

Goal-Specific Survey Considerations

Goal #3: Improve the safety of using medications.

Requirement #3.b and 3c--Drug concentrations/look-alike/sound alike drugs

- Interview pharmacy director; P&T chair
- Written policy not required, but review if there is one
- Focus on preparations of insulin, heparin, antibiotics, aneoplastic
- Multiple concentrations based on clinical need, not individual practitioner preference
- Look-alike/sound-alike drugs identified and reviewed annually



Goal-Specific Survey Considerations

Goal #5: Improve the safety of using infusion pumps.

Requirement #5.a.--Free-flow protection on IV pumps

- Interview safety officer/equipment manager: Are all pumps on equipment inventory? How is free-flow protection assured?
- Check pumps in use on units against equipment inventory
- Look for rental units
- Add-on devices (e.g., anti-siphon valves) must be reviewed as alternative approaches – not permitted after 2003



Goal-Specific Survey Considerations

Goal #7: Reduce the risk of health care-associated infection.

Requirement #7.a.—Comply with CDC Guidelines

- Determine how staff, including L.I.P.s, are informed about the Guidelines
- Through interviews, assess level of understanding of Guidelines by staff, including L.I.P.s
- Observe implementation of Guidelines during tracer and other survey activities on patient care units



Goal-Specific Survey Considerations

Goal #7: Reduce the risk of health care-associated infection.

Requirement #7.b.—Manage as sentinel events ...

- Ensure that the organization's definition of "sentinel event" does not exclude events that are associated with infection
- Review IC surveillance data to determine whether qualifying sentinel events are reported internally for review (RCA)
- Assess RCA process for this type of event (by example provided by the organization or by discussion of methodology)
 - Participants (should be a team, not just the ICP)
 - Scope (should be the patient's care, not just the infection)



Goal-Specific Survey Consideration

Goal #8: Accurately and completely reconcile medications across the continuum of care.

Requirement #8.a. and 8.b. – Process Development/ Provider Communication

- Interview leadership
- Interview Pharmacy Director, P & T chair
- Patient Tracer Activity
- System Tracer Activity



Goal-Specific Survey Consideration

Goal 9 Reduce the risk of patient harm resulting from falls

Requirement 9.a.—Risk Assessment

- Patient Tracer Activity
- Medical Record Reviews
- Review assessment and re-assessment process
- Interview direct caregivers
- Review organization's written policies



For more information:

The Joint Commission Web Site

dchristiansen@jcaho.org




**The Joint Commission
ORYX Initiative**

**Using Performance Measures to
Improve the Quality of Health Care**


Japanese Council on Quality Healthcare
August 30, 2004

Frank S. Zibrat
Associate Director
ORYX Implementation
Division of Accreditation Operations
630/792-5992

 Joint Commission
RESOURCES

**Improving the
Accreditation Process**


Agenda for Change
1987

 Joint Commission
RESOURCES

The Agenda for Change

Establish a *data-driven* continuous accreditation process designed to:


- Increase relevance and value of Joint Commission accreditation
- Strengthen Joint Commission standards development process
- Enhance comparative evaluation of health care organizations
- Support process improvement in health care organizations

 Joint Commission
RESOURCES

**Standards vs.
Performance Measures**

Standard


- A statement that defines the performance expectations, structures, or processes that must be substantially in place in an organization or service to enhance quality of care

 Joint Commission
RESOURCES

**Standards vs.
Performance Measures**

Performance measure


- A qualitative tool reported as a rate, ratio or percentage.
- Provides an indication of an organization's or service's performance in relation to a specified process or outcome.

 Joint Commission
RESOURCES

**Use of Performance Measure Data
The Accreditation Process**


Use performance measure data to supplement and guide the standards-based survey process:

- To provide a more targeted focus
- To enhance the surveyor's ability to assess the way HCOs analyze and use performance measurement data
- As a basis for monitoring actual ongoing performance
- As a tool for guiding and stimulating continuous improvement in accredited organizations

 Joint Commission
RESOURCES


Use of Performance Measure Data Health Care Organizations

- Assess current performance – establish baseline
 - How have we done over time?
 - How do we compare with other organizations?
 - In what areas can we improve?
- Control performance
 - Are key processes in control?
 - Early warning system that identifies potential areas of poor performance
 - Allows for immediate corrective action




