

Excellence and Evidence in Staffing



Essential Links
to Staffing Strategies,

Design and Solutions
for Healthcare.

IT IS WITH GRATITUDE AND HUMILITY THAT I THANK THE FOLLOWING PEOPLE
WHOSE SUPPORT MADE THIS WORK POSSIBLE.

All the participants who donated their time, experience insights and wisdom (see Appendix A). Karlene Kerfoot, Rhonda Anderson, Kathleen McCormick, Pat Stone, Leah Curtin, Nancy Valentine, Carol Ann Cavouras, Ann VanSlyck and JoEllen Koerner for supporting this idea and helping to see it through. Graham Barnes for his trust. Deborah Cleeter for facilitation, Jane Corrigan and Beth Kantz for support related to the literature review. Sara Moncada for gracefully managing this project. Leah Curtin for her patience and many hours of editing. And finally, ANCC and STTI for their part in making March 10th happen and for their on-going support.

BECOME AN ACTIVE PARTICIPANT.

Access, comment, contribute to this work at
www.ideaconnect2.com

Inquiries: kdouglas@concerro.com

Cover Photography by Eva Kolenko

Booklet Design by Julie Grantz

© Copyright 2008 Concerro, Inc.

REPORT OUT FROM THE

Excellence and Evidence in Staffing Roundtable

MARCH 10, 2008

HOSTS

The American Nurses Credentialing Center (ANCC)

The Honor Society of Nursing, Sigma Theta Tau International (STTI)

Concerro, Inc.

CONVENER / AUTHOR

Kathy Douglas, RN, MHA

EDITOR

Leah Curtin, DSc(h), RN, FAAN

PRIMARY REVIEWERS*

Rhonda Anderson, RN, CNAA, FAAN, CHE, MPH, Carol Ann Cavouras, MS, RN, CNAA, Holly De Groot, PhD, RN, FAAN, Karlene Kerfoot, PhD, RN, CNAA, FAAN, JoEllen Koerner, RN, PhD, FAAN, Ann VanSlyck, MSN, RN, CNAA, FAAN

**All participants (see Appendix A) had the opportunity to review and many made recommendations to assure the paper represented the work of the group. However, the individuals named above had a primary role in the review process.*

Introduction

Staffing in hospitals and healthcare systems is complex, increasingly regulated, and closely associated with patient safety. Moreover, a growing body of evidence suggests that quality, cost of care, safety, length of stay, readmissions, patient, physician and staff satisfaction, turnover and vacancy rates—all of which have an impact on operational and financial performance—are linked to staffing. Consequently, healthcare administrators are under pressure from insurers, patient advocates, unions, and state and national governments to define, secure and assure effective, safe, cost-effective staffing. This mandate is complicated by falling reimbursement rates, increasing labor shortages, rising labor costs, and increasing patient acuity.

An issue that affects an organization so pervasively, cries out for definition. So this quest began by asking “What is excellent staffing?” And then, “How do we know when we’ve achieved it?” Investigation into these questions generated a lot of interest, but few answers. Thus the decision to convene an invitational conference that would bring a broad spectrum of operational and ‘thought’ leaders together, and ask them to address these questions directly. This led to a remarkable gathering that included thought leaders from a wide range of backgrounds (see list of contributors Appendix A) who donated their time and insights to answering these questions (see Appendix B for the process used). This paper is one outcome of that gathering. It is not a definitive statement, so much as it is an opening gambit in an ongoing discussion which, it is our hope, will eventually lead to consensus on an operational definition of excellence in staffing.

Excellence in Staffing

A DEFINITION

Some, perhaps even many, may claim that excellence itself defies definition, or that excellence in staffing adds complexity upon complexity, and thus is impossible to define. This paper provides a different view, if something can be measured, it can be defined. There are metrics used to measure staffing, to measure patient outcomes, to measure organizational performance, to measure staff and patient and even physician satisfaction. These metrics, collectively can be extrapolated to measure staffing, thus to define excellence in staffing. The work of achieving excellence in staffing begins with developing a common understanding of the elements and their metrics, and that, in turn, will provide a framework for staffing standards, policies, and models that support excellence. The following definition specifies key characteristics and goals or aims of staffing excellence:

Excellence in staffing is a dynamic, evidence-driven process that results in the efficient, effective use of qualified staff and the stewardship of resources to achieve the best possible outcomes for patients, their families, the workforce, and the organization in which care is delivered.

KEY CHARACTERISTICS

Several elements of this definition merit special attention. First, the definition acknowledges that, at its most fundamental level, staffing is an ongoing process: the orchestration of elements that effectively matches *qualified staff and resources* to the care needs of patients. The word *qualified* addresses the importance of clearly understanding the roles, role authority, licensure, and role-related competencies and skills of the people who deliver care. The word *resources* encompasses an array of factors—human, material, technical, and financial—that support excellent outcomes, and implies *stewardship* in their use.

Excellence in Staffing

A DEFINITION

Effective means that staffing practices enable and prioritize the *best possible outcomes for patients, the workforce, and the organization*.

This means that the structure and decision models that are applied support all stakeholders appropriately. It also means that all factors are aligned to achieve safe patient care and support a qualified, motivated, and committed workforce. This, in turn, optimizes the organization's operational and financial goals.

The use of the word *dynamic* acknowledges changing patient needs, technological developments, regulatory changes, and other forces that affect the staffing process. It highlights the importance of understanding interrelationships among factors and the impact inherent in changing any one factor. Thus, any staffing model that is used, and the policies and practices that govern the model, must be flexible enough to accommodate ongoing change. *Dynamic* also implies that continual learning at all levels in the organization is an essential element of effective and sustainable staffing.

Excellent staffing presupposes judicious decision-making, informed and *driven by evidence*. Safe staffing, and certainly excellent staffing, no longer can be left to the whims of opinion, tradition, or financial concerns alone. Science and research now contribute information, and even evidence, that both support and justify staffing decisions. Relevant findings from research provide an underpinning for staffing strategies and practices. Staffing standards, related findings, and best practice recommendations offered by other healthcare providers and professional organizations augment research findings and help assure that both evidence and experience are at the heart of staffing decisions.

Best Practices

SUPPORTING EXCELLENCE IN STAFFING

Achieving excellence in staffing requires flexibility, commitment, and innovation. Like other complex processes, staffing is influenced by many variables and relies on the efficient operation of numerous systems and processes. Each of these systems and processes must be attended to if an organization is to achieve staffing excellence.

To help organizations attain excellence in staffing, we identified best practices in 10 different domains. The best practices offered here not only demonstrate what excellence in staffing means, but also provide a framework and can serve as guideposts for organizations that choose to embark on the journey to staffing excellence.

Best Practice 1 ORGANIZATIONAL CULTURE

Best Practice 2 MODELS, STANDARDS, POLICIES

Best Practice 3 EVIDENCE & DATA

Best Practice 4 ENVIRONMENT

Best Practice 5 PARTICIPATION

Best Practice 6 COLLABORATION WITH FINANCE

Best Practice 7 CONTINUAL IMPROVEMENT

Best Practice 8 PROFESSIONAL DEVELOPMENT

Best Practice 9 TECHNOLOGY

Best Practice 10 INNOVATION

BEST PRACTICES: 1

Organizing Culture

The organization's culture is patient-focused, encourages open communication and transparency, and values both trust and lifelong learning at all levels in the organization.

An organization's culture is shaped by and reflects the values, beliefs, and norms held by its founders, leaders, and organizational members. Organizational cultures in which values are aligned and honored, where transparency and open communication are the norm, and where decision-making is informed by a process of continual learning foster excellence in staffing. Cultures that embody these characteristics demonstrate them in the organization's structures, standards, policies, and systems. They shape the care environment, staffing practices, and organizational performance, all of which influence the experience of caregivers and the patients and families they serve.

Staffing excellence is enabled by organizational cultures that are open to adopting new practices, encourage thoughtful and informed risk-taking, and inspire the testing of new approaches while tracking data and making adjustments as necessary. Such organizations not only actively engage members of the workforce, they rely upon their contributions to on-going improvement.

Review Of Selected Literature

Nurses prefer building their careers in organizations that have values-based cultures, and that invite employees to fulfill their potential to make a ‘difference’ through their work. (Koerner & Wesley, 2008) To create these cultures, leaders nurture learning and innovation, and inspire staff to unleash their creativity, enthusiasm, and passion for their work. (Jaramillo, et al., 2008; Kerfoot, 2008) They also find ways for individuals to genuinely contribute to organizational change and to share in the responsibilities of governance, decision making, and shaping the work environment. (Jaramillo, et al., 2008; Porter-O’Grady, 2005) Perhaps the healthcare leader’s most important responsibility is to earn the trust of staff. (Kerfoot, 2008) Without trust, efforts to introduce change—or to engage staff in achieving organizational goals—encounters strong resistance and limited success. (Lawson & Price, 2003)

Patient-centered is a defining characteristic of the organizational culture in many institutions. (Ponte et al., 2003; Smith & Conant Rees, 2000). There is no other characteristics that is as important a feature of an effective healthcare organization. The decision to become patient-centered is built on an understanding that patients and families not only possess a unique perspective that should inform the design of care, but also that they are the sine qua non of the healthcare enterprise. [Institute of Medicine (IOM), 2001; Centers for Medicare and Medicaid Services, 2008; Joint Commission, 2008) In patient-centered organizations, open communication, trust, collaboration, and participation guide interactions with patients and families as well as with employees. (Institute for Family Centered Care, 2008)

BEST PRACTICES: 2

Models, Standards, Policies

Staffing model, standards, and policies are developed in partnership with key stakeholders, promoting a proactive approach to staffing that is safe, effective and fiscally responsible.

Good staffing decisions are at the core of safe and effective patient care, and are based on an understanding of role authority and relationships articulated in professional and legal standards of practice. Their effectiveness is determined by how well decision-makers understand and adhere to the organization's staffing model, standards, and policies, whether they have access to current research on safe staffing, and the accuracy and currency of information available to them about patients, caregivers, and the environment.

Staffing structures that best promote good decision-making are developed collaboratively, and the agreed upon framework reflects the organization's commitment to safe and effective patient care, a satisfied workforce and fiscal responsibility for the organization, the community, and society as a whole.

Review Of Selected Literature

*Landmark reports published by the Institute of Medicine in 2000 and 2001 drew the nation's attention to patient safety. (IOM, 2000; IOM, 2001) Health researchers have long been interested in the link between staffing and patient safety, and have conducted numerous studies exploring the relationship between patient outcomes and staffing levels and other staffing practices. These studies suggest that higher levels of nurse staffing are associated with lower rates of adverse events in hospitals. (*See references listed below.)*

Translating the recommendations of researchers into actual staffing practices at the hospital and unit level is challenging for a variety of reasons related to patient characteristics, the physical design of the nursing units, the flow of work, the inadequacies of many acuity systems, and the experience and skill level of staff as well as market-based resource constraints that vary widely across organizations and nursing units. (Lang, Hodge, Olson, Romano, & Kravits, 2004; AHRQ, 2004; Curtin, 2003) In light of this, the Joint Commission recommends that hospitals and other providers strive for “staffing effectiveness,” which involves determining the optimal number, competency, and skill mix of staff needed to provide services. The Joint Commission further recommends that healthcare organizations use continuous improvement techniques to gauge their success. (Joint Commission, 2006) A similar approach is recommended by leading nursing organizations, including the American Nurses Association (ANA, 1999), the American Association of Critical Care Nurses (AACN, 2005), and the American Organization of Nurse Executives (AONE 2003).

**(Aiken, Clark, & Sloane, 2002; Person et al., 2004; Elting et al., 2005; Kane, Shamliyan, Mueller, Duval, Wilt, 2007; Stone et al., 2007; Needleman, Buerhaus, Mattke, Stewart, & Zelevinsky, 2001; Needleman, Buerhaus, Mattke, Stewart, & Zelevinsky, 2002; Kovner, Jones, Zhan, & Basu, 2002; Cho, Ketefian, Barkauskas, & Smith, 2003; Unruh, 2003; Dunton, Gajewski, Taunton, & Moore, 2004; Dang, Johantgen, Pronovost, Jenckes, & Bass, 2002; Pronovost, et al., 2001; Dimick, Swoboda, Pronovost, & Lipsett, 2001; Stone et al., 2007; Dunton, Gajewski, Klaus, Pierson, 2007)*

BEST PRACTICES: 3

Evidence & Data

The staffing model, policies, and practices are based on and driven by evidence.

There is access to multi-dimensional data supporting informed and effective decision making.

Evidence is the foundation of excellence in staffing and in the development of effective staffing policies and procedures. Thus, good staffing judgments are informed by valid and reliable data. Staffing, scheduling, care delivery, and practice model decisions are based on a sound understanding of safe practices, and the relationship between staffing and positive patient outcomes. Individuals making staffing decisions have ready access to accurate and current data on the condition of patients and their medical/nursing needs; on the resources that are available, including the role competencies of available staff, as well as their skills, experience, work schedule, fatigue level, and other variables that may impact their ability to provide needed care; and information about scheduled procedures, admissions, discharges, transfers, and other planned activities that affect the unit as a whole.

Mechanisms are in place to monitor and adjust staffing practices based on new research findings, current recommendations and ‘best practices’ promulgated by professional groups and associations, and other feedback processes.

Evidence-based staffing is in its infancy. While there is some excellent work upon which to base the design of staffing models and practices, there is also much work ahead. For such efforts to be most helpful to institutions and policy-making bodies, there is a need to standardize staffing metrics and gain agreement on the meaning of common terms and to reach consensus on the data structures that are required to support a robust analysis of staffing practices and their impact on

quality and economic viability. It is important for government and private sources to fund further research and disseminate findings to individuals on the front lines of staffing. Adopting evidence-based staffing is critical to patient safety and professional advancement. It is through the collection, analysis, and reporting of staffing impact data that safe and sustainable staffing practices will become the norm.

BEST PRACTICES: 3

Review Of Selected Literature

Like their clinical practice colleagues, health care managers are expected to use an evidence-based approach to decision making. (DeGroot, 2005) Calls for using an evidence-based approach to staffing decisions come from multiple quarters, including the American Nurses Association (ANA), which highlights the importance of analyzing patient needs and staff competencies when determining staffing levels (ANA, 1999), and the American Association of Critical Care Nurses, which encourages organizations to routinely evaluate the effect of staffing decisions on patient and system outcomes. (AACN, 2005) The American Organization of Nurse Executives' Policy Statement on Staffing Ratios urges the use of research to identify the components of appropriate levels of nurse staffing in hospitals. (AONE, 2003)

To enhance staffing efficiency, decision makers must have access to information about patients, and about the staff that provide care. (Curtin & Zurlage, 1995) Staffing systems that fail to consider all of the relevant factors risk adverse events and poor patient outcomes. (Hyun, Bakken, Douglas, & Stone, 2008) Specific unit, patient, and nurse characteristics that should be considered when determining required staffing levels and competencies have been identified by the ANA and are listed in the ANA's Principles for Nurse Staffing. (ANA, 1999) Data to inform staffing decisions can be obtained from multiple sources, including patient classification systems, systems that track patient flow, track patient-caregiver interactions, electronic medication administration and health records, quality and safety databases, and databases with information on workforce qualifications and competencies. (Hyun et al., 2008; Van Slyck & Johnson, 2001) Today's leading organizations recognize the costs associated with ineffective staffing practices, and routinely measure their "human resource capital" along with financial and other metrics. (Lutz & Root, 2007)

Well-designed organization-based studies can provide baseline measures of nurse-sensitive outcomes and help explain the relationship between outcomes and key nurse staffing variables. (Potter, Barr, McSweeney, & Sledge, 2003) By examining

data describing how processes and management methods affect quality, health care organizations can gain insight into resource utilization, prioritization of services, and patient safety. (Dunham-Taylor & Pinezuk, 2006) Tapping into national databases, such as the ANA's National Database of Nursing Quality Indicators®, and comparing results to those of other organizations can yield an even deeper level of understanding. (Dunton et al., 2007)

BEST PRACTICES: 4

Environment

Staffing practices occur within environments that are designed to meet the needs of patients and families, address the needs of the nursing workforce, and promote the health and well being of all involved.

In organizations pursuing staffing excellence, a commitment to patients and care providers alike is reflected in the way work environments are designed. The environment is clean, orderly, reasonably quiet, respectful, and patient-centered, and supports the healing process as well as the safety and efficiency of the workforce. Both architecture and IT systems are designed for the end-user and reflect the needs of staff as well as patients.

Developing and maintaining the workforce requires attention to factors that promote caregiver satisfaction: life-long learning, work-life balance, respect, role autonomy and role authority, collegial relationships, adequate employment packages, opportunities for advancement, and patient workloads that foster role satisfaction.

Review Of Selected Literature

The work environment is shaped by physical, cultural, social, psychological, and professional factors, each of which contribute to the work experience. (DeGroot & McIntosh, 2008) Developing and maintaining a healthy work environment is a prerequisite for improving nurse recruitment and retention, job satisfaction, and patient and family outcomes (McCauley & Irwin, 2006), and requires the creation of systems, structures, and cultures that support communication, collaboration, decision making, staffing, recognition, and leadership. (AACN, 2005) Nurses must be involved in efforts to create such environments and “conditions of employment” that are conducive to providing safe, high quality health care and that are consistent with the values and ethics of the nursing profession. (ANA, 2001)

Many of the environmental factors that influence patient satisfaction—including communication with doctors and nurses, responsiveness of hospital staff, and the cleanliness and quietness of the hospital environment—are assessed by the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS), a patient satisfaction survey developed and administered by the Centers for Medicare and Medicaid Services. (CMS, 2008) Of note, is that more than half of the survey’s questions address aspects of care provided by nurses. (Lutz & Root, 2007) This underscores the relationship between nursing and patient satisfaction, a relationship that is still incompletely understood, however, and that requires further investigation.

Like patients, nurses are strongly affected by their environment. Work environments that embody organizational and managerial support for nursing are associated with higher levels of nurse satisfaction and help minimize the burnout that leads to poor nurse retention. (Bournes & Ferguson-Pare, 2007; Lacey et al., 2007; Aiken, Clarke, & Stone, 2002; Ulrich et al, 2007) Staffing variables that may impact nurse satisfaction and/or retention include working time, schedules, and relationships with nursing management (Stordeur, 2007); opportunities for self-scheduling (Teahan, 1998), workload (Shaver & Lacey, 2003; Aiken, Clark, & Sloane, 2002; Jolma, 1990); and shift structure, for example 8 vs. 12 hour shifts. (Stone et al., 2006; Dwyer, Jamieson, Moxham, Austen, & Smith, 2007)

BEST PRACTICES: 5

Participation

Staff are proactive participants in staffing and assignment practices that effectively match patient needs with role competency and related skills and knowledge of staff, taking into account continuity of care and the importance of nurse/patient relationships.

An environment of excellence anticipates staffing and assignment needs and encourages staff participation and shared decision-making. The organization has a healthy respect for the private lives of its staff and engages in practices that promote work-life balance.

Current and accurate information on skill competencies, knowledge of the abilities and credentials of individual caregivers, as well as the skill/experience mix on care teams in all areas is available. Up-to-date information on continually changing patient situations and populations is available and used in concert with caregiver and care team information for effective decision-making.

Staffing structures and policies are flexible enough to respond to the needs, desires, requests, capabilities, and generational differences of today's workforce. They also empower managers and care providers to make adjustments in response to unexpected changes in unit activity, staff availability, or patient need. Moreover, the relational dynamics involving the nurse, other care team members, and the patient are built into the staffing process.

Review Of Selected Literature

Using a collaborative approach to decision making ensures that all decisions, including those related to staffing, are informed by the unique insights, perspectives, and knowledge of managers as well as staff. (Porter-O'Grady, 2005) Research has shown that units with high levels of collaboration, autonomy, and continuity, and where nurses have greater control over their practice, are associated with better patient outcomes. (Boyle, 2004; Taunton, Kleinbeck, Stafford, Woods, & Bott, 1994) Involving direct care nurses and other members of the staff in decisions related to staffing helps assure that patient needs and staff competencies are appropriately matched, yielding better results for patients and staff alike.

Practice models that promote continuity of care, flexibility, and the effective matching of patients and caregivers can provide a useful framework for making staffing decisions. One promising model is the Synergy Model, developed by the American Association of Critical Care Nurses. (Curley, 2007) The Synergy Model assumes that patient outcomes are optimized when patient needs and nurse competencies are in a synergistic relationship with one another. It identifies key patient characteristics and nurse competencies that should be considered when matching nurses and patients.

Self-scheduling systems provide a way to actively involve nurses in scheduling decisions, while also allowing them to gain more control over their work schedules and achieve a better balance between their personal and professional lives. For self-scheduling systems to succeed, individuals must be willing to consider the staffing needs of the patient care unit as well as their own needs and preferences. (Bailyn, Collins, & Song, 2007) If managed effectively, self-scheduling systems can help assure appropriate staffing and have a positive impact on staff morale, satisfaction, and retention; promote team problem solving, and yield financial benefits through the reduction of sick calls and turnover. (Teahan, 1998)

**Synergy is the term used to describe a situation where the final outcome of a system is greater than the sum of its parts.*

BEST PRACTICES: 6

Collaboration with Finance

Nursing and Finance share a commitment to fiscal responsibility and accountability.

The practice framework, staffing, and care delivery processes represent a strong and shared understanding of the impact of staffing on patient outcomes, and on the financial requirements and interests of the institution. The two elements of a healthy relationship between nursing and finance are: 1) shared accountability and 2) fiscally responsible staffing. This assures that both patient safety and excellent patient care outcomes are the goals of both Nursing and Finance.

The development of budgets and performance metrics are the result of collaboration between Nursing and Finance, and serve the needs of both groups which, in turn, serves the needs of the whole organization. Performance measures are monitored and reported in a predictable manner that supports timely analysis and response and allows for informed decision-making.

To assure excellence in staffing, individuals who are responsible for day-to-day staffing decisions are knowledgeable about the clinical, operational and financial implications of the decisions they make. Thus the organization provides training and education to all individuals who are responsible for making staffing decisions.

Review Of Selected Literature

Between 2000 and 2004, the average annual salary of full-time RNs rose 23.5 percent. Salaries continued to rise over the next three years, reaching \$62,480 in 2007. (Nursing Link, 2007; US Department of Labor, 2008) In the face of these steady salary increases, leaders in Nursing and Finance must pay close attention to factors that add to labor costs, such as nursing turnover and the increased use of temporary staff (O'Brien-Pallas et al., 2006; Bloom, Alexander, & Nuchols, 1997), and must work together to find ways to decrease expenses. Using open-shift management technologies is one way. These systems allow organizations to more efficiently staff unfilled shifts and to realize gains in productivity by better using their existing workforce. (Valentine, Nash, Hughes, and Douglas, 2008) Another approach to managing labor costs is suggested by studies indicating that using higher levels of part-time staff or more experienced staff is associated with lower personnel and operating costs. (Bloom et al., 1997)

Leaders in Nursing and Finance also must monitor research that explores linkages between staffing, financial outcomes, care quality, and patient safety. A recent meta-analysis conducted by Kane and colleagues (2007), for example, examined 28 studies that looked at nurse staffing and patient outcomes, and found that higher staffing levels were associated with a 24% reduction in length of stay in ICUs and a 31 percent reduction of LOS in SICU patients. Another study found that increasing the proportion of RN nursing hours per patient day was associated with a net decrease in costs due to reductions in length of stay, deaths, and adverse outcomes. (Needleman, Buerhaus, Stewart, Zelevinsky, & Mattke, 2006) These studies and others like them provide essential background for discussions and decision making related to nurse staffing.

BEST PRACTICES: 7

Continual Improvement

Staffing practices, policies, and models are routinely updated to reflect findings from internal and external analyses, changes in the care environment, current research, and recommendations from patients, staff, and professional organizations.

Like all complex processes, staffing practices and the policies and model that guide them must be continuously evaluated, updated, and improved based on new findings. Organizations committed to excellence in staffing have mechanisms in place to capture and analyze staffing impact data, including staff and patient observations and recommendations for improvements that benefit patients, the workforce, and the organization.

In addition to reviewing internal effectiveness data, knowledgeable nurse leaders support staffing excellence by regularly reviewing the staffing literature and research findings, as well as recommendations from professional organizations. These and other data sources are used to stay abreast of best staffing practices and determine appropriate applications.

Collaborative structures are in place to review processes and make recommendations for change. All members of the workforce clearly understand how to give feedback and are kept informed about actions that are taken in response to their suggestions and observations. Staff are included in improvement efforts, and their observations about organization-wide implications of any changes are promptly brought forward. The objective and subjective evaluation processes employed by the organization invite broad participation by members of the nursing workforce and other departments and encourage them to participate in efforts to optimize staffing and care delivery outcomes.

Review Of Selected Literature

Monitoring and evaluating organizational practices, and acting on what is learned, are central to quality improvement and are hallmarks of learning organizations. (IOM, 2001)

The importance of ongoing evaluation is recognized by the American Nurses Credentialing Center (ANCC), which requires Magnet organizations to demonstrate how their structures, systems, and processes impact clinical, workforce, patient and family, and organizational outcomes. (ANCC, 2008; Wolf, Triolo, & Reid Ponte, 2008) It is also recognized by the American Nurses Association (ANA), which emphasizes the importance of evaluating staffing systems to determine if they meet the needs of patients and nurses. (ANA, 2005)

Effective evaluation and improvement efforts use a team approach and involve managers and staff who are familiar with the process in question. (Institute for Healthcare Improvement - IHI-2006) Measuring outcomes; using data to gain insight into cause, effect, and system interactions; comparing data to benchmarks and using it to drive change are fundamental to improvement efforts at the unit, service, and system level. (IHI; Dunham-Taylor & Pinezuk, 2006) Also valuable is a systems approach in which participants consider the whole picture and the interaction between the parts, rather than each part in isolation, and take time to uncover patterns that reveal root causes and may lead to creative solutions. (Douglas & Kerfoot, 2008)

While much can be gained by monitoring the performance of one's own organization or comparing one unit to another, even more can be learned when research findings and the experiences and recommendations of groups outside the organization are also considered. (Wolf, et al., 2008) Many professional organizations recognize the benefits of comparing practices and outcomes, and several maintain databases of quality indicators that institutions may use for benchmarking purposes. For example, the ANA's National Database of Nursing Quality Indicators® (NDNQI®) includes data on a range of key staffing and quality variables. Through NDNQI®, institutions can benchmark themselves against organizations of similar size and scope and learn how they compare in terms of staffing mix, nursing hours per patient day, nurse turnover, job satisfaction, and a range of patient outcomes at the unit level. (ANA, 2008; Montalvo & Dunton, 2006) Other groups that offer opportunities for benchmarking include the Joint Commission through its ORYX initiative (Joint Commission, 2007), and the Centers for Medicare and Medicaid Services through the Hospital Consumer Assessment of Healthcare Providers and Systems survey. (CMS, 2008)

BEST PRACTICES: 8

Professional Development

There is support for the ongoing professional development of nurses and other care providers, promoting clinical and managerial excellence.

Staff development is the foundation of ongoing excellence and professional growth. Assuring that staff have an opportunity to stay current with new care practices, treatments, technologies, and healthcare trends, is a priority. Pursuing certifications or advanced education is encouraged at all levels in all clinical departments. There is support for exploring interests in different practice areas and acquiring new role-related skills within and outside the organization. Staffing practices allow for flexibility to support education and growth while promoting accountability.

Managerial excellence is also a priority. There is an ongoing commitment to ensuring that managers have the role competency and related skills, knowledge, and tools necessary for success. New managers have access to programs designed to help them acquire new skills, as well as access to mentors who can offer them counsel and advice. All managers have access to programs and processes that foster the continued improvement of leadership and managerial expertise.

Review Of Selected Literature

Today's healthcare environments are marked by a steady expansion in clinical knowledge and an ever-growing array of new technologies and treatments. (IOM, 2001) Programs for professional development are critical for helping nurses acquire the competencies needed to practice safely and effectively in these environments (IOM, 2003), and to develop the knowledge, critical thinking, and decision making skills that are essential components of the nursing role. (O'Rourke, 2006)

Practice environments that demonstrate strong administrative support for nurses and nursing care are associated with better patient outcomes, as well as higher rates of nurse satisfaction and lower rates of nurse burnout. (Vahey, Aiken, Sloane, Clarke, & Vargas, 2004; Aiken, Clarke, & Sloane, 2002) In addition, organizations that nourish learning among employees, that develop exceptional managers and supervisors; and that embrace their employees' personal strengths and help them develop pride and confidence are associated with higher levels of employee engagement. High levels of engagement, in turn, are linked to job satisfaction and intent to remain in an organization, as well as patient satisfaction and patient outcomes. (Wagner, 2006)

Creating an environment that is professionally rewarding and that promotes job satisfaction is especially important today in light of the ongoing nursing shortage and the need to keep nurses in nursing and attract new people to nursing careers. (Joint Commission, 2002; Buerhaus, et al., 2007)

BEST PRACTICES: 9

Technology

Technology is used to optimize communication, collaboration, decision-making, and resource use. It supports consistent capture of relevant staffing data.

The sheer quantity of information and the quality of communication required for excellence in staffing demands the use of technology. Technology enables the deployment of staffing strategies that are well conceived and the management of on-going staffing activities. It also allows the collection and analysis of data that are required to evaluate staffing practices and their impact on patient, caregiver, and organizational outcomes, and to identify areas for improvement.

In today's world, technology is the sine qua non of support for excellence. It must be widely accessible and used to ensure timely access to data and information by both managers and staff. It enables decision-makers to understand staffing needs across units, clinical areas, and the organization as a whole. It supports operational efficiency by optimizing the complex communications essential for effective staffing, and provides access to data essential for effective decision-making. Organizations committed to excellence in staffing have structures in place to identify new ways of leveraging technology to advance staffing practices, and develop partnerships with vendors to continually improve technology solutions.

Review Of Selected Literature

Computers have transformed health care and the nursing profession. (Saba & McCormick, 2006) Through informatics, health care organizations are able to capture and utilize data to guide operations and support evidence-based decision-making at all levels, including the point of care. (IOM, 2003) In addition to enhancing decision support and guideline-based care, health information technologies have proven beneficial to surveillance and clinical monitoring efforts, and have led to improvements in medication practices leading to a decrease in medication errors. (Chaudhry, et al., 2006)

Systems that allow staff to access evidence in the form of data and integrate it into practice are critical for maximizing workforce capability. (IOM, 2003) Advances in health care technology offer organizations an opportunity to address many of the issues and challenges associated with achieving staffing excellence. These include acquiring data from multiple sources; representing data in a way that allows it to be re-used for multiple purposes; processing and mining data to support evidenced-based decision making; and presenting data in standardized and user-configurable ways, including in dashboards that benchmark staffing practices. (Hyun, et al., 2008; Bakken , Stone, Larson, in press) Today's computer and web-based staffing applications can help decrease time spent on scheduling activities. In addition to giving decision makers ready access to data that are used to make staffing decisions, the systems can facilitate self-scheduling, shift-posting, and shift bidding activities. (Fabre, 2006; Sabet, 2005)

The Internet, with its information sharing and social networking capabilities, offers the healthcare workforce an unparalleled opportunity to share new ideas and to gather, disseminate, and discuss information, standards, and best practices. (Bakken , Stone, Larson, in press; Li & Bernoff, 2008; Charron, Li, & Favier, 2006) In today's world, computers and the Internet must be available wherever nurses practice. (Saba & McCormick, 2006)

BEST PRACTICES: 10

Innovation

A culture of innovation is cultivated.

Change and innovation are inevitable companions as we move into the future. By its very nature, an organization committed to excellence is one that seeks out new approaches and innovations to promote the evolution of effective staffing practices. Everyone involved in the continuum of care delivery is enabled to understand the staffing process and is rewarded for making recommendations for innovative ideas. This includes patients, nurses, other care team members, physicians, managers, and leadership. A formal organizational structure supports innovation by allowing new ideas to surface and be reviewed and adopted according to pre-set innovation criteria, and by supporting the adoption, implementation, and evaluation of those innovations found to further excellent staffing practices.

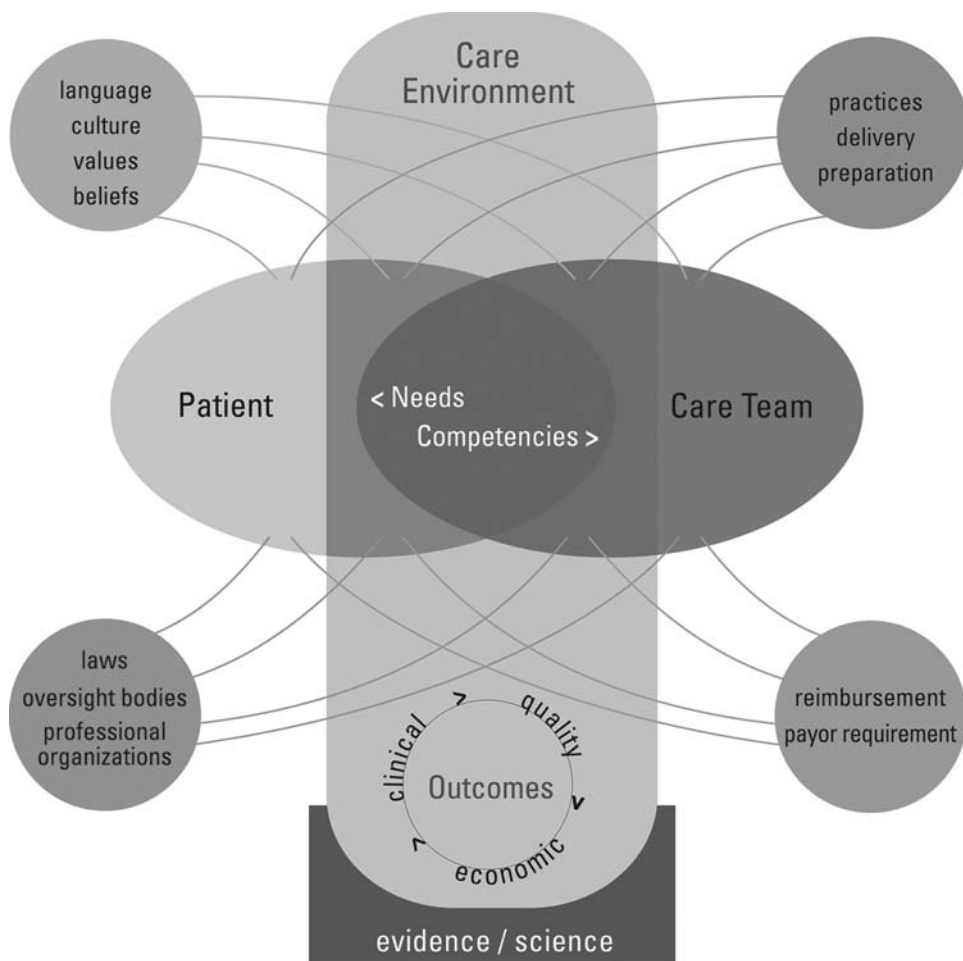
Review Of Selected Literature

For innovation to thrive within an organization, the organization's leaders must create a culture that fosters creativity and experimentation, and a work environment in which employees feel energized and can keep their passions alive. (Jaramillo, et al., 2008; Kerfoot, 2001)

Innovation is encouraged by leaders who: ask questions; create opportunities for individuals to interact and continuously learn from one another; demonstrate interest and support for the work of teams and individuals; and attend to their results. (Donaldson and Mohr, 2000; IOM, 2001) As the members of an organization begin to realize their input and creativity make a difference, new ideas and innovation will become the norm rather than the exception. (Jaramillo, 2008)

A MODEL FOR
Achieving Staffing Excellence

The model below embodies the concepts and principles represented in the definition and standards for excellence in staffing, and demonstrates an integration of the various elements explored in this paper.



Elements of the Staffing Model

As represented in the staffing model, the following core elements are essential components of an evidenced-based staffing framework and interact with one another to support the definition and standards of excellence.

PATIENTS

As used in the model, the term “patients” refers to individuals receiving care, as well as family members and other loved ones who require the teaching and support of nurses and other direct care providers. The Model for Achieving Staffing Excellence purposely places the patient both within and outside the care environment and illustrates how all patients bring into the care environment their own set of values, beliefs, expectations and needs—a dimension that is often overlooked, but that is needed to inform excellent staffing decisions.

NURSES / CARE TEAM

By definition, staffing involves the matching of patients with nurses and other licensed and unlicensed staff who care for them. The model incorporates nurses and other care providers, as well as the role and skill competencies and experiences they bring to the care equation. The model also acknowledges the values and beliefs of caregivers, and how these influence caregivers’ lives and experiences within and outside the care environment. A professional practice model that promotes role-appropriate autonomy and accountability is implied.

NEEDS / COMPETENCIES

Aligning role competencies and related skill competencies to the specific and changing needs of patients is the art and science of staffing. Placing competencies and needs at the intersection of the patient and care team highlights the importance of this information to staffing decisions.

Elements of the Staffing Model

ON-GOING EVALUATION AND FEEDBACK SYSTEM

It is through careful and on-going monitoring that positive impact is recognized and issues are identified and addressed. Data about each element of the staffing model combine to inform clinical, quality, and financial outcomes for patients, the workforce and the organization and are used to drive changes in staffing practices.

EVIDENCE / SCIENCE

The use of evidence and science to inform excellence holds a foundational position in the model. Its placement speaks to the way evidence must influence all aspects of staffing. New knowledge about staffing practices and their impact keeps the staffing program in a state of dynamic evolution and informs continual improvement.

THE CARE ENVIRONMENT

In the model, the environment represents any physical location in which care is delivered, and includes the organization's purpose, culture, and systems. Its location in the model acknowledges the environment as the place where patients and the care team intersect. The model also recognizes internal and external influences that impact the care environment and their changing nature.

EXTERNAL INFLUENCES

Many external influences come to bear on the patient, workforce, and care environment. This highlights the complex and interconnected nature of the external and internal environments in which care is delivered.

Moving Forward

To move forward, we must put a process in place to exercise and refine the definition and standards offered in this work. To do this effectively, all stakeholders need to be involved in the following activities:

1. Support standardization of staffing terminology and metrics.
2. Identify needs for further research and resources to fill gaps.
3. Create forums for exchanging ideas, solutions, experiences, and lessons learned, and to encourage the use and expansion of knowledge about staffing excellence.
4. Establish a process to refine the definition and standards of staffing excellence, so that they reflect new knowledge, innovations, insights, experiences, and research.
5. Identify ways to disseminate information on best practices in staffing as information evolves.
6. Initiate a process to garner further input from key stakeholders.
7. Develop the business case for Excellence in Staffing.
8. Look at future trends and their potential implications (e.g., predicted cuts in Medicare and Medicaid).
9. Look at different ways to optimize and support the effective and efficient use of professional nurses.
10. Explore new ways of using technology to support excellence in staffing.

BECOME AN ACTIVE PARTICIPANT.

Access, comment, contribute to this work at
www.ideaconnect2.com

References

- Agency for Healthcare Research and Quality. Research in Action. March 2004, Issue 14.
- Aiken, L.H., Clarke, S.P., Sloane, D.M. (2002). Hospital staffing, organization, and quality of care: Cross-national findings. *Nursing Outlook*. 50(5), 187-194.
- Aiken, L.H., Clark, S.P., Sloane, DM, Sochalski, J., Silber, J.H. (2002). Hospital nurse staffing and patient mortality, nurse burnout, and job dissatisfaction. *Journal of American Medical Association*. 288, 1987-1993.
- American Association of Critical Care Nurses. (2005). AACN Standards for Establishing and Sustaining Healthy Work Environments. Aliso Viejo, CA: AACN.
- American Nurses Credentialing Center. (2008). Magnet Recognition Program. Retrieved September 8, 2008 from www.nursecredentialing.org/Magnet.aspx.
- American Nurses Association. (2001). Code of Ethics for Nurses with Interpretive Statements. Silver Spring, Maryland: American Nurses Association.
- American Nurses Association. (2008). The National Database. Retrieved September 8, 2008 from www.nursingworld.org/MainMenuCategories/ThePracticeofProfessionalNursing/PatientSafetyQuality/NDNQI/NDNQL1.aspx.
- American Nurses Association. (1999). Principles for Nurse Staffing. Washington, DC: American Nurses Association.
- American Nurses Association. (2005). Utilization Guide for the ANA Principles for Nurse Staffing. Silver Spring, MD: American Nurses Association.
- American Organization of Nurse Executives (2003). Policy Statement on Staffing Ratios. Washington, DC: The American Organization of Nurse Executives.
- Bailyn, L., Collins, R., Song, Y. (2007). Self-scheduling for hospital nurses: an attempt and its difficulties. *Journal of Nursing Management*. Vol. 15, 72-77.
- Bakken S, Stone PW, Larson EL. A nursing informatics research agenda for 2008-18: Contextual influences and key components. *Nursing Outlook* (in press).
- Bloom, J.R., Alexander, J.A., Nuchols, B.A. (1997). Nurse staffing patterns and hospital efficiency in the United States. *Social Science and Medicine*. 44(2), 147-155.

- Bournes, D.A., Ferguson-Pare, M. (2007). Human becoming and 80/20: an innovative professional development model for nurses. *Nursing Science Quarterly*. 20, 237-253.
- Boyle, S.M. (2004). Nursing unit characteristics and patient outcomes. *Nursing Economics*. 22(3):111-117.
- Buerhaus PI, Donelan K, Ulrich TB, Norman L, DesRoches C, Dittus R. Impact of the nurse shortage on hospital patient care: comparative perspectives. *Health Affairs*. 2007;26:8535-862.
- Centers for Medicare and Medicaid Services. (2008). HCAHPS: Patients' Perspectives of Care Survey. Retrieved September 5, 2008, from www.cms.hhs.gov/hospitalqualityinits/30_hospitalHCAHPS.asp.
- Charron, C., Li, C., Favier, J. (2006). *Social Computing: How Networks Erode International Power and What To Do About It*. Cambridge, MA: Forrester Research.
- Chaudhry, B., Wang, J., Wu, S., Maglione, M., Mojica, W., Roth, E., et al. (2006). Systematic review: impact of health information technology on quality, efficiency, and costs of medical care. *Annals of Internal Medicine*. 144, 742-752.
- Cho, S.H., Ketefian, S., Barkauskas, V.H., Smith, D.G. (2003). The effects of nurse staffing on adverse events, morbidity, mortality, and medical costs. *Nursing Research*. 52(2), 71-79.
- Curley, M.A.Q. (2007). *Synergy: The Unique Relationship between Nurses and Patients*. Indianapolis, IN: Sigma Theta Tau International.
- Curtin, L.L., Zurlage, C.L. (1995). Nursing productivity: from data to definition. *Nursing Management*. 17(5), 32-34, 38-39, 40-41.
- Curtin, L.L. (September 30, 2003). An integrated analysis of nurse staffing and related variables: effects on patient outcomes. *Online Journal of Issues in Nursing*. 8(3). Retrieved September 8, 2008, from www.nursingworld.org/MainMenuCategories/ANAMarketplace/ANAPeriodicals/OJIN/Keynotesof-Note/StaffingandVariablesAnalysis.aspx. (Updated by author, March 2008.)
- Dang, D., Johantgen, M.E., Pronovost, P.J., Jenckes, M.W., Bass, E.B. (2002). Postoperative complications: does intensive care unit staff nursing make a difference? *Heart and Lung: The Journal of Critical Care*. 31, 219-228.

References

- De Groot, H.A. (April 2005). Evidence-based leadership: nursing's new mandate. *Nurse Leader*. 37-41.
- DeGroot, H.A., McIntosh, L.O. (2008). The nursing work environment and intent to stay: a new look. Unpublished manuscript.
- Dimick, J.B., Swoboda, S.M., Pronovost, P.J., Lipsett, P.A. (2001). Effect of nurse-to-patient ratio in the intensive care unit on pulmonary complications and resource use after hepatectomy. *American Journal of Critical Care*. 10, 376-382.
- Donaldson, M.S., Mohr, J.J. (2000). *Exploring Innovation and Quality Improvement in Health Care Micro-Systems: A Cross-Case Analysis*. Washington, D.C.: Institute of Medicine, National Academy Press. Retrieved June 25, 2008 from www.nap.edu/catalog.php?record_id=10096#toc.
- Douglas, K., Kerfoot, K. (October 2008). Applying a systems thinking model for effective staffing. *Nurse Leader*. 29-33.
- Dunham-Taylor, J., Pinezuk, J.Z. (2006). *Health Care Financial Management for Nurse Managers: Merging the Heart with the Dollar*. Chapt. 19: Patient Classification Systems. Sudbury, Mass.: Jones and Bartlett.
- 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*. Vol. 12, No. 3, Manuscript 4. Retrieved September 4, 2008 from www.nursingworld.org/MainMenuCategories/ANAMarketplace/ANAPeriodicals/OJIN/TableofContents/Volume122007/No3Sept07/Nursing-WorkforceCharacteristics.aspx.
- Dunton, N., Gajewski, B., Taunton, R.L., Moore, J. (2004). Nurse staffing and patient falls on acute care hospital units. *Nursing Outlook*. 52(1), 53-59.
- Dwyer, T., Jamieson, L., Moxham, L., Austen, D., Smith, K. (2007). Evaluation of the 12-hour shift trial in a regional intensive care unit. *Journal of Nursing Management*. 15, 711-720.
- Elting, L.S., Pettaway, C., Bekele, B.N., Grossman, B.H., Cooksley, C., Avritscher, E.B., Saldin, K., Dinney, C.P. (2005). Correlation between annual volume of cystectomy, professional staffing, and outcomes: a statewide, population-based study. *Cancer*. 104, 975-984.
- Fabre, J. (October 2006). Do the math: staffing software multiplies effectiveness.

IT Solutions. 20-24.

Hobbs, S.F., Sodomka, P.F. (2000). Developing partnerships among patients, families, and staff at the Medical College of Georgia Hospital and Clinics. *Joint Commission Journal of Quality Improvement*. 26, 268-276.

Hyun, S., Bakken, S., Douglas, K., Stone, P. (May-June 2008) Evidence-based staffing: potential roles for informatics. *Nursing Economics*. 26(3), 151-8, 173.

Institute for Family Centered Care. (2008). FAQ. Retrieved April 29, 2008 from www.familycenteredcare.org/index.html.

Institute for Healthcare Improvement. (n.d.). How to Improve. Retrieved June 23, 2008 from www.ihl.org/IHI/Topics/Improvement/ImprovementMethods/HowToImprove/.

Institute of Medicine. (2000). Kohn, L., Corrigan, J., Donaldson, M. (Eds.). *To Err Is Human: Building a Safer Health System*. Washington, DC: National Academy Press.

Institute of Medicine. (2001). *Crossing the Quality Chasm: A New Health System for the 21st Century*. Washington, DC: National Academy Press.

Institute of Medicine. (2003). Page A. (Ed.). *Keeping Patients Safe: Transforming the Work Environment of Nurses*. Washington, DC: National Academies Press.

Jaramillo, B., Jenkins, C., Kermes, F., Wilson, L., Mazzocco, J., Longo, T. (April 2008). Positive deviance: innovation from the inside out. *Nurse Leader*. 30-34.

Joint Commission on Accreditation of Healthcare Organizations. (2002). *Health Care at the Crossroads: Strategies for Addressing the Evolving Nursing Crisis*. 2002. Retrieved on May 14, 2008 from www.jointcommission.org/NR/rