Improving Nursing Sensitive Patient Outcomes: Show me the Evidence

Susan L. Beck PhD APRN
FAAN AOCN
Interim Associate Dean for Academic Programs
University of Utah
College of Nursing

The day in which we talk about what we do versus what we accomplish is over. It’s all about Outcomes!

Nursing-Sensitive Patient Outcomes

- Outcomes, which focus on how patients and their healthcare problems are affected by nursing interventions, have been identified and are described as nursing-sensitive patient outcomes.
- Nursing-sensitive patient outcomes are those outcomes arrived at, or significantly impacted by, nursing interventions. The interventions must be within the scope of nursing practice and integral to the processes of nursing care; an empirical link must exist.

Nursing-Sensitive Patient Outcomes

- Nursing-sensitive patient outcomes are outcomes that are sensitive to nursing care or care rendered in collaboration with other healthcare providers.
- Nursing-sensitive patient outcomes represent the consequences or effects of nursing interventions and result in changes in patients’ symptom experience, functional status, safety, psychological distress, and/or costs.

Why Nursing Sensitive Patient Outcomes

- Critical to focus on the recipient of our care
- Demand for accountability and quality
- Demand for safety and cost effectiveness
- Sensitizes us to think about results of nursing care
- Define our contributions to care – are we making a difference?

The 21st Century: The Era of Accountability

- Benchmarking for excellence
- CMS and Medicare reimbursement
- ANA Outcomes Initiative
- VA Health Systems
- NQF Nursing Outcomes
- ASCO Quality Initiative
Federal Government-CMS
- Centers for Medicare and Medicaid Services – Medicare Hospital Quality Initiative
- Hospitals that submit quality info are eligible to receive full Medicare payments
- Roll-out: heart attack, heart failure, pneumonia
- Publicly available on HospitalCompare

Federal Government-AHRQ to CMS
- The Quality Initiative: A Public Resource on Hospital Performance
- Voluntary participation of 3179 hospitals
- Eight dimensions of patient-centered care adopted by IOM
- HCAHPS-32 items..now 25

10. During this hospital stay, did you need medicine for pain?
1. Yes
2. No If No, Go to Question 13

11. During this hospital stay, how often was your pain well controlled?
1. Never
2. Sometimes
3. Usually
4. Always

ANA National Database of Nursing Quality Indicators-Acute Care Setting
- As of Nov 2004, 670 hospitals participating—8000 patient units
- Indicators-unit level data
  - Nursing (staff mix, hours per patient day, RN education, RN certification, % contract hours)
  - Patient (pressure ulcers, falls, patient satisfaction, nosocomial infections)
  - Nurse satisfaction
- University of Kansas-data warehouse
- Process to access data established

Veteran’s Health System
- Integrated health information system
- Praised by IOM
- “to collect data once at the point of care”
VA Nursing Outcomes Database Project

- To benchmark local, VISN, and national patient quality outcomes
- Six indicators
  - Nursing staff (hours per patient day, skill mix)
  - Patient (pressure ulcers, falls, patient satisfaction)
  - Nurse (satisfaction)
- Twelve pilot VA medical centers with acute care beds

American Society of Clinical Oncology Quality Oncology Practice Initiative

- “to develop a culture of self-examination and quality improvement in practice”
- Focus on processes based on guidelines
- Focus on private practice setting
- Used chart review with web entry
- Beta testing with guidelines provided
- At ASCO session, 75% of participants indicated a willingness to participate
- Outcomes are part of future plans

National Quality Forum

- National Voluntary Consensus Standards for Nursing-Sensitive Care: An Initial Performance Measure Set is the first-ever national standards for nursing care.
- Endorsed by the NQF’s 250-plus member organizations
- 15 new standards provide a framework for how to measure the quality of nursing care
- Next stage in outcomes measurement

15 NQF Measures

1) Death among surgical inpatients with treatable serious complications (“failure to rescue”)
2) Pressure ulcer prevalence
3) Falls prevalence
4) Falls with injury
5) Restraint prevalence (vest and limb only)
6) Urinary catheter-associated urinary tract infection for intensive care unit (ICU) patients
7) Central line catheter-associated blood stream infection rate for ICU and high-risk nursery (HRN) patients
8) Ventilator-associated pneumonia for ICU and HRN patients

15 Measures continued

9) Smoking cessation counseling for acute myocardial infarction patients
10) Smoking cessation counseling for heart failure patients
11) Smoking cessation counseling for pneumonia patients
12) Skill mix
13) Nursing care hours per patient day
14) Practice Environment Scale—Nursing Work Index (composite+five subscales)
15) Voluntary turnover

The explosion of databases-exemplars

IKnowMed- oncology database that captures treatment outcomes including treatment response, toxicities, treatment regimen, relative dose intensity, chemo dosing, tests, lab results
US Oncology-network of more than 850 physicians at over 450 sites throughout the country care for more than 350,000 cancer patients a year - more than any other single medical organization in the world.
CaPSURE database 1000 urologists and patient-reported variables—data from 1995- present
Housed at UCSF
The explosion of databases-exemplars

- The SEER-Medicare datalink
  - reflect the linkage of two large population-based sources of data that provide detailed information about elderly persons with cancer.
- The National Health Interview Survey (NHIS)
  - is an annual nationwide survey of about 36,000 households in the U.S. to determine knowledge, attitudes, and practices concerning cancer-related health behaviors and cancer screening modalities.

