

Written Statement

of

Isis Montalvo, RN, MS, MBA
Manager, Nursing Practice & Policy
American Nurses Association
8515 Georgia Avenue, Suite 400
Silver Spring, MD 20903

for the

Senate Finance Committee of
The United States

on

THE CENTERS FOR MEDICARE AND MEDICAID SERVICES (CMS) HOSPITAL
VALUE-BASED PURCHASING (VBP) PROGRAM IMPLEMENTATION PLAN

March 6, 2008

The American Nurses Association (ANA) is the only full-service professional organization representing the interests of the nation's 2.9 million registered nurses (RNs) through its 54 Constituent Member Associations (CMA's), Individual Member Division, organizational affiliates, and individual affiliates. Our members include RNs working and teaching in every health care sector across the entire United States. I am Isis Montalvo, a registered nurse with over 20 years of experience working in a variety of clinical settings. In my current role as Manager of Nursing Practice and Policy at the ANA, I provide oversight to the National Database of Nursing Quality Indicators™ (NDNQI®) which has collected and reported on nursing sensitive measures for over 10 years.

Thank you for the opportunity to provide ANA's perspective on the CMS Value Based Purchasing Program Implementation Plan, which links payment to performance for Medicare hospital services. Unfortunately, this plan fails to include the central provider of care in any given setting – the nurse – and fails to recognize nurses' extensive contributions to patient outcomes. Consequently, the ANA strongly advocates for inclusion of nursing sensitive measures in VBP. We hope to provide you with an overview of nursing sensitive indicators and how they are used to improve patient outcomes.

Nursing Sensitive Measures are a Crucial Tool for Improving Patient Outcomes

The ANA has been working to develop nursing quality and performance improvement measures for many years. In 1994, ANA launched the Patient Safety and Quality Initiative to explore and evaluate linkages between nursing care and patient outcomes. ANA fully funded pilot studies in seven states to evaluate those linkages and identify subsequent nursing sensitive measures. As a result of this work, the *Nursing Care Report Card for Acute Care*¹ proposed 21 measures of hospital performance related to the availability and quality of nursing services in acute care settings, with 10 final recommendations for nursing sensitive measures.

In 1998, ANA established the National Database of Nursing Quality Indicators™ (NDNQI®), currently administered by the University of Kansas Medical Center under contract to ANA. NDNQI is the only national level database that provides nursing data and patient outcomes at the unit level. Data are collected on structure, process and outcome indicators, based on Donabedian's quality framework. NDNQI's mission is to aid the registered nurse in patient safety and quality improvement efforts by providing research-based national comparative data on nursing care and the relationship to patient outcomes. The database has grown from 30 pilot hospitals in 1998, to over 1200 hospitals of all sizes currently participating from all 50 states and the District of Columbia. International hospitals on their Magnet™ journey also are participating. Facilities voluntarily participate in NDNQI because they are interested in quality improvement, the Magnet™ journey or a mechanism to meet regulatory requirements by using the data available in the database. Participation distribution crosses all bedsizes: <100, 16%; 100-199, 26%; 200-299, 22%; 300-399, 15%; 400-499, 9%; and >500, 12%.

¹ American Nurses Association (1995) *Nursing Care Report Card for Acute Care*. Washington, DC: American Nurses Publishing.

VBP Quality Measures

ANA believes there are valuable lessons to be learned from the NDNQI experiences that can enhance the VBP plan. One key consideration is utilizing structure, process and outcome nursing measures to improve patient outcomes in VBP. The VBP plan does include, within the HCAHPS portion measures, a patient’s perception on dimensions that nursing may have a role in. However, the plan does not acknowledge nursing measures that capture the structure of nursing care, nursing processes and nursing-relevant patient outcomes. Our experience and research, along with that of other researchers, have identified key nursing measures that impact patient outcomes. By failing to include nursing measures in this plan, CMS has failed to recognize the largest direct provider of care impacting patient outcome. We encourage Congress and any VBP plan to include nursing structural, process and outcome measures. At a minimum, the following nursing measures need to be considered for inclusion due to their impact to patient outcome:

<i>Structural Measures (System Centered Measures)</i>	<i>Process and Outcome Measures</i>	<i>Patient Outcome Measures</i>
<ul style="list-style-type: none"> • Nursing Hours per Patient Day • Staff Mix • Voluntary Turnover 	<ul style="list-style-type: none"> • Hospital Acquired Pressure Ulcer Prevalence • Falls Incidence • Falls with Injury 	<ul style="list-style-type: none"> • Restraint Prevalence • Urinary catheter-associated urinary tract infections • Central line catheter-associated blood stream infections • Ventilator-associated pneumonia

