

Nursing Performance Measurement Set Promises to Deliver Substantial Quality Improvement

The quality spotlight is finally shining on nursing—as the National Quality Forum (NQF) Nursing-Sensitive Care Measure Set continues to evolve.

Even though nurses are the single largest group of health care professionals in the United States¹—and, therefore, have a significant impact on health care quality and outcomes—quality measures traditionally have focused on specific diseases or conditions or care settings, not directly on nursing care.

By zeroing in on nursing, however, these emerging quality measures—which have become known as the “NQF 15”—could dramatically push quality improvement forward, says Susan Yendro, R.N., Joint Commission associate project director and cofacilitator of the Nursing-Sensitive Care Pilot Project.

“The contribution of the nurse to quality care is monumental. Yet, limited attention has been paid to the nurses,” Yendro says. “Prior to these measures there really had been very few nursing measures recognized at the national level. So this is an important effort when you look at what is going on in performance measurement overall.”

An examination of the theory behind these nursing-specific measures and a look at the Robert Wood Foundation-funded Joint Commission pilot testing project illustrates how the NQF 15 could soon have a powerful impact on overall quality measures in the nation’s hospitals.

Unique Measures

Created by a variety of developers and endorsed by the NQF in 2003, the measures include 15 consensus-based

NQF 15: National Voluntary Consensus Standards for Nursing-Sensitive Care

Category: *Patient-centered outcome measures*

Measure:

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 rate for intensive care unit (ICU) and neonatal intensive care unit (NICU) patients
7. Central line catheter-associated blood stream infection rate for ICU and NICU patients
8. Ventilator-associated pneumonia for ICU and NICU patients

Category: *Nursing-centered intervention measures*

Measure:

9. Smoking cessation counseling for acute myocardial infarction
10. Smoking cessation counseling for heart failure
11. Smoking cessation counseling for pneumonia

Category: *System-centered measures*

Measure:

12. Skill mix (registered nurse, licensed vocational/practical nurse, unlicensed assistive personnel, and contract)
13. Nursing care hours per patient day
14. Practice Environment Scale—Nursing Work Index
15. Voluntary turnover

nursing-sensitive measures for inpatient care. (See the table above.)

These 15 measures examine nursing contributions to hospital care from the following three perspectives:

1. Patient-centered outcome measures (such as prevalence of pressure ulcers and inpatient falls)
2. Nursing-centered intervention measures (such as smoking cessation counseling)
3. System-centered measures (such as voluntary turnover and nursing care hours per patient day)

The measures differ from other performance measurement sets in a number of ways. First, and perhaps most important, the measures are all directly linked

to nursing, whereas other measurement sets are either linked to a specific disease or condition (such as diabetes) or care setting (such as intensive care unit or hospital-based inpatient psychiatric services).

In addition, the NQF 15 differs from other sets in the following ways:

- Many measure sets focus only on patient populations, while this set includes patient, nurse, and administrative data.
- The measures are collected from a variety of data sources, including medical and human resources records. Some of the data are even collected via a nursing satisfaction survey instrument.

- The measures are collected at various time intervals. While many other measurement sets collect all of the data simultaneously, the NQF collects data at various intervals—quarterly, monthly, and annually.

The Road to Implementation

Although the measures have been endorsed by the NQF, the measures must be tested and modified (based on test results) to assure that data can be consistently, completely, and accurately captured across the nation's hospitals before being put into widespread use. To this end, The Joint Commission is conducting its pilot test of the NQF-endorsed Nursing-Sensitive Care Measures Set.

Prior to this initiative, with funding from the Robert Wood Johnson Foundation, The Joint Commission developed a Technical Implementation Guide for this measure set in the fall of 2005. The guide includes standardized technical measure specifications as well as education and training materials to support the implementation of the consensus measures. The guide provides a detailed technical road map to ensure consistent and reliable data collection across all health care organizations.

Subsequently, in 2006, The Joint Commission began a two-year project to test the NQF 15 as a set, also funded by the Robert Wood Johnson Foundation. The aim of the project is to fully integrate and test the correct set of measures so that hospitals can use them to improve care. Modifications to the NQF 15, based on the results of the tests, are expected in early 2009. The measures should then be able to be incorporated into the current complement of measure sets and used for public reporting, quality improvement, and accreditation.

