Thomas Jefferson University
Jefferson Digital Commons

School of Nursing Faculty Papers & Presentations

Jefferson School of Nursing

January 2006

Linking nursing workload and performance indicators in ambulatory care

Karen F. Griffin MSN, RN, CNAA
South Texas Veterans Healthcare System

Beth Ann Swan PhD, CRNP, FAAN
Thomas Jefferson University, bethannswan@gmail.com

Let us know how access to this document benefits you

Follow this and additional works at: http://jdc.jefferson.edu/nursfp

Part of the Nursing Commons

Recommended Citation
Griffin, Karen F. MSN, RN, CNAA and Swan, Beth Ann PhD, CRNP, FAAN, "Linking nursing workload and performance indicators in ambulatory care" (2006). *School of Nursing Faculty Papers & Presentations.* Paper 5.
http://jdc.jefferson.edu/nursfp/5

This Article is brought to you for free and open access by the Jefferson Digital Commons. The Jefferson Digital Commons is a service of Thomas Jefferson University's Academic & Instructional Support & Resources Department (AISR). The Commons is a showcase for Jefferson books and journals, peer-reviewed scholarly publications, unique historical collections from the University archives, and teaching tools. The Jefferson Digital Commons allows researchers and interested readers anywhere in the world to learn about and keep up to date with Jefferson scholarship. This article has been accepted for inclusion in School of Nursing Faculty Papers & Presentations by an authorized administrator of the Jefferson Digital Commons. For more information, please contact: JeffersonDigitalCommons@jefferson.edu.

Karen F. Griffin
Beth Ann Swan

Linking Nursing Workload and Performance Indicators in Ambulatory Care

Executive Summary

- More and more ambulatory care organizations are using nursing report cards to monitor and evaluate the quality and effectiveness of nursing care in the ambulatory setting.
- Nurse staffing levels is usually one of the items included in a nursing report card and the one most scrutinized by ambulatory care administrators.
- One strategy employed by the nursing leadership at the South Texas Veterans Healthcare System to justify nurse staffing levels is linking administrative staffing monitors with nurse-sensitive outcomes via workload and performance indicators.
- Through this approach, nurse leaders are able to justify nurse staffing level changes, needed technology changes, process improvements, and/or workflow needs to administrators with positive results and support.

MORE AND MORE AMBULATORY CARE organizations are using nursing report cards to monitor and evaluate the quality and effectiveness of nursing care in the ambulatory setting. These report cards usually provide information on the relative performance of all measures across nurse practice settings without focusing on the specific performance of the individual nurse providers. The development of report cards facilitates a mechanism for benchmarking quality patient care delivered in ambulatory care settings and assists in identifying performance or clinical indicators representative of nursing care. Nurse staffing levels is usually one of the items included in a nursing report card and the one most scrutinized by ambulatory care administrators. One strategy employed by the nursing leadership at the South Texas Veterans Healthcare System to justify nurse staffing levels is linking administrative staffing monitors with nurse-sensitive outcomes via workload and performance indicators. Through this approach, nurse leaders are able to justify nurse staffing level changes, needed technology changes, process improvements, and/or workflow needs to administrators with positive results and support. An overview of one organization's journey in implementing this innovative strategy is described.

Ambulatory care nurse leaders at the South Texas Veterans Healthcare System (STVHS) believed that certain nurse staffing levels are required to provide quality of care expected by their patients. In September 2001, the STVHS's ambulatory care and primary care clinic division began developing a process to link staffing/workload indicators and performance indicators. Selected workload and performance indicators reviewed by the group during the planning phase are listed in Table 1.

Performance and Workload Indicators

The ambulatory care nurse-sensitive performance indicators selected for the project were (a) pain assessment; (b) nursing process as documented in the new patient/annual note; (c) patient satisfaction with telecare services; (d) advance directives; (e) evidenced-based clinical practice guidelines assigned to nursing staff to include such topics as nutrition and exercise counseling for hypertensive and obese patients, diabetic education, depression screens, and tobacco screen and counseling to quit; (f) health screening measures and education including hepatitis C screening, ETOH screening, colorectal cancer screening, and other cancer screening; (g) education on health promotion and safety topics; and (h) functional, nutritional, and social assessment annually.

The workload indicators selected were (a) understaffing rate based on the nurse staffing plan for each clinic, (b) vacancy rate, (c) turnover rate experienced in the last 6 months, (d) compensatory and overtime hours used, (e) staffing pool hours used, (f) monthly workload, and (g) assessment of the adequacy of support services (were staff being utilized appropriately and were nurses performing nursing not clerical duties?). All the indicators reflected nursing tasks and assignments within the clinics.

