Implementing QI Validation Tools for Coding and Clinical Quality Improvement in Academic Medical Centers

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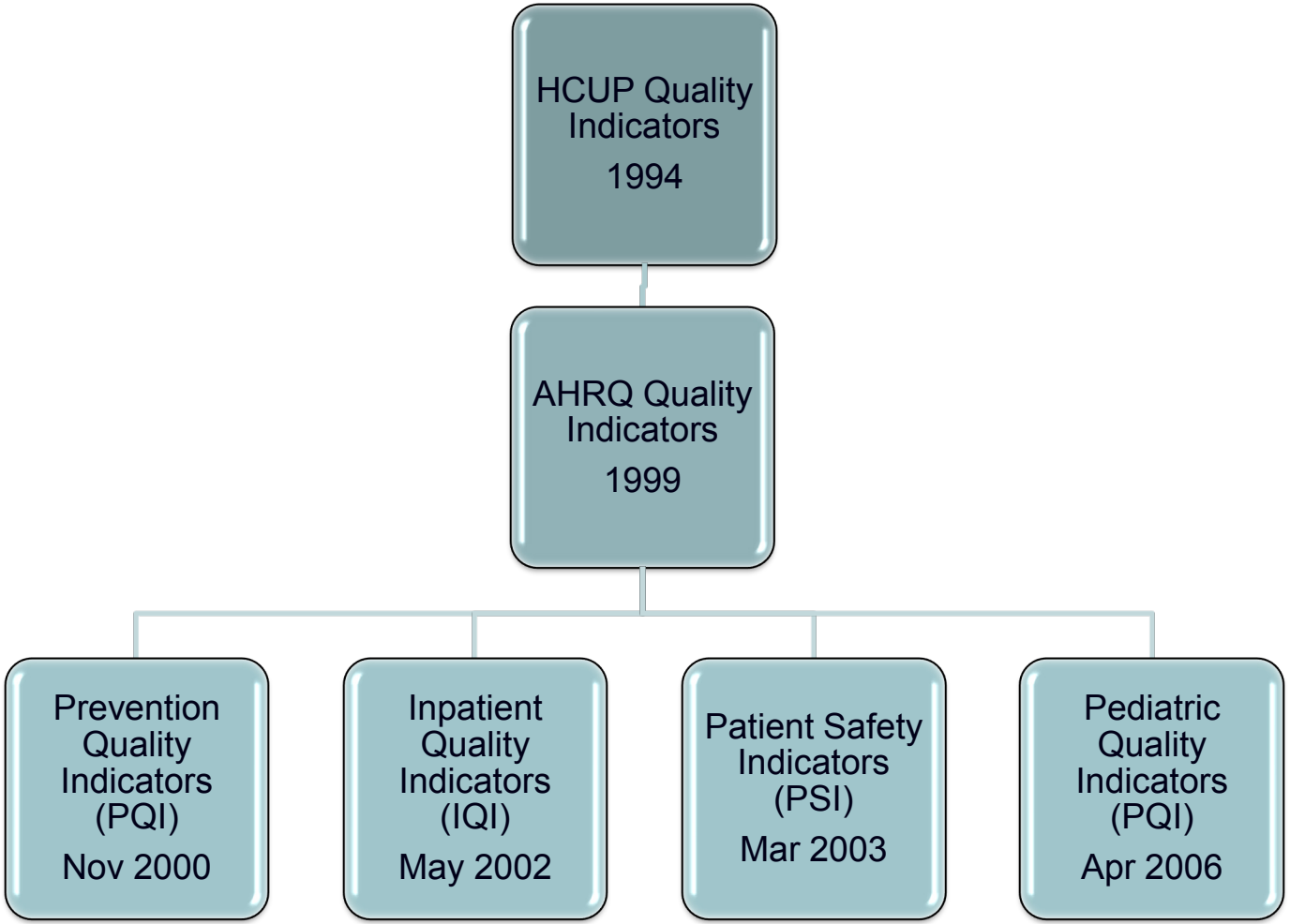
Objectives

- Recognize the importance of validation efforts to healthcare providers (Academic Medical Centers in particular)
  - National Landscape
  - Describe the Annual UHC Performance Ranking and the use of the PSI's
- Identify the tools and techniques used in QI validation
  - Chart Review
  - Case Control Study
  - Case Scenarios
- Assess the role validation serves in successfully implementing improvement activities
  - Improving Practice and Outcomes: Success Stories
  - Why other providers should also be interested in QI validation

Why is QI Validation Important to Academic Medical Centers?

Proliferation of QI indicators over time



Why is QI Validation Important to Academic Medical Centers?

Visibility in an array of (increasingly public) venues

Type of Organization	Public Reporting	Quality Improvement/ Benchmarking	Pay-for-Performance	Research	Other/Unknown
Business Group	X				
Consulting Firm				X	
Employer		X			
Federal Government		X	X	X	
Health plan	X	X	X		X
Hospital Association	X	X		X	
Hospital or Hospital Network	X	X		X	X
Integrated Delivery System		X			X
Other	X	X			X
Research Organization		X		X	X
State or Local Government	X	X		X	X

RAND Analysis of environmental scan results, 2007

"Evaluation of the Use of AHRQ and other Quality Indicators", AHRQ Publication No. 08-M012-EF December 2007

Why is QI Validation Important to Academic Medical Centers

Reimbursement

- Similar metrics in DRG-based reimbursement now
- QI indicators to be incorporated into Value Based Purchasing starting in Federal Fiscal Year 2015

Improvement

- More complex patients more prone to certain conditions
- To guide improvement, AMCs need to be confident that the QIs are identifying:
  - The appropriate target populations
  - The appropriate risk factors

Comparative Ranking of UHC Members has driven a focus on all aspects of improvement

Since 2005, on an annual basis, UHC has ranked performance of all of its principal members on selected dimensions of quality

Domain	2005	2006	2007	2008	2009	2010	2011
Mortality	30%	30%	35%	30%	30%	30%	25%
Safety	30%	30%	20%	25%	30%	30%	25%
Effectiveness	30%	30%	35%	30%	30%	30%	25%
Equity	10%	10%	10%	10%	5%	5%	5%
Patient Centeredness	Y	Y	Y	5%	5%	5%	10%
Efficiency	Y	Y	Y	Y	Y	Y	10%

