A CLER Aim: Leveraging Trainees to Improve Care

By James Moses, Kedar Mate, and Kevin Weiss
With Special Guests: Chris Worsham, Andrew Buchert, and Gabriella Butler

Tuesday, Dec 8, 2015
1:30 PM - 2:45 PM

Session Code: C2

The presenters have nothing to disclose.

Session Objectives

- Describe the growing imperative of including GME trainees in efforts to improve patient care
- Provide hospital leaders an organizing framework for engaging GME trainees in efforts to improve quality and patient safety at the point of care
- Share "best practice" examples of current efforts to apply the framework in real health care settings
The Clinical Learning Environment Review (CLER) Program: and how we can benefit from it.

Kevin B. Weiss, MD
Senior Vice President for Institutional Accreditation
Accreditation Council for Graduate Medical Education
Chicago, Illinois

Disclosures
Professor of Medicine, Northwestern University Feinberg School of Medicine

Conflicts of Interest related to this Presentation
None
The CLER Program

- Established by ACGME Board of Directors in 2011
- First CLER site visits Sept 2012
- Completed first round of nearly 300 visits, April 2015
- Release of technical report of findings by end of year
- New ACGME learning collaboration announcement, 11/3

CLER Six Focus Areas

- Patient Safety
- Healthcare Quality
- Supervision
- Professionalism
- Fatigue Management
- Transitions In Care
Improving Clinical Learning Environments for Tomorrow’s Physicians

Thomas J. Noone, M.D., Kevin R. Wilco, M.D., and James P. Bogen, M.D.

Approximately 2 months ago, I had a patient who had been administered a wrong dose of fentanyl during a procedure. The patient developed severe hypotension, and the procedure had to be temporarily halted until we could get her blood pressure back up.

"The reason this happened is that during a procedure, it is sometimes necessary to administer more drugs than are actually necessary. In this case, the wrong dose was administered.

This experience is not unique to our institution, but rather is a common occurrence. Thus, it is essential that we work together to improve the clinical learning environment in which we provide medical care.

CLER: Clinical Learning Environment Review

CLER Pathways to Excellence

Expectations for an optimal clinical learning environment to achieve safe and high-quality patient care

PDF copies available at ACGME.org
Focus Area: Patient Safety  
Preliminary Analyses, January 2015

For those Clinical Learning Environments where information was available:

A median of 1.2% of patient safety events were reported by residents (~60% CLEs did not or could not track)

Based on interviews with nurses and other clinical staff, residents infrequently report events; it was not unusual that the CLE’s system was used to report on individual behaviors

Focus Area: Supervision

Percent of residents perceived placed in or witnessed a peer in a situation where supervision was inadequate (such as an attending unavailable)

In 43% of the CLEs, the safety and quality leaders recalled patient safety events related to supervision in past year

In discussions with nurses, residents, and faculty most common concerns related to nights and weekends
What opportunities does the CLER data provide?

- A new look at the value of our educational mission to better align with our patient care missions
  - Improvement in patient care: new eyes on patient safety
  - Training our own future workforce in system-based skills
  - Improving the patient care experience
Capacity Building

- Pathway Leaders
- Pathway Learners
- Pathway Innovators
- Shared Learning

Clinical Learning Environment Review Program

Pursuing Excellence in Clinical Learning Environments

ACGME invites input from Sponsoring Institutions, via a Request for Information to help shape the RFP that will be released in February. [www.acgme.org/pursuingexcellence](http://www.acgme.org/pursuingexcellence)
Clinical Learning Environment Review

A journey

Some questions to consider

• How can our medical centers capitalize on the soon to be release findings from CLER to improve patient care?

• What might be opportunities—Pursuing Excellence Initiative—for us, working together, to better engage residents and their faculty within our medical centers to improve their education and patient care?
Shift in the healthcare landscape is necessitating a change in our approach to training

- To ensure that the healthcare workforce has the necessary knowledge and skills
- And seeing the trainees, in their role at the point of care, as actual ‘drivers’ of health care quality

Addressing current state gaps means addressing historical norms in the training environment

- Resident/fellows as transitory
- Trainee QI efforts not linked to system priorities
- Input as frontline staff not incorporated into hospital QI efforts

Care improvement occurs in organizations despite housestaff as opposed to because of housestaff
GME Learners as Key Stakeholders

- Opportunity to create change

**Delivery of Patient Care**
- Fellows and Residents
- Faculty
- Department/Division Chiefs
- CMO/Physician-In-Chief
- CEO
- Board

**MD Power Structure**
- Board
- CEO
- CMO/Physician-In-Chief
- Department/Division Chiefs
- Faculty
- Fellows and Residents

Benefits to both the training institution and to the housestaff

**Training Institution**
- Frontline staff involvement and input into solutions
- Housestaff become faculty
- Housestaff engagement → QPS culture

**Trainee**
- QPS as an institutional priority
- QPS as part of every day work (identity)
- Learn skills of QPS improvement work
Barriers to address

