Quality and Safety in Hospital Systems
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Disclosure

I do not have a relationship with a commercial interest.

A commercial interest is any entity producing, marketing, re-selling, or distributing health care goods or services consumed by, or used on, patients.
All participants are required to complete an evaluation for this activity. Please submit one at the end of this session or complete one electronically using the tag reader system.
Objectives

- Put QI and PS into context of new accreditation requirements for house officer training
- Define quality and safety
- Review common challenges
- Describe common QI/PS methodologies
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Clinical Learning Environment Review
Clinical Learning Environment Review

CLER assesses sponsoring institutions in the following 6 focus areas:

1- **Patient Safety** – including opportunities for residents to report errors, unsafe conditions, and near misses, and to participate in inter-professional teams to promote and enhance safe care.

2- **Quality Improvement** – including how sponsoring institutions engage residents in the use of data to improve systems of care, reduce health care disparities and improve patient outcomes.
3 - **Transitions in Care** – including how sponsoring institutions demonstrate effective standardization and oversight of transitions of care.

4- **Supervision** – including how sponsoring institutions maintain and oversee policies of supervision concordant with ACGME requirements in an environment at both the institutional and program level that assures the absence of retribution.
5 - **Duty Hours Oversight, Fatigue Management & Mitigation** – including how sponsoring institutions: (i) demonstrate effective and meaningful oversight of duty hours across all residency programs institution-wide; (ii) design systems and provide settings that facilitate fatigue management and mitigation; and (iii) provide effective education of faculty members and residents in sleep, fatigue recognition, and fatigue mitigation.

6 – **Professionalism** - with regard to how sponsoring institutions educate for professionalism, monitor behavior on the part of residents and faculty and respond to issues concerning: (i) accurate reporting of program information; (ii) integrity in fulfilling educational and professional responsibilities; and (iii) veracity in scholarly pursuits.
Clinical Learning Environment Review

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What is Quality?

QI is a process of continually evaluating clinical practices using patient outcomes as the basis of evaluation.

Patients’ outcomes should be the fundamental source of the definition of quality.

The Dimension of Quality
IOM 6 Aims for Improvement

S.T.E.E.P.
SAFE • TIMELY • EFFECTIVE
EFFICIENT • EQUITABLE
PATIENT-CENTERED
What is Patient Safety?

- A subset of healthcare quality
- Review of the clinical system to minimize the risk of errors and improve the chances of catching errors before they occur
- Focus on system components—not persons, devices or departments

Putting It All Together

Administration

- Buy-in
- Support
- Resources

QI & PS

External Observers
- Patients
- Policy agencies
- Accreditors

Staff
- Buy-in
- Implementation
- Service excellence
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Challenges: Equity of Care

- Social determinants of health include:
  - Income inequality
  - Poor access to transportation
  - Inadequate educational quality

To design services that promote health equity, there must be a clear focus on specific communities at risk, a commitment to listen and collect meaningful data to understand local needs and priorities, a conviction to make progress, and ongoing assessment of health outcomes.

Challenges: Health Literacy

- A 2006 study notes that only about 12% of US adults have a proficient state of health literacy.

- Health literacy can be defined as having the ability to obtain, process and understand the basic health information and services needed to make appropriate health decisions.

US Department of Education, National Center for Education Statistics (NCES). The Health Literacy of America’s Adults: Results from the 2003 National Assessment of Adult Literacy.

Challenges: Spreading Innovation

Organizational Challenges:

- Willingness or ability to adopt new ideas
- Organizational and cultural support
- Diffusion of innovations
- Implementation of improvement strategies

Challenges: Incident Reporting

- Know HOW to report – be familiar with your clinical site’s event reporting protocol
- Know WHEN to report adverse or sentinel events, and near misses
- Know your ROLE in reporting – be transparent and follow up
- Participate in safety investigations such as RCAs whenever possible
Challenges: Incident Reporting

**UMCNO**
- Voicemail: B-SAFE (7233) in-house
- Email: umcsafe@lcmchealth.org

Questions? Contact Quality Department
702-3248

**Children’s Hospital**
- Voicemail: ext. 2727
- ASAP@chnola.org
- Paper Safety Report
  - Forward to QA/QI Office

**Our Lady of the Lake (OLOL)**
- Patient Safety Speak Up Hotline: (225) 765-1734
- Online: Quantros
  - LakeLink >> “Applications”
  - Use OLOL username and password
- Compliance Hotline: (888) 400-4517
  - Or FMOLHSintegritylink.com
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Quality Improvement Process

1. Planning
   - **Benchmark**: Compare ourselves with others or from a historical internal perspective

2. Define the process
   - **Root Cause Analysis**
   - **Fishbone (Ishikawa) Diagrams**
   - **Flow Charts**
   - **Brainstorming**

3. Effect Change
   - **Identify** participants and resources
   - **Implement** changes or interventions
   - **Monitor** outcomes to sustain improvement
Common QI/PS Methodology: RCA

Guiding principle:
An adverse event is only a symptom of underlying problems.