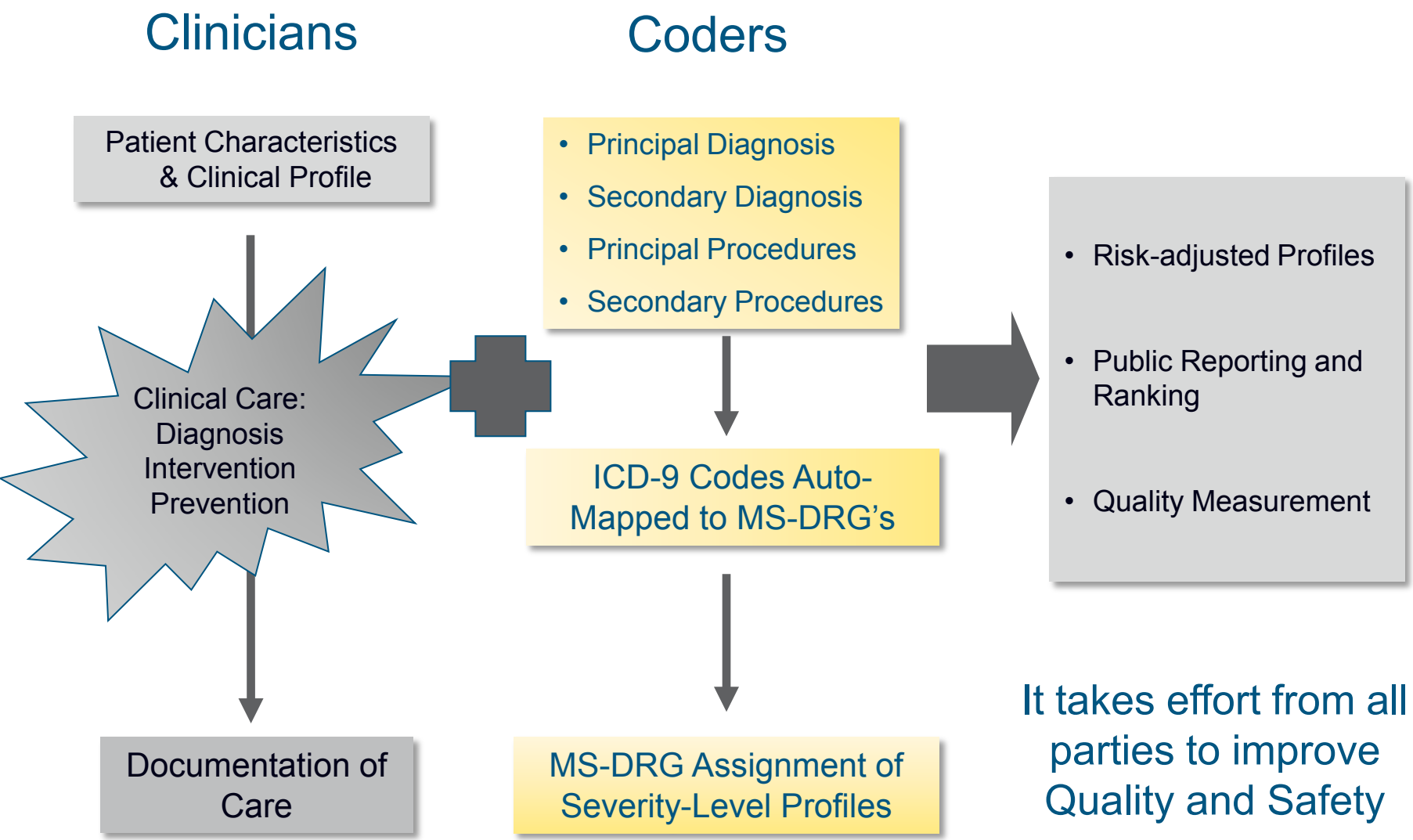
Y= performance levels provided but no included as a component in the overall ranking

UHC Quality& Accountability Study: Safety Domain, 2011

Domain	Metrics	Weighting
Safety	Based on 6 Patient Safety Indicators - PSIs (Developed by the Agency for Healthcare Research and Quality –AHRQ version 4.2, 3.2 for PSI-3 only))	25%

Metric	Observed/Expected Ratio			
	Mean	Median	Minimum	Maximum
PSI-7 Central line–associated bloodstream infection	0.79	0.68	0.10	2.49
PSI-3 Pressure ulcer, all stages	1.38	1.18	0.09	4.38
PSI-6 Iatrogenic pneumothorax	1.17	1.18	0.13	3.36
PSI-9 Postoperative hemorrhage and hematoma	2.05	2.00	0.60	4.03
PSI-11 Postoperative respiratory failure	1.15	1.08	0.50	2.52
PSI-12 Postoperative pulmonary embolism or deep vein thrombosis	0.71	0.62	0.26	2.25

Improving Patient Care is a Team Sport



UHC's Approach to Improvement – Connections to QI validation

Benchmark and Share Best Practices for Clinical Care, Documentation and Coding

Clinical Care - Appropriate Population and Risk Factors

- Understand measures of performance (i.e. numerator and denominator)
- Understand the evidence based practice associated with the treatment of a condition or prophylaxis
- Evaluate actual patient care provided in relation to evidence based practice
- Determine the factors that influence the outcome of interest

