closing Plan (markers of success by March 2015)	a. The ultimate goal of this pilot project was to build a quality improvement initiative that would positively influence the culture of patient safety at the hospital and better integrate residents into the hospital's patient safety initiatives b. A second goal of this project is to publish a minimum of one peer-reviewed manuscript by March 2015.
X.	Success Factors	a. The most successful component of our work was engaging faculty and residents in patient safety discussions. i. Our ability to close the feedback loop on several key patient safety issues allowed us to reinforce reporting and increase physician communication of patient safety issues. *b.* We were inspired by a colleagues in NI-IV. Hearing them discuss problems they had been facing within their hospital enabled us to focus our project.
XI.	Barriers	a. The largest barrier we encountered was initially having faculty and residents buy in to completing patient safety discussions on rounds b. We overcame this by offering faculty development to increase confidence in leading discussions and reinforce the importance of having these discussions. Also, we were able to close the feedback loop, so that residents and faculty could see the impact of identifying patient safety issues. This significantly reinforced the importance of patient safety

		discussions and empowered faculty and residents.
XII.	Lessons Learned	a. The single most important piece of advice we would provide another team embarking on a similar initiative would be to keep your project simple, focused, and structured. b. It is also important to incorporate outcome measures that allow you to track whether your intervention has had an impact on the variable you wished to change.
XIII.	Expectations Versus Results	*On a scale of 1 to 10 (with "1" meaning nothing and "10" meaning everything), how much of what you set out to do was your team able to accomplish?* *1 2 3 4 5 6 7 8 9 10*
XIV.	Satisfaction	*On a scale of 1 to 10 (with "1" meaning not at all satisfied and "10" meaning completely satisfied), how satisfied are you with what you were able to accomplish in your NI III work?* *1 2 3 4 5 6 7 8 9 10*
XV.	Project Impact	*What changes have you observed in your residency program(s), or at your institution, based upon your work?* Our faculty and residents have become more aware of patient safety, and preliminary evidence from one residency suggests residents have become more engaged in error reporting. In addition, faculty from other residency programs have asked to join our next initiative. We have entitled our working group, "scholars in quality" and meet regularly to discuss forward progress. We are developing a QI fellowship to begin in July 2015.
XVI.	Next Steps	*Describe next steps for your project, including plans for sustaining and spreading the changes made.* Our working group meets regularly to discuss plans for future research and quality improvement projects. Several residency programs have built upon the momentum of this project to incorporate additional patient safety tools into their rounds.

Improving Resident Education of Patient Safety: A Campus-Wide Initiative

OUR LADY OF THE LAKE REGIONAL MEDICAL CENTER
Franciscan Missionaries of Our Lady Health System

National Initiative

L. Calongne, M. Musso, R. Vath, K. Rhynes, S. Hosea, M. Bolton, A. Dunbar, T. Caffery, S. Mantzor, L. Rabalais, B. Miller, A. Johnson, L. Tynes

Background and Goal

- Residency programs at our institution were implementing patient safety curricula in a variety of ways but rarely communicated with one another.
- The objective of this project was to develop and implement a campus-wide, standardized learning experience to enhance residents' knowledge of patient safety.

Project Context

Phase 1: Co-investigators from five residency programs brainstormed a standardized learning experience:

- The working group determined that using text message reminders to facilitate patient safety discussions on hospital-based rounds would be a novel *and* accessible means of engaging faculty and residents.
- Participating faculty were provided with a training video modeling how to incorporate patient safety discussions on rounds.

Phase 2: Pilot Study in Spring 2014

- Over a 2-month period participating faculty received weekly text reminders to discuss PS on rounds.
- Residents on hospital-based rotations participated in the safety rounds initiative; residents on alternative rotations served as a control group.

Vision Statement

We hoped that by emphasizing the importance of patient safety discussions on rounds, residents and faculty across the hospital might more meaningfully engage with the emerging culture of safety and quality.

Methods

The following reminder was sent weekly to participating faculty as a text message. Faculty replied to texts indicating they had patient safety discussions. As specific issues arose, patient safety officers were notified and the feedback loop was closed after action was taken.

Please remember to ask the following questions during hospital rounds today:

1. ***Did anything happen today that resulted in harm or could have resulted in harm to your patient?***
2. ***Was this a system error, a process error, or a human error?***
3. ***Is this a solvable challenge, and if so, what are the appropriate reporting mechanisms?***

Measurable Impacts

- We observed increases in resident perceptions of the culture of quality and patient safety at our institution as a result or our initiative, particularly in the **Communication** and **Event Reporting** sections of the modified AHRQ (administered pre and post pilot).
- **95%** of faculty who completed follow-up survey reported that they were continuing to incorporate patient safety discussions on rounds after pilot phase.

Success Factors and Lessons Learned

- Weekly text message reminders ensured that our faculty remained engaged and that patient safety discussions were relatively standardized.
- The majority of faculty reported that safety rounds were effective and manageable and that residents were very responsive to their incorporation.
- Some faculty who were initially skeptical about the project raved about its effectiveness in closing the feedback loop.

Barriers Encountered/Limitations

- Co-investigators were responsible for text messaging and error monitoring, a methodology that proved difficult to maintain after the study period. Though faculty reported continuation of patient safety rounds, the sustainability absent prompting and monitoring was unclear.
- To address these concerns, we have begun to incorporate PS/QI reminders and teaching points into our extant GME communication channels.
- Faculty also reported limitations in the current reporting architecture at our hospital. This remains an area of focused interest for both GME leaders and quality officers at the hospital.

Conclusions

- We believe that this standardized learning experience led to an increased sense of ownership of quality and patient safety on the part of our physician learners and teachers, as evidenced by significant movement in residents perceptions and reporting activity.
- Additionally, our experience in NI IV brought faculty and residents out of departmental silos and engaged them to work with quality leaders at the hospital to improve patient safety outcomes.
- This collaborative momentum yielded an additional outcome: the creation of a Quality and Patient Safety Fellowship beginning in AY 2015.

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Team: OhioHealth Riverside Methodist Hospital Focus Area: Quality Improvement

I.	Team Charter/Objectives ('needs statement,' project requirements, project assumptions, stakeholders, etc.; Teams should identify members and define responsibility/purpose)	This QI initiative was designed to engage residents to work closely with hospital administration on QI projects and to actively participate in improving their clinical learning environment. -QI should be a part of daily life not just during initiatives/projects -QI is not just the job of nurses/administration -Residents should be empowered to report/identify areas for improvement -Residents should drive change with the support of an engaged C-suite and the GME staff -Key stakeholders include: residents, faculty, program directors, DIO, C-suite (especially VPMA and VP of Quality), nursing, GME staff
II.	Project Description	-"Find It, Fix It" -Kaizen approach—process boards and idea cards -Central place/process to post improvement opportunities (large and small) -Visually show progress and track completed issues -Use of PDSA cycles to address issues raised on idea cards -Engagement of residents and C-suite to identify issues, actively work to provide solutions and close feedback loop
III.	Necessary Resources (staff, finances, etc.)	-Resident-driven for better buy in--Resident "champions" from each program -Kaizen boards -GME staff -C-suite support (presence, participation, financial support) -Finances will vary (GME vs hospital support) -Time—residents, GME staff, administration, project manager, faculty, DIO
IV.	Measurement/Data Collection Plan (must partner/match with Milestone Markers)	Outcome measures -Self-efficacy/empowerment/engagement survey data of residents—Pre/Post -Project success rates—number of ideas per resident/residency, number of completed projects, type of projects -Engagement of C-suite -Success of 5/2014 CLER visit—positive feedback from site visitors -National presentations (AIAMC 3/2015, ACGME 2/2015)
V.	Communication Plan (may be helpful to draft a flow chart of team members & senior management, both internal & external)	RESIDENTS----------→C-suite Champions President All programs DIO VP Q/S, VPMA Underlying GME support (staff, money, time) Reporting at interdisciplinary meetings, executive meetings, GMEC, etc.
VI.	Accountability (list of team members and who is accountable for what)	-Residents: identifying issues, participating in action plans, scholarly activities -C-suite: support, action planning -Med Ed leadership/staff: support, planning, organizing resources,

		data management -Research support: protocol development, data analysis, scholarly activities -Faculty project manager: management of ideas, collection of outcomes
VII.	Potential Challenges (engagement, budget, time, skills gaps, etc)	-Engagement is top concern (apathy, time, interest, buy-in, stigma, etc.) -Resources depending on issues raised -Project management—resources limited -Skills, knowledge of QI process -Scope of project -Too many ideas to work all—need for prioritization to best utilize scare resources (time) -Resident "champions" not all engaged
VIII.	Markers (project phases, progress checks, schedule, etc.; must partner/match measurement/data collection plan)	-Resident & team meeting: November--DONE -Protocol/IRB: Nov/Dec--DONE -Information dissemination/kickoff: Jan/Feb—DONE (2/18) -Pre-surveys: Jan/Feb—DONE (2/18/14); Interns (6/2014) -Kaizen identification/action: ONGOING as of 2/2014 -Revision/continuation of project: Summer 2014—ongoing -Post-surveys: DONE 6/2014 (4 month), 2/2015 (1 year, 8 month for interns) -Analysis: Winter 2015 -Presentation: AIAMC 3/2015, ACGME 2/2015
IX.	Vision Statement/Closing Plan (markers of success by March 2015)	-Our Find It, Fix It project engaged residents and the C-suite in QI projects -Resident knowledge and participation in QI processes improved as seen on surveys -The project allowed GME to have weekly meetings with C-suite members -Beginnings of cultural change seen: IM and FM developed Quality rotations, outpatient faculty more engaged in QI outside of Find It, Fix It -Project was highlighted at May 2014 CLER visit -Project created opportunities for scholarly activity (AIAMC, ACGME, STFM presentations as of February 2015) -Sustainability of project in current form is being examined as it is resource intensive
X.	Success Factors	-The project engaged residents from all programs and increased QI knowledge -C-suite and GME collaboration led to successful completion of projects: improved access to resources, better alignment with ongoing hospital QI work -Providing residents protected time increased their involvement in QI -Unexpected win: The project was showcased at our successful CLER visit

XI.	Barriers	-Scope of project required significant project management (time, effort, expertise) -Engagement of residents was variable and challenging -Knowledge improved over the year while attitudes toward QI did not -Need to involve all stakeholders from the start (faculty, program directors) -Expectations should be realistic -Goals/metrics should be carefully considered at the start -Continuous evaluation and improvement of the project important -Recognize and manage project fatigue early
XII.	Lessons Learned	Success of this type of project requires early engagement of all stakeholders and ensuring that there is sufficient time available for active participation.
XIII.	Expectations Versus Results	*On a scale of 1 to 10 (with "1" meaning nothing and "10" meaning everything), how much of what you set out to do was your team able to accomplish?* *1 2 3 4 5 6 7* ***8*** *9 10*
XIV.	Satisfaction	*On a scale of 1 to 10 (with "1" meaning not at all satisfied and "10" meaning completely satisfied), how satisfied are you with what you were able to accomplish in your NI IV work?* *1 2 3 4 5 6 7* ***8*** *9 10*
XV.	Project Impact	-124 ideas were submitted by 72 residents -71 projects were initiated (57% of ideas) -36 projects were QI/PS and patient focused (51% of initiated projects) -32 projects were completed (45% of initiated projects) including 10 QI projects -Engagement in QI outside of the project increased: development of QI rotations in FM and IM programs, outpatient faculty-led initiatives outside of Find It, Fix It -QI work creates opportunity for scholarly activity: Posters/presentations at three national conferences as of 2/2015
XVI.	Next Steps	The planning committee is evaluating the project and considering options for a next phase that would ensure sustainability. We are also determining how this project fits into our overall QI education for our trainees.

