

Aligning Multiple Data Sources for Quality, Regulatory Compliance, and Documentation Improvement around Hospital-Acquired Conditions

ABSTRACT

Regulators and payers are beginning to focus attention on hospital-acquired conditions (HACs) with the expectation that hospitals should not get paid for certain types of complications that arise during the course of patient care. Hospitals need to develop systems and processes that allow for measurement and tracking of HACs not just for quality improvement but also for financial reimbursement and regulatory compliance.

BIOGRAPHY

Brian Taylor, PhD

Director of Clinical Analytics
New York Presbyterian Healthcare System

Dr. Taylor is the Director of Clinical Analytics for the New York Presbyterian Healthcare System. In his role, he oversees the development and implementation of quality metrics, policy analysis, and quality research for the System. He is also responsible for coordinating two of the System's councils—chief medical officers and coding/documentation specialists.

Wazim Narain, MPH

Specialist, Data Analytics / Business Solutions Group
New York Presbyterian Healthcare System

Wazim Narain is a Specialist in the Data Analytics/ Business Solutions group at New York Presbyterian Hospital. He is responsible for producing, analyzing and presenting data from internal and external databases maintained by the hospital. He supports service line staff, quality and patient safety division and hospital administration in the use of data to evaluate clinical operations and outcomes. He is currently pursuing his PhD in Biomedical Informatics.

Aligning Multiple Data Sources for Quality, Regulatory Compliance, and Documentation Improvement around Hospital Acquired Conditions

Brian Taylor, PhD
Director, Clinical Analytics
Wazim Narain
Specialist Clinical Information Support Services

Changing Health Care Landscape

- Institute of Medicine report 1999
 - Between 44,000 – 98,000 people die in hospitals every year from medical errors that could have been prevented
 - Medical errors cost to society ~ \$17B – \$29B / yr
 - Errors arise from faulty systems, processes, and conditions that lead health care providers to make mistakes or fail to prevent them
- Recommended
 - National focus on ensuring safety
 - Identifying and learning from errors through mandatory public reporting
 - Raising performance standards and expectations
 - Implementing safety systems and fostering a “culture of safety”

National Quality Forum

- Private, not-for-profit membership organization representing virtually every sector of the health care system.
 - Sets national priorities and goals for performance improvement
 - Endorses national consensus standards for measuring and publicly reporting on performance
 - Promoting the attainment national goals through education and outreach program

Cost Containment

- Health care costs continue to rise faster than inflation
 - ~15% of every \$ spent is on health care
- Payers want to pay for quality, not volume
 - CMS is interested in transforming from a passive payer to an active purchaser of quality care
- Value-based Purchasing (VBP)
 - Transition from pay-for-reporting to pay-for-performance
- Health Care Reform efforts
 - Expand coverage
 - Reduce waste, fraud, inefficiencies
 - Improve quality
 - Cut costs

Fraud & Compliance

- Recovery Audit Contractors (RAC)
 - Find and prevent waste, fraud and abuse in Medicare
 - 3-year RAC demonstration program in California , Florida , New York , Massachusetts , South Carolina and Arizona collected over \$900 million in overpayments and nearly \$38 million in underpayments returned to health care providers
- Zone Program Integrity Contractors (ZPICs)
 - Responsible for ensuring the integrity of all Medicare-related claims
 - Parts A and B (hospital, skilled nursing, home health, provider and durable medical equipment claims)
 - Part C (Medicare Advantage health plans)
 - Part D (prescription drug plans)
 - Coordination of Medicare-Medicaid data matches
- New York State
 - Office of the Medicaid Inspector General

Quality Metrics

- Hospital Compare
 - Process of care, outcomes (mortality), efficiency (readmissions), patient experience (HCAHPS)
- HealthGrades, US News & World Report, Thomson-Reuters “Top 100”
- Agency for Healthcare Research & Quality (AHRQ)
 - Quality indicators for inpatient care, patient safety, prevention, pediatric
- Present on Admission
- ICD-10 in 2013

Health Information Technology

- US health care system is extraordinarily fragmented
 - Cost
 - Medical errors
 - Inefficient
- HIT
 - Facilitate communication between providers
 - Exchange patient information
 - Measure and improve performance
 - Translate clinical knowledge and skills into practice
 - Care processes based on best practices
- Meaningful Use 2010

(No) Pay for (No) Performance

- Hospital Acquired Conditions (HAC)
- Serious Adverse Events (SAE)
- Hospitals should **not** be paid more for certain complications that occur in the inpatient setting
- HACs = Federal: Billing implications for Medicare
- SAEs = NYS: Billing implications for Medicaid