The explosion of databases-exemplars

- Home Care: Outcome and Assessment Information Set (OASIS)
  - is a group of data elements that represent core items of a comprehensive assessment for an adult home care patient; and
  - form the basis for measuring patient outcomes for purposes of outcome-based quality improvement (OBQI).

The explosion of databases-exemplars

Databases in long-term care

- Minimum Data Set (MDS)
- Online Survey, Certification and Reporting (OSCAR)
- National Nursing Home Survey (NNHS)
- Medical Expenditure Panel Survey-Nursing Home Component (MEPS-NHC)

Key Points

- Link between NSPO and quality-process and outcomes
- Role of legislation, government, and private organizations
- Acute care focus is now expanding to other settings
- Alignment of efforts
- Databases are a rich resource for nursing research
- Where is oncology nursing? Where could we be?

Did the patient achieve the desired outcome? Who cares?

- Legislators
- Purchasers
- Regulators
- Insurers
- Providers
- Consumers
The Drive to be A Magnet Hospital

Applicants for Magnet designation must collect specific nurse-sensitive quality indicators at the unit level and benchmark that data against a database at the highest/broadest level possible (i.e., national, state, specialty organization, regional, or system) to support research and quality improvement initiatives.

http://www.nursecredentialing.org/magnet/process.html

Forces of Magnetism

The pivotal role of the nurse in the identification, implementation and improvement of patient or organizational processes. Examples should demonstrate the staff nurse role in the process, evidence that supports the interventions, and processes that are ongoing and sustained across time and practice settings.

- How was the problem identified?
- What literature was reviewed?
- Who was involved in the refinement of the process?
- How were staff involved in the decision and educated on the new process?
- What measures were used to demonstrate improved patient care as a result of the new process?
- What evidence exists that these measures are ongoing and continually assessed by the staff for refinements and improvements?

Issues in Nursing Sensitive Outcomes

- What outcomes should be included – develop core list and speak out
- How to easily measure outcomes
- How to link nursing processes with outcomes
- Where, when to measure outcomes
- Market our outcome contribution to care
- Need to build clinical data bases documenting outcomes in terms of relevance to the health system

Which outcomes are important?

- level of nursing practice (Staff Nurse or Advanced Practice Nurse)
- setting (hospital, clinic, office, home care, etc.)
- clinical context (episode of care, continuum of care, etc.)
- population or type (cancer site, cancer stage)
- intervention of interest

(Carroll & Fay, 1997; Patrick & Chiang, 2000).

Think about Lisa...

1. Which outcomes matter?
2. What types of evidence would help you decide on what interventions might help Lisa?
How to measure?
ONS Evidence-based Summaries
http://onsopcontent.ons.org/toolkits/evidence/Clinical/summaries.shtml

A Web Tour of Evidence-Based Summaries

Dyspnea
Fatigue
Mucositis
Nausea and Vomiting
Pain
Peripheral Neuropathy
Sleep-Wake Disturbances
Functional Status
Nutritional Status
Return to Usual Functioning
Safety—Preventing Adverse Events
Prevention of Infection
Psychological Distress
Depression
Economic Evidence-based Practice
Care that integrates best scientific evidence with clinical expertise, knowledge of pathophysiology, knowledge of psychosocial issues, and decision making preferences of patients”

(Rutledge & Grant, 2002, p.1)

The Patient’s Preferences Matter
EBP is unique because it includes the preferences and values of the patient and family in the process. While the clinician may utilize the best evidence available, application and outcomes will differ based upon the patients’ values, preferences, concerns, and/or expectations.
How do you decide which interventions to use?

An Introduction to Sources of Evidence

The Evidence Equation
Clinician Experience +
Patient Preferences +
Scientific Findings =
Evidence Based Practice
Depalma, 2000

Oncology nurses have a mandate to measure the end results of their care and to improve the results over time.

Given et al, 2004

Keypad
In the Medicare Hospital Quality Initiative
a. Hospitals are fined if they do not submit data
b. Data are available to health professionals only.
c. The roll-out focused on heart attacks and heart failure.
d. Nursing-sensitive outcomes are a main focus.

The ANA National Database of Nursing Quality Indicators
a. provides data at the patient level
b. has been limited to the outpatient setting
c. excludes any information about nursing
d. includes outcomes data from more than 8000 patient units

Keypad
The nursing-sensitive outcomes included by the National Quality Forum include:
a. Death among surgical inpatients with treatable serious complications (“failure to rescue”)
b. Smoking cessation counseling for lung cancer patients
c. Pain intensity
d. Chemotherapy extravasations
Keypad
The national database of interest to nursing homes is:

a. IKnowMed
b. OSCAR
c. SEER
d. CaPSURE

LINKS

- www.qualityforum.org
- www.patientexperiencestandard.org
- www.thenrcpickergroup.com
- http://appliedresearch.cancer.gov/surveys/nhis/
- http://healthservices.cancer.gov/seermedicare/
- http://www.nursecredentialing.org/magnet/process.html
- www.ons.org