Find It, Fix It: Engaging Residents and the C-Suite in Quality Improvement

Sara Sukalich MD and Miriam Chan PharmD,
on behalf of the Find It, Fix It Planning Committee
OhioHealth Riverside Methodist Hospital, Columbus OH

Overall Goal/Abstract

Riverside Methodist Hospital is a large community hospital with approximately 122 residents in 5 residencies (Internal Medicine, Family Medicine, General Surgery, OB/GYN and Transitional Year). Our institutional quality improvement/patient safety (QI/PS) initiatives rarely involved trainees and there was little education or participation in QI/PS at the GME level. This gap highlights an opportunity for engaging residents and the C-suite in a shared QI initiative.

The aims of the AIAMC NI IV QI initiative were to:

- Provide GME-wide exposure to QI
- Develop a GME-led QI initiative
- Engage the C-Suite in the initiative
- Better align GME QI efforts with institutional priorities
- Lay the groundwork for culture change

Background

The ACGME Clinical Learning Environment Review (CLER) program calls for residents to participate in quality improvement and patient safety (QI/PS) initiatives. Aligning GME-led QI/PS initiatives with the sponsoring institution's priorities and enlisting the support of the C-suite are the keys to achieving optimal clinical learning environment in the areas of QI and PS.

Vision Statement

Our vision is that the Find It, Fix It project will engage residents and the C-Suite in QI and will ultimately lead to a cultural shift where residents actively participate in QI on a daily basis.

Materials/Methods

•Planning Committee was formed (residents, faculty members, GME staff, nursing, hospital VPMA, hospital VP of quality) in October 2013

• Quality improvement project "Find It, Fix It" was developed using a Kaizen process board approach

•Find It, Fix It kicked off in February 2014

•Residents are encouraged to submit "idea cards" when they identify opportunities for improvement in their environment

•The C-suite, GME staff and faculty meet weekly to review the central board and help residents fine tune their ideas and facilitate the projects

•The residents learn QI hands-on by working through PDSA cycles

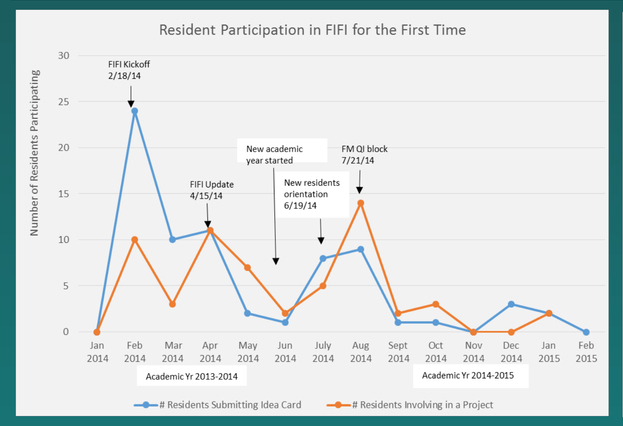
•A survey of knowledge and attitudes based on the Continuous Quality Improvement Questionnaire and Quality Improvement Knowledge Application Tool pre-test was administered to Academic Year 13-14 trainees pre-project (2/2014), at 4 months (6/2014) and at 12 months (2/2015) and also to incoming Academic Year 14-15 interns 6/2014 and at 7 months (2/2015).

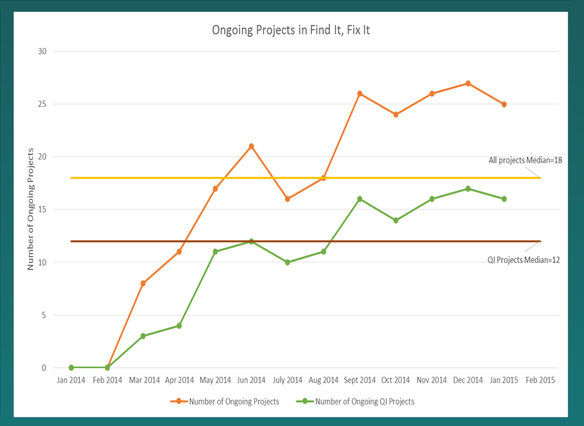
•Metrics overall and for the individual residency programs were tracked including: number of idea cards submitted, number of projects started, number of projects completed, type of project, and number of residents involved

Results

Outcome Measures

•124 ideas were submitted by 72 residents
•71 projects were initiated (57% of ideas)
•36 projects were QI/PS and patient focused (51% of initiated projects)
•32 projects were completed (45% of initiated projects) including 10 QI projects





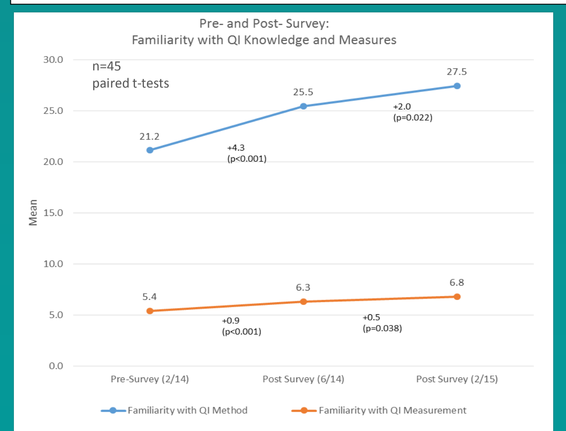
Examples of Ongoing Projects

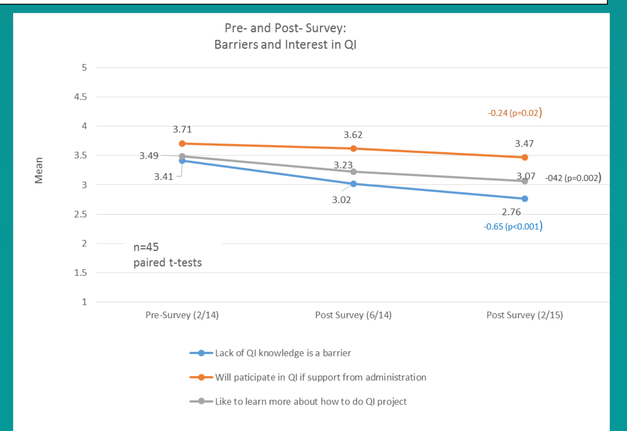
Project Title (Team)	Problem	Intervention
Newborn Handoff (FM, OBGYN)	Poor communication between FM and OBGYN residents on maternal-infant issues	Implement a daily face-to-face sign out and standardize information to be signed out
OB Sign-out Location (OBGYN)	Sign-out currently takes place in a common area on L&D that is noisy and not private	Renovate unused room on L&D and equip the room with computer access
Resident-Initiated Consultant Project (IM)	Lack of a closed loop communication between primary teams and consultants	Develop a standardized process to facilitate physician to physician communication
The Green Project (IM, OBGYN, Surgery)	Lack of recycling bins in Med Ed or call rooms	Place recycling bins in Med Ed/call rooms with hope to expand into public areas

Impact of Completed Projects	Number of Projects
Projects that led to improvement in patient care quality	10
Projects that led to equipment/storage improvement	18
Projects that led to improvement in education/training	1
Projects accepted for national presentations (as of 2/2015)	3

Survey Results:

- 97, 106, and 125 residents completed the pre-, 4-month post, and 12-month post survey respectively
- In the 12 months prior to project, 40% of residents were involved in at least one QI project while 87% were involved during the first 12 months of the initiative
- 45 residents completed all three surveys (Pre-, 4-month post, 12-month post)
  - Knowledge of QI improved and lack of knowledge was felt to be less of a barrier
  - Interest in QI decreased and measures of attitude toward QI did not improved





Success Factors and Lessons Learned

•The project engaged residents from all programs and increased QI knowledge

•C-suite and GME collaboration led to successful completion of projects: improved access to resources, better alignment with ongoing hospital QI work

•Providing residents protected time increased their involvement in QI

•Engagement in QI outside of the project increased: development of QI rotations in FM and IM programs, outpatient faculty-led initiatives outside of Find It, Fix It

•Unexpected win: The project was showcased at our successful CLER visit

•QI work creates opportunity for scholarly activity: Posters/presentations at three national conferences as of 2/2015

Barriers Encountered/Limitations

•Scope of project required significant project management (time, effort, expertise)

•Engagement of residents was variable and challenging

•Knowledge improved over the year while attitudes toward QI did not

•Need to involve all stakeholders from the start (faculty, program directors)

•Expectations should be realistic

•Goals/metrics should be carefully considered at the start

•Continuous evaluation and improvement of the project important

•Recognize and manage project fatigue early

Conclusions

- Find It, Fix It was a successful initiative to engage residents and the C-suite in quality improvement
- The Kaizen approach allowed widespread exposure and involvement in QI
- Sustainability of this large project will require significant time and effort for faculty
- A GME-led quality initiative can spur culture change around QI within residency programs and create opportunities to showcase medical education at the institutional and organizational level

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AIAMC NI IV Find It, Fix It Planning Committee includes: Ben Bring DO, Miriam Chan PharmD, Tom Harmon MD, Michael Kasten MD, Matt Kunar DO, Kimberly Morton MD, Jim O'Brien MD, Jennifer Stubbs MBA, Sheri Southworth RN, Sara Sukalich MD

A Research Simulation with OB/GYN Residents to Assess Current Language Service Practices

Brian Riley, DO, Lawrence Young, MPH, Marcus McKinney, D.Min., LPC, Jeri Hepworth, PhD, Elizabeth Sipusic, M.D., Amanda Wilson, DO, Ashley Negrini, MS

Saint Francis Hospital, Hartford, CT

Abstract

Saint Francis Care has a commitment to highest levels of quality and safety, with emphasis on the critical domains of communication, teamwork, transition in care, medication use, and minimally evasive procedures. Health equity is a board level priority, and effective communication, including appropriate language services, is an equity and safety concern. Enhancing access to appropriate language services is a system wide initiative, led by the Curtis D. Robinson Center for Health Equity, a Saint Francis institute. As part of that effort, an education, simulation and evaluation activity with OB/GYN residents served as an initial demonstration for system wide implementation. The specific target is to enhance use of the MARTTI-video remote interpreter device to improve the services for patients with Limited English Proficiency (LEP). A group of 15 OB/GYN residents participated in a pretest, educational session, and a simulation activity where 5 residents worked with a patient with LEP and accessed language services. The remaining 10 served as observers and participated in a discussion assessing the activity, current hospital medical standards, and provided recommendations for other trainings focused on language service. Following the discussion, a posttest about the MARTTI was given. Our project increased awareness about the importance of language services in our hospital. Issues with language and communication between physicians and patients have been identified as potential barriers to providing equitable care.

Background

- Discussions with community members, residents and clinicians indicated that health equity issues can be reflected in simple but important ways such as access to language services.
- Language barriers impact the use of health services for patients with LEP. They can cause patients to avoid seeking care, leave the hospital against medical advice, not have a regular primary care provider, and not comply with medical recommendations 1,2 3
- LEP patients are more likely than English-speaking patients to experience medical errors caused by communication errors. 4, 6
- LEP patients who experience medical communication errors are more likely to be harmed more severely when compared to English speaking patients 5,6

Specific Aims

- To identify specific factors that impact the effective utilization of the MARTTI device among physicians.
- To obtain insight on how physicians would like to use the MARTTI device to effectively treat and diagnose their patients.
- To produce recommendations and improvements to our current language service use guidelines that promote equitable care for all patients.

Results

- 5/5 Residents used the MARTTI within 1 minute of patient encounter.
- 2/5Residents accurately reached the diagnosis.
- 3/5 Residents continued interaction with patient throughout encounter.
- 2/5 Residents checked to see if there were questions regarding the diagnosis.
- No residents accurately described the MARTTI process using the translation service.
- 3/5 Residents described MARTTI prior to having the translator present.
- 7/15 Residents improved their scores from pre-assessment to post-assessment.
- 6/15 Scores remained the same.

Success Factors and Lessons Learned

- This project increased awareness of different translation services and brought to light areas of deficiency for which we can improve.
- Once MARTTI was implemented, residents effectively communicated with the patient. MARTTI was implemented in a timely fashion, without delay in patient care.
- Increased awareness regarding other translation services, including “Language Boxes” and record translation, was achieved through this project.

Methods

- **Pre Assessment-** A brief assessment about language service guidelines, protocol, and how the use MARTI device (10 Question Assessment)
- Presentation about MARTTI Video Remote Interpreter
- 2 patient case scenarios for OB/GYN residents to do in simulation lab
- 8 Item Observer check list- measureable items based on language service/ MARTII and best practice guidelines to check the resident’s use of protocol during the simulation and serve as points of discussion after the exercise.
- Discussion about the importance of language service, the simulation activity (what went well/what was difficult), quality outcomes, how medical errors can be avoided, and how language barriers can impact health outcomes.
- **Post Assessment** - A similar assessment was given following simulation activity and discussion

Limitations

- The simulation could have been improved by more attention to realistic context, (i.e., without the MARTTI device positioned at the bedside.)
- The simulation was limited by a small sample size and should be opened up to other residents, faculty, and ancillary staff
- One of the requested languages was not available with MARTTI; this challenge could have been circumvented by having multiple language services available for translation, as well as different modalities

Conclusion

- The simulation provided a valuable experience for residents and insight into how the MARTTI device is currently utilized among physicians.
- The lecture and discussion associated with the simulation improved resident knowledge about language services and resources.
- The simulation can be easily expanded to include other resident groups, as well as faculty and staff.

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Team: Scott and White Healthcare **Focus Area:** Transitions in Care

I.	Team Charter/Objectives ('needs statement,' project requirements, project assumptions, stakeholders, etc.; Teams should identify members and define responsibility/purpose)	*Develop system-wide transitions in care and build on the current work of House Staff Quality Council. Disseminate & systematize standardized Transitions in Care/Hand-Off Process building off the work of the HSQC and bring to a system level leveraging system quality.* *Assess the current state of hand-offs and transitions in care protocol.* *All stakeholders from each of the departments need to participate and provide input.* *The assumption is that this is an institutional priority as such there will be a buy-in from all to develop a standard process and allow each department to add items as needed so that they will own the process rather than feeling like coming from the "top".* *Team: Drs. Wesson, Kallur, Mirkes, McAllister, Wehbe-Janek, Manning, Papaconstantinou, Dixon, Williams, Thomas, Ms. Peters, Ms. Hochhalter, Ms. Sanford.*
II.	Project Description	*To develop system-wide "transitions in care" protocol and allow individual departments to add information as needed to meet the departmental requirements.*
III.	Necessary Resources (staff, finances, etc.)	*Funding for meetings* *Incentives for residents to actively participate* *EPIC team to setup a standard template* *Education and training of all involved on the team as well as the users* *Support from House Staff Quality Council and House Staff* *Utilization of New Innovations software*
IV.	Measurement/Data Collection Plan (must partner/match with Milestone Markers)	*AHRQ Survey Data (Baseline HRQ Culture and Safety)* *Develop and Collect information using baseline survey in January 14-15* *Conduct a perspective survey of House Staff*
V.	Communication Plan (may be helpful to draft a flow chart of team members & senior management, both internal & external)	*Developed template be placed in New Innovations (NI) / Let programs/departments build upon HSQC template.* • *Dr. McAllister and Dr. Thomas to contact Surgery/Sub-Surgical specialties and request templates being used in their programs.* • *Dr. Mirkes to contact Medicine subspecialties and request templates being used in their programs* o *Collected Plastic Surgery, General Surgery, Family Medicine and Internal Medicine templates* • *Obtain Checklists – SBAR and IPASS* o *DATA Checklist; System-wide Checklist – See attached* • Develop Standardized care transition processes for in hospital, and transition out of hospital care transitions. Dr. Manning is PD "Champion" for this. We will have a common standardized template that will be used by all programs hospital wide with the option for some programs to add a few items if that is required. *Present the information to Nursing Council* *APPS* *House Staff and Quality Council* *Chair Caucus* *CMO Monthly Newsletter* *BOD and AO Council Presentation* • *Create an Institutional Policy*

VI.	Accountability (list of team members and who is accountable for what)	*Discuss roles at next team meeting* • *Help HSQC get support they need to move their project forward.* • *Are HSQC members getting time off?* *Involve residents, faculty, nursing staff, chairs and GME administration.*
VII.	Potential Challenges (engagement, budget, time, skills gaps, etc)	*Time for meetings* • *Not all participants attended teleconferences and meetings due to clinical responsibilities.* • *Budget* *EPIC Implementation Schedule* • *EPIC is fully integrated at S&W.*
VIII.	Markers (project phases, progress checks, schedule, etc.; must partner/match measurement/data collection plan)	*Establish monthly milestones in parallel with the webinars* *Webinar's; Monthly Teleconferences* *Small groups to discuss and plan* *Next six months – Strategize for dissemination of information to all concerned including House Staff*
IX.	Vision Statement/Closing Plan (markers of success by March 2015)	*Develop sustaining system-wide process for transitions of care and patient safety that can be modified annually.*
X.	Success Factors	*The most successful component of our work was creating a system-wide TIC Checklist.* *We were inspired by the work and energy the HSQC had previously achieved.* *After CLER visit our program directors took the lead in developing workable solutions in the areas of "Transitions in Care and Supervision" along with our House Staff Quality Council.*
XI.	Barriers	*The largest barrier we encountered was time. Our Team members are nearly all clinicians and very challenging to organize meetings with their limited availability.* *We worked to overcome this by communicating via email and adding as a GMEC Agenda item when necessary.*
XII.	Lessons Learned	*The single most important piece of advice to provide another team embarking on a similar initiative would be consider the availability of your members and getting the House Staff involved as early on as possible.*
XIII.	Expectations Versus Results	*On a scale of 1 to 10 (with "1" meaning nothing and "10" meaning everything), how much of what you set out to do was your team able to accomplish?* *1 2 3 4 5 6* ***7*** *8 9 10*
XIV.	Satisfaction	*On a scale of 1 to 10 (with "1" meaning not at all satisfied and "10" meaning completely satisfied), how satisfied are you with what you were able to accomplish in your NI III work?* *1 2 3 4 5 6* ***7*** *8 9 10*
XV.	Project Impact	*What changes have you observed in your residency program(s), or at your institution, based upon your work?* *We are still working on fully integrating the checklist as system-wide practice.*
XVI.	Next Steps	*Describe next steps for your project, including plans for sustaining and spreading the changes made.* *Upload DATA Checklist in New Innovations; list a resource on GME Website.* *EPIC – Coordinate with EPIC Team and upload DATA Checklist into EPIC.* *Follow-up in 2015-2015 on effectiveness.*

CLER: One Institution's Experience and the Importance of Integrating the C-Suite in Graduate Medical Education

Ravi Kallur, PhD, MPA; Marguerite Peters, MEd; Hania Wehbe-Janek, PhD
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Overall Goal/Abstract

Objective of your project?
Share lessons learned pre and post CLER visit.

What made you choose this project?
To gain more knowledge in understanding the CLER visit.

Gap?
Lack of information to involve all constituents of GME at the institutional level, including the C-suite.

Background

Describe your project in a detailed, yet concise, manner.

With CLER, the entire institution is held accountable including the C-suite, Quality and Safety personnel, and the Nursing staff. Plans were made to tackle the "anticipated CLER" visit as an opportunity rather than an accreditation visit. This approach required a team effort consisting of house staff, program coordinators, program directors, faculty members, safety and quality staff, and C-suite to work as a team with the DIO.

Vision Statement

What would you like to see happen?
Establish a team approach to address six areas of CLER (Patient Safety, Professionalism, Fatigue Management/ Duty Hours, Quality Improvement, Transitions in Care, and Supervision.)

What are you aiming to change/improve?
Standardize patient handover process throughout the hospital; improve sharing of information and involvement of house staff at the institutional level of Patient Safety & Quality Council, and improve communication between house staff and senior administration of the institution.

Materials/Methods

1. Handouts for House Staff, Program Directors, Faculty, C-Suite, and Nursing Staff.
2. Badge holder insert with description of "six focus areas"
3. Meetings that included CLER advisory group consisting of house staff, coordinators, PDs, faculty and GME Staff
4. Presentation to nursing executives, Chair caucus, GMEC Board of Directors and Academic Operations Council
5. Shared updates at GMEC meetings

Results

1. Excellent team representation that contributed to dissemination of information to all concerned.
2. Timely support and input from the Board of Directors and C-suite.
3. Program Directors, faculty, and house staff led each of groups in disseminating information and coordinating team for actual site visit.
4. Coherent, enthusiastic, and common platform response during site visit, a proactive approach rather than a reactive one.

Success Factors and Lessons Learned (Discussion)

What made your project successful?
Early planning; willing and supportive team members. C-suite that understood the importance of GME and wanted to make it the best. PDs taking on the initiative to work with the DIO.

What worked?
Alignment of responsibilities to the right individuals. All concerned with GME making it a priority.

What are you most satisfied with?
Final report reflecting many positives.

Unexpected 'wins?'
Reaffirming that our handoff time and programspecific policy is working. House staff reaffirming that they have a safe environment to learn and to express themselves.