(No) Pay for (No) Performance

- Beginning October 1, 2008, CMS no longer pays the incremental reimbursement associated with hospital-acquired conditions (HACs) having the following characteristics:
 - High volume and/or high cost
 - A complication or comorbidity that can influence DRG-based payment
 - A condition for which clinical evidence-based guidelines suggest could **reasonably** be prevented
- CMS HACs FFY 2009
 - Foreign object retained after surgery
 - Air embolism
 - Blood incompatibility
 - Pressure ulcers
 - Hospital-acquired injuries
 - Catheter-associated UTI
 - Vascular catheter-associated infections
 - Surgical site infections following CABG, bariatric surgery, specific orthopedic procedures
 - DVT/PE for specific orthopedic procedures
 - Manifestations of poor glycemic control
 - Wrong site/ wrong patient/ wrong procedure**

Medicaid SAEs

- The New York State government developed a separate list of Serious Adverse Events, (SAE) including four which mirror the federal Medicare HAC list & payment policy:
 - Foreign object retained after surgery
 - Air embolism
 - Blood incompatibility
 - Wrong site/pt/procedure
- Seven additional SAE's were added to the list effective Nov 1, 2009

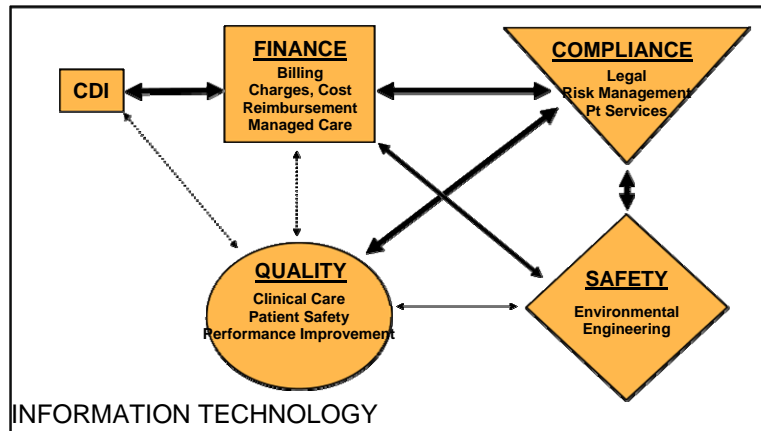
Seven SAEs Effective November 1, 2009

- Patient disability* associated with:
 - Medication error
 - Contaminated drugs, devices, biologics
 - Use or function of a device in which the device is used or functions other than as intended
 - Electric shock while being cared for in a healthcare facility
 - Burn incurred from any source
 - Use of restraints or bedrails
 - Oxygen or other gas line contains the wrong gas or is contaminated by a toxic substance
- *"disability" = any event which increases cost

Multiple Reporting Agencies

		REPORTING AGENCIES							
				NY State DOH Reporting					
		Billing Data	Nursing (PDHQP)	NYPORTS	Blood Bank	Cardiac	Hospital - Acquired Infections (HAIHQ)	Surgical Care Improvement (SCIHQ)	Bariatric Surgery (ACS BSCQ)
Never Events	Retained foreign body	◆		◆					◆
	Blood incompatibility	◆			◆				
	Air embolism	◆							
	Catheter-associated UTI	◆						◆	◆
Serious Adverse Events	Central line infections	◆					◆		
	In-Hospital injuries	Fractures	◆	◆	◆				
		Dislocation	◆	◆	◆				
		Intracranial	◆	◆	◆				
		Crushing	◆		◆				
		Burns	◆		◆				
		Shock	◆		◆				
	Poor glucose control	◆							
	SSI: Mediastinitis post-CABG	◆				◆	◆		
	SSI: Select orthopedic proc	◆					◆		
	SSI: Bariatric surgery	◆					◆	◆	◆
	DVT-PE: Select orthopedic proc	◆		◆					
	Hospital-acquired pressure ulcers	Stage 1	◆	◆					
		Stage 4	◆	◆					
		Unspecified	◆	◆					
		Unstageable	◆	◆					

Hospital Operations in Silos



Silos and HACs Don't Mix in Today's Environment

- Data for hospital-acquired conditions may reside in multiple homes...
 - Finance: Discharge/billing data
 - Compliance: Case management for serious adverse events
 - Quality: Clinical care assessments (e.g. nursing)
 - Information Technology: Electronic Health Record
- Quality and patient safety metrics can tell different stories...
 - Data home?
 - Metric definition? (numerator, denominator)
 - Benchmark? (UHC, Thomson, AHRQ)
- Results in mixed messages...
 - Hospital leadership, Board of Trustees, public, hospital operations
- Compliance problem?
 - RAC, NY State OMIG

Nursing Data: National Database for Nursing Quality Indicators (NDNQI)

- Safety & Quality Initiative launched in 1994 by the American Nurses Association (ANA) to assess nursing care and outcomes
- Approximately 1200 hospitals nationwide currently participate
 - Benchmarking on comparative unit levels: Med/Surg, ICU, Rehab
- NQF has endorsed many NDNQI indicators including:
 - Falls & falls w/injuries
 - Pressure ulcers
 - Nosocomial infections (VAPS, CLABS, CA-UTI)
 - Restraint prevalence