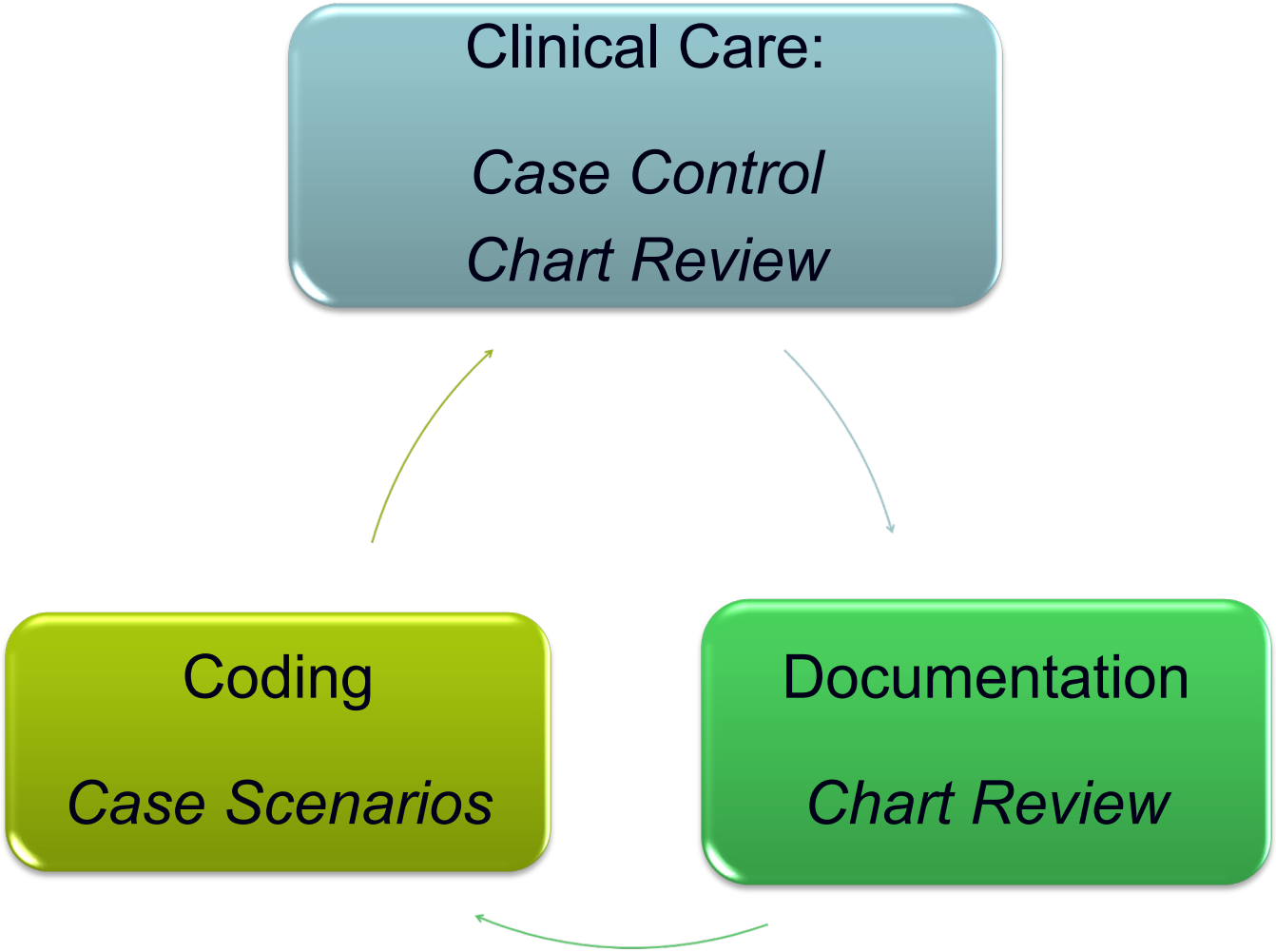
Documentation – Accurate reflection?

- Timely documentation to define the condition as co-morbid vs. complication
- Appropriate terminology to represent the severity of illness of the patient
- Terms that describe the severity of the condition
- Clarification regarding conditions that are ruled-out

Coding – Correct, Consistent translation

- Consistent interpretation of the condition
- Correct selection of codes to represent patient condition and care

QI Validation – Dimensions and Tools



UHC VTE Benchmarking Project

Project Goals:

- Identify opportunities to improve prophylaxis methods to consistently meet evidence-based practice guidelines.
- Demonstrate that some patients receiving evidence-based prophylaxis still developed VTEs.
- Learn which patient characteristics or other criteria are most commonly present in VTE cases.

Patient Population of Focus: Total Knee Replacement (TKR)

CDB Analysis

In addition to review of impact of prophylaxis methods and guideline compliance, also reviewed accuracy of case identification in PSI 12, Post-operative DVT/PE.

UHC VTE Benchmarking Project - Coding and documentation of VTEs for TKR: Case Control and Chart Review

Work with team from UC Davis Health System

Applied PSI 12 (post-operative DVT/PE) Version 4.1 to eligible cases with POA flags.

- Additional DVT/PE cases were captured by applying the same ICD-9-CM definition to POA diagnoses on records within 90 days of the TKR discharge.

Flagged cases (n=126) and non-flagged controls (n=463) were audited at each participating hospital.

- When there was a discrepancy between PSI-flagged status and the abstractor's determination, a detailed review was conducted to identify reasons for the discrepancy.

Data Collection Tool – element categories captured:

- Administrative*
- Demographics*
- Surgery & Screening
- Prophylaxis
- Ambulation
- Outcomes

** = data linked with UHC/s Clinical DataBase/Resource Manager (CDB/RM) for validation*

VTE Benchmarking Project - Data Collection Tool: Administrative

A. ADMINISTRATIVE

1. Encounter number: **(CDB)** (required) |__|__|__|__|__|__|__|__|__|__|__|__|__|__|__|__|__|__|__|__|
2. Age: ___ years **(CDB)** (required)
3. Hospital admission date **(CDB)** (required)

   Date: ____/___/_____**(mm/dd/yyyy)**
4. Hospital discharge/death date **(CDB)** (required)

   Date: ____/___/_____**(mm/dd/yyyy)**
5. Was a Total Knee Replacement (TKR) or revision performed in an operating room at any time during this hospitalization? **(CDB)** (check one) (required)

   ☐ Yes – Primary TKR - Unilateral
   ☐ Yes – Primary TKR - Bilateral
   ☐ Yes – Revision for mechanical problem
   ☐ Yes – Revision for infected prosthesis (exclude)
6. Did the patient have a qualifying hip or knee surgery within 90 days **before** this admission (see clarification document? **(CDB)** (required)

   ☐ Yes (exclude) ☐ No
7. Is admission related to pregnancy, childbirth or puerperium (MDC 14)? **(CDB)** (required)

   ☐ Yes (exclude) ☐ No
8. Did the patient have a **principal** ICD-9-CM diagnosis for DVT/PE for the index admission? **(CDB)** (required)

   ☐ Yes (exclude) ☐ No
9. Did the patient have an acute DVT or PE as a **secondary** ICD-9-CM diagnosis present on admission (POA=Y)? **(CDB)** (required)

