

## Annual Quality and Patient Safety Report University of Illinois Board of Trustees Meeting January, 2016

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 2015 highlights are briefly outlined below.

### Quality & Patient Safety Division

Directed by the Associate Vice President for Health Affairs, 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 President for Health Affairs, and UIC health sciences colleges.

### FY16 Quality & Patient Safety Goals

In June 2015, QSSL finalized its FY16 Quality & Patient Safety priorities and targets, including the launch of a Zero Harm initiative aimed at the eventual elimination of all patient- and employee-related harm at UI Health. As a starting point, our FY16 Zero Harm efforts are focusing on 8 types of patient-related and 4 types of employee-related harm.

1. **Zero Harm:** Decrease the overall incidence of the following types of patient- and employee-related harm by 10 to 20%:

#### ***Patient-Related Harm***

Central Line-Associated Blood Stream Infections  
Catheter-Associated Urinary Tract Infections  
Surgical Site Infections  
Post-Operative DVTs/PEs  
Inpatient Falls Resulting in Injury  
Hospital-Acquired Pressure Ulcers  
Medication Errors Resulting in Harm  
Sentinel Events

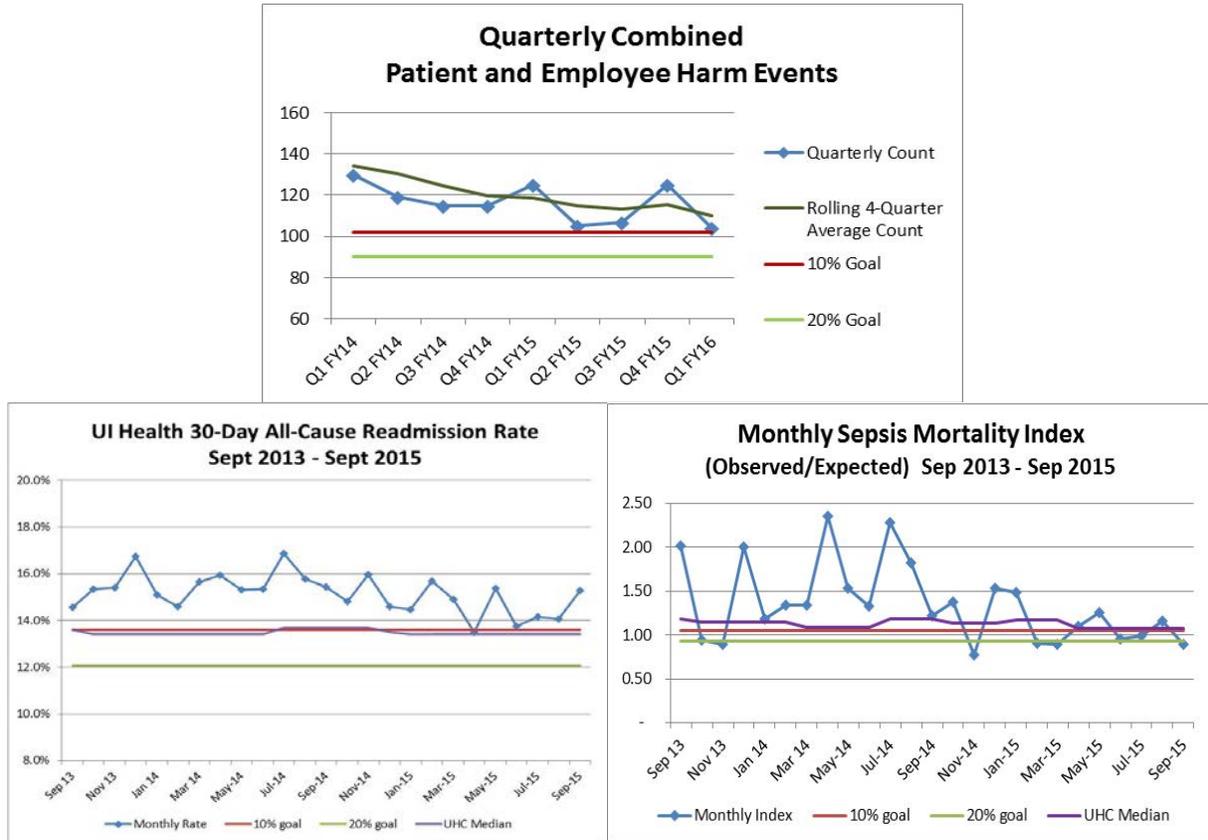
#### ***Employee-Related Harm***

Sharps Injuries  
Injuries from Patient Handling  
Slips / Trips / Falls  
Injuries from Violent Acts

2. **30-day All-Cause Readmissions:** Decrease 30-day All-Cause Readmissions by 10 to 20%
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, 2015. For each of these priority areas, multidisciplinary project teams and detailed project plans have been formed and implementation of those plans is now underway.