NYPH Nursing Data

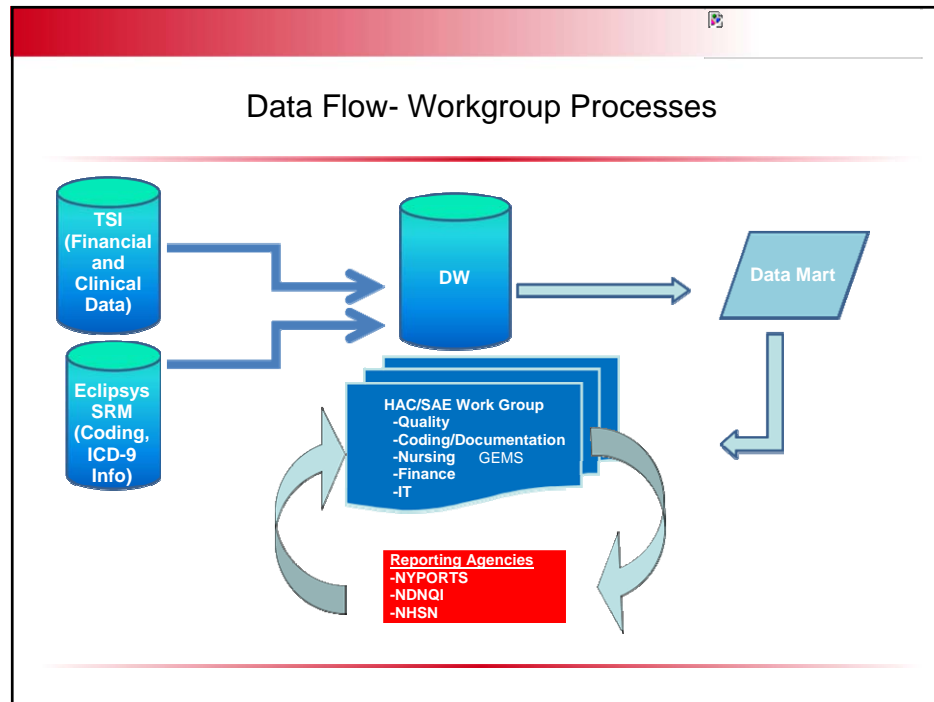
- Pressure Ulcers (NDNQI)
 - Prevalence (100% sampling) by nursing once a month on every inpatient unit (snapshot)
 - Identify patients with pressure ulcers, stage the pressure ulcer(s), and determine if community- or hospital-acquired
- Falls with Injury
 - Fall reports from NYPH medical event reporting system (MERS) are extracted and reviewed to assign injury level prior to reporting in NDNQI
 - MERS designed to capture:
 - Events that cause harm ("misadventure")
 - Events that did not cause harm ("no-harm events")
 - Events that almost occurred ("near miss" or "good catch")
 - Dangerous situations that could cause a future event

NYPORTS

- New York Patient Occurrence and Report Tracking System
- Adverse reporting system for all hospitals in NY State
 - “An occurrence is an unintended adverse and undesirable development in a patient’s condition”
- Number of event categories
 - Burns
 - Falls
 - DVT/PE
 - Medication errors
- Some events require a root cause analysis review that is reported to the State

NewYork-Presbyterian Hospital Response to a Changing Environment

- Internal “HAC” workgroup in late 2008 in response to CMS implementation of hospital-acquired conditions
- Representation from:
 - Quality
 - Nursing
 - Coding/documentation
 - Finance
 - IT



Concerns with HAC Policy

- Punitive approach
 - Necessary emphasis on root cause analysis
- Not all HACs/ SAEs are preventable
 - E.g. Surgical site infections, DVT/PE
- Determination of POA status
- Patient Non-Compliance
- Documentation/ Coding errors
- Primarily data driven
 - Is knowledge acquired "actionable"
 - Need for expected rates and benchmarking
- Affect patient care
 - Increased testing/ screening (e.g. to show pre-existing conditions), increase costs
 - Need to risk adjust for more susceptible populations (e.g. burn, palliative care)

Rising Role of HIT

- Boosted by American Recovery and Reinvestment Act of 2009
 - \$23 billion set aside for investment in the development and implementation of HIT
 - Promote “meaningful use” of HIT
 - HIT’s capability to further the goals of information exchange among health care professionals
- Facilitate coordination and continuity of health care
 - Smooth electronic exchange of health information and computerized decision support
- Maximize quality, safety and efficiency of health care delivery systems
- Avoid redundancy
- Reduce overall health care expenditure

HIT Challenges and Concerns

- High costs associated with adoption, implementation and maintenance
- Lack of uniform standards for recording and exchanging clinical information
- Disclosure and sharing of information
- Data entry errors
- Limits human interaction
- Does not account for clinician professional judgment
- Enforces pay for performance
- Multiple points of data entry (fragmented health care system)

QUESTIONS?

- Contact Info
 - Brian Taylor, PhD
brt9012@nyp.org
212.746.1711
 - Wazim Narain
wan9005@nyp.org
212.297.4233