   ☐ Yes (exclude) ☐ No

VTE Benchmarking Project - Data Collection Tool: Demographics

B. DEMOGRAPHICS

1. Gender: **(CDB)** (check one) (required)
   - ☐ Male ☐ Female

2. Race/Ethnicity: **(CDB)** (check all that apply) (required)
   - ☐ African-American/Black
   - ☐ Asian
   - ☐ Caucasian/White
   - ☐ Hispanic
   - ☐ Native American/Eskimo
   - ☐ Unknown
   - ☐ Other: (specify) _____

3. Primary Payer: **(CDB)** (check one) (required)
   - ☐ None/Uninsured/Self-pay
   - ☐ Medicaid/Managed Care
   - ☐ Medicare/Managed Care
   - ☐ Private
   - ☐ Unknown/Undocumented
   - ☐ U.S./State/Local government agency
   - ☐ Other: (specify) _____

4. Height _____cm OR _____inches OR ☐ Not documented (required)

5. Weight _____kg OR _____lbs OR ☐ Not documented (required)

6. What was the last hemoglobin value prior to surgery (limit to 30 days prior to admission)? (required)

   Value: _____ (g/dl) ☐ Lab performed but results unknown ☐ Lab not done

7. What was the last hematocrit value prior to surgery (limit to 30 days prior to admission)? (required)

   Value: _____ (%) ☐ Lab performed but results unknown ☐ Lab not done

8. What was the last BUN value prior to surgery (limit to 30 days prior to admission)? (required

   Value: _____ (mg/dl) ☐ Lab performed but results unknown ☐ Lab not done

9. What was the last serum creatinine value prior to surgery (limit to 30 days prior to admission)? (required)

   Value: _____ (mg/dl) ☐ Lab performed but results unknown ☐ Lab not done

10. Indicate which of the following risk factors were co-morbid (present on admission): (check all that apply) (required)
    - ☐ Diabetes **(CDB)**
    - ☐ Hypertension **(CDB)**
    - ☐ History of malignancy **(CDB)**
    - ☐ Current neoplasm **(CDB)**
    - ☐ Documented history/risk of bleeding or hematoma
    - ☐ History of any other surgery (OR procedure within 90 days) at another hospital prior to this admission
    - ☐ Baseline inability to ambulate without assistance from staff (does not include cane/walker use)
    - ☐ Trauma, head trauma, new fractures (within 90 prior to this admission)
    - ☐ Current use of oral contraceptive or system estrogen, progestin, or combined estrogen/progestin therapy
    - ☐ Past Stroke/CVA with residual weakness
    - ☐ Prior history of DVT
    - ☐ Prior history of PE
    - ☐ Family history of VTE
    - ☐ Known thrombophilia
    - ☐ None of the above documented

VTE Benchmarking Project - Data Collection Tool: Surgery & Screening

C. SURGERY AND SCREENING

1. Start date and time of principal procedure (defined as the time of induction of anesthesia): (required)

   Date _____/___/_____**(mm/dd/yyyy)** Time (24-hour clock) _____:_____ **(hh:mm)**

2. End date and time of principal procedure (defined as anesthesia end time): (required)

   Date _____/___/_____**(mm/dd/yyyy)** Time (24-hour clock) _____:_____ **(hh:mm)**

3. End date and time of principal procedure (defined as incision close time): (required)

   Date _____/___/_____**(mm/dd/yyyy)** Time (24-hour clock) _____:_____ **(hh:mm)**

4. Did this patient have more than one surgery requiring an operating room visit during this admission? (required)
   - ☐ Yes
   - ☐ No (skip to question 5)

   4a. Procedure performed (provide two or three word description): _____

   4b. Date/time of this procedure (defined as the time of induction of anesthesia):

   Date _____/___/_____**(mm/dd/yyyy)** Time (24-hour clock) _____:_____ **(hh:mm)**

5. Was the patient screened using ultrasound without DVT suspicion or signs or symptoms noted?
   - ☐ Yes
   - ☐ No (skip to section D)

   5a. Date and time of ultrasound screening:

   Date ___/_____/___**(mm/dd/yyyy)** Time (24-hour clock) ___:___ **(hh:mm)** ☐ Time unknown (required)

VTE Benchmarking Project - Data Collection Tool: Prophylaxis

D. PROPHYLAXIS

1. Did this patient receive pharmacologic VTE ***prophylaxis*** during this admission? (required)
   - ☐ Yes (complete table below)
   - ☐ No (skip to section E)

Pharmacologic Prophylaxis Given	Last dose (if any) prior to incision Date/time given (mm/dd/yyyy, 24-hour clock), dose, and frequency	First post-op dose administered date/ time given (mm/dd/yyyy, 24-hour clock), dose, and frequency	Last date/time given in hospital (mm/dd/yyyy, 24-hour clock); dose, and frequency	Cont. at Dis-charge	Total Duration Prescribed (include post d/c)
☐ Enoxaparin (Lovenox)	((Dt) __/__/__ (Tm) __:__ ☐30 mg q 12 hr ☐40 mg q day ☐other	Dt) __/__/__ (Tm) __:__ ☐30 mg q 12 hr ☐40 mg q day ☐other	Dt) __/__/__ (Tm) __:__ ☐30 mg q 12 hr ☐40 mg q day ☐other	☐Yes ☐No	
☐ Daltaparin (Fragmin)	(Dt) __/__/__ (Tm) __:__ ☐2500 IU q 12 hr ☐5000 IU q day ☐other	(Dt) __/__/__ (Tm) __:__ ☐2500 IU q 12 hr ☐5000 IU q day ☐other	Dt) __/__/__ (Tm) __:__ ☐2500 IU q 12 hr ☐5000 IU q day ☐other	☐Yes ☐No	
☐ Tinzaparin (Innohep)	(Dt) __/__/__ (Tm) __:__ ____ q ____	(Dt) __/__/__ (Tm) __:__ ____ q ____	(Dt) __/__/__ (Tm) __:__ ____ q ____	☐Yes ☐No	
☐ Fondaparinux (Arixtra) (anti-Xa)	(Dt) __/__/__ (Tm) __:__ ☐2.5 mg q day ☐other	Dt) __/__/__ (Tm) __:__ ☐2.5 mg q day ☐other	Dt) __/__/__ (Tm) __:__ ☐2.5 mg q day ☐other	☐Yes ☐No	
☐ Warfarin (Coumadin™)	(Dt) __/__/__ (Tm) __:__ ☐2-10 mg ☐other q ____	(Dt) __/__/__ (Tm) __:__ ☐2-10 mg ☐other q ____	(Dt) __/__/__ (Tm) __:__ ☐2-10 mg ☐other q ____	☐Yes ☐No	
☐ Aspirin	(Dt) __/__/__ (Tm) __:__ ____ mg q ____	(Dt) __/__/__ (Tm) __:__ ____ mg q ____	(Dt) __/__/__ (Tm) __:__ ____ mg q ____	☐Yes ☐No	
☐ Unfractionated heparin subcutaneous	(Dt) __/__/__ (Tm) __:__ ____ q ____	(Dt) __/__/__ (Tm) __:__ ____ q ____	(Dt) __/__/__ (Tm) __:__ ____ q ____	☐Yes ☐No	

