

Annual Quality and Patient Safety Report University of Illinois Board of Trustees Meeting January 2017

The Quality and Patient Safety program at the University of Illinois Hospital & Health Sciences System (“UI Health”) supports quality and safety improvement for UI Health’s entire scope of clinical operations including our hospital, clinics, and Mile Square Health Centers.

We also continue to partner and collaborate with UIC health sciences colleges and to pursue opportunities to align and integrate key quality and safety endeavors with other organizational priorities. Key 2017 highlights are briefly outlined below.

Quality & Patient Safety Division

Directed by the Associate Vice Chancellor for Quality & Patient Safety, UI Health’s Quality & Patient Safety division includes four teams: Accreditation & Clinical Compliance, Infection Prevention & Control, Quality Performance & Improvement, and Patient Safety & Risk Management.

Quality & Safety Strategy & Leadership Steering Committee

Established in early 2013, the Quality & Safety Strategy & Leadership Steering Committee (“QSSL”) continues to provide leadership, direction, and oversight to UI Health’s enterprise-wide quality and patient safety priorities, performance, and action plan. Its membership includes key clinical and operational leaders from across the clinical enterprise, the Office of the Vice Chancellor for Health Affairs, and UIC health sciences colleges.

FY18 Quality & Patient Safety Goals

In June 2017, QSSL finalized its FY18 Quality & Patient Safety priorities and targets, including continuance of our Zero Harm initiative aimed at the eventual elimination of all patient- and employee-related harm at UI Health. Our FY18 goals are as follows:

1. Patient-Related Harm:

Decrease the overall incidence of the following types of harm by 5 to 15%:

- Central Line-Associated Blood Stream Infections
- Catheter-Associated Urinary Tract Infections
- Surgical Site Infections
- Post-Operative Deep Venous Thromboses and Pulmonary Emboli
- Inpatient Falls Resulting in Injury
- Hospital-Acquired Pressure Injuries
- Medication Errors Resulting in Harm
- Sentinel Events

2. Employee-Related Harm:

Decrease the overall incidence of the following types of harm by 5 to 15%:

- Sharps Injuries
- Injuries from Patient and Equipment Handling
- Slips, Trips, and Falls
- Injuries from Physical Altercations