Use of Performance Measure Data Health Care Organizations

- Verify improved performance
 - How have design changes affected processes and outcomes
- Improve Outcomes
 - Continuously monitoring and improving performance leads to improved outcomes and increased patient satisfaction

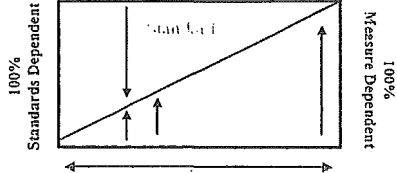


Use of Performance Measurement Data in the Accreditation Process


- Accreditation decisions continue to be standards-based
- Survey Process:
 - Data use will be assessed during on-site surveys
 - Data will contribute to evaluation of standards compliance



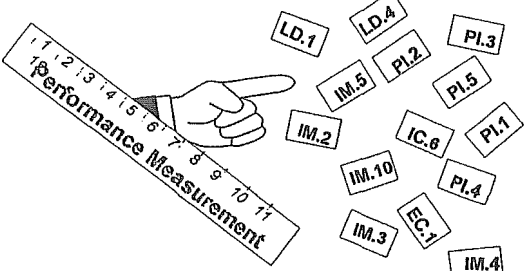

Standards and Performance Measures Are Complementary



Complex interrelationships exist among any given standard and an array of relevant performance measures




Performance Measures May Point to Standards Compliance Issues

ORYX: The Next Evolution in Accreditation™

Initial Phase
1996



ORYX Initial Phase

Advisory Council on Performance Measurement

- Identify criteria against which performance measurement systems could be evaluated
- Advisory body to the Joint Commission
 - Enhance understanding of the state of performance measurement nationally through evaluation of current measurement methods
 - Advise on the uses of performance measurement data



Performance Measure

- Performance measure:
 - A quantitative tool
 - Calculated from a group of data elements
 - Provides an indication of a health care organization's performance in relation to a specific process or outcome



Performance Measurement System

- Performance Measurement System:
 - An entity consisting of an automated database(s) that facilitates performance improvement in health care organizations through the collection of data on process and/or outcome measures of performance.
 - Must be able to generate internal comparisons of organization performance over time, and external comparisons of performance among participating organizations at comparable times.



What Is A Good Measure?

- Description of rationale and intent
- Documented description of population
- Defined data elements and allowable values
- Defined sampling procedure (if applicable)
- Specified calculation methodology
- Useful to health care organization



Types of Performance Measures

- Clinical Measures:
 - Evaluate the processes or outcomes of care associated with the delivery of clinical services
 - Allow for intra- and inter-organizational comparisons to continuously improve patient health outcomes
 - May focus on the appropriateness of clinical decision making and implementation of these decisions
 - Must be condition specific, procedure specific, or address important function of patient care, e.g.
 - medication use
 - infection control
 - patient assessment, etc.



Types of Performance Measures

- Clinical measures (cont'd)
 - **Process:** A measure that assesses a process of care, i.e., an interrelated series of events, activities, actions, mechanisms, or steps that transform inputs into outputs
 - **Example:** aspirin at arrival for patients experiencing an AMI
 - **Outcome:** A measure that indicates the result of the performance (or non-performance) of a function(s) or process(es).
 - **Example:** mortality following coronary bypass surgery



Types of Performance Measures

- **Perception of Care/Service:** focus on satisfaction with the delivery of clinical care, e.g., medication use, pain management, communication regarding plans/outcomes of care, prevention and illness, improvement in health status, etc.
 - **Example:** patient education about discharge medications
- **Health Status:** address the functional well-being of specific populations in relation to specific conditions, demonstrating change over time.
 - **Example:** physical well-being before and after treatment



Calculation of Performance Measures

- **Proportion (rate):** Derived by dividing the numerator (i.e., cases that meet the criterion for good/poor care) by the denominator (i.e., all cases to which the criterion applies) within a given time frame. The numerator is a subset of the denominator.
- **Ratio (rate):** A rate-based measure in which a relationship exists between two counted sets of data which may have a value of zero or greater. In a ratio, the numerator is not necessarily a subset of the denominator.
- **Continuous variable:** An aggregate data measure in which the value of each measurement can fall anywhere along a continuous scale.