Barriers Encountered/Limitations-

What could you have done differently?
Better understanding of patient safety and quality hospital team work, risk mgmt. policies and procedures for "misses". Improvement of follow through on incident reports.

Opportunities for improvement?
Include House Staff on hospital safety and quality committees. Have C-suite reps meet with house staff regarding hospital issues, priorities, finance, etc. Hospital wide patient handover policy development.

Unexpected challenges (and solutions)?
Time limitation to gather C-suite and safety and quality staff to meet with site visitors. ACGME's strict requirement as to who should be at the table for opening and closing sessions.

Conclusions

Final thoughts…

Overall experience…

It paved the way for developing better relationships with house staff and understanding of institutional goals, policies, and quality and safety projects.

Will be very useful and critical for the success of the GME programs.

A few areas from the report and have the PDs take ownership and implement improvements. CLER is an ongoing process, and will help institutions to be all they can possibly be.

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Team: Scottsdale Healthcare **Focus Area:** Quality Improvement/Patient Safety

I.	Team Charter/Objectives ('needs statement,' project requirements, project assumptions, stakeholders, etc.; Teams should identify members and define responsibility/purpose)	*Create a project to engage residents in SHC Quality Improvement efforts using the "ZERO CAUTI" collaborative as a model. Team members include (listed alphabetically):* *Greg Alaestante DO- FM resident member* *Cheralyn Beaudry- Assoc. VP Quality/Safety* *M. Moe Bell MD- chair; Assoc Dir FM residency* *James Burke MD- Sr VP- CMO* *Chip Finch DO- Chief Academic Officer/DIO* *Wendy Hardina- FM Residency Coordinator* *Lafe Harris DO- FM resident member* *Cindy Kegowicz MD- FM Residency Director* *Todd LaPorte- Sr VP CFO* *Carol Mayer- Academic Project Coordinator, GME*
II.	Project Description	*"ZERO CAUTI" Collaborative- The AIAMC IV team will collaborate with hospital quality leaders in a multidisciplinary, multifaceted fashion, with resident leadership, with a long-term goal of reducing the SHC CAUTI rate to ZERO. Elements include:* *1. Collaborate with the SHC CAUTI taskforce (creating a CAUTI bundle, working on nursing-led efforts to reduce catheter use, and picking a high-risk unit for implementation- the SHC Osborn ICU)* *2. Help prepare and present a CME multidisciplinary conference addressing CAUTI prevention* *3. A resident teaching service initiative to record Foley use and indication on patient census and in progress notes.* *4. Work with administration and the medical staff on physician efforts to reduce catheter use (require daily order for catheter as with restraints?)* *5. Collaborate with the Emergency department to reduce unnecessary urinary catheter insertions (education regarding indications and supporting alternatives)* *6. Collaborate with surgical units to reduce intra-operative urinary catheter use and encourage removal in the recovery room when catheter no longer indicated)* *7. Collaborate with urology to create a protocol to address urine retention in the hospital (stopping anticholinergic medications, bladder scans, and timing of straight caths)*
III.	Necessary Resources (staff, finances, etc.)	1. *Administrative support* 2. *Quality consultant support* 3. *Financial budget for research and statistical data retrieval, IRB, design, and development Physician support/time*
IV.	Measurement/Data Collection Plan (must partner/match with Milestone Markers)	*1. Collect monthly CAUTI rate and location data to compare with baseline* *(Milestone SBP-2 Emphasizes patient safety)* *2. Meet every other month to monitor team progress*

		(BP-4 Coordinates team based care) *3. Monitor progress on physician initiatives* *(PBLI-3 Improves systems in which the physician provides care)*
V.	Communication Plan (may be helpful to draft a flow chart of team members & senior management, both internal & external)	*The AIAMC IV team will have a tele-conference meeting in February as a trial to improve attendance and efficiency. Updates of the AIAMC team's work will be provided to the SHC QRM committee and to the CAUTI initiative team. Communication with residents with will occur through updates at resident faculty meetings.*
VI.	Accountability (list of team members and who is accountable for what)	*Greg Alaestante DO- working on CME forum and resident liaison with QRM committee* *Cheralyn Beaudry- liaison with the QRM committee and the CAUTI TASKFORCE* *M. Moe Bell MD- coordinate the project, liaison with QRM and CAUTI taskforce* *James Burke MD- support physician initiatives and liaison with C-suite regarding CLER visit* *Chip Finch DO- working on CME forum and liaison for ED initiative* *Wendy Hardina- prepare for CLER visit* *Lafe Harris DO- working on resident service initiative and resident liaison with QRM committee* *Cindy Kegowicz MD- support resident teaching service Foley initiative* *Todd LaPorte- ensure financial resources for the initiatives* *Carol Mayer- coordinate meetings, prepare for CLER visit*
VII.	Potential Challenges (engagement, budget, time, skills gaps, etc)	*Complex project with several initiatives involves many departments and requires collaboration among nursing, medical staff, and administration. Solutions involve new ways of thinking and new technologies (such as wicking pads to measure urine output in the ICU).*
VIII.	Markers (project phases, progress checks, schedule, etc.; must partner/match measurement/data collection plan)	*Timeline was created to prepare the multidisciplinary clinical forum on CAUTI (Alaestante and Finch). The CAUTI initiative has a timeline and agenda for the next year. The team will explore the feasibility of the other elements and create timelines for each.*
IX.	Vision Statement/Closing Plan (markers of success by March 2015)	*Vision: Residents will be actively involved in Quality Improvement efforts at SHC and the institution will be well along the path to the quality goal of zero CAUTI's.*
X.	Success Factors	*The most successful component of our work was culture change in the emergency department and on the medical floors to significantly reduce urinary catheter use in our hospital. A conversation was started that helped reduce Foley days in our ICU by 30%.* *We were inspired by the teamwork witnessed- a true multidisciplinary and inter-professional effort of nursing, physician leadership, the quality improvement team, and the IT team to help with EMR changes.*

XI.	Barriers	*The largest barrier we encountered was entrenched practices by both physicians and nurses in the ICU setting, it proved hard to change the culture in that arena.* *We worked to overcome this by ongoing education and instituting a daily management system with daily huddles and tracking of patients who had foley catheters.*
XII.	Lessons Learned	*The single most important piece of advice to provide another team embarking on a similar initiative would be teamwork and ongoing communication and education are critical.*
XIII.	Expectations Versus Results	*On a scale of 1 to 10 (with "1" meaning nothing and "10" meaning everything), how much of what you set out to do was your team able to accomplish?* *1 2 3 4 5 6 7* ***8*** *9 10*
XIV.	Satisfaction	*On a scale of 1 to 10 (with "1" meaning not at all satisfied and "10" meaning completely satisfied), how satisfied are you with what you were able to accomplish in your NI III work?* *1 2 3 4 5 6 7* ***8*** *9 10*
XV.	Project Impact	*What changes have you observed in your residency program(s), or at your institution, based upon your work?* *1. A resident quality champion position was created and will be continued after the end of the initiative.* *2. The emergency room drastically reduced urinary catheter use due to education efforts and an electronic medical record system prompt to enter the reason for a urinary catheter when one was ordered.* *3. Daily management plans now take place and include tracking of all patients who have urinary catheters on both the medical floors and the ICU.* *4. A urine retention protocol has been implemented to help manage patients with urine retention after catheter removal.* *5. A CAUTI bundle was instituted in the ICU and wicking pads were adopted as an alternative to urinary catheters.* *6. An automated prompt was incorporated in the hospital EMR to ask physicians each day if a urinary catheter could be removed, and if not to list the indication for continued use.* *7. Due to all these efforts, our hospital ICU had 35% fewer CAUTI's and reduced total Foley days by 31% in 2014 compared with 2012. (National data from 2009 through 2013 showed an increase in CAUTI of 6%*
XVI.	Next Steps	*Describe next steps for your project, including plans for sustaining and spreading the changes made.* *1. The CAUTI committee will continue its work because CAUTI rates remain high in our hospital ICU setting. The group will join a statewide initiative organized by HSAG to attempt to reduce CAUTI rates. They are also participating in a national group.* *2. The quality department will attempt to create standard work processes across all hospitals in our institution to reduce CAUTI rates in the hospitals where rates remain high.*

CAUTI Prevention through education, continuum of care, and system-wide buy-in

Greg Alaestante, DO, PGY3; M. Moe Bell, MD, MPH; Charles 'Chip' Finch, DO
Scottsdale Lincoln Health Network, Scottsdale, AZ 85251

Overall Goal/Abstract

Objective of your project?
Decrease catheter associated urinary tract infections (CAUTI) at Scottsdale Healthcare (SHC).

What made you choose this project?
CAUTI rates were very high, especially in the Osborn campus ICU. The AIAMC team involved residents and quality leaders in an effort to improve care and save lives.

Background / accomplishments

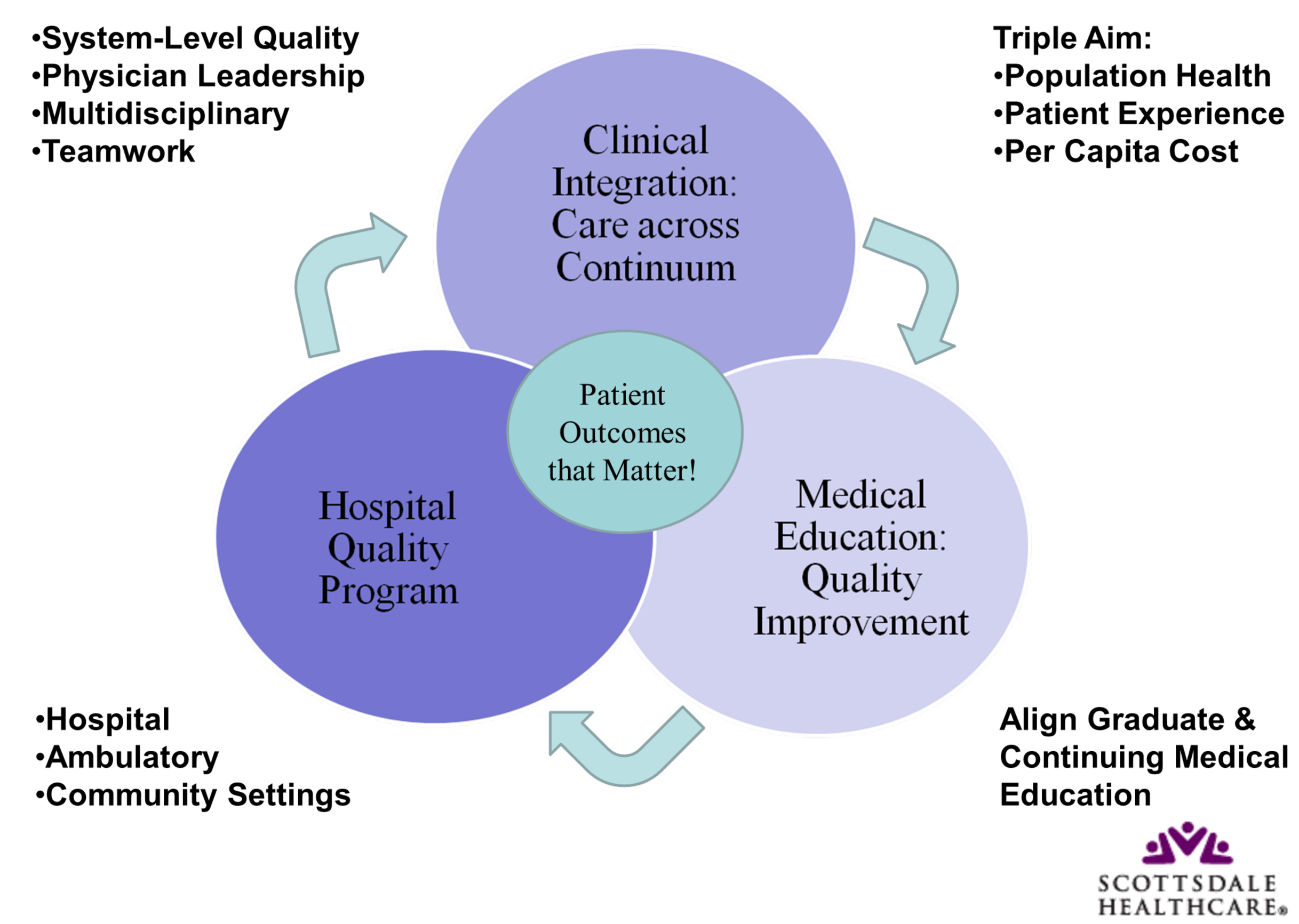
CAUTI reduction efforts / initiatives accomplished included:
- Presented a multi-disciplinary CME forum on CAUTI
- Collaborated with a system-wide CAUTI taskforce
- Created a resident quality champion position for GME
- Implemented daily management plans to track catheter use
- Implemented a urine retention protocol
- Instituted Emergency dept. education and EMR prompt to enter the reason for a urinary catheter when ordered
- Instituted hospital EMR prompt to ask physicians if a urinary catheter could be removed, and to list the indication for continued use

Vision Statement

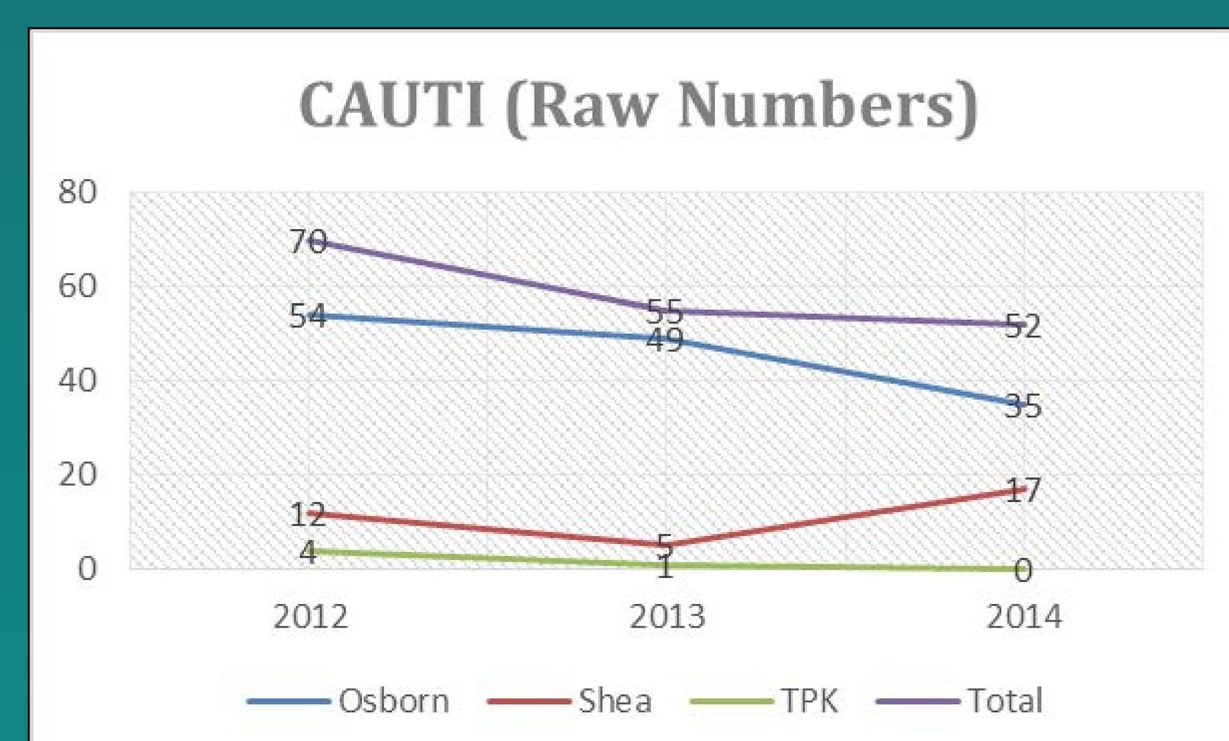
What would you like to see happen?
Residents will be actively involved in Quality Improvement efforts at SHC and the institution will be well along the path to the quality goal of zero CAUTI's.

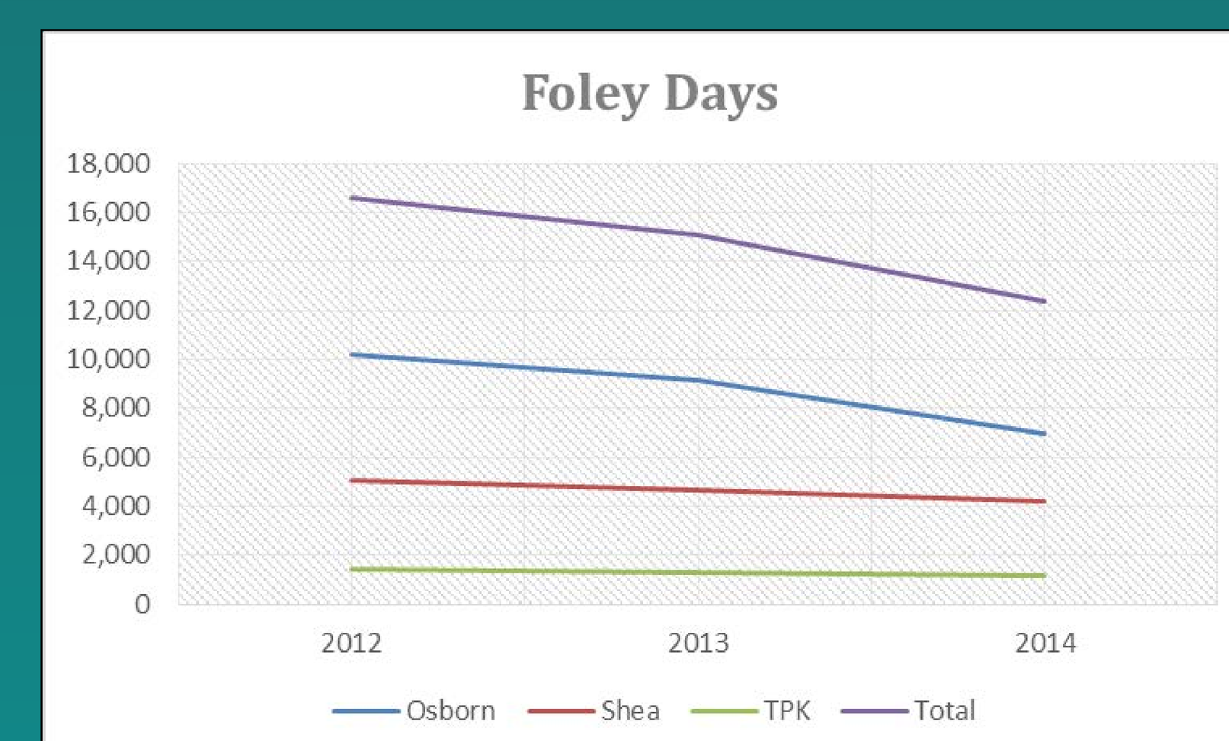
What are you aiming to change/improve?
Our primary aim is to advance Scottsdale Healthcare CAUTI prevention. However, a broader goal is to direct GME and CME towards quality improvement projects. Our hope is to develop and encourage leadership from our residents to guide system-wide change through patient safety and quality improvement.

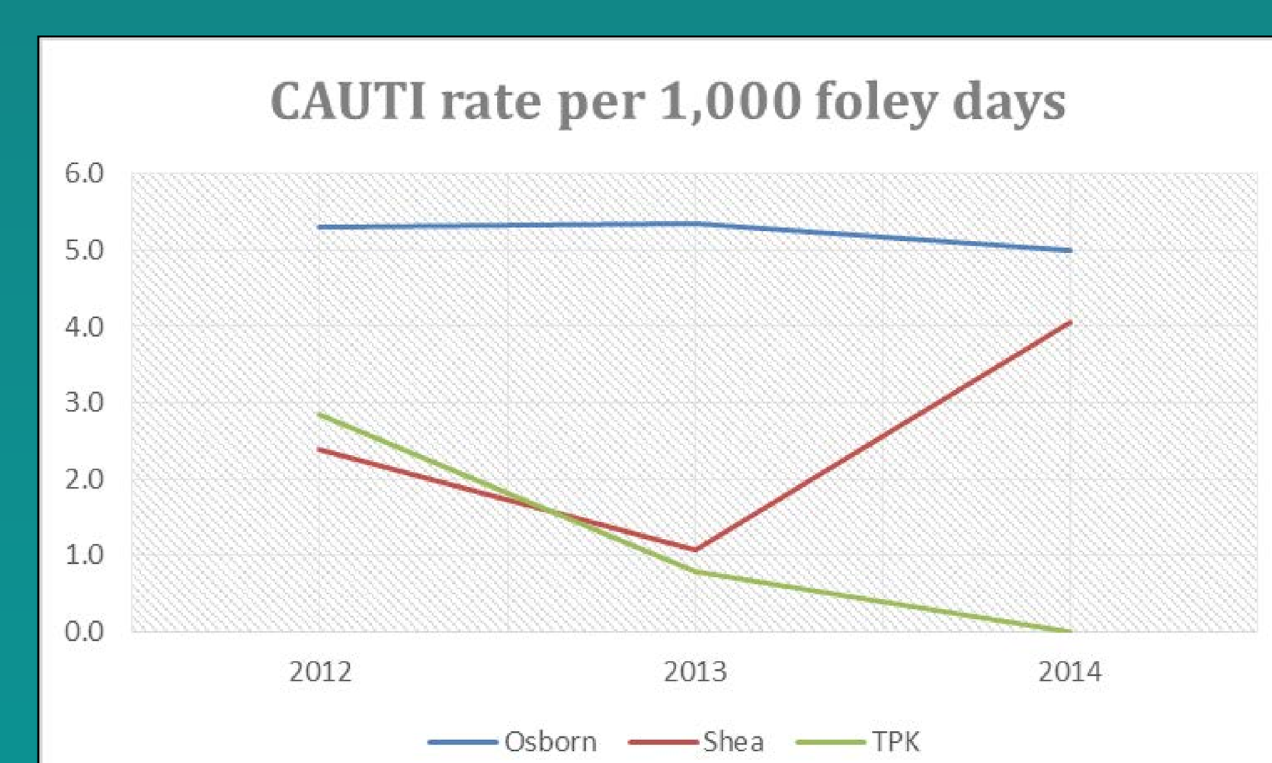
Materials/Methods



Results







Barriers Encountered/Limitations

What could you have done differently?
The largest barrier we encountered was entrenched practices from both physicians and nurses in the ICU.

Opportunities for improvement?
Involving those same physicians and nurses to lead quality improvement.

Unexpected challenges (and solutions)?
Different practices within a single group of physicians and some nurses in the ICU made it difficult to pinpoint specific ways to change 'bad habits'. (The emergency Dept. physicians and nurses, on the other hand, fully embraced changes to reduce catheter use.)

Success Factors and Lessons Learned(Discussion)

What made your project successful?
By far the most successful component of our work was a culture change in the emergency department and on the medical floors to significantly reduce urinary catheter use.
What worked?
Allowing all parties to implement their own methods of addressing catheter use and CAUTI prevention with support provided by the CAUTI Initiative team.
What are you most satisfied with?
The overall decrease of catheter use by approximately 30% and a similar reduction of CAUTIs from our baseline.

Conclusions

As a project that focused on patient safety and decreasing mortality and morbidity, we were successful. Our hope to completely eliminate CAUTIs in our system was not met. However, many key initiatives will continue and should lead to further reduction in CAUTI in future years.

A multidisciplinary, multifaceted approach with resident involvement is feasible and resulted in positive impact in our system. The resident quality champion position will continue and as will efforts to reduce CAUTI.

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Team: TriHealth **Focus Area:** Patient Safety /Event Reporting

I.	Team Charter/Objectives ('needs statement,' project requirements, project assumptions, stakeholders, etc.; Teams should identify members and define responsibility/purpose)	AIM: By March 2015 all of our residents and teaching faculty will know and recognize the list of serious reportable events (SRE's) and will demonstrate a four fold increase in the use the event reporting system (*within 48 hours from occurrence the event).* Project Assumptions: 1. Faculty and Staff are a captured audience where we can get significant participation. 2. Technology will be available. 3. Educational resources that can be disseminated to 100% of residents and faculty 4. Current culture does not encourage and at times discourages consistent safety event reporting. Team Members: **David Dhanraj MD, MBA: Generalist Division Director, Dept of OB/GYN** **Michelle Louis MD: Associate Program Director, Department of Internal Medicine** Michael Marcotte, MD: Director of Quality and Safety, Women's Services Alex Saba MD: Associate Program Director, Department of Surgery Lorraine Stephens: Chairman and Program Director, Family Medicine Becky Williams MA: Administrative Director of Graduate Medical Education Ginger Klarquist DO/Lindsey Crawford DO: OB/GYN Residents Fiza Warsi MD: Family Practice Resident Bilal Khan: Internal Medicine Resident Dee Murphy RN, MBA: Director, Patient Safety and Accreditation
II.	Project Description	*The project will be composed of the following elements* 1. Residents and faculty will become knowledgeable of SRE's for their specialty 2. We will establish the desired culture and behavior and model it (actual and simulation, DATIX in-services) 3. Assisting with the successful implementation of the new event reporting system (DATIX) 4. We will develop a process map of what happens with a reported event and ensure all residents understand this. Outcome: Belief by our residents and faculty that this process is effective (Survey Data)
III.	Necessary Resources (staff, finances, etc.)	Working event reporting system (Dee Murphy) Trainers, superusers (resident time) Faculty time to develop mastery Research/Data collection staff (residents from each program, QA Nurses, Research Division)
IV.	Measurement/Data Collection Plan (must partner/match with Milestone Markers)	*Completion rate of educational modules* *Resident feedback of result of reporting (consequences, attitudes etc.)* *--use some questions of Culture of Safety questions (by January 1)* *--goal of 5 minute to complete all surveys (MedHub?)—Dawn Kelly* Pre and Post Surveys of Knowledge of SRE, PS Concepts (RCA's)

		Knowledge of Management of SRE's in each department Pre and post Datix for event reporting. Time from event to report (decrease) Number of events that are self-reported
V.	Communication Plan (may be helpful to draft a flow chart of team members & senior management, both internal & external)	*Dr. Welling, Program Director (PD Advisor meeting), GMEC, Departmental level with resident and faculty leader.* *Layered communication plan: Lectures, email of lectures, presentations at department meeting.* *Datix Communication plan*
VI.	Accountability (list of team members and who is accountable for what)	*Dave Dhanraj and Michelle Louis will co-lead these efforts.* *Program faculty and residents from each specialty* *Dave Dhanraj: Project Management, Monthly calls, AIAMC communications* *Mike Marcotte: Communication Plan, Key Driver Diagram* *Alex Saba: Work with Dawn on how to use Med Hub in pre and post assessments* *Michelle Louis: Will work with Patient Safety and accreditation in coordinating our efforts with current hospital programs and with the implementation of the new safety event reporting system (Datix).* *Residents: working with faculty on communication in their program and organizing participation and data collection.*
VII.	Potential Challenges (engagement, budget, time, skills gaps, etc)	*Delay in implementing new technology* *Engagement of residents, faculty staff* *Leadership support (PD's Chairs, Adminstration)*
VIII.	Markers (project phases, progress checks, schedule, etc.; must partner/match measurement/data collection plan)	*Baseline data: Current reporting number (last year), determination of SRE list for each program.* *Pre: First week in January 2014* *Assessment of current working knowledge of patient safety concepts and management skills for SRE's.* *Mid: August 2014: All residents will have been through didactics and training.* *Post: First week in January 2015 (data through December 2014)* *Follow-up assessments of working knowledge of patient safety concepts and management skills for SRE's, post intervention.* *Abstract and publications beginning in August 2015*
IX.	Vision Statement/Closing Plan (markers of success by March 2015)	*A sustainable program of culture of safety will be fully integrated into all GME programs:* *1. We will see an increase in self-reporting faculty and staff who will lead these efforts for their respective specialties.* *2. Technology will be effectively leveraged in these efforts.*

X.	Success Factors	*The most successful component of our work was…….* *- Having representatives from each residency program involved which included both residents and faculty. We received excellent financial support from our administration.* *We were inspired by……..Our CLER Report. The feedback and guidance from our ACGME site-visitors was constructive and specific.*
XI.	Barriers	*The largest barrier we encountered was……..* *The delay in implementation of our new event reporting system* *We worked to overcome this by…….. focusing on resident and faculty education on Serious Reportable Events. We believe this improved the effectiveness of our intervention once the event reporting system was ready for go-live.*
XII.	Lessons Learned	*The single most important piece of advice to provide another team embarking on a similar initiative would be……* *GME leadership needs to involve Program Directors into the process early. It was difficult to get buy in and interest from all the programs early in the process*
XIII.	Expectations Versus Results	*On a scale of 1 to 10 (with "1" meaning nothing and "10" meaning everything), how much of what you set out to do was your team able to accomplish?* *1 2 3 4 5 6 7 8* ***9*** *10*
XIV.	Satisfaction	*On a scale of 1 to 10 (with "1" meaning not at all satisfied and "10" meaning completely satisfied), how satisfied are you with what you were able to accomplish in your NI III work?* *1 2 3 4 5 6 7 8* ***9*** *10*
XV.	Project Impact	*What changes have you observed in your residency program(s), or at your institution, based upon your work?* *We demonstrated an increased use of event reporting by our residents and faculty*
XVI.	Next Steps	*Describe next steps for your project, including plans for sustaining and spreading the changes made.* *-Instituting event report training into new resident orientation* *-Reinforcing event reporting into quarterly GME quality/safety curriculum* *-"Closing the Loop": Reporting back to resident and faculty the outcomes of submitted event reports.*

Improving patient safety event reporting among residents and teaching faculty

Michelle Louis MD, Lala Hussain MSc, David Dhanraj MD MBA, Bilal Khan MD, Steven Jung MD, Wendy Quiles MD, Mark Broering MD,
Kevin Schrand MD, Lindsey Crawford DO, Lori Klarquist DO, Lorraine Stephens MD, Alexander Saba MD, Michael Marcotte MD, Becky Williams MEd
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Background

A June 2012 site visit report from the Accreditation Council for Graduate Medical Education (ACGME) Clinical Learning Environment Review (CLER) revealed residents and physicians lack of awareness and understanding of the hospital's system for reporting patient safety concerns in the following three areas: 1) lack of knowledge of what constitutes a reportable patient safety event; 2) lack of awareness of the person responsible for reporting; and 3) lack of understanding of the current reporting system.

Overall Goal and Vision Statement

A quality improvement study was conducted consisting of an educational program (intervention) focusing on the importance of event reporting and a pre / post educational survey to measure attitudes, knowledge and self-reported behaviors. Following the implementation of a new patient safety event (PSE) reporting system, we compared the reported events with baseline data to determine improvement in PSE reporting. The combination of an educational intervention and a new PSE reporting system would improve PSE reporting among residents and teaching faculty in our residency programs and optimize their engagement in 6 Focus Areas of ACGME CLER.

Methods

The subjects included residents and teaching faculty from the following Graduate Medical Education (GME) programs: Internal Medicine, Family Medicine, General Surgery, Obstetrics and Gynecology (OB/GYN), Urogynecology, and Vascular Surgery.

Data Collection

Questionnaire: A questionnaire was adapted from previous research and included items to assess attitudes and experience regarding patient safety event reporting [1]. The questionnaire included the following elements: (1) experience reporting, (2) responsibility to self, (3) responsibility to community, (4) responsibility to profession, (5) attitudinal barriers of reporting, (6) feelings of uncertainty, (7) and fears of reporting. A comments section was provided for feedback. The questionnaire was completed anonymously by the subjects before and after the educational program.

Patient Safety Events: We retrospectively collected 3 years of reported PSE for baseline data and tracked the events reported following the educational intervention from July 2014 to December 2014 (ongoing data collection until June 2015).

Educational Program (Intervention)

Educational Lecture: An educational lecture was developed and provided within each GME program to improve knowledge and skills related to patient safety and event reporting.

Department of Patient Safety: The investigators collaborated with Patient Safety Administration for effective implementation of the new online event reporting system.

Statistical analysis was computed using R Statistical Analysis Software (version 3.0.3), and $\chi 2$ or Fisher's exact test were used to test the differences between pre- and post-educational questionnaire data. Control chart methodology was adapted to develop the goal chart to monitor progress [2].

Results

Among 105 residents, response rate was 56% - 92% for pre-intervention survey and 68% - 100% for post-intervention survey. Among 78 teaching faculty, response rate was 43% - 67% for pre-intervention survey and 33% - 92% for post-intervention survey.