- Time
- Lack of role models
- Resource and support allocation
- Competing priorities

Three Different Models

Flexible/Adaptable to suit the varied interest of the trainee and the local constraints in the ‘Learning Environment’
Model 1: Short-term, Team-based

- Definition: Focused on behavior change and/or process change within control of interdisciplinary medical team
- Scenario: Inpatient team spends 2-4 weeks together, integrating QI/PS into daily clinical care routines
- Improvement Objective: To solve a proximal workflow issue or gap in care that a team identifies
- Educational Objective: Motivate trainees to incorporate improvement principles and systems based thinking into daily clinical routines versus thinking of QI/PS as separate activity

Example: Team prioritizes ensuring that 100% of patients admitted to the service have a completed VTE Risk Assessment completed by admitting resident prior to initiation of DVT prophylaxis

Model 2: Medium-term, Unit-based

- Definition: Focused on a workflow in a particular unit or clinic with aims that are tied to institutional priorities
- Scenario: Trainees who rotate through an unit (or clinic) and work on a QI project developed by the unit (or clinic)
- Improvement Objective: To develop new practice or implement an evidence-based intervention for the unit or clinic
- Educational Objective: To demonstrate to the trainee that even with limited period of time spent in one particular unit, he or she can play a vital role in accelerating that unit’s improvement initiatives

Example: Trainees who have weekly continuity clinic, participate as part of the clinic’s QI team working to improve flu vaccination rates
Model 3: Long-term, Systems-based

- Definition: Focused on a workflow(s) that crosses multiple units/clinics with an aim to improve systems at departmental/institutional level
- Scenario: Trainees who join a hospital taskforce related to improving a corporate quality goal prioritize ensuring interventions are adopted locally as they rotate through a unit (or clinic)
- Improvement Objective: To make system-level change that helps achieve institutional QI/PS objectives
- Educational Objective: To integrate trainees into a larger institutional objectives for quality and safety; to make robust connections between clinical care at the bedside and institutional quality and safety aims

Example: Trainees on a hospital readmissions taskforce join multidisciplinary rounds when on an inpatient rotation to ensure all patients have follow-up with PCP scheduled by the unit coordinator within 2 weeks of discharge

Putting the 3 Different Models to Action

Sharing of ‘Best Practice’ Examples

#HIIFORUM
Model 1

Short-term, Team-based
Aim & approach

- Teach students & residents how to improve (and how not to hate QI)

- What could we improve in 2 weeks?
  - Team-based approach

- Start with this question: What makes your day difficult?

- And then…wait

What Steve told me…
Simple measurement

- So, I asked…how many of our patients had catheters?
- Our Day 1 measure:
  - Total # of catheters
- Data collection plan:
  - MS III to note presence of catheter during bedside rounds
  - Plot number on workroom whiteboard
- Our Day 1 PM measure:
  - Total # catheters/Total # of patients
- Our Day 2 AM measure:
  - Total # of medical necessary catheters/Total # of patient patients
- Our Day 3 AM measure (final measure):
  - Total # of medically unnecessary catheters that were still found inserted by PM rounds
  - AIM statement: get to zero (never let the sun set on an unnecessary catheter)

No Foley Left Behind

![Graph showing the number of catheters over time]

- Unnessary in PM—Total # catheters
- Total # patients
What changes did we make?

- Daily recording & paying attention
- A focus during AM and PM rounds
- Built into our patient presentations
- Catheter rounds by each MS and PGY-1 duo right after lunch
- Alerted nursing to our effort…nurses joined in.

What I didn’t do

- Teach the Model for Improvement, PDSA, run charts, variation analysis, systems thinking
- Mention Juran, Deming or Shewhart
- Use acronyms
- Tell the residents about the strategic priorities of our hospital
- Work on an abstract idea
- Work on something that didn’t bother them
Model 2
Medium-term, Unit-based

Resident Project

Chris Worsham, M.D.
Internal Medicine Resident, PGY-3
Boston Medical Center

“Improving Infection Control Measures in an ICU”
Resident Project

- C. diff rate higher than national average
- Routine infection control precautions are not always taken
- Hospital epidemiologist looking for pilot project

Resident Project

- Single unit, small 12-bed ICU
- Staff and leadership aware and on board
- Flexible scheduling
- No funding initially
Resident Project: Aim

- Improve adherence to basic infection control measures in the 9N ICU by 15% by January 31, 2016.