Performance is being tracked monthly by QSSL, and progress is shared broadly each month throughout UI Health. Our most recent performance is as follows:



### Continuing Improvements and Quality & Safety Performance

Several of our FY16 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 these areas, as summarized here:

Priority	Improvement since 1/2015	Improvement since 1/2013
Central Line-Associated Blood Stream Infections (CLABSIs)	2% ▼	59% ▼
Catheter-Associated Urinary Tract Infections (CAUTIs)	5% ▼	58% ▼
Post-Operative Deep Venous Thrombosis (DVT) and Pulmonary Embolism (PE)	- 3% ▲	23% ▼
30-day All-Cause Readmissions	4% ▼	5% ▼
Sepsis Mortality Index (Observed / Expected)	26% ▼	34% ▼
Total Inpatient Mortality Index (Observed / Expected)	7% ▼	9% ▼
Hand Hygiene Compliance	10% ▲	37% ▲

## **Patient Safety & Risk Management**

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

### *Risk Management Consultation and Education*

The Safety & Risk 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.

### *Risk Management Assessment*

During 2015, comprehensive risk assessments for our Interventional Radiology and Labor & Delivery service lines were conducted. Positive accomplishments as well as opportunities for improvement were identified for both services. Executive leadership, with the assistance of Safety & Risk, prioritized improvement opportunities, and implementation of these improvements is now underway. A Medical Staff Services risk assessment was recently conducted; that report will be available in early 2016.

### *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 Safety & Risk team investigated 24 patient events in 2015, nine of which were deemed sentinel events. Contributing factors identified as part of the root cause analysis include staffing issues in seven of the 24 events and, most commonly, lack of standardized workflows or variations in practice. The following patient safety events occurred and were evaluated in 2015 (sentinel events are asterisked):

- Retained foreign object following an invasive procedure\*
- Invasive procedure on the wrong site\*
- Severe maternal morbidity\*
- Hand-off communication in Labor and Delivery
- Pediatric sepsis alert management and treatment protocol implementation
- Psychiatric inpatient elopement
- Boarding of psychiatric patients in the Emergency Department
- Inpatient use of illicit drugs
- Communication in the Operating Room
- Unanticipated death of a term infant\*
- Severe hyperbilirubinemia\*
- Medication error with temporary severe harm\*

Evaluation of these patient safety events has led to the identification and implementation of numerous process improvements. These include standardized work flows, definition of standard

work to reduce process variation, policy and procedure development and revision, and staff education.

The Safety & Risk 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 Safety & Risk team activates peer-to-peer support for clinicians who have been involved in or affected by patient harm events.

### *Culture of Safety Survey and Action Plan*

A Culture of Safety Survey was conducted in early 2015, with results demonstrating broad improvements from our 2013 survey. Each UI Health clinical team developed a Culture of Safety Action Plan based on their team-specific scores, and Safety & Risk led an organization-wide workgroup in developing and implementing an organizational Action Plan.