- Root Cause Analysis (RCA) identifies the causal factors underlying a variation or adverse event.
- This process is limited to authorized personnel in a strictly confidential investigation.

## Common QI/PS Methodology: RCA

All RCAs must be:

### Thorough
- Examine all systems, areas and processes directly associated with the event
- Determine potential improvement(s) that would reduce risk of similar events

### Acceptable
- Focus on systems and processes, not individuals
- Dig deeper at every point with “Why?” questions
- Progress from special causes (what made this event different) to common causes (what always happens)

### Credible
- Participation by organizational leadership and individuals most closely associated with event
- Internal consistency – no contradictions or obviously unanswered questions
- Review all relevant literature

RCA Tools: 5 Why Analysis

5-WHY ANALYSIS TEMPLATE

Problem / Defect

1st WHY?

Answer what caused the specific situation

2nd WHY?

Answer why the problem wasn’t detected

3rd WHY?

Answer what system(s) failed

4th WHY?

Should be at the root cause near 5th question

5th WHY?
RCA Tools: Fishbone Diagrams

Simple Fishbone Diagram Example

- People
  - Unpleasant side effects
- Procedures
  - Inconsistent patient education
  - Pharmacy hours of operation
- Policies
- Plant
  - Patient not taking hypertension medication

An RCA should produce **Action Plans**

- Strategies to be implemented to reduce the risk of recurrence.
- Each AP should address responsibility for: implementation of changes, oversight, time lines, and how effectiveness of changes will be measured.
Action Plan: The Model for Improvement
**Common QI/PS Methodology: PDSA**

**Act:** Develop a plan to implement change. If successful, periodically reevaluate to maintain adequate levels of success. If not successful, modify action plan and begin a second cycle.

**Plan:** Explore a challenge, perform a literature search, and develop an action plan that is measureable, achievable, and relevant.

**Study:** Evaluate progress to plan change.

**Do:** Implement your action plan with quantifiable data measurement.

Common QI/PS Methodology: Lean

- Define problems in processes and outcomes
- Implement changes to
  - Eliminate waste
  - Add value
- Sample tool: Fishbone diagram – Map out all the variables
Common QI/PS Methodology: Lean

Make the system lean by eliminating “Pushes” and adopting “Pulls.”

- **Push**: Reactively dealing with delays (e.g. – the ED “pushing” to get patients out to beds)
- **Pull**: Anticipate problems and optimize the system (e.g. – inpatient units pull patients by facilitating early discharges and creating capacity for new admits)

Analyzing Data to Improve

There are many other QI methodologies and tools. Additional resources are available on the EQuIP website.
2015 National Patient Safety Goals

- Identify Patients Correctly
- Improve Staff Communication
- Use Medications Safely
- Use Alarms Safely
- Prevent Infection
- Identify Patient Safety Risks
- Prevent Mistakes in Surgery
UMCNO Patient Safety Goals

- Attention to alarm safety
- Patient identification
- Increased safety event reporting (call B-SAFE or email umcsafe@lcmchealth.org)
- Do no harm
- Systems based approaches to learning – through the use of Root Cause Analysis (RCA)
UMCNO Quality Improvement/Healthcare Disparities Goals

- Achieving National Standards
- Appropriate implementation of STEMI protocol
- Improving throughput
- Providing equitable care for the homeless and indigent
- Providing HIV testing
- Creating disease management programs
Transitions in Care:
- Proper patient hand-offs
- Improved communication

Professionalism
- Fatigue management
- Proper supervision
- Fatigue mitigation
- Professionalism education
- Incident reporting
QI/PS at LSUSOM

Faculty Development

Residents

Students

Teaching Hospital(s)
Program Directors and Coordinators

EQuIP

DIO
Program Directors and Coordinators

Science and Practice of Medicine Curriculum
QI/PS Committees

1. Establish a sense of urgency
2. Form a guiding coalition
3. Create a vision
4. Communicate the Vision
5. Empower others to act
6. Plan and create short-term wins
7. Continue to improve the process
8. Institutionalize approaches

Breaking Down Silos

**Clinical Sites**
- Ongoing QI/PS projects
- Report outcomes as already scheduled
- Professional development for SOM faculty

**EQuIP Operations Committee**
- Match residents and fellows to QI/PS committees
- Establish timelines for reporting and oversee day-to-day operations
- Solicit applications for new initiatives from programs and residents

**Steering Committee**
- Review new QI/PS projects
- Overcome roadblocks in meaningful resident participation
- Help to bring projects not making meaningful progress into compliance
- Champions for program compliance with EQuIP curriculum
What is EQuIP?

