### **Nursing Quality Indicators**



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## **History of Nursing Quality Indicators** (NQI)

- The Beginning of Evaluating the quality of nursing practice
  - When Florence Nightingale began to measure patient outcomes.



- Reflection for today: She used statistical methods to generate reports correlating patient outcomes to environmental conditions (<u>Dossey</u>, <u>2005</u>; <u>Nightingale</u>, <u>1859/1946</u>).
- Over the years, quality measurement in health care has evolved Quality Assurance Continuous Quality Improvement, Quality Movement & Campaign, Accreditation Awards and Recognition .......Moving beyond Accreditation ......
- India QCI, NABH, CAHO, JCI, NABH NE etc....
- We learn from advanced countries: The work done in the 1970s by the American Nurses Association (ANA), the wide dissemination of the Quality Assurance (QA) model (Rantz, 1995), and the introduction of Donabedian's structure, process, and outcomes model (Donabedian, 1988, 1992) have offered a comprehensive method for evaluating health care quality specifically in Nursing.

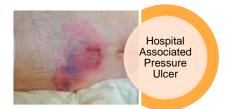




















# QUALITY INDICATORS – Familiar NQIs





#### What is Nursing Quality Indicator?

The Nursing Quality Indicators are measures of Nursing care quality that use readily available hospital inpatient administrative data.

#### What is Continuous Nursing quality improvement (CNQI)?

Continuous Nursing quality improvement (CNQI) is the key to care excellence to match with the paradigm shift in roles of health care professionals, expectations from consumers and technological advancements in Health care. Safety and quality are integral aspects of Nursing Care Continuum.





#### Let us Reflect

For patients, what helps make their hospital stay a much better experience & how nursing care impacts?

......A smart competent people friendly health care provider at their bedside.

Who else other than Nurses can be fitting into this ...

What helps these providers perform better especially "The Nurses"?

...... An environment that encourages/ nourishes proactive & predictive

**behaviors** directed toward prioritizing patient care.

How to evaluate the quality of care? ......Right and Appropriate Quality Indicators





#### Why NQI?

• It remains a critical element in the nursing professional tool kit to ensure accountability, transparency, and quality improvement.

#### Why monito QI?

- To carry out interdisciplinary processes to meet organizational QI goals and to measure, improve, and control nursing-sensitive indicators (NSI) affecting patient outcomes specific to nursing practices.
- Monitor for early recognition of adverse events, complications and errors.
- Initiating deployment of appropriate and timely nursing care to aid patients in speedy recovery.
- To ensure TAT in clinical process.



For defining strategies to achieve goals & redefining patient care.



### How do we identify QI for Nursing Service?

Its Nursing Domain Decision

### Scope/ Center of Excellence

- General Medical and Surgical
- Superspecialist Transplantation
- Obstetrics
- Orthopedics
- Neurology
- Pediatrics
- Oncology

#### Depth/Limit

No specified size and limit for the number of QI that can be monitored. How ever critical NQIs are significant.

#### Eg: Medication Error

- Incidence of Medication Error
- Incidence of prescription error
- · Incidence of transcription error
- · Incidence of dispensing error
- Incidence of administration error
- Percentage of admissions with ADR
- Percentage of medication charts with error prone abbreviations
- Compliance rate to Medication Prescription in capitals
- Percentage of patients receiving high risk medications developing adverse drug event.
- Percentage of contrast allergic reaction
- Number of patients on NG tube receiving Non- enteric coated drugs.

#### Key Principle:

- Appropriate & Relevant Eg: Initiation of Breast feeding
   Obstetrics Nursing
- Simple to Complex Eg. Pressure Injury (PI) to PI Healing pattern
- Common / Routine to uncommon/ Rare



### **Nursing Indicator – Safe Staffing For Example**

Missed breaks

Nursing staff

unable to take

scheduled

breaks

Nursing overtime

Nursing staff working extra hours Planned, required and available nurses for each shift

The number of planned, required and available nursing hours on hospital inpatient wards in relation to bed utilization.

High levels and/or ongoing reliance on temporary nursing

Temporarypull in & pull out nursing staff on hospital inpatient wards. Compliance with any mandatory training

Compliance of ward nursing staff with any mandatory training in accordance with local policy



#### Importance of NQI in NABH & JCI

CNQI.2.

The organization identifies key nursing quality indicators to monitor the care structure, process and outcome, which are used as tools for excellence in nursing care.

NABH NE

Ref: NABH NF

#### Management of Quality and Patient Safety Activities

QPS.1 A qualified individual(s) guides the implementation of the hospital's program for quality improvement and patient safety and manages the activities needed to carry out an effective program of continuous quality improvement and patient safety within the hospital.

#### Measure Selection and Data Collection

- QPS.2 Quality and patient safety program staff support the measure selection process throughout the hospital and provide coordination and integration of measurement activities throughout the hospital.
- QPS.3 Hospital leadership builds a culture and environment that supports implementation of evidence-based care through the use of current scientific knowledge and information to support patient care, health professional education, clinical research, and management.

#### Analysis and Validation of Measurement Data

- QPS.4 The quality and patient safety program includes the aggregation and analysis of data to support patient care, hospital management, and the quality management program and participation in external databases.
  - QPS.4.1 Individuals with appropriate experience, knowledge, and skills systematically aggregate and analyze data in the hospital.
- QPS.5 The data analysis process includes at least one determination per year of the impact of hospitalwide priority improvements on cost and efficiency.
- QPS.7 The hospital uses a defined process for identifying and managing sentinel events. 

  ®
  - QPS.7.1 The hospital uses a defined process for identifying and managing adverse, no-harm, and near miss events.
- QPS.8 Data are always analyzed when undesirable trends and variation are evident from the data. ®

#### **Gaining and Sustaining Improvement**

- QPS.9 Improvement in quality and safety is achieved and sustained.
- QPS.10 An ongoing program of risk management is used to identify and to proactively reduce unanticipates adverse events and other safety risks to patients and staff. 

  Ø



#### **Nursing Sensitive Indicators- Structure Process & Outcome Model**

#### **Structural Indicators**

 Includes the supply of nursing staff, the skill level of nursing staff, equipment, education and certification levels of nursing staff.

#### **Process Indicators**

 Measure methods of patient assessment and nursing interventions and competency assessment. Nurses job satisfaction is also considered a process indicator.

#### **Outcome Indicators**

 Reflect patient outcomes that are determined to be nursingsensitive because they depend on the quantity or quality of nursing care outcome. These include pressure ulcers and falls.



#### Structure Process Outcome Model

### Organizational- Focused Structural Indicators

#### \*Nurse Staffing Characteristics

Number of Nursing Staff Number Staffing Ratio Nurse Staffing Levels Nurse Staffing Qualifications Nurse Experience Nurse Education

#### \*Hospital Characteristics

Work Schedule Patient Safety Patient turnover Work environment Nurse autonomy Case Mix

#### Nursing Focused Process/Intervention Indicators

- Treatment and Procedures
- Pain Management
- Maintenance of skin integrity
- · Patient Education

### Nurse Focused outcome Indicators

- Nurses Job satisfaction
- · Nurse reported quality of care
- Nurse burnout
- · Nurse turnover

### Patient Focused Outcome Indicators

- Nosocomial Infection
- Mortality
- Pressure ulcer
- Patient Satisfaction
- Patient falls
- Patient falls with injury
- LOS
- DVT/Pulmonary Embolism
- Physical restrain use
- Shock/Cardiac arrest



### **How are Nursing-Sensitive Indicators Developed?**

Identification of potential Indicator

Literature Review

Nursing Panel review's the validity of the Indicator

Conduct Pilot study

\*\*Once the potential indicator has been empirically supported to be meaningful in clinical practice and it has been determined that no undue burden would be placed on participating facilities/ team. A pilot study is performed in willing facilities/unit/area. It shall be an inclusive approach.





### **Nursing Sensitive Indicators - Classification**

INDICATOR	SUB- INDICATOR	MEASURE
Nursing Hours per Patient Day	Registered Nurses (RN)	Structure
Patient Falls with Injury	Injury Level	Process & Outcome
Pressure Ulcer Prevalence	Community Acquired Hospital Acquired Unit Acquired	Process & Outcome
<ul> <li>Nosocomial Infections</li> <li>a. Urinary catheter-associated urinary tract infection (UTI)</li> <li>b. Central line catheter associated blood stream infection (CABSI)</li> <li>c. Ventilator-associated pneumonia (VAP)</li> </ul>	Community Acquired Hospital Acquired Unit Acquired	Process & Outcome



This is not enough we need to move to next level to impact outcome



# Benchmarking QI for Nursing - Where do we position our Nursing Care

**Benchmarking -** A continuous process comparing an organization's performance against that of the best in the industry considering critical consumer needs and determining what should be improved.

#### **Benchmarking Encompasses:**

- Regularly comparing indicators (structure, activities, processes and outcomes) against best practitioners
- Identifying differences in outcomes through inter-organizational visits
- Seeking out new approaches in order to make improvements that will have the greatest impact on outcomes; and Monitoring Indicators. **Here comes Ideation, Innovation & Enovation**

Benchmarking can be done at Department level, hospital level, National level or international level.

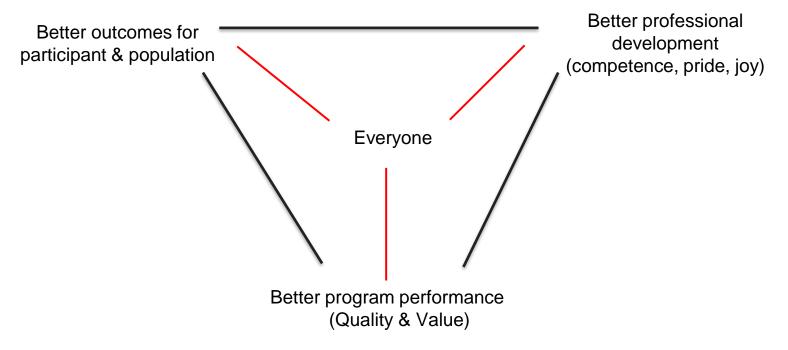
### **Steps of Benchmarking**

- 1. Select the object of the benchmarking (the service or activity to be improved).
- 2. Identify benchmarking partners (reference points).
- 3. Collect and organize data internally.
- 4. Identify the competitive gap by comparing against external data.
- 5. Set future performance targets (objectives).
- 6. Communicate the benchmarking results.
- 7. Develop action plans.
- 8. Take concrete action (project management).

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9. Monitor progress.

### Linking NQI to Performance of an Organization





### **Role of Nurse in Quality Improvement**

- To carry out interdisciplinary processes to meet organizational QI goals and to measure, improve, and control nursing-sensitive indicators (NSI) affecting patient outcomes specific to nursing practices.
- All levels of nurses, from the direct care bedside nurse to the chief nursing officer (CNO), play a
  part in promoting QI within the healthcare provider organization.
- Monitor for early recognition of adverse events, complications and errors.
- Initiating deployment of appropriate and timely nursing care to aid patients hastens speedy recovery.
- Sharpen Nurses EQ/CQ & Empower them to Express without fear while at Bedside or in
   Boardroom



### Involvement of Nurses at Various level in monitoring QI

#### The CNO

- CNOs set the tone for the nursing department's participation in QI.
- As a member of administrative leadership, the CNO must integrate nursing practices into the organizational goals for excellence in patient outcomes through communication of strategic goals to all levels of staff.

#### The nurse manager (NM)

 The NM is responsible for communicating and operationalizing the organization's QI goals and processes to the bedside nurse, identifying specific NSIs that need improvement according to his or her particular patient population, and coordinating QI processes to improve these at the unit level

#### The direct care nurse/Bed side RN

 The direct care bedside nurse is the key to quality patient outcomes, carrying out the protocols and standards of care shown by evidence to improve patient care.

Data Originator? Data Validation?

Not an additional task, but a frame of mind



### **Other Factors Related to Quality**

**Competent nurses** 

**Independent and autonomous practice** (micro-management is frowned upon, even in other professions)



Management support (recognitions, team building, and other activities or programs are present)

Patient-centered culture (patients over revenue)

Collaborative working environment (particularly between nurses and doctors)

Availability of continuing education and training options (engagement of team & newer approaches)

**Nurses directly affect the quality of hospital care** - All efforts to train them and maintain their value should be addressed. Nurses will – in turn – pass the same value and care along to their patients.



### The difficulties encountered by RNs while implementing QI



Lack of time



Inadequate number of professionals



Lack of knowledge on the subject.



Lack of understanding of how to use these instruments

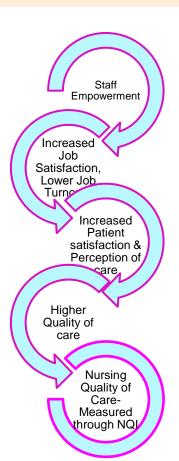


CRITICAL FACTOR -Available level of nurse staffing



### Relationship between Quality of care and Staff Empowerment





#### What Builds Staff Empowerment?

- Leader support and teams.
- Communication and information sharing.
- Positive reinforcement.
- Confidence.
- 5. Just Culture

#### **Barriers for Staff Empowerment?**

- 1. Lack of senior leader support.
- 2. Lack of resources.
- 3. Poor teamwork and support.
- Stagnation and loss of momentum for change.
- 5. Staff turnover.
- 6. Punitive response to error.



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### Thank You



Nurse you are a Patient Advocate & Express without fear while at Bedside or in Boardroom.