ORYX Initial Phase

Great degree of flexibility

- Choice of over 100 measurement systems
- Over 8,000 disparate measures
 - Lack of standardization of measure specifications across systems
 - Valid comparisons only between organizations using the same measures
 - Limited size of comparison groups and hindered statistically valid data analyses.



Disparate Measurement Strategies

- Clinical measures with predefined numerators and denominators
- Severity indices
- Care planning tools
- Survey instruments
- Clinical registries



Variable Approaches to Data Collection

- Administrative data
- Medical record data
- Combination of medical record and administrative data
- Clinician or patient-based assessment instruments (i. e., survey data)




ORYX: The Next Evolution in Accreditation™

Data Collection & Submission




Data Collection and Submission

- Hospital
 - Contacts with a measurement system and advises the Joint Commission
 - Selects required number of relevant performance measures from among those offered by measurement system and approved by Joint Commission
 - High risk
 - High volume
 - Problem prone
 - Collects and submits patient level measure data monthly to measurement system




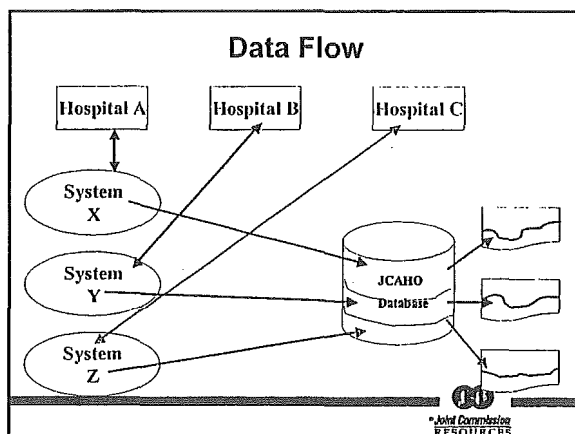
Data Collection and Submission

- Measurement System
 - Quarterly electronic submission of measure data
 - Monthly aggregate data points
 - Healthcare organizational-level data
 - System-level data
 - Data are due to Joint Commission 4 months after the last day of each quarter
 - Example: January-March data due July 31




Top Ten ORYX Measures Chosen for Hospitals

1. Perioperative Complications	6. Respiratory function
2. Perioperative Mortality	7. Rehabilitation
3. ER Dept.	8. Pneumonia
4. CHF	9. Cardiovascular
5. Acute myocardial infarction	10. Patient satisfaction





ORYX Performance Measure Report




Joint Commission's Measure Analysis

1. Missing data
 - Aberrant data
2. Control charts
 - Internal comparisons
3. Comparison charts
 - External comparisons




ORYX Performance Measure Report

Control Charts




Control Chart Requirements

- Time ordered data
- 12 – 15 data points considered “trial limits”
 - Process capability is known when 24 data points available if “in statistical control”
- Select the correct control chart type based on how the measure is calculated...



Control Chart Types


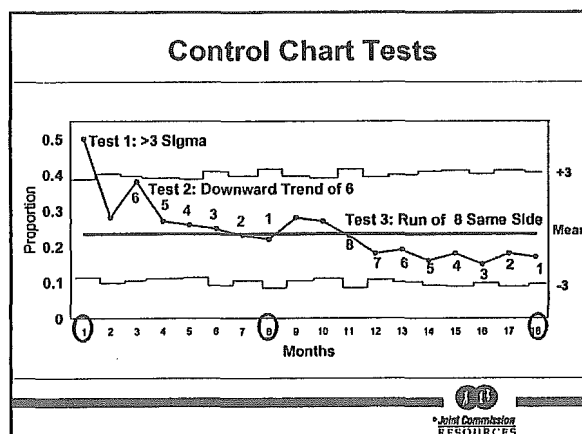
Measurement Data:	Control Chart	IF small sample size
PROPORTION	p-chart	Adjusted p-chart
RATIO	u-chart	Adjusted u-chart
CONTINUOUS	X-bar S chart	XmR chart (Individual's chart)



Control Chart Signals


“Out of Statistical Control” Tests for Special Cause Variation:

1. A data point above the UCL or below the LCL (Shewhart's test)
2. A run of 8 consecutive data points on one side of the center line
3. A trend of 6 consecutive data points steadily increasing or decreasing