- Engages all residents and fellows in QI/PS
  - Each project should have tangible objectives and measurable outcomes
  - Should have a reporting date and a scholarly product
  - EQuIP office facilitates hospital or clinic-based QI/PS projects and monitors resident progress
**EQuIP Projects**

- Collecting information or biological samples through intervention or interaction with subjects?
- Examining records or biological samples containing personal identifiers, e.g., medical charts or identifiable tissue samples?
- Recording identifiable private information?

**If yes to any of these, you are conducting a human subjects project.**

- Is this a systematic investigation, i.e., is there a project design that will answer a question? Or, will patients be randomized into groups with different therapies?
- Will the information obtained be generalizable, i.e., would others outside your unit (or at other clinical sites) find this information useful in their practices?

**If yes to any of these, then you are conducting research.**

If answer is ‘yes’ to questions in **both** boxes above, project is referred to the IRB.
**EQuIP – Project Review Form**

### Equip Project Review Form 2015-2016

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What is the “gap” in quality that resulted in the development of this project?

To determine if project is a human subjects project (as defined by 45 CFR 46), answer the following:

1. Are you collecting information or biological samples through intervention or interaction with subjects?
   - [ ] Yes
   - [ ] No

2. Are you examining records or biological samples containing personal identifiers, e.g., medical charts or identifiable tissue samples?
   - [ ] Yes
   - [ ] No

3. Are you recording identifier private information?
   - [ ] Yes
   - [ ] No

To determine if project constitutes research (as defined by 45 CFR 46), answer the following:

1. Is this a systematic investigation, i.e., is there a project design that will answer a question?
   - [ ] Yes
   - [ ] No

2. Will the information obtained be generalizable, i.e., would others outside your unit (other clinical sites) find this information useful in their practices?
   - [ ] Yes
   - [ ] No

**Note:** If the answer to questions in both of the categories above is “yes,” the project could constitute human subjects research, and the EQuIP office will consult the LSUHC NO IRB to determine if IRB review will be necessary.

To determine if project must be reviewed by hospital administration, please answer the following:

1. Will this project involve significant institutional resources at the clinical site (i.e., field visits in EHR system, hospital-wide surveys, etc.)?
   - [ ] Yes
   - [ ] No

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**LSU Health**

**School of Medicine**

[Logo]
**Project Review Process**

1. **HO develops a project Idea**
2. **Idea goes to EQuIP**
3. **Human subjects research?**
   - If yes, **IRB review required**
   - If no, **Subsequent steps**
4. **Significant institutional resources required?**
   - If yes, **RRC/hospital approves project**
   - If no, **Proceed with project**

**Flowchart:**
- If review (IRB, RRC) not required, go to Human subjects research?
- If IRB review required, go to Non-physician comes up with an idea for a project
- If RRC/hospital approves project, go to Proceed with project
EQuIP Rotation at UMCNO

- Experiential learning opportunity for HO2+
- “Shadowing” in Quality/Safety Office
- Didactic teaching coupled with hands-on experiences
- Deliverables expected
- Can be interlaced with other clinical/research rotations
- To-date: Pathology, Radiology, Medicine
  - Plenty of space for more…
Faculty Quality & Safety Champions

Potential departmental QI/PS Champions:

- Full-time LSUSOM clinically active faculty
- Collaborate with GME office in creation and dissemination of educational/didactic content on quality improvement and safety, geared at department’s house officers and faculty
- Facilitate communication about UMCNO’s QI/PS priorities and institutional policies to departmental faculty and trainees
- Collaborate with UMCNO (or primary training site) Quality Management department to identify areas of improvement within clinical domain
- Interact with hospital leadership (including Service Line Directors, as appropriate) to prioritize quality improvement initiatives
- Foster involvement of departmental faculty, residents/fellows, and hospital personnel in successfully accomplishing quality improvement initiatives
Thank You

It’s not just about errors...

Let’s make the system better.
EQuIP Staff

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LSU Health
NEW ORLEANS
School of Medicine
Enhancing Quality Improvement for Patients (EQuIP) Program