Majority of all respondents agreed that as a health care provider, they will be responsible for medical error at some point in time; and to improve patient safety, serious events should be reported to hospital administration.

- 62% of all respondents did not have medical error report training in their medical schools
- 71% of all respondents had never used online error event reporting system in our health care organization
- 33% of all respondents indicated they did not receive education / training on how to disclose medical errors to hospital administration, yet 76% will likely report medical errors

Most importantly, the number of reported patient safety events increased (Figure 1).

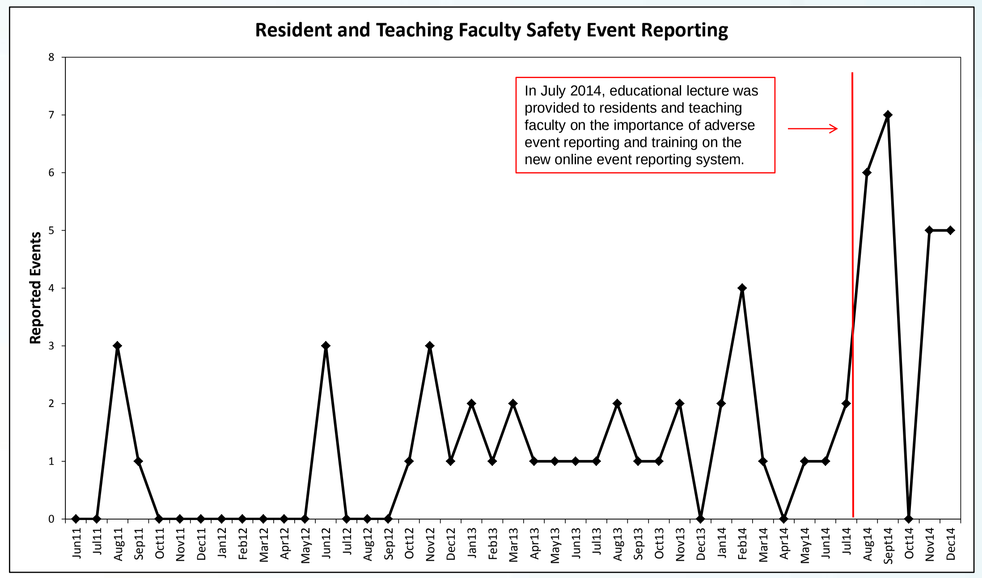


Figure 1. Number of events reported from June 2011 to December 2014. Pre-intervention average: 1.5; post-intervention average: 4.6.

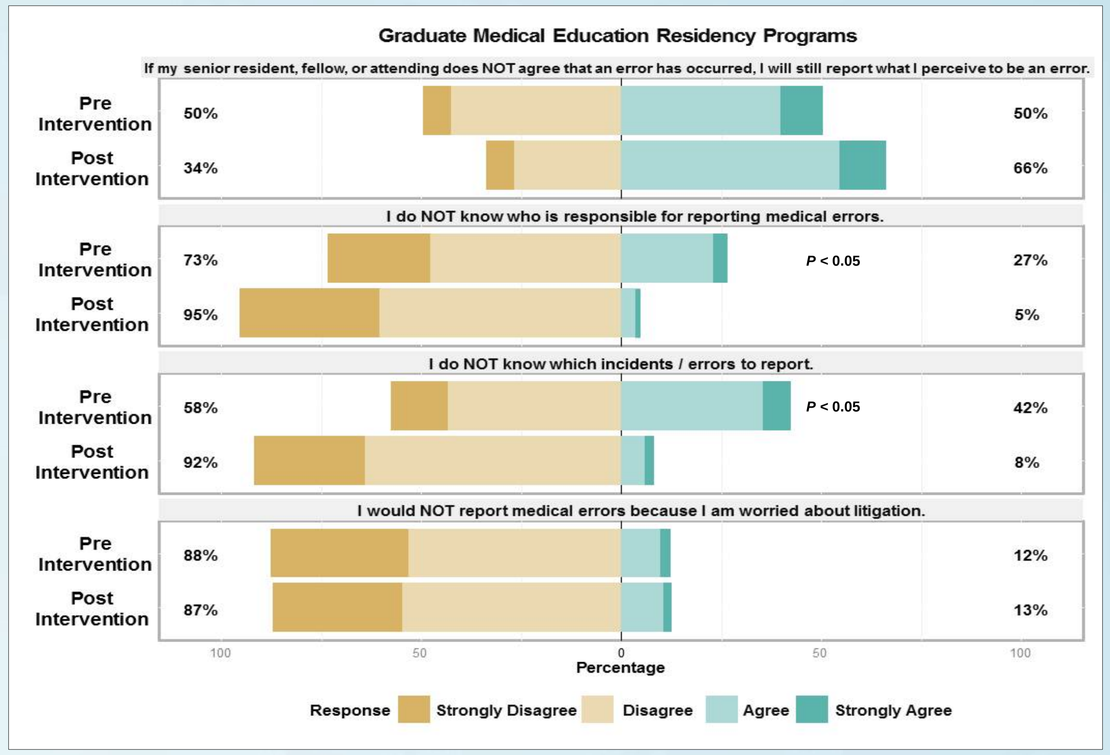
Success Factors

Immediately after the intervention, we achieved approximately 5-fold increase in the number of reported events by residents and teaching faculty.

The educational intervention that was provided did improve knowledge of which incidents or errors to report (Likert response graph).

Also, after the intervention, in 3 of the 4 residency programs more residents would report an error even if their colleagues or attendings disagreed.

Barriers Encountered	Lessons Learned & Opportunities for Improvement
Our current system is unable to track or access anonymous reports.	The excluded residents and teaching faculty that reported anonymously would have contributed to overall improvement in events reported.
Due to time constraints and administrative burden, physicians are reluctant to report events.	Continue to simplify the reporting process or assign a designated patient safety administrator to call for reporting events.
Our current system lacks a direct feedback process to the reporter after an event is analyzed.	Improve direct and timely feedback to the reporter indicating the change or improvement that resulted from the report.
Across GME, we observed differing responses to same questions that may have reflected program differences for reporting.	Provide ongoing education to residents and teaching faculty.
Most residents and teaching faculty did not have error reporting in medical school.	Provide ongoing education to highlight importance of event reporting to maintain sustainability.



Conclusions

This was a unique quality improvement project that spanned 4 different residency programs addressing patient safety event reporting. The aim of increasing event reporting was achieved due to both a new event reporting system for TriHealth and new curriculum that was developed and delivered within each residency program.

The keys to ongoing sustainability will be threefold:

- Continue to develop patient safety faculty and resident experts within each residency program to both teach and be patient safety role models
- Continue to work to decrease barriers to reporting
- Sustain error reporting rates through timely feedback and system changes

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Team: University of Utah **Focus Area:** Quality Improvement

I.	Team Charter/Objectives ('needs statement,' project requirements, project assumptions, stakeholders, etc.; Teams should identify members and define responsibility/purpose)	ACGME requirements and CLER focus on quality improvement, as well as the hospital's QI goals and priorities, are driving the need to improve resident QI education and align their improvement projects with the hospital system's strategic plan for quality. As a result of our CLER visit, it was determined that an unacceptable percentage of our residents understand the hospital's priorities for QI, are engaged with hospital leadership in advancing the hospital's quality strategy, have linked their quality projects with hospital goals, are engaged in inter-professional QI teams, understand QI terminology and methods, and have access to organized systems for collecting and analyzing data for quality improvement. Consequently, the purpose of our project is to develop action plans for addressing these opportunities for improvement.
II.	Project Description	A GME Value Council (GMEVC) will be established to oversee and coordinate alignment and integration of resident QI projects with the hospital's goals and priorities; provide expertise and resources for residents in developing and implementing their projects; develop Qi curriculum and educational experiences for residents; and promote resident participation in interprofessional QI teams within the hospital system. GMEVC will be comprised of program directors/associate directors, chief residents, residents/fellows, Quality Department staff, GME office staff, and hospital administration. GMEVC members will work with the health system's quality and patient safety professionals/experts to: (1) align departmental QI efforts with the system's priorities, goals and strategic initiatives; (2) develop QI educational experiences for residents; and (3) ensure residents' active participation in interdisciplinary clinical quality improvement and patient safety programs. The GMEVC will be organized as a subcommittee of the GMEC.
III.	Necessary Resources (staff, finances, etc.)	• Scheduling support • Data generation and distribution support • Quality Department support and access to data, tracking measures, QI initiatives • Program coordinator support • Program Director and resident time.
IV.	Measurement/Data Collection Plan (must partner/match with Milestone Markers)	TBD
V.	Communication Plan (may be helpful to draft a flow chart of team members & senior management, both	• Monthly Value Counsel meeting • Monthly GME Value Committee meeting • Monthly GMEC meeting

	internal & external)	• Annual Program Director Retreat • Reports to senior management
VI.	Accountability (list of team members and who is accountable for what)	• Graduate Medical Education Committee (GME) (initiative development, implementation and assessment) • University Hospital Quality Department • Program Directors • GME Office
VII.	Potential Challenges (engagement, budget, time, skills gaps, etc)	• Program director, resident, and administration commitment • Program director, resident, and administration time/availability for meetings and task completion • Development and delivery of resident training
VIII.	Markers (project phases, progress checks, schedule, etc.; must partner/match measurement/data collection plan)	• Form GME Value Council and fix meeting schedule (January 2015) • Identify current program and resident Quality and Patient Safety projects and educational resources. • Review current program/resident QPS projects and educational resources. • Review current health system operational QPS goals (Feb – Mar 2015) • Create quality curriculum (May 2015) • Align/integrate program & resident QPS projects with system operational goals and CLER requirements (FY 2016) • Finalize measurable goals for FY2016
IX.	Vision Statement/Closing Plan (markers of success by March 2015)	Identification of GMEVC members and initial meeting.

Aligning Resident QI Activities with Institutional Strategic Goals

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Overall Goal/Abstract

Overall project goals are:

1.To increase resident awareness of the hospital system's goals and priorities for quality improvement (QI).

2.To increase resident engagement with hospital leadership in developing the hospital's strategic goals for quality improvement.

3.To increase alignment between resident QI projects and hospital goals and strategies.

4.To increase resident engagement in interprofessional QI teams.

Background

ACGME requirements and the CLER focus on quality improvement, as well as the hospital's QI goals and priorities, are driving the need to improve resident QI education and align their improvement projects with the hospital system's strategic plan for quality. As a result of our CLER visit, it was determined that an unacceptable percentage of our residents understand the hospital's priorities for QI, are engaged with hospital leadership in advancing the hospital's quality strategy, have linked their quality projects with hospital goals, are engaged in interprofessional QI teams, understand QI terminology and methods, and have access to organized systems for collecting and analyzing data for quality improvement. Consequently, the purpose of our project is to develop action plans for addressing these opportunities for improvement.

Vision Statement

Resident projects will be linked to hospital strategic quality improvement goals; residents will be involved in interprofessional improvement teams, and will provide input to establishing the hospital's QI priorities and focused action plans.