3. Sepsis Mortality:

Reduce Sepsis Mortality Index (observed to expected) by 10% to 20%

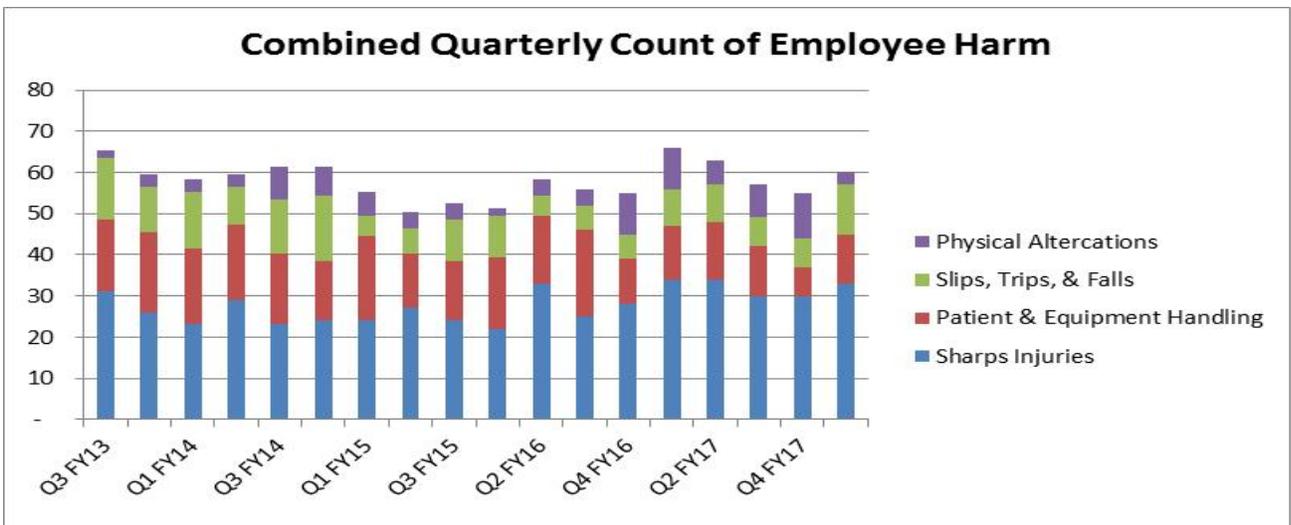
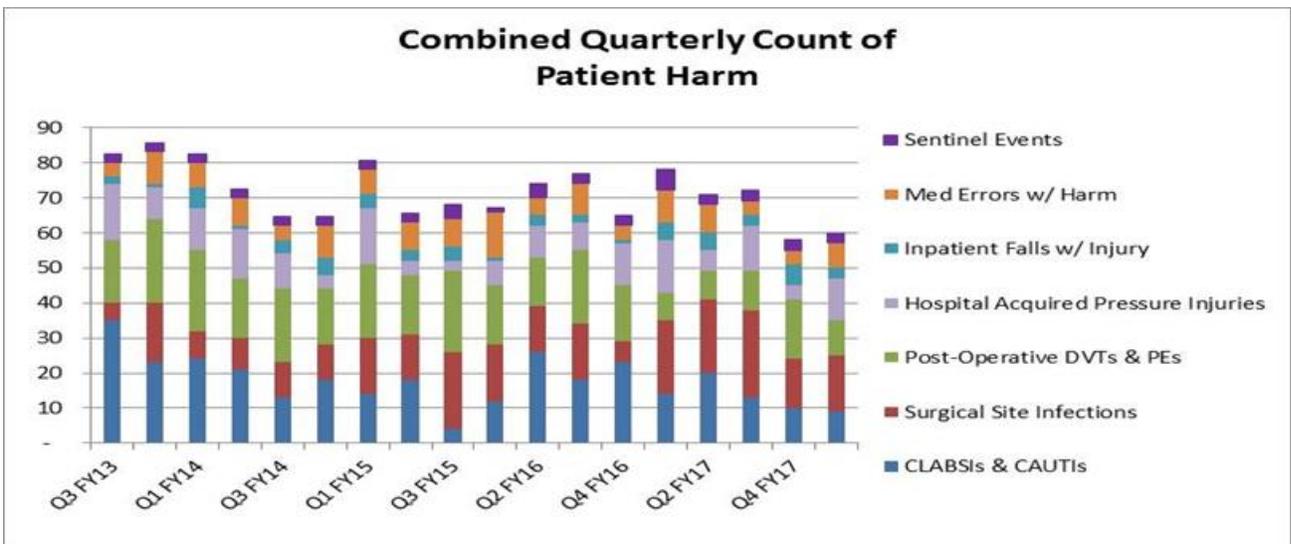
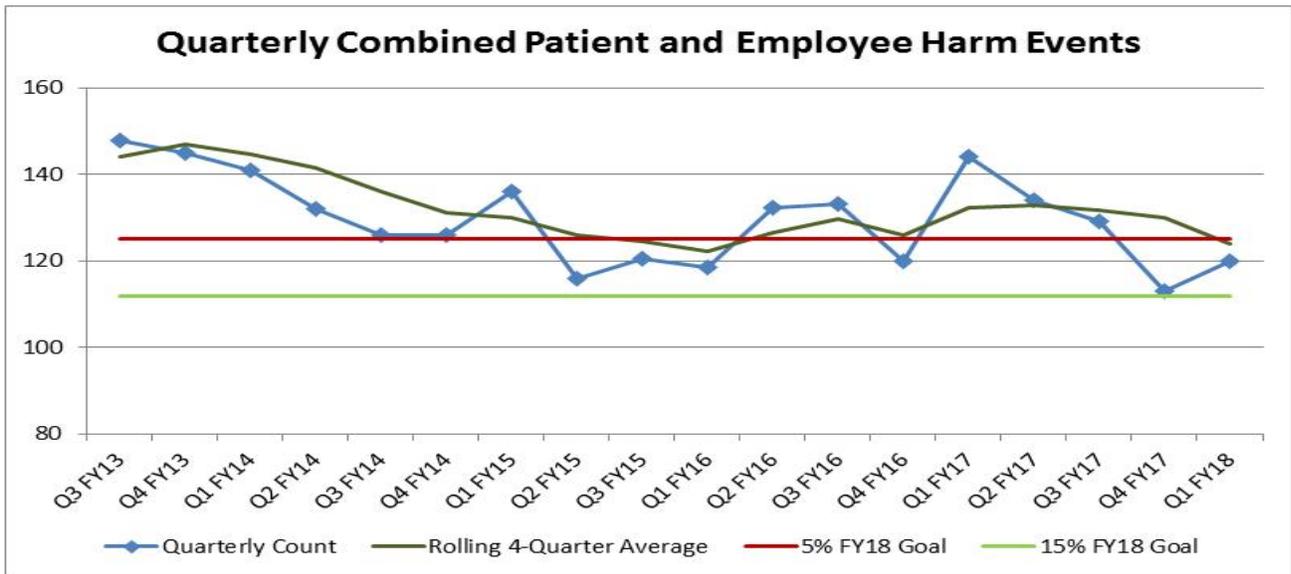
All improvement targets are relative to UI Health’s baseline performance as of June 30, 2017. For each of these priority areas, multidisciplinary project teams and detailed project plans have been formed and implementation of those plans is continuing.

Performance is being tracked monthly by QSSL, and progress is shared broadly each month throughout UI Health.

Continuing Improvements and Quality & Safety Performance

All of our FY18 priorities were areas of focus in previous years. Wide-spread involvement and support from leaders and staff across our organization are resulting in continued measureable improvements in almost all areas, as summarized here:

Priority	2017 Improvement	Improvement since 1/2013
Central Line-Associated Blood Stream Infections (CLABSIs)	37% ▼	80% ▼
Catheter-Associated Urinary Tract Infections (CAUTIs)	58% ▼	71% ▼
Surgical Site Infections (SSIs)	3% ▼	2% ▲
Hand Hygiene Compliance	2% ▲	14% ▲
Post-Operative Deep Venous Thrombosis (DVT) and Pulmonary Embolism (PE)	2% ▲	56% ▼
Inpatient Falls resulting in Injury	46% ▲	90% ▲
Hospital-Acquired Pressure Injuries	7% ▼	26% ▼
Employee Harm Events	0%	8% ▼
Sepsis Mortality Index (Observed / Expected)	5% ▲	5% ▼
Total Inpatient Mortality Index (Observed / Expected)	2% ▲	0%



Patient Safety & Risk Management

Our Patient Safety & Risk Management team is continuing its work to provide risk identification, assessment, consultation, education, and support to further elevate the safety of UIH care processes and systems.

Risk Identification

Implementation of an updated electronic patient safety reporting system was completed in January 2017. The enhanced system provides improved data analytics and access to comparative data from other academic medical centers through our membership in a Patient Safety Organization (PSO). Participation in a PSO provides a safe table environment for discussing safety events as well as access to best practices and process improvements implemented by other leading healthcare delivery organizations.

Risk Management Consultation and Education

The Patient Safety & Risk Management team provides 24/7 coverage for consultation with clinical and operational leaders and staff. Additionally, senior risk managers are assigned to clinical service lines and attend quality assessments, mortality and morbidity reviews, and staff meetings at both the enterprise- and unit/service level to address risk issues and provide risk-focused education. The Patient Safety & Risk Management internal website facilitates access to additional resources and information on safety and risk topics for all UI Health staff and clinicians.

It Really Happens Here, a risk management grand rounds program aimed at bringing risk event awareness and solutions to staff, was conducted three times this year. Topics included bullying behaviors, ensuring accurate patient identification, and assisting victims of human trafficking who present to health care facilities. In addition, a one-page *Safety Huddle* is distributed to all leaders each month. Each Safety Huddle contains a safety case study, written to facilitate discussions about safety concerns and to communicate lessons learned from and improvements made in response to recent patient safety events.

Risk Management Assessment

The Patient Safety & Risk Management team provides ongoing assessment of high-risk areas for UIH and helps facilitate comprehensive reviews when potential patterns emerge. The team is continuing to partner with the Obstetrics Task Force convened last year in response to a comprehensive risk assessment, and they are currently assisting with a comprehensive review of our Child & Adolescent Treatment Unit that will be completed in late 2017.

Patient Safety Services

Evaluating the safety of our care processes and systems includes the investigation of patient safety events and sentinel events – patient safety events that result in death, permanent harm, or severe temporary harm. Using an evaluation process aimed at determining the root causes of patient safety events, the Patient Safety & Risk Management team formally investigated 20

patient events from January through November 2017, 10 of which were deemed sentinel events. The most commonly occurring contributing factor identified as part of the root cause analysis (identified in 14 of the 22 investigations) was the lack of standardized workflows or variations in practice. The following patient safety events occurred and were evaluated in 2017 (sentinel events are asterisked):

- Avoided identification error of a surgical patient
- Behavioral incident involving a pediatric patient's family members in a procedural area
- Breast milk administration error
- Contaminated surgical tray
- Death of an obstetrics patient after an emergency Cesarean section
- Elopement of a psychiatric patient from the Obstetrical Emergency Room
- Fire in a surgical or procedural area (2)*
- Imaging procedure performed on the wrong patient (2)
- Medication error with severe temporary harm (2)*
- Patient fall resulting in harm (4)*
- Patient requiring re-intubation after being taken off the ventilator
- Pediatric patient transfer for psychiatric care
- Physical altercation involving a patient
- Seizure of a pediatric patient while being transferred from the clinic to the Emergency Department
- Unintended retained foreign object following an invasive procedure (2)*

Evaluation of these patient safety events has led to identification and implementation of improved processes and systems. These include standardized work flows, definition of standard work to reduce process variation, policy and procedure development and revision, equipment standardization, and staff education.

The Patient Safety & Risk Management team facilitates full disclosure to our patients and families when harm occurs. Team members provide coaching to clinicians preparing for communications with patients and families; they also attend and facilitate patient and family meetings involving communication of adverse events as requested. In addition, the team activates peer-to-peer support for clinicians who have been involved in or affected by patient harm events.

Safety Committee

The Safety Committee is a multi-disciplinary committee whose charge includes improving patient safety through implementing The Joint Commission's National Patient Safety Goals (NPSGs). The focus of the NPSGs includes: clinical alarm management; medication reconciliation; preventing surgical errors; preventing patient identification errors; improving prevention of blood clots; communicating critical test results; improving medication labeling in surgery and procedures; infectious disease prevention; and suicide screening and prevention.

Participation in National Programs

The Director of Patient Safety & Risk Management continues to serve on the Advocacy Task Force of the American Society of Healthcare Risk Management. The focus of the task force is to review federal legislation and regulatory matters relating to healthcare risk management and to develop advocacy strategies for members. The Director also continues to serve as Vice-Chair of the Academic Medical Centers Risk Network for Vizient, a healthcare member organization comprised largely of academic medical centers whose goals include improving patient safety.

Culture of Safety Action Plan and Survey

During 2017, each UI Health department, unit, and clinic team continued to work on team-specific Culture of Safety Action Plans developed in response to our 2016 Culture of Safety Survey. In addition, our Patient Safety & Risk Management team is providing ongoing leadership for our organization-wide Culture of Safety workgroup and Action Plan. The Culture of Safety Survey will be re-administered in March 2018.

Quality Performance & Improvement

Our Quality Performance & Improvement team continues to support UI Health in three primary ways:

1. Planning, analytic support, and project management for quality priorities
2. Data collection, analysis, and reporting of required quality performance metrics to external regulatory bodies and managed care programs
3. Expansion of UI Health's "improvement capability and capacity" through clinician education, consultation with leaders and staff, and facilitation of improvement teams

During 2017, the Quality team:

- Has been providing guidance as well as analytic and reporting support for UI Health's participation in the ***Great Lakes Practice Transformation Network***, a CMS-funded initiative aimed at assisting clinicians to prepare for effective participation in value-based payment systems.
- Is providing project management for many of UI Health's ***Zero Harm initiatives*** as well as our ***Reducing Sepsis Mortality*** Steering Committee and workgroup.
- Continues to collaborate with UI Health Information Services staff, as well as external subject matter experts, to ensure compliance with newly-required electronic reporting of a subset of quality metrics (known as ***eCQMs***) to CMS and The Joint Commission.
- Provided continued project management for UI Health's third year of participation in the ***Illinois Surgical Quality Improvement Collaborative***, funded in part by a Blue Cross Blue Shield of Illinois grant. The major 2017 project completed through this initiative was implementation of ***PreAnesthesia Intake Instructions to Enhance Surgical Outcomes***, which encourage patients to drink clear, carbohydrate-containing beverages the night before and up to two hours prior to their surgery. UI Health's poster describing this initiative was accepted for presentation at both the American College of Surgeons' National Surgical

Quality Improvement Program Annual Conference and the University of Iowa Hospitals and Clinics 25th National Evidence-Based Practice Conference.

- **Hosted the 7th Annual Quality & Safety Fair**, which saw a continuing high level of participation. There were 37 poster submissions describing a wide variety of initiatives resulting in improvements in processes, systems, care, and outcomes. Teams from 4 of our health sciences schools - Medicine, Nursing, Pharmacy, and Public Health - joined dozens of UIH multidisciplinary teams in highlighting improvement work that ranged from clinical topics like improving outcomes for stroke patients at risk for cognitive and mood impairments to implementing “care bundles” to prevent blood clots and bloodstream infections to creating systems to reduce secondhand exposure of chemotherapy for healthcare workers.

Accreditation & Clinical Compliance

The Accreditation & Clinical Compliance team facilitates ongoing readiness strategies to promote compliance with standards for accreditation by The Joint Commission (TJC), as well as other regulators including the Centers for Medicare and Medicaid Services (CMS) and the Illinois Department of Public Health (IDPH).

Methods utilized include risk assessments, improvement action plans, “tracers” (where patients and processes are followed through their normal course to analyze our systems of providing care, treatment, and services), team environmental rounds, staff huddles (brief regular meetings, for example at the start of each shift, where key information is shared with the entire team), policy development, an accreditation website with resources, and various education programs.

In 2017, the Accreditation team supported numerous successful site visits including:

- Bariatric Surgery Program Reaccreditation Survey by the Metabolic and Bariatric Surgery Accreditation and Quality Improvement Program
- Chicago Department of Public Health Tuberculosis Division Case Investigation
- The Illinois Department of Public Health (IDPH) Dialysis Recertification Survey
- IDPH Investigation of an Emergency Medical Treatment and Labor Act (EMTALA) Complaint
- IDPH Perinatal Center Review and Level III Perinatal Facility Redesignation Survey
- The Joint Commission Comprehensive Stroke Center Recertification Review

Infection Prevention & Control

The Infection Prevention & Control team’s 2017 priorities included:

- Maintaining our improvements in **hand hygiene, central-line-associated blood stream infections (CLABSIs), and catheter-associated urinary tract infections (CAUTIs)**
 - CLABSI reduction efforts focused on 8W Blood and Marrow Transplant unit
 - CAUTI reduction efforts focused on 6E Neurosurgical ICU and step-down unit

- Continued leadership of a ***Surgical Site Infection multidisciplinary workgroup*** with focus on Orthopedic and C-Section infections.
- Detailed ***analysis of each healthcare associated infection*** to identify patterns, trends, and opportunities for improvement
- Assisting the success of the second year of our ***mandatory influenza vaccination program*** for all UI Health employees that achieved 100% compliance (5,541 out of 5,541 employees) during the 2016-2017 influenza season (October 2016 through March 2017).
- Enhanced reporting and dissemination of ***infection-related performance data***
- Collaboration with Bed Control to improve ***proper patient placement*** and throughput
- Continued ***partnerships with leaders and staff*** to improve infection control practices and to educate patients and our workforce on key infection prevention topics

Supporting our Education and Research Missions

Our Quality & Patient Safety teams continue to provide support, consultation, and facilitation for the important body of work that collectively comprises UI Health's performance improvement journey. Some examples include the following:

- We are partnering with the College of Medicine to ensure successful implementation of the new Association of American Medical Colleges (AAMC) Entrustable Professional Activities (EPAs), primarily EPA13: Identify system failures and contribute to a culture of safety and improvement.
- We redesigned and deliver all course content on Quality and Patient Safety for the School of Public Health's MHA and Executive MHA programs.
- We have been advising the College of Nursing on its BSN and DNP curriculum revisions including development of a Quality and Patient Safety course, which we help teach.
- Our leaders and staff also continue to provide frequent classroom training for undergraduate and graduate programs at most of our health sciences colleges.
- We continue to offer training to leaders and staff throughout our hospital and clinics on Improvement Methodology and basic improvement tools and techniques.
- A Leadership Book Club established in 2015 continues to serve as a forum for leaders across departments and disciplines to learn together and support each other through the challenges and successes of our efforts to improve care and outcomes at UI Health.