Specific objectives of this initiative include the following:

- Determining the effectiveness of the measures when used together as a fully integrated* set
 - Assessing the potential impact of the measures in improving the quality of nursing and patient care
 - Appraising the capacity for determining nursing-specific variance within multidisciplinary care processes
 - Evaluating the reliability of both the measures and the data elements when implemented according to the standardized technical specifications
- To realize these goals, The Joint Commission has launched the following activities:

- *Convened a technical advisory panel*, which includes representation from a diverse group of leaders in multiple aspects of nursing and quality measurement. The panel includes a representative for each endorsed measure developer/sponsor as well as nursing leaders from academia, health care systems, and government agencies.
- *Updated technical specifications*, which are included in the revised Implementation Guide for the NQF-endorsed Nursing-Sensitive Care Performance Measures. The purpose of the guide is to ensure that the measures are being implemented in a uniform fashion.

For example, without the implementation guide, one provider might consider 16-year-old patients as adults while another might not consider patients as adults until they turn 18. In addition, various, and sometimes conflicting, definitions for provider entities could come into play.

“With the specification guide, we

* “Fully integrated”—When data elements are common within or among core measure sets they are defined in the same way.

are aligning all of those things,” Yendro says. “We are making sure that every hospital understands how to implement the measures and that they collect all of the data in the same way.”

The testing process also aims to evaluate the reliability of the elements to ensure that they are being captured in the same way from provider to provider. By testing the reliability, The Joint Commission will be able to understand interpretability issues and undertake the changes necessary to improve the measures so that they can be uniformly used on a national basis.

The revised implementation guide has been distributed to all volunteer test hospitals. However, the guide posted on the Joint Commission Web site for public use will not be updated until early 2009, when the final findings and recommendations from the testing process become available.

- *Recruited and enrolled volunteer sites.* Site recruitment was initiated in May 2007. After receiving 276 applications, 185 application surveys were processed through a regression model to randomly identify a sample population representing defined testing selection criteria. Fifty-four sites were selected to participate, and are distributed as follows:
 - 9 geographic regions
 - 24 states
 - 26 teaching hospitals
 - 28 nonteaching hospitals
 - 11 hospitals with fewer than 100 operating beds
 - 19 hospitals with between 100 and 299 operating beds
 - 24 hospitals with more than 300 operating beds
- *Trained volunteer test sites.* Site train-

(Continued on page 9)

**PM Beat: Nursing Performance
Measurement Set Promises to Deliver
Substantial Quality Improvement**
Continued from page 5

ing has been designed in multiple modules following a framework for data collection. In addition, a series of conference calls has been devised to provide ongoing support as well as in-depth measure education with the measure developer or a representative of the measure sponsor. The first training session was held in June 2007 and additional calls are scheduled monthly throughout the course of data collection.

A training manual also has been developed to act as a companion to the implementation guide and has been distributed to all participating test sites.

- *Developed data entry and transmission software for pilot test.* This electronic tool for data collection and transmission enables sites to enter clinical data directly as well as upload administrative data.

Data collection began in August 2007. Project activities slated for the remainder of 2007 include the continued support of organizational implementation of data collection for all 15 measures. Ongoing education will continue to be provided via conference calls, individualized staff assistance, and regular distribution of frequently asked questions. Preparations for reliability visits, which will commence in early 2008, include the development of reliability (adjudication) software, an on-site survey instrument, and interview tools that will be used during the on-site reli-

ability visits.

“With the continued involvement of the volunteer test sites, the project stands to have an impact on overall quality improvement,” Yendro says.

“These volunteers are going above and beyond what’s required in helping us shape the measures,” Yendro adds. “After all, without testing the measures, we would not be able to scientifically demonstrate measure reliability and we would not be able to make the improvements necessary to move to national implementation of these important measures.” **B**

Reference

1. U.S. Department of Health and Human Services (HHS), Health Resources and Services Administration (HRSA), Bureau of Health Professions (BHP): *The Registered Nurse Population: Findings from the March 2004 National Sample Survey of Registered Nurses*. <ftp://ftp.hrsa.gov/bhpr/workforce/0306rnss.pdf> (accessed Dec. 7, 2007).