Materials/Methods

A GME Value Council (GMEVC) was established under the Graduate Medical Education Committee (GMEC) to oversee and coordinate alignment and integration of resident QI projects with the hospital's goals and priorities; provide expertise and resources for residents in developing and implementing their projects; develop Qi curriculum and educational experiences for residents; and promote resident participation in interprofessional QI teams within the hospital system. Members of the GMEVC include the DIO, GMEC Chair, CMO, CQO, program directors, residents and a value engineer.

Results

The project is still in progress.

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Success Factors and Lessons Learned (Discussion)

The project is still in progress.

Barriers Encountered/Limitations

The GMEVC was initally formed under the hospital's Value Council, then moved to the GMEC. We lost valuable time in developing the GMEVC's mission, vision and goals and in operationalizing the committee during this transition. Gaining program director leadership of the group was also a challenge.

Conclusions

We believe that integration of resident QI activities and the hospital's strategic QI goals, with GMEVC oversight and support, will enhance the residents' clinical learning environment while engaging them as active contributors in creating and implementing the institution's strategic plan for quality.

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2. ACGME Institutional Requirements, July 1, 2014.
3. ACGME CLER Pathways to Excellence, March 18, 2014.

Team: Virginia Mason Focus Area: Quality Improvement

I.	Team Charter/Objectives ('needs statement,' project requirements, project assumptions, stakeholders, etc.; Teams should identify members and define responsibility/purpose)	Virginia Mason wants to ensure that resident/fellows have access to data to *reduce health care disparities,* to improve patient outcomes and to provide opportunities to participate in quality improvement initiatives. All staff currently receive limited training on diversity (i.e. an on-line learning module, "Understanding Cultural Diversity"). We have systems and processes available which may reduce disparities; however we believe that faculty and residents may have limited understanding of how to engage these resources. In defining disparities, we wish to consider not only racial or ethnic differences but also other causes of disparities (both health system factors and patient factors). "The causes of disparities in health status are not limited to poverty, race and ethnicity but are further linked to social determinants." *Health Care Disparities: A Bimodal Approach to Curriculum, Academic Internal Medicine Insight* 2010 8:4. Our team consisted of two internal medicine residents, an anesthesiology resident and three members of the GME Leadership team.
II.	Project Description	Our project was designed to increase provider awareness of deficiencies in health literacy and to provide tools that providers can implement in their daily practice to help all patients, including those who have deficiencies in health literacy. Our intent is that application of these skills will improve individual patient care and the system of care. Using the ADDIE model of curriculum development, we identified educational needs and preferred means of addressing the need for a group of primary care givers in our medical center. We created 3 to 5 minute teaching modules using patient testimonials to introduce proven communication tools and methods and presented the modules to our pilot group of primary care physicians. We will work with the Center for Health Services Research to publish our results.
III.	Necessary Resources (staff, finances, etc.)	Staff time: NI IV Team, including GME Leadership (DIO, SVP for GME, GME Operations Director) and three residents were the primary team members. We enlisted other VM teams as needed: Director of Patient Education and Health Literacy; VM's Med Photo team, Funds for travel to AIAMC National Initiative meetings; Director, Center of Health Services Research. Administrative Support for preparing documents, meeting set-up, tracking
IV.	Measurement/Data Collection Plan (must partner/match with Milestone Markers)	Preliminary data collection with the REALM-R tool was completed in a general internal medicine outpatient clinic. Participating providers included physicians and nurses in an integrated care management team. Initial survey demonstrated that providers felt 20% of patients were at risk for health literacy challenges. We will resurvey in the same pilot group after our educational intervention to determine what percentage of patients providers feel are at risk for difficulty with a care plan as a result of health literacy issues.

V.	Communication Plan (may be helpful to draft a flow chart of team members & senior management, both internal & external)	Our team includes two members of the Executive Leadership Group, one of whom also serves on the Senior Council. One executive reports to the CEO; the other to the Medical Director of the Hospital. Both brief their supervisors regularly about this initiative. In addition, both the DIO and the Sr VM for GME meet periodically with quality leadership of the organization and NI 4 has been on the agenda for several of the meetings.
VI.	Accountability (list of team members and who is accountable for what)	Co-Team Leaders: Ananth Shenoy and Justin Liberman Ananth and Justin are accountable for continued development of curriculum, implementation and data gathering. Team Members: Gillian Abshire, Lynne Chafetz, Lauren Sullenberger and Brian Owens. The extended team is responsible for guidance and support of team co-leaders.
VII.	Potential Challenges (engagement, budget, time, skills gaps, etc)	We've noted numerous challenges to our project including limitations on time and prioritization of tasks. We've struggled with timely implementation of project pieces due to conflicting schedules and availability.
VIII.	Markers (project phases, progress checks, schedule, etc.; must partner/match measurement/data collection plan)	After implementation of our educational curriculum we will resurvey our providers for anticipation of health literacy deficiencies in their patient panel. This will be our primary marker for impact of the curriculum and we are looking for an improvement in provider rate of listing or noting a concern for health literacy deficiencies. This will be taking place in March 2015.
IX.	Vision Statement/Closing Plan (markers of success by March 2015)	Vision: To improve patient outcomes by increasing awareness and by implementing a curriculum to enhance patient-provider communication. These interventions must be sustainable in our current health care delivery model and assessed for impact on patient health outcomes. Plan: Our plan to continue this project is to further develop the curriculum in response to provider/user feedback and reassess if changes persist. We will know if our project has been a success if our providers anticipate that every patient has a health literacy deficiency and adjust their communication accordingly.
X.	Success Factors	*The most successful component of our work was our collaboration amongst our group and with team members across our medical center. This was helpful for many reasons including exposure to new ideas and approaches and perspectives as well as facilitating our work.* *We were inspired by the work of our providers and by the work of Victor Montori which highlighted our patient's and community's vulnerabilities in communication and understanding.*

XI.	Barriers	*The largest barriers we encountered were scope and time. Our team consisted of members of the GME leadership and residents and we had difficulty narrowing down the scope of our project. We started off with a very ambitious goal but this was difficult to meet for many reasons, including its breadth. We have worked to hone the scope to be more manageable and have run into the difficulty of trying to tackle more than we have time for amongst our team.*
XII.	Lessons Learned	*The single most important piece of advice to provide another team embarking on a similar initiative would be managing scope and finding how to align this with the organization's goals is essential to developing and implanting a project.*
XIII.	Expectations Versus Results	*On a scale of 1 to 10 (with "1" meaning nothing and "10" meaning everything), how much of what you set out to do was your team able to accomplish?* *We are still working on this and at present, have not been able to implement the main element of our plan but we are completing the main element and will soon be able to trial it.* *1 2 3* ***4*** *5 6 7 8 9 10*
XIV.	Satisfaction	*On a scale of 1 to 10 (with "1" meaning not at all satisfied and "10" meaning completely satisfied), how satisfied are you with what you were able to accomplish in your NI III work?* *Given what is coming and where we plan to take it, we are very excited with where this will go.* *1 2 3 4 5* ***6*** *7 8 9 10*
XV.	Project Impact	*It is too early to note the changes in the organization. There is now more of a dialogue on the role of health literacy but we will need to expand this and with our educational initiative, we will be able to measure the impact.*
XVI.	Next Steps	*Our next step will be to implement the main piece of the curriculum – which will be instructional videos and measure the immediate impact on practice. For sustainability, we will be able to integrate the videos and tools for providers into resident didactics but still need to do work to see how we role this out to the other providers in our organization.*

The "Silent" Disparity - Health Literacy: Enhancing Provider Awareness

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Virginia Mason Medical Center – Seattle, Washington

Charter

Vision: To improve patient outcomes by increasing awareness and by implementing a curriculum to enhance patient-provider communication. These interventions must be sustainable in our current health care delivery model and assessed for impact on patient health outcomes.

Background

Health literacy is an essential concept in patient-centered medical care. It represents a combination of literacy skills with the ability to understand, process and engage in health care to further one's own health and provide a sense of patient autonomy.

Deficiency in this skill is a common problem, and the Institute of Medicine estimates that half the adult population in the United States, approximately ninety million people, have difficulty understanding and acting upon health information. [1,2]

The impact of poor health literacy is striking. Lower health literacy levels are associated with a nearly two-fold increase in mortality.[3] Patients with limited health literacy often have difficulty with treatment adherence and are likely to misinterpret instructions such as medication labels[4]. This, in turn, leads to progression of disease, subsequent hospitalizations, poor health outcomes and increased costs.

We choose to investigate the incidence of limited health literacy in a subset of the Virginia Mason Medical Center patient population in one of our primary care clinics.

Materials/Methods

Literacy Assessment - Members of the healthcare team (attending physicians, residents and nurse practitioners) were assessed as to their ability to accurately identify patients with deficiencies in healthcare literacy. We selected the Rapid Assessment of Adult Literacy in Medicine (REALM-R) as our Literacy assessment tool (Bass et al, 2003). Designated medical team members administered REALM-R surveys to patients, which were scored and kept anonymous and confidential. Providers were then asked two questions, 1) Have you met this patient before and 2) does this patient have a problem with health literacy. Answers provided by health care providers were then compared to the objective data provided by the REALM-R survey to assess provider identification of health literacy deficiency.

Development of Literacy Curriculum – A multi-disciplinary team was assembled in order to develop an educational intervention/curriculum using the ADDIE model and based from previously published literacy interventions. Our goal is to increase awareness of deficiencies in health literacy and to provide tools that providers can implement in their daily practice to help patients who may have deficiencies in health literacy. A series of videos highlighting individual stories from patients who experienced an inability to understand their own health care was created. These videos will be available through a website devoted to addressing the topic of health literacy and also provide further tools providers can use for further self-directed education in order to improve the patient-provider communication in their own practice.

Results

Preliminary data collection with the REALM-R tool was completed in a general internal medicine outpatient clinic. Participating providers included physicians and nurses in an integrated care management team. Following survey administration it was determined that 20% of patients with health literacy deficits were identified correctly by their providers. This will be compared to the rate of identification post identification.

Lessons Learned & Barriers

Interdisciplinary teamwork facilitates idea generation and new perspectives.

Large scale change is difficult and aligning with organizational goals facilitates change implementation.

Learning the challenges of taking ideas to implementation in a large organization.

Identifying a manageable scope is key to being able to implement improvements.

Barriers Encountered / Limitations

Time limitations in giving survey despite limited time needed to administer.

Our initial scope was not in line with our capabilities. We have had to re-scope our project multiple times in order to find a feasible target to address.

Data collection was very time consuming and difficult to maintain consistency.

Conclusions

Our provider teams have difficulty in consistently identifying those patients with health literacy deficiencies and this is consistent with national trends. Rather than focus on identifying those at risk, we are examining the benefit of assuming every patient may be at risk in their health literacy and target communication to alleviate and address this. We are disseminating tools that improve provider communication and our measure will be determining if provider perception of the scope of the problem has changed. Our goal is that by sharing the importance and impact of poor health literacy and providing tools to help with communication, we will improve health care outcomes.

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