VTE Benchmarking Project - Data Collection Tool: Prophylaxis (non-pharmacologic)

E. PROPHYLAXIS CONTINUED

1. Did this patient receive *other* pharmacologic VTE ***prophylaxis*** during this admission? (required)
   - ☐ Yes (complete table below)
   - ☐ No (skip to question 2)

Pharmacologic Prophylaxis Given	Last dose (if any) prior to incision Date/time given (mm/dd/yyyy, 24-hour clock), dose, and frequency	First post-op dose administered date/ time given (mm/dd/yyyy, 24-hour clock), dose, and frequency	Last date/time given in hospital (mm/dd/yyyy, 24-hour clock); dose, and frequency	Cont. at Dis-charge	Total Duration Prescribed (include post d/c)
☐ Other pharmacologic VTE prophylaxis (specify in 1a)	(Dt) __/__/__ (Tm) __:__ ____ q ____	Dt) __/__/__ (Tm) __:__ ____ q ____	Dt) __/__/__ (Tm) __:__ ____ q ____	☐Yes ☐No	
☐ Only IVC filter with no pharmacologic VTE prophylaxis					

1a. Specify other pharmacologic prophylaxis given: _____ (required)

2. Did this patient receive ***non***-pharmacologic VTE ***prophylaxis*** during this admission? (required)
   - ☐ Yes (complete table below)
   - ☐ No (skip to Section F)

Non–Pharmacologic Prophylaxis Given	First date/time ordered (mm/dd/yyyy, 24-hour clock)	Number of hospital days ordered	Continued at Discharge
☐ Intermittent Pneumatic Compression Device	____/____/____ ____:____		☐
☐ Graduated Compression Stockings	____/____/____ ____:____		☐
☐ Foot pumps	____/____/____ ____:____		☐
☐ Other non- pharmacologic VTE prophylaxis (specify in 2a)	____/____/____ ____:____		☐

2a. Specify other non-pharmacologic prophylaxis given: _____ (required)

VTE Benchmarking Project – Data Collection Tool: Ambulation

F. AMBULATION

1. Post-operatively, was the patient ambulating pre-discharge? (check all that apply) (required)

   ☐ Yes, taking steps in room, with or without a walker
   Date ___/___/___**(mm/dd/yyyy)** Time (24-hour clock) ___:___ **(hh:mm)** ☐ Time unknown (required)

   ☐ Yes, weight bearing in physical therapy
   Date ___/___/___**(mm/dd/yyyy)** Time (24-hour clock) ___:___ **(hh:mm)** ☐ Time unknown (required)

   ☐ No ambulation pre-discharge

2. If the patient was administered warfarin during admission, what was the last INR value prior to discharge?

   Value: _____ ☐ Never done ☐ Patient not administered warfarin

VTE Benchmarking Project – Data Collection Tool: Outcomes

G. OUTCOMES

1. For the ***index admission***, what was the final discharge disposition? **(CDB)** (check one) (required)
   - ☐ Death
   - ☐ Transferred to inpatient rehabilitation services
   - ☐ Home on self care/family care
   - ☐ Home with hospice/palliative care services
   - ☐ Transferred to another acute care hospital
   - ☐ Home with home health services excluding hospice
   - ☐ Transferred to inpatient hospice/palliative care facility
   - ☐ Skilled nursing facility
   - ☐ Long-term care facility
   - ☐ Other, specify: _____
   - ☐ Left against medical advice

2. Did this patient have a VTE event prior to discharge OR within 90 days of discharge from the index admission? (check all that apply) (required)
   - ☐ Yes, DVT
   - ☐ Yes, PE
   - ☐ No (skip to question 5)

   2a. Where/when was the VTE event diagnosed?
   - ☐ During the index admission post knee surgery
   - ☐ During an admission for rehabilitation
   - ☐ In the emergency department after discharge from the index admission
   - ☐ In an outpatient clinic after discharge from the index admission
   - ☐ As an inpatient as a direct readmission NOT for inpatient physical therapy

For question series 3 (DVT-related) and series 4 (PE-related) please refer to the earliest VTE event, if more than one event for each type of VTE is selected in question 2a.

3. ***DVT-related***

3a. Date DVT was first suspected: (required)

Date: ___/___/____(mm/dd/yyyy) ☐ Unknown or unclear

3b. Date of diagnosis of DVT confirmed in the medical record: (required)

Date: ___/___/____(mm/dd/yyyy) ☐ Unknown or unclear ☐ Diagnosis not confirmed

3c. Date DVT treatment started: (required)

Date: ___/___/____(mm/dd/yyyy) ☐ Unknown or unclear ☐ Treatment not started

3d. How was the diagnosis of DVT confirmed? (check all that apply) (required)
- ☐ Venous Doppler/Duplex ultrasonography
- ☐ CT scan
- ☐ Contrast venography
- ☐ Other (specify): _____
- ☐ Diagnosis not confirmed

3e. What specific segment(s) of the venous system was/were identified to have the thrombus? (check all that apply) (required)

☐ Location not documented

Upper Limb	Lower Limb	Central
☐ Brachiocephalic vein	☐ Iliac vein	☐ Inferior vena cava
☐ Subclavian vein	☐ Femoral vein	☐ Superior vena cava
☐ Internal Jugular vein	☐ Popliteal vein	
☐ Axillary vein	☐ Peroneal, Anterior or Post Tibial vein	
☐ Brachial vein	☐ Gastroc or Soleal vein	
☐ Cephalic or Basilic vein	☐ Lessor or Greater Saphenous vein	

4. PE-related

4a. Date that PE was first suspected: (required)

Date: ___/___/____(mm/dd/yyyy) ☐ Unknown or unclear

4b. Date that diagnosis of PE confirmed in the medical record: (required)

Date: ___/___/____(mm/dd/yyyy) ☐ Unknown or unclear ☐ Diagnosis not confirmed

4c. Date PE treatment started: (required)

Date: ___/___/____(mm/dd/yyyy) ☐ Unknown or unclear ☐ Treatment not started

4d. How was the diagnosis of PE confirmed? (check all that apply) (required)
- ☐ CT without contrast
- ☐ CT angiogram of the chest with contrast
- ☐ Pulmonary angiogram
- ☐ Ventilation/perfusion scan
- ☐ Other (specify): _____
- ☐ Diagnosis not confirmed

5. If the patient was ***readmitted***, what was the final discharge disposition of the readmission? **(CDB)** (check one) (required)
   - ☐ Death
   - ☐ Transferred to inpatient rehabilitation services
   - ☐ Home on self care/family care
   - ☐ Home with hospice/palliative care services
   - ☐ Transferred to another acute care hospital
   - ☐ Home with home health services excluding hospice
   - ☐ Transferred to inpatient hospice/palliative care facility
   - ☐ Skilled nursing facility
   - ☐ Long-term care facility
   - ☐ Other, specify: _____
   - ☐ Left against medical advice
   - ☐ **Patient was not readmitted**

UHC VTE Benchmarking Project: Results

Post-Op DVT/PE Status	Flagged by PSI 12	Not Flagged by PSI 12
Confirmed via UHC Abstraction Process	125 *(99.2%)*	5 *(1.1%)*
Not Confirmed via UHC Abstraction Process	1 *(0.8%)*	458 *(98.9%)*
Total	126	463

AHRQ PSI 12 can be used with high accuracy to flag post-operative DVT/PE cases and to monitor trends over time

UHC VTE Benchmarking Project: Practice Improvement Opportunities

Routinely monitor and analyze your hospital's DVT/PE rates against internal and external benchmarks.

Provide patients with guideline-directed prophylaxis and focus on the timing of the first post-operative dose.

Promote early ambulation (within 24 hours after surgery) to guard against DVT/PE.

Reduce practice variation and standardize guidelines within the organization and across providers.

- Integrate standardization into the order sets.

Identify and empower a physician champion who can promote best practices and provide education and feedback to all stakeholders.

Establish and support an effective review forum for VTE events.

Postoperative Respiratory Complications Benchmarking Project

Postoperative Respiratory Complications Documentation and Coding Survey

- Follow-up to the Postoperative Respiratory Failure 2007 Benchmarking Project
- Survey purpose: to understand the variation in coding postoperative respiratory failure (PSI 11)
- Case scenario and multiple-choice questions
- Requested that 3 coders from each organization respond
- Sent to UHC full members

CDB Analysis

- Purpose was to examine preferences for the use of PSI 11 codes

Definition PSI 11: Postoperative Respiratory Failure (version 3.1 current at time of study)

Numerator Codes:

Respiratory failure ICD-9-CM secondary diagnosis code

- **518.81:** Diagnosis of acute respiratory failure
- **518.84:** Diagnosis of acute and chronic respiratory failure

OR

Intubation or ventilation ICD-9-CM procedure code with appropriate timing after a qualifying surgical procedure

- **96.04:** Endotracheal tube insertion procedure takes place **1 or more days after** a major operating room procedure—i.e., reintubation
- **96.70:** Continuous ventilation (unspecified duration) or **96.71:** Continuous ventilation (less than 96 hours) identified **2 or more days after** a major operating room procedure
- **96.72:** Continuous ventilation (for 96 hours or more) identified **on or any time after** the day of a major operating room procedure

Denominator:

- Adults undergoing elective operations
- Excludes
  - Diagnoses of respiratory failure on admission
  - Tracheostomy before or during the main procedure
  - Patients with primary respiratory, circulatory, or pregnancy-related process or a neuromuscular disorder

Predictive Value of PSI 11
Data Collection Tool for Chart Review

- 609 flagged cases from 18 UHC-affiliated centers
- Medical records reviewed

Data Collection Form – Categories covered

- Administrative Data*
- Demographics/Patient Factors*
- Surgical Procedures (first, additional)*
- Invasive intubation
- Additional invasive intubations or ventilator support episodes for chronic trach patients
- Outcome

** = data linked with UHC/s Clinical DataBase/Resource Manager (CDB/RM) for validation*

Predictive Value of PSI 11
Benchmarking Project Experience – Chart Review

- 90% of cases had accurate coding
  - Hospitalization not elective in 5%
  - Inaccurate diagnosis, procedure codes in 3%
- **83% of cases represented true PRF**

	Diagnosis Only	Diagnosis or Procedure	Addition of Dx 518.5
Sensitivity	**19%**	**63%***	**67%**
PPV	**74%**	**68%**	**66%**

*** p<0.05**

Romano et al., *Health Serv Res*, 2009

Predictive Value of PSI 11
Coding Experience – Case Scenarios

17 organizations participated

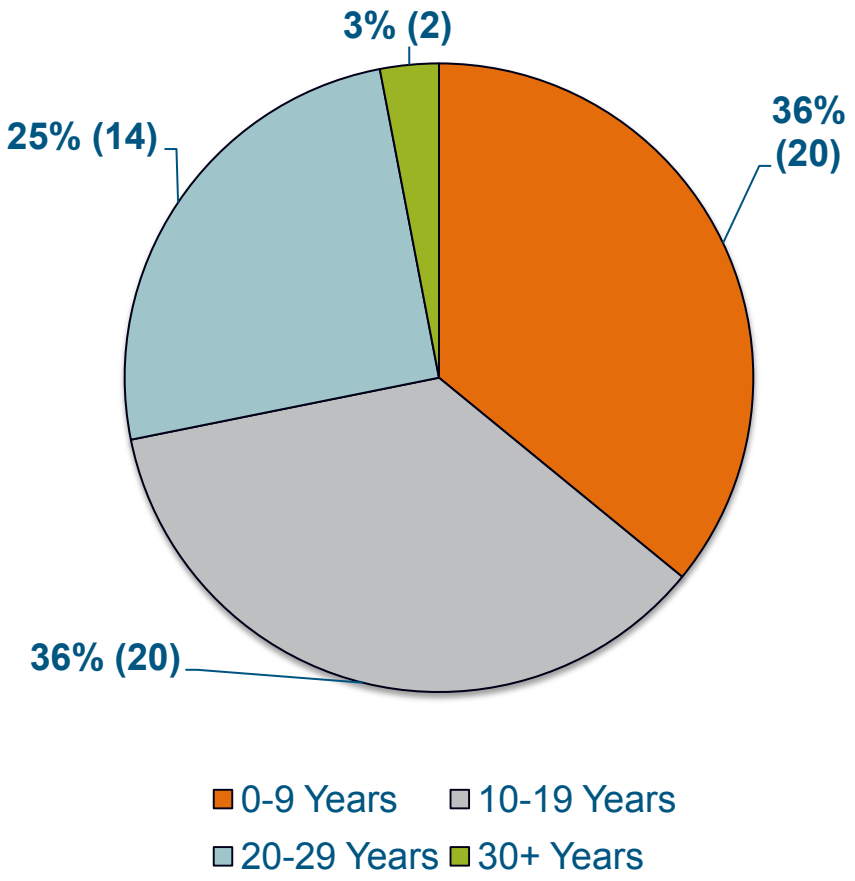
- 3 coders per organization were requested to respond

Total of 56 coders responded

Coding experience

- Average = 13.5 years
- Median = 11.5 years
- Range = 1.5 to 30 years

- Two Case Scenarios concerning postoperative respiratory failure presented for interpretation



Coding Experience Summary and Review: What Do the Survey Results Tell Us?

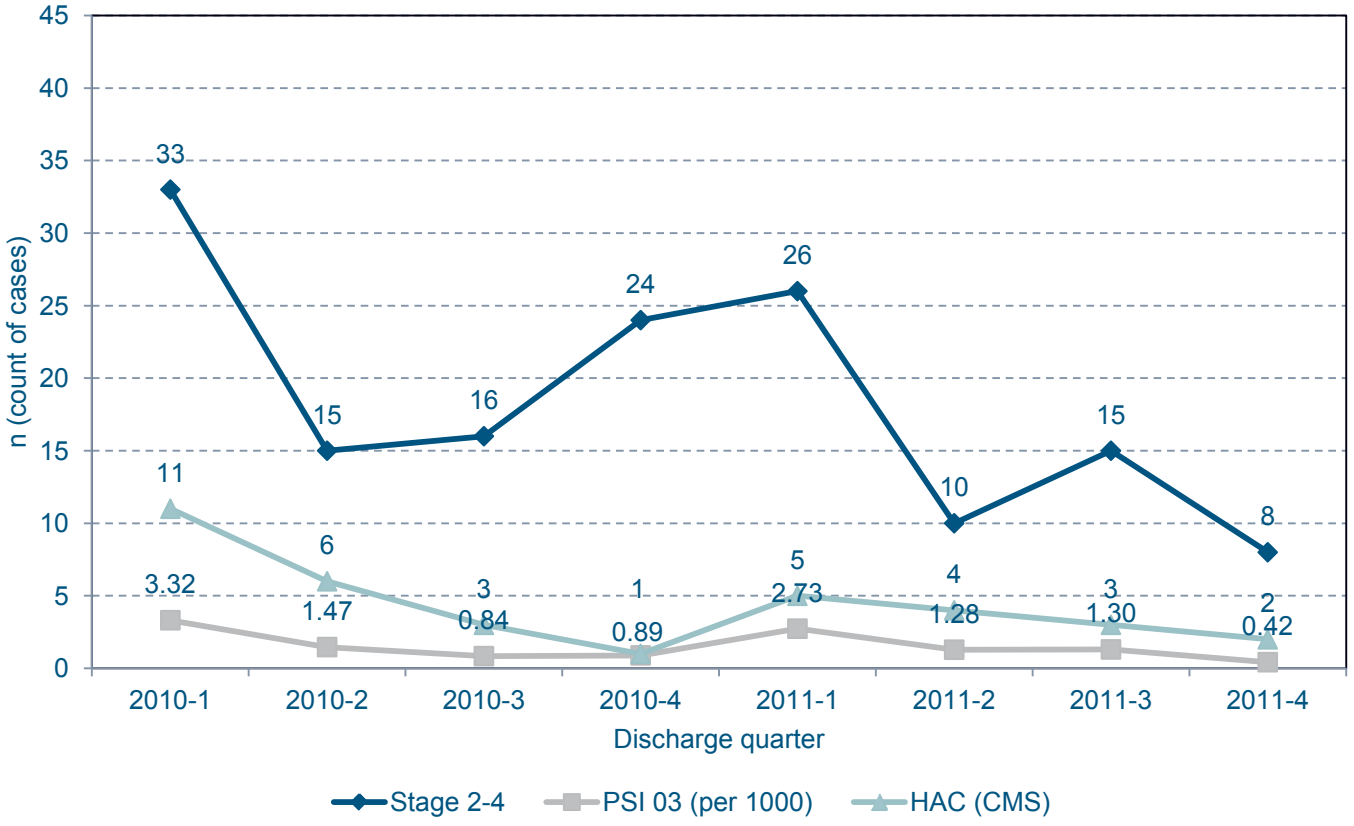
Inter- and intra-organization variation in coding postoperative respiratory failure

- Inter-organizational variation was apparent based on the number of different ICD-9-CM diagnosis codes identified by survey respondents.
- Intra-organizational variation was identified by differences in the responses to the case scenarios by coders from the same organizations.
- Variation in coding was also identified through the responses to 2 statements regarding documentation and coding of postoperative respiratory failure.
  - For each statement, about half of the respondents agreed or strongly agreed that they would use the identified code and about one-third disagreed or strongly disagreed with using the identified code.

Hospital Successes using QIs

Improving Outcomes: Success Stories

Pressure Ulcer Performance



Success Stories: Pressure Ulcer Reduction

Goal: *Commitment to top decile performance*

Background: In 2010, UAB Hospital sought to streamline the commitment to quality through the appointment of a new Chief Quality and Safety Officer (CQSO) as well as a reorganization of the Nursing Quality Council (NQC). Both changes align with the Health Systems clearly articulated goal: to provide exceptionally safe and high quality health care as measured by national quality indicators. NEW STRUCTURE = NEW APPROACH TO QUALITY MEASUREMENT

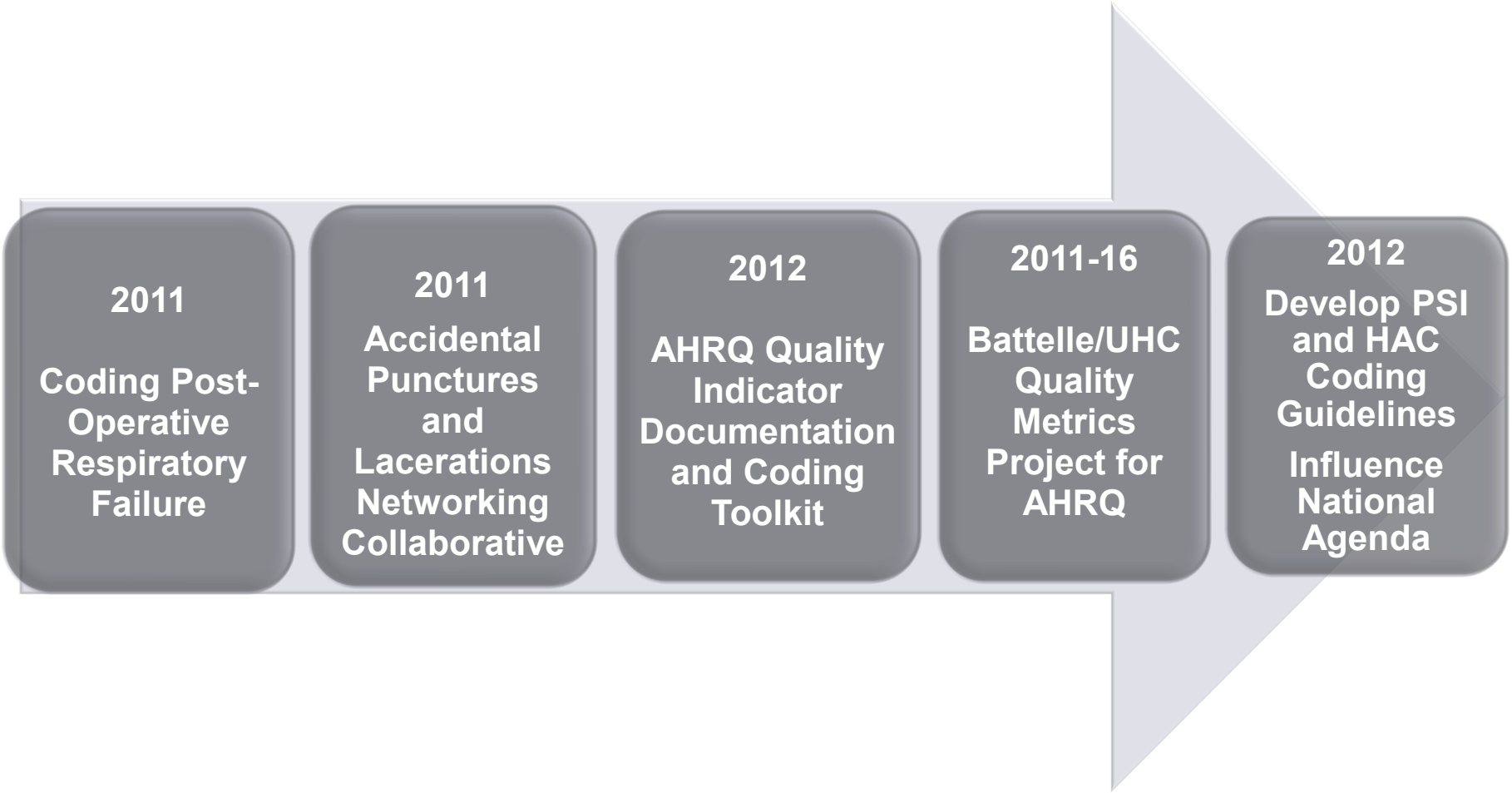
Interventions:

1) education and increased awareness by all disciplines of causes and preventative measures
2) creation of unit based quality dashboards,
3) implementation of monthly quality variance meetings, where all HACs are discussed and action plans determined.
4) hospital wide monthly trending to identify targeted opportunities
5) identification of unit based staff nurse pressure ulcer experts,

Results: The number of hospital acquired pressure ulcers decreased from 33 in first quarter 2010 to 8 in the fourth quarter 2011.

UHC's Work on PSI and HAC Coding

UHC's Work on PSI and HAC Coding



Consensus Recommendations Development Project: Accurate Documentation and Coding

- Develop consensus recommendations for documentation/reporting PSIs and HACs
  - Compliant with national definitions and existing guidelines
- Provide consistent interpretation in areas of uncertainty
- Promote standardized reporting across members
- Enhance the accuracy and comparability of data

Patient Safety Expert Panel

Accidental puncture or laceration

Postoperative respiratory failure

Iatrogenic pneumothorax

Foreign body left during procedure

- The Cleveland Clinic Foundation
- NewYork-Presbyterian Hospital
- NYU Langone Medical Center
- UC Davis Medical Center
- University of Kentucky Hospital
- University of Michigan Hospitals & Health Centers
- Vanderbilt University Medical Center
- Wexner Medical Center at The Ohio State University
- University of Washington
- Emory University Hospital

Obstetric Expert Panel

OB trauma - with instrument

OB trauma - without instrument

Birth trauma - injury to neonate

- Beaumont Hospital, Royal Oak
- Froedtert & The Medical College of Wisconsin
- Massachusetts General Hospital
- Medical University of South Carolina
- The Nebraska Medical Center
- The University of Kansas Hospital Authority
- UC Davis Medical Center
- University of North Carolina Hospitals
- University Hospitals Case Medical Center
- University of Washington Medical Center
- UT Southwestern Medical Center University Hospitals - Zale Lipshy and St. Paul

Why other providers should be interested in QI Validation

Metrics will eventually affect all provider types

- Long term care, ambulatory surgery, others
- Value Based Purchasing extension into episodes of care; improvement will move into an extended collaborative effort across these care settings
- Pace of usage will only increase over time as budget constraints increase
- ICD-10 provides an opportunity to reset the slate

Where do you want to be? Ahead of the curve and informing the decision, or behind the curve and accepting the result?

Questions?