Resident Project

- Led by resident
- Team membership has been variable
  - **Baseline data:** 1 resident, 1 medical student
  - **Jr Resident Project:** 3 residents, 3 MPH students
  - **Currently:** 2 residents, 1 medical student
- Mentorship from hospital epidemiologist
- Collaboration with RN and MD leaders, unit RNs
Resident Project

- Healthcare workers observed with checklist
- Observations at irregular intervals given duty schedule
- Baseline data taken
- Process analyzed by traditional QI techniques

Resident Project

- All healthcare workers had trouble adhering to basic hand hygiene & special precautions
- Multiple common failure points identified
Resident Project

- Install more hand sanitizer dispensers
- Create a campaign with infection control characters
- Make new alert signs featuring characters

#HIIFORM

Resident Project

- $1,600 QI grant from Resident Union’s BMC HS QI Council jointly supported by BMC’s Malpractice Captive
- Work orders for new hand sanitizers
- Printed up signs and posters
- Measuring for change currently

#HIIFORM
Resident Project

- Lessons learned
  - Duty schedule often not compatible with project schedule
  - Do project in manageable chunks
  - Observations are more difficult than chart-based measurements
  - Resident/student QI programs can work
  - Trainees and students want to take leadership roles

- Unit based project
  - Unit was engaged and interested in improvement
  - Leadership comfortable with resident-run project
  - Smaller is better; easier to make changes
  - Less funding needed
  - Unit-based pilots are the gateway to larger projects

Model 3

Long-term, Systems-based
Engaging Residents in Patient Safety and QI Work at the Institutional Level

Andrew R. Buchert, MD
Gabriella A. Butler, MSN, RN

Children’s Hospital of Pittsburgh of UPMC
Pittsburgh, PA

Who we are...

- **314 bed free-standing tertiary children’s hospital**
- **Pediatric Residency Program**
  - 85 General Pediatrics Residents, 16 Internal Medicine-Pediatrics Residents, 9 Triple Board Pediatrics-Psychiatry-Child and Adolescent Psych Residents
- **Pediatric Fellowship Program**
  - 25 Pediatric Subspecialty and Surgical Subspecialty Fellowships
- **Clinical site for other non-pediatric residency training programs**
  - UPMC Surgical, Surgical Subspecialty, Anesthesiology, Radiology, Emergency Medicine, Family Medicine, Psychiatry, and Pathology residents
  - Family Medicine and Surgical residents from training programs outside of UPMC
Quality and Safety are at our core…

Where do Graduate Medical Trainees fit in?

Residents and fellows are our frontline physicians

- In the trenches of patient care day in and day out
- Recognition of shortcomings in our systems of care is a given – they need to be empowered to share their ideas and to participate in improvement

They are ideally positioned to implement solutions

Are Graduate Medical Trainees EMPOWERED?

- Do they know what to do when medical errors or near misses happen?
- Do they know how to access the patient safety and QI infrastructure of the hospital?

We must provide them with the knowledge to recognize errors and near misses, the invitation to report them, and the power to fix them.
Our Patient Safety and QI Mission for our Trainees

- **Engaging** graduate medical trainees in patient safety and quality improvement
- **Increasing** safety event and medical error reporting by graduate medical trainees
- **Integrating** graduate medical trainees into hospital/institutional safety and quality structures

---

**Strategic Approach**

- **Didactics to provide the foundation**
  - Orientation
  - Noon Conference
  - Intern Boot Camp

- **Consistent Access to Hospital Leadership**
  - To Err Is Human
  - Senior Safety Rounds

- **Integration of PSQI into daily activities**
  - Start morning sign-in and rounds with patient safety
  - Discussion about safety events in real time
  - Regular inquiry from faculty about safety concerns and opportunities for improvement

- **Designated Point-Person**
  - Chief Resident for Patient Safety and Quality

- **Involvement in institutionally-supported QI work**
  - Hand hygiene, Pediatric Septic Shock Collaborative, Solutions for Patient Safety HAC work, Clinical Pathways, Medication Reconciliation, Handoffs

---

**Knowledge & Prioritization**

- Leadership Buy-In

**Faculty Support**

- Protected Time & Bridge to Leadership

**Sustainability & Meaningful Contribution**
Evolution

Strong partnership between all stakeholders
- Hospital Patient Safety and Quality leadership, Medical leadership,
  Nursing leadership, Residency Program leadership, Core faculty

User-friendly safety event reporting system
- Link to reporting software through the EMR

Timely follow-up of safety events
- Non-judgmental follow-up immediately after event
- Resident participation in root cause analyses, workgroups,
  committees, administrative projects
- Recurrent themes addressed via Senior Safety Rounds, Intern To Err
  is Human, Housestaff lunch

Invitation to own the solution
- Resident participation in and leadership of workgroups, committees,
  administrative projects
THANK YOU!!

Summary

- Changing landscape of medicine requires a change in the learning environment of trainees
- CLER, ACGME’s new initiative, calls for the better integration and active participation of the trainees by hospital leaders in achieving meaningful quality and safety improvements for training institutions
- Lessons learned from CLER’s initial round of site visits demonstrates a clear gap of where we are currently and where we need to get to at a national level
- Locally, many barriers exist in integrating trainees into Quality and Patient safety initiatives in a meaningful way
- Solutions do exist by integrating trainee improvement work at the point of care
- Which can be done in team based, unit based and system based efforts in which trainees play a central role to realizing improvement
2016 IHI Change Conference
Lead Well at Every Turn
March 10-11, 2016 - Dallas, TX

ihi.org/2016IHIChangeConference