VBP Performance Standards & Incentives Structure

All of the structural measures along with many of the process and outcome measures transcend specific conditions and are relevant to many patient populations. Therefore qualification for the financial incentives should not be limited to reporting on all measures relevant to a service mix. All of these measures can contribute meaningfully to informed consumer decision making and should be part of the VBP program and publicly reported. The mechanism by which ANA has collected the data has been successful with high validity and reliability. Nursing has the pivotal role in providing care to patients to ensure optimal health and recovery across the lifespan. CMS is urged to re-examine its payment structure and recognize the value of nursing. Whatever changes are made in payment structure, there needs to be some recognition of the value that nursing brings to patient outcomes and quality improvement. Incentives for quality improvement measures should ensure that there is adequate nurse staffing at the bedside, and contain some mechanism to enhance nursing structural and processes of care that can improve patient outcomes. Consumers and providers of care would expect that a portion of quality improvement incentives should be at least partly allocated to where it could have the most impact – at the bedside.

The NDNQI Program in Detail

NDNQI is multi-faceted and includes database participation, indicator development with subsequent pilot testing, report generation, education and research. Indicator development and

implementation is ongoing and research based. Implementing an indicator is a multi-step process. Currently, data is collected on 17 indicators. Several NDNQI indicators were accepted by the National Quality Forum (NQF) as part of their consensus measure process in evaluating nursing sensitive measures. Other NQF measures have also been included in the database (*NQF endorsed measures):

- Patient Falls*
- Patient Falls with Injury*
- Nursing Hours per Patient Day*
- Staff Mix*
- Percentage of Nursing Hours Supplied by Agency Staff*
- RN Satisfaction Survey
 - Job Enjoyment Scale – Standard Form
 - Job Enjoyment Scale – Short Form
 - Practice Environment Scale (PES)*
- Restraints*
- Pressure Ulcer Prevalence
 - Community Acquired
 - Hospital Acquired
 - Unit Acquired
- RN Education & RN Certification
- Completeness of the Pediatric Pain Assessment, Intervention, Reassessment (AIR) Cycle
- Pediatric Peripheral Intravenous Infiltration Rate
- Psychiatric Physical/Sexual Assault Rate
- Nursing Voluntary Turnover*
- Nosocomial Infections*
 - Central Line Associated Blood Stream Infections (CLABSI)
 - Catheter Line Associated Urinary Tract Infections (CLAUTI)
 - Ventilator Associated Pneumonia (VAP)

Indicator development and implementation is a rigorous process to ensure data validity, reliability and feasibility of data collection from hospitals. Participating hospitals also have the opportunity to participate in pilot testing of a new indicator.

NDNQI Data Submission

Participating hospitals provide data to NDNQI from administrative records systems or special studies. Medical records, including electronic health records, are possible sources. Data are submitted via a secure web site, by web forms or files uploaded via XML. These sources contain the standardized information required by NDNQI, and have a known level of reliability.

Requested data can include; 1) Actual nursing hours from payroll or staffing systems; 2) Patient days from census data systems; 3) Falls data from incident reports and medical records (risk assessment results); 4) Pressure ulcer data from prevalence studies, including medical record review (present on admission, risk assessment results, prevention protocol); 5) Completeness of the pain assessment cycle from a prevalence study, including medical record review; 6) Peripheral Intravenous (PIV) Infiltration from a prevalence study; 7) Injury assaults from incident reports, NDNQI assault log, seclusion and restraint logs, medical record reviews, and interviews with involved nurse; 8) Restraint use from a prevalence study and medical record review; 9) Nurse turnover from human resources records, payroll records, and staffing system data; and 10) Nosocomial infection indicators (VAP, CLABSI, CAUTI) from infection control logs and laboratory results

Specific processes were established in order to attain the project goals of collecting standardized and reliable data from hospitals across the nation in order to provide the hospitals with comparative reports that they can use in both quality improvement initiatives, and in analyses of the relationship between aspects of the nursing workforce and nursing sensitive patient outcomes. These processes include: 1) standardized definitions and data collection guidelines to collect comparable data from each hospital; 2) A web-based tutorial for training data collection and data entry staff on the guidelines; 3) In-person interviews with hospital site coordinators to correctly classify units into unit types; 4) Soliciting input from hospitals about data they would like in the reports they receive from NDNQI; and 5) Guaranteeing the confidentiality of data, so that hospitals are motivated to provide accurate data.

Data Reliability was ascertained by using the initial ANA indicators and then NQF indicators, which have been through expert review for reliability and validity. Annual reliability studies on indicators that include survey on data collection practices and rater-to-standard reliability assessments or audits of reported data against original records.

The NDNQI's Pressure Ulcer Reliability Study demonstrated moderate to near perfect reliability based on Kappa values.² The results also demonstrated that certified wound ostomy continence nurses had better reliability in wound assessment. As a result, a pressure ulcer tutorial was developed to educate all nurses in wound assessment. The computer based learning tutorial was distributed via CD to all NDNQI hospitals for use within their internal educational systems and the module was placed on line on NDNQI's website (www.nursingquality.org) to reach all nurses and educate them on wound assessment. The tutorial has been well received and over 19,500 nurses have completed the tutorial.

NDNQI Data Use & Outcomes

NDNQI issues quarterly reports on nurse staffing and patient outcomes to participating hospitals, which cover eight rolling quarters of data, statistical significance, quartiles and national comparisons at the unit level based on patient, unit type and hospital bedsize. The RN Satisfaction Survey is administered annually with a report delivered a month after survey completion. Facilities primarily use the reports for quality improvement purposes and to assist them in recognizing and improving structure and process outcomes that affect patient outcomes. NDNQI is also collaborating with states to provide statewide reports. Other specialized reports are provided to groups of hospitals, as well.

Research conducted by NDNQI has demonstrated significance at the unit level.³ Studies related to falls and pressure ulcers demonstrated which staffing or workforce element was statistically significant at the unit for the patient outcome.⁴ For example, lower fall rates were associated with

² Hart, S., Bergquist, S., Gajewski, B. & Dunton, N. (2006) Reliability Testing of the National Database of Nursing Quality Indicators Pressure Ulcer Indicator. *Journal of Nursing Care Quality* 21(3), 256-265.

³ Dunton, N., Gajewski, B., Klaus, S., Pierson, B., (September 30, 2007) "The Relationship of Nursing Workforce Characteristics to Patient Outcomes" *OJIN: The Online Journal of Issues in Nursing* (12) 3, Manuscript 4. www.nursingworld.org/MainMenuCategories/ANAMarketplace/ANAPeriodicals/OJIN/TableofContents/Volume12/2007/No3Sept07/NursingWorkforceCharacteristics.aspx.

⁴ Dunton N., Gajewski, B., Taunton, R.L. & Moore, J. (2004) Nurse Staffing and Patient Falls on Acute Care Hospital Units. *Nurs Outlook*, 52, 53-9.

higher staffing on step-down, medical and combined medical-surgical units; on units where higher percentages of RNs with 10+ years of experience in nursing had lower fall rates and lower pressure ulcer rates.

An NDNQI monograph on best practice exemplars from 14 hospitals with sustained improvement in a specified nursing indicator was profiled in *Transforming Nursing Data into Quality Care: Profiles of Quality Improvement in Healthcare Facilities*⁵. Best practices, methods and tools were shared by the facility describing how they used the data, what they implemented to address a specific need and their subsequent successes and experience with nursing measures impacting patient outcomes.

The annual NDNQI Data Use Conference provides the state of the science for specified nursing indicators, evidence-based practices and performance improvement initiatives related to nursing sensitive indicators. Hands-on, practical tools and information are provided.

New enhancements are ongoing which includes developing a methodology for unit-based acuity or risk adjustment. This information is needed to include mixed acuity units (universal beds, critical access hospitals) in the data base necessary before the data can be rolled up to hospital level indicators that could be used for public reporting. Hospital level information also is desired by hospitals for Board reports. The significance and importance of implementing and evaluating the indicator at the unit level -- where care occurs, cannot be underestimated and is of vital importance to improving patient safety and outcomes. NDNQI also is developing more interactive reporting systems, especially with more narrowly defined comparison groups for use in quality improvement

Implementation of Nursing Sensitive Measures in VBP

In our experience with NDNQI, pilot testing was very effective in addressing feasibility of data collection of an indicator. Timely reporting, within 45 days of data collection, has also been paramount to initiate quality improvements. Significant resources are required for the ongoing operations of NDNQI, in capital investment, a secure web site, and the participation of an entire team of nurse researchers, statisticians, etc.

Collecting nursing structure, process and outcome indicators provides a comprehensive means for evaluating the quality of nursing care and patient outcomes. The NDNQI success story demonstrates that it this can be done with appropriate collection and reporting of indicators and resource allocation. Implementation of a Medicare Hospital Value-Based Purchasing Program without the reporting of nursing structure, process and outcome indicators would be incomplete and would not serve the public in its effort to evaluate and improve care.

Thank you for providing this opportunity to provide comments on behalf of the American Nurses Association and the nursing profession.

⁵ Montalvo, I. & Dunton, N. (2007) *Transforming Nursing Data into Quality Care: Profiles of Quality Improvement in U.S. Healthcare Facilities*. Silver Spring, MD: Nursesbooks.org.