Aligning Indicators with Standards

Next, the selected performance/clinical indicators were aligned with Joint Commission on Accreditation of Healthcare Organizations (JCAHO) standards and ambulatory care nurse-sensitive outcomes. For example, pain assessment was linked to the JCAHO chapter on assessment and management

KAREN F. GRIFFIN, MSN, RN, CNAA, is an Associate Chief, Nursing Service, South Texas Veterans Healthcare System, Kerrville, TX.

BETH ANN SWAN, PhD, CRNP, FAAN, is an Associate Professor, Thomas Jefferson University, Jefferson College of Health Professions, Department of Nursing, Philadelphia, PA.

NOTE: This column is written by members of the American Academy of Ambulatory Care Nursing and edited by ELIZABETH DICKEY, MPH, RN, FNP. For more information about the organization, contact: AAACN, East Holly Avenue, Box 56, Pitman, NJ 08071-0056; (856)256-2300; (800)AMB-NURS; FAX (856)589-7463; E-mail: aaacn@ajj.com; Web Site: http://www.AAACN.com

Table 1.
Selected Workload and Performance Indicators

Organization	Nurse Report Card Quality Indicators
American Nurses Association. (1994). Patient Safety and Nurse Quality Initiative	• Identified indicators to support the contribution of registered nurses to improved patient outcomes.
American Nurses Association. (1996). 10 Acute Care Nurse Sensitive Indicators	• Mix of RN, LPNs, and unlicensed staff caring for patients in acute care settings • Total nursing care hours provided per patient day • Pressure ulcers • Patient falls • Patient satisfaction with pain management • Patient satisfaction with educational information • Patient satisfaction with overall care • Patient satisfaction with nursing care • Nosocomial infection rate • Nurse staff satisfaction
American Nurses Association. (2000). 10 Community-Based Non-Acute Care Nurse Sensitive Indicators	• Pain management • Consistency of communication • Staff mix • Client satisfaction • Prevention of tobacco use • Cardiovascular prevention • Caregiver activity • Identification of primary caregiver • Psychosocial interaction • Psychosocial interaction
Joint Commission of the Accreditation of Healthcare Organizations. (2001). Staffing and Effectiveness Standards: Human Resource/Workload Indicators; Clinical/Performance Indicators	• Overtime, vacancy rate, staff satisfaction, turnover rate, understaffing and staffing plan, staff injuries, on-call/per diem use and sick time • Family/patient complaints, patient falls, adverse drug event/med errors, injuries to patients, nosocomial infections, pneumonia, post-op infections, urinary tract infections, skin breakdown, shock/cardiac arrest.

of pain, and related to nursing-sensitive processes and outcomes of care, such as the use of a pain scale and pain score, education of the patient on pain medication and nonpharmacological alternatives for pain relief, and effectiveness of medication given. Nursing process as documented in the new patient/annual note was related to the JCAHO chapters on care of the patient, and associated with nurse-sensitive processes and outcome of care, such as health promotion and health seeking behavior and compliance. Patient satisfaction with telecare services was related to the JCAHO chapter on care of the patient, and symptom/medical-based calls were evaluated with nurse-sensitive outcomes such as assessing if the chief complaint was solicited, protocol used, advice given, and patient understanding documented. Education about advance directives was related to the JCAHO chapter on patient rights and associated with whether the nurse helped the patient receive information on advance directives and whether the nurse initiated a social service consultation if the patient was interested. Patient satisfaction was linked to the JCAHO chapter on care of the patient and the indicators included level of satisfaction with the services provided, patient questions being answered, and patient calls answered in a timely fashion.

The clinical practice guidelines and prevention measures were matched to the JCAHO chapter on improving organizational performance and to all seven of the nursing outcomes. Measures specifically completed by nursing staff were evaluated, such as patient education on health promotion and disease management topics and completion of health screenings. Lastly, the functional, nutritional, and social assessments were related to the JCAHO chapter on safety. The nursing outcomes were associated with health promotion, physical aging status, health-seeking behavior, and acceptance of health status and whether the annual functional, nutritional, and

social assessments were completed; whether the patient was caring for herself or himself alone at home; whether the patient's condition changed, and if so, whether referrals were sent to the appropriate services.

The nurse leaders collaborated with a nurse researcher to develop weighted scores and summary scores across three nurse staffing/workload indicator categories: *delighted, acceptable,* and *suboptimal* summary scores. Then the group reviewed current indicators, monitors, and performance measures relevant to ambulatory care nursing outcomes. Clinical or performance indicators were given a weighted score based on compliance with goals. Implementation and reporting started in January 2002. Data from the workload and performance indicators were scored and summarized on a weighted grid sheet. Data were placed on a "radar" sheet illustrating delighted, acceptable, or suboptimal levels. The adequacy of support services was also analyzed. This one-page report was used to show a quick and concise overview of staffing and outcomes of care specifically related to nursing. This report was then submitted to the nursing quality management group and hospital leadership on a quarterly basis (Alexander, 2001).

For each area, trends were analyzed and opportunities for improvement identified related to number of staff, skill mix, education or training, equipment, workflow, retention/recruitment, equipment enhancements, reorganization of workflow, and use of ancillary or support staff. By using this method, the nurse leaders were able to demonstrate and justify nurse staffing level changes, needed equipment being purchased, process improvements, and/or workflow needs to administration with positive results and support. This information has made nurses' contributions to the quality of care visible throughout the system, and is also used as a part of the annual business planning process at South Texas Veterans Healthcare System.

For acute care, in 2002, the Department of Veteran's Affairs Office of Nursing Services developed a strategic plan that included the VA Nursing Outcome Database (VANOD) project. The goals of VANOD include (a) establishing reliable methods for data collection of nursing quality indicators that impact patient outcomes, (b) building the VA Nursing Database, and (c) providing capacity for benchmarking and comparing quality outcome indicators at local, regional, and national levels. This project began in 2003 with the development of acute care nurse-sensitive indicators. In 2004, data collection began at pilot sites. In 2005, data reporting from the pilot sites began via Web-based reports to view trends across the nation. Several nurse-sensitive inpatient indicators have been developed for inpatient areas and include (a) nursing hours per patient day, (b) skill mix, (c) patient falls, (d) pressure ulcer prevalence, (e) nursing staff musculoskeletal patient handling injuries, (f) patient satisfaction, and (g) RN satisfaction. The VANOD is continuing new indicator development with workgroups for other settings, such as administrative, ambulatory care, mental health, long-term care, and spinal cord injury (Buffman, 2005).

An Evolution

Throughout the 4 years since these projects were initiated, standards and resources for ambulatory care performance and workload indicators continue to evolve. In May 2004, the National Quality Forum (NQF) began a project to produce national voluntary consensus standards on a set of performance measures to assess quality of ambulatory care. Phase 1 of the project consisted of a workshop held during the Spring of 2004 where ten top priority areas were identified for which standardized performance measures should be sought. These are patient experience with care, coordination of care, asthma, prevention both primary and secondary including immunizations, medication management, heart disease, diabetes, hypertension, depression, and obesity (Lang & Kizer, 2005). In August 2005, Phase 2 was completed with the endorsement of a set of NQF National Voluntary Consensus Standards for Ambulatory Care. Forty-three measures (individual and paired) were endorsed in the following topic areas: (a) asthma/respiratory illness, (b) behavioral health/depression, (c) bone conditions, (d) diabetes, (e) heart disease, (f) hypertension, (g) prenatal care, and (h) prevention, immunization, and screening (www.qualityforum.org). Phase 3 is in progress with a "Call for Measures" in each identified priority area.

In 2005, JCAHO introduced, "Using Clinical Practice Guidelines in Ambulatory Care," a resource to facilitate ambulatory care organizations to meet JCAHO's clinical practice guideline requirements (www.jcaho.org). Subsequently, the Joint Commission announced their 2006 National Patient Safety Goals for ambulatory care and office-based surgery. The goals highlight problematic areas in health care and describe evidence and expert-based solutions to these problems. Two new goals and requirements were introduced. One goal relates to improving effectiveness of communication among caregivers: providing caregivers an opportunity to ask and respond to questions through a standardized approach to "hand off" communications. The second goal relates to improving the safety of using medications in perioperative and procedural settings by labeling all medications and solutions and their containers used in and around the sterile field (www.jcaho.org).

As an organization, the American Academy of Ambulatory Care Nursing (AAACN) is striving to develop a policy statement and standards for work-

load indicators. Due to the fluctuating nature of ambulatory care, the multiple types and levels of providers, and multiple settings in which care is provided, identifying one valid and reliable indicator/method for acceptable registered nurse (RN) staffing levels continues to be a challenge (Swan & Griffin, 2005). In response to a growing need for ambulatory care workload indicators for RN staffing, AAACN published an annotated bibliography on research-based models for ambulatory care nurse staffing. This publication includes definitions of the scope and dimensions of ambulatory care nursing practice, methods to collect data on nursing workload, how to develop your own patient intensity index or patient classification system for your clinical area, and various staffing plans (Swan & Griffin, 2005).

The ambulatory care nurse leaders at the South Texas Veterans Healthcare System are continuously updating and revising the indicators to meet the ever-changing environment in which their nurses practice. By utilizing this method of linking nursing workload and performance indicators in a visual one-page summary, nursing leaders were able to (a) increase full-time equivalents (FTEs) in primary care clinics to support growing panels of patients and to meet performance expectations, (b) change the staffing mix calculation to include nurse practitioners and physician assistants, (c) acquire additional space for workflow redesign, (d) create crossover positions (LVN/phlebotomy positions in smaller clinics that do not need full time phlebotomists), (e) purchase additional computers and printers for the nursing staff to fully utilize the electronic medical record and education resources for nursing staff, and (f) achieve buy-in from top management on new staffing models for clinics with justification based on the linked data from performance indicators and staffing workload reports. Following these organizational changes, clinics that added FTEs and changed workflow processes improved their performance.

Conclusion

As nurses and nurse leaders, intuition and experience often guide our beliefs that certain RN staffing levels are required to provide the quality of care expected by patients; however, administrators demand hard data and evidence. The case exemplar presented here provides one method to visually show the effect of RN staffing by comparing workload indicators with performance indicators that are nurse sensitive. By measuring patient outcomes and linking them to administrative staffing standards, one can better articulate RN staffing needs and the positive impact nurses have on quality of care delivered to patients in ambulatory care.**$**

REFERENCES

Alexander, S. (2001). *Linking staffing and performance guidelines*. Paper presented at the Nursing Leadership Meeting of the South Texas Veteran's Healthcare System, San Antonio, TX.

Buffman, M. (2005). *The VA nursing outcomes database project (VANOD): Entering the 21st century*. Presented to the National Nurse Research Group. Retrieved May 31, 2005, from http://vaww.collage.research.med.va.gov/collage/VANOD/new/pubs.asp

Lang, N.M., & Kizer, K (2005). Nursing-sensitive quality performance measures: A key to health care improvement. *AAACN Viewpoint, 27*(2), 1, 8-10.

Swan, B.A., & Griffin, K.F. (2005). Measuring nursing workload in ambulatory care. *Nursing Economic$, 23*(5), 253-260.

Swan, B.A., & Griffin, K.F. (Eds). (2005). *Ambulatory care nurse staffing: An annotated bibliography*. Pitman, NJ: American Academy of Ambulatory Care Nurses.

ADDITIONAL READINGS

American Nurses Association (ANA). (1999). *Principles for nurse staffing*. Retrieved May 31, 2005, from http://www.nursingworld.org/readroom/stffprnc.htm

Joint Commission on the Accreditation of Healthcare Organizations (JCAHO). (2002). A pictorial method of benchmarking. *Joint Commission Perspectives, 22*(7), 9.

Joint Commission on the Accreditation of Healthcare Organizations (JCAHO). (2002). *Comprehensive accreditation manual for hospitals: The official handbook*. Oakbrook Terrace, IL: Author.

Joint Commission on the Accreditation of Healthcare Organizations (JCAHO). (2002). Gearing up to meet the new staffing effectiveness requirements. *Joint Commission Perspectives, 22*(7), 6-8.

Joint Commission on the Accreditation of Healthcare Organizations (JCAHO). (2002). Linking staffing and quality issues. *Joint Commission Perspectives, 21*(8), 8-9.

Joint Commission on the Accreditation of Healthcare Organizations (JCAHO). (2002). Surveying for staffing effectiveness in hospitals. *Joint Commission Perspectives, 22*(7), 5-6.

Mastal, M. (2001). Ambulatory care nursing outcomes. *AAACN Viewpoint, 23*(4), 6-7.

Mastal, M. (2000). Report cards: Providing value of ambulatory care nursing. *AAACN Viewpoint, 22*(6), 16-17, 22.

Letters Welcome

Nursing Economic$* welcomes readers' comments and invites readers to share information with their colleagues through Letters to the Editor. Submission of a letter constitutes permission for its copyright and publication in *Nursing Economic$. Letters are subject to editing.

Address your correspondence to: *Nursing Economic$,* East Holly Avenue Box 56, Pitman, NJ 08071–0056.