HOSPITAL SURVEY	UIH 2015	UIH 2013	UIH 2011	AHRQ Median	Improvement since 2011	Improvement since 2013
Teamwork within Units	70%	62%	58%	81%	12%	8%
Supervisor/manager expectations & actions promoting safety	63%	58%		76%		5%
Organizational learning - Continuous improvement	64%	60%		73%		4%
Management Support for Patient Safety	55%	55%	53%	72%	2%	0%
Feedback & Communication About Error	55%	44%	42%	66%	13%	11%
Overall Perceptions of Patient Safety	49%	47%	45%	66%	4%	2%
Frequency of Events Reported	56%	47%	45%	65%	11%	9%
Communication Openness	52%	48%	46%	62%	6%	4%
Teamwork across Units	43%	39%		59%		4%
Staffing	38%	38%		55%		0%
Handoffs & Transitions	30%	27%		46%		3%
Nonpunitive Response to Error	33%	29%	25%	43%	8%	4%
CLINIC SURVEY	UIH 2015	UIH 2013	UIH 2011	AHRQ Median	Improvement since 2011	Improvement since 2013
Teamwork	73%	61%	61%	89%	12%	12%
Patient Care Tracking / Follow-Up	65%	38%		88%		27%
Overall Perceptions of Patient Safety & Quality	60%	47%		82%		13%
Organizational Learning	61%	50%		82%		11%
Staff Training	61%	54%		77%		7%
Communication about Error	55%	44%	40%	70%	15%	11%
Leadership Support for Patient Safety	49%	44%		70%		5%
Office Processes and Standardization	47%	39%		70%		8%
Communication Openness	53%	43%	42%	68%	11%	10%
Work Pressure and Pace	33%	29%		50%		4%

*AHRQ: Agency for Healthcare Research & Quality. Green shading indicates improvement from prior period.*

As one element of this Action Plan, the Safety & Risk team recently began a quarterly Grand Rounds series targeted to all UI Health staff. The goals of this forum are to communicate lessons learned from patient safety events, facilitate staff engagement in safety behaviors, and promote adoption of best practices to improve patient and workplace safety.

### **Quality Performance & Improvement**

Our Quality Performance & Improvement team supports 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 capacity" through clinician education, consultation with leaders and staff, and facilitation of improvement teams

In 2015, the Quality team played an instrumental role in securing UI Health's participation in the Illinois Surgical Quality Improvement Collaborative (ISQIC) and wrote a successful ISQIC Pilot Grant proposal. The team is also laying the groundwork for our organization's 2016 involvement in CMS's Partnership for Patients initiative through the University HealthSystem Consortium.

### **Accreditation & Clinical Compliance**

The Accreditation & Clinical Compliance team facilitates ongoing readiness strategies to promote compliance with standards for accreditation by The Joint Commission, as well as other regulators including CMS and the Illinois Department of Public Health. In 2015, this included support for regulatory surveys of our Dialysis, Transplant, and Psychiatry programs, as well as a successful visit in April 2015 in which UI Health achieved Joint Commission Certification as a Comprehensive Stroke Center.

The team's current focus is assisting UI Health in final preparations for our next full accreditation survey by The Joint Commission, which is due to occur in late 2016.

### **Infection Prevention & Control**

The Infection Prevention & Control team's 2015 priorities included:

- Efforts resulting in additional improvements in hand hygiene, central-line-associated blood stream infections (CLABSIs), and catheter-associated urinary tract infections (CAUTIs)
- Assisting the successful development and implementation of a mandatory influenza vaccination program for all UI Health employees
- Launch of a Surgical Site Infection multidisciplinary workgroup
- Enhanced reporting and dissemination of infection-related performance
- Detailed analysis of each healthcare associated infection to identify patterns, trends, and opportunities for improvement
- 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 and 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:

- Our team assisted with recent curriculum redesigns for the College of Nursing's MS and DNP programs, the College of Medicine's MS in Patient Safety Leadership program, and the School of Public Health's MHA and Clinician Executive MHA programs. Q&PS leaders and staff provide frequent classroom training for these and other undergraduate and graduate programs at our health sciences colleges.

- We contributed to a number of successful grant proposals in 2015, and are actively partnering with grant-funded initiatives including PARTNER, CAPriCORN, and the Great Lakes Practice Transformation Network.
- We are currently collaborating with several attending physicians and Program Directors to standardize and streamline Quality Improvement training for residents and fellows.
- 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 this year has created a new 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.

### Broad and Sustained Improvement

One of the tools the Quality and Patient Safety division uses to track UI Health’s progress is the University HealthSystem Consortium’s “Vitals in Performance” dashboard. This VIP dashboard includes a total of 20 quality and patient safety measures in four categories:

1. Improving Survival
2. Coordinating Care
3. Reducing Variations in Care, and
4. Preventing Patient Harm.

Our performance on these metrics demonstrates that we are continuing to achieve sustained and significant improvements across a broad portfolio of quality and safety priorities.