Interpretation of Control Charts

- In statistical control = *common cause variation*
 - A stable process that is performing as it was designed
 - Lacks out of statistical control signals
- Out of statistical control = *special cause variation*
 - Signals are present that suggest the process (behind the measure) is not performing as it was designed
 - Process is unstable, and performance in the future is not predictable




Control Chart Benefits

- **WHEN:**
 - Shows the time period(s) to investigate
- **WHAT:**
 - Distinguishes variation due to common cause(s) vs. special cause(s)
 - Prevent unnecessary process adjustment
 - Provide information about process capability
- **HOW:**
 - Gives clues about the type of action needed
 - Assesses results of process improvement efforts
 - Increases management's responsibility and credibility




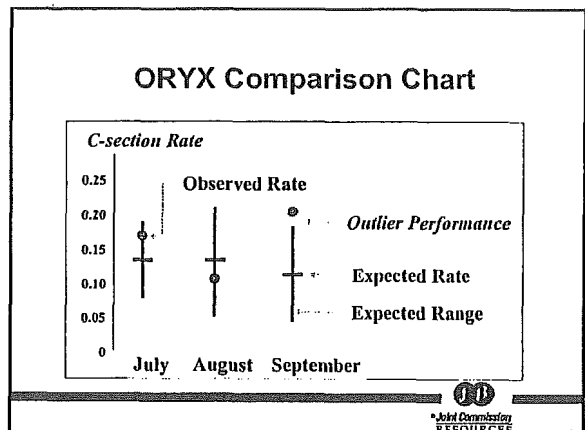
ORYX Performance Measure Report

Comparison Charts




ORYX Comparison Analysis

- A graphical comparison between a health care organization's Observed Rate and its Expected Rate
 - Displayed by calculating a 99% confidence interval around the organization's actual observed rate and converting the confidence interval into the expected range around the expected (national) rate for each measure


ORYX: The Next Evolution in Accreditation™

The Evolution to Core Performance Measures 1998




Why Do We Need Core Measures?

- Get beyond broad system characteristics and face validity
- Current disparate measures
- Need pools of measures to support accreditation
- Little ability to compare across systems
- Uniformity




Core Measures Working Definition

- Standardized sets of performance measures (usually disease- condition specific)
- Precisely-defined specifications
- Can be uniformly embedded/adopted in extant systems
- Standardized data collection protocols
- Meet established evaluation criteria



Attributes of Core Performance Measures


- Improve health
- Precisely defined
- Reliable
- Valid
- Can be interpreted
- Risk adjusted
- Data collection assessed
- Useful in accreditation
- Provider control
- Public availability



ORYX The Move to Core Measures


1999 - Input from stakeholders about potential focus areas for core measures for hospitals.

- clinical professionals,
- health care provider organizations,
- state hospital associations
- health care consumers
- performance measurement experts




Core Measure Selection Process

- Identify measurement focus areas
 - Acute myocardial infarction
 - Heart failure
 - Community-acquired pneumonia
 - Pregnancy and related conditions
 - Surgical procedures and complications




Core Measure Selection Process

- Establish measurement framework
 - Evidence-based measures
 - Meet established evaluation criteria
 - CMS measures (where feasible)




Core Measure Selection Process

- Stakeholder comment period
- Modify as needed
- Joint Commission Board ratification




Acute Myocardial Infarction

- Aspirin at arrival
- Aspirin at discharge
- ACE inhibitor for Left Ventricular Systolic Dysfunction
- Adult smoking cessation advice/counseling
- Beta blocker at arrival
- Beta blocker at discharge
- Time to thrombolysis
 - Thrombolysis within 30 minutes of arrival
- Time to PCI
 - PCI within 120 minutes of arrival
- Risk adjusted inpatient mortality




Heart Failure

- Discharge instructions
 - Activity, diet, meds, follow-up appointment, weight monitoring, symptom worsening
- Assessment of left ventricular function
- ACE Inhibitor for Left Ventricular Systolic Dysfunction
- Adult smoking cessation advice/counseling




Pneumonia

- Oxygenation assessment
- Pneumococcal screening and/or vaccination
- Blood culture collected before antibiotic started
- Adult smoking cessation advice/counseling
- Pediatric smoking cessation advice/counseling
- Antibiotic timing (arrival to 1st administration)
 - Initial antibiotic within 8 hours of arrival
 - Initial antibiotic within 4 hours of arrival
- Initial antibiotic selection – ICU patients
- Initial antibiotic selection – non-ICU patients
- Influenza vaccination



Pregnancy and Related Conditions

- Risk adjusted vaginal birth after cesarean section (VBAC)
- Risk adjusted inpatient neonatal mortality
- Risk adjusted third or fourth degree laceration




Core Measure Set

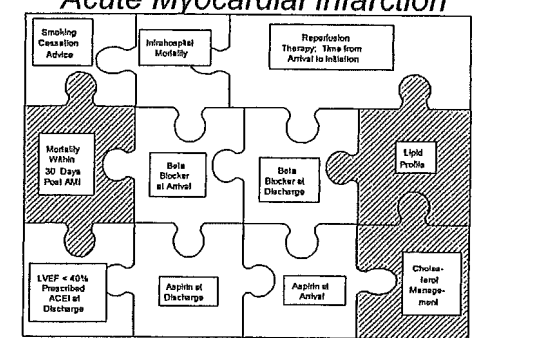
Includes 4-10 Well-tested, Evidence-Based Measures

A	B	C
D	E	F
		G


A = Initial set
 B = Initial set
 C = Initial set
 D = Initial set
 E = Initial set
 F = Future measure
 G = Future measure

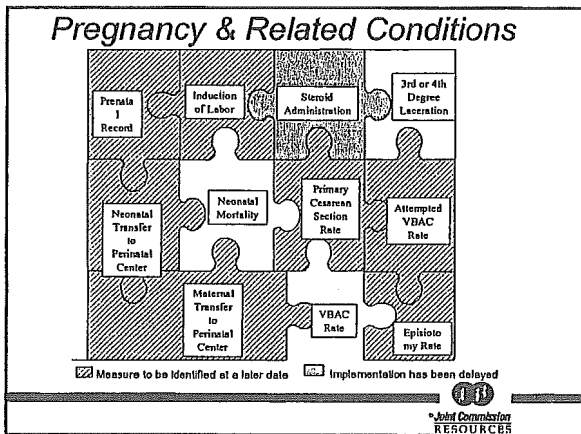
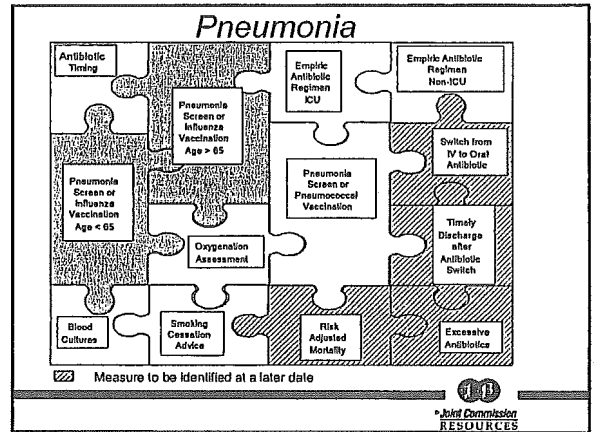
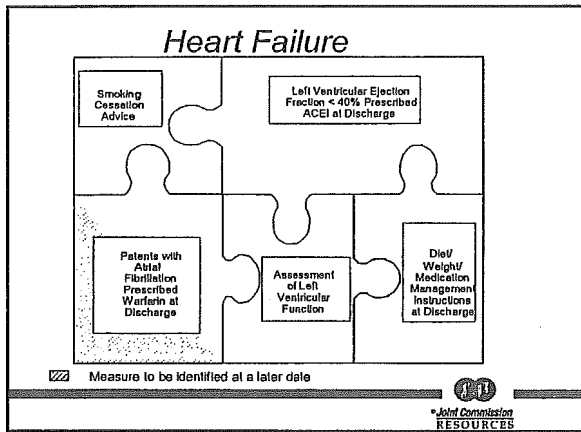


Acute Myocardial Infarction*



▨ To be Identified





Methods for Creating Standardized Technical Measure Specifications

- General data elements
- Measure-specific data elements
- Measure information forms
- Flowcharts

Joint Commission
RESOURCES

Data Element Efficiencies

- Minimum approach
- Use of administrative data
- Use of ICD-9-CM codes
- Standardization
- Other efficiencies to reduce burden

Joint Commission
RESOURCES

Technical Specifications Manual

- Detailed information
- Combine measures and technical information

Joint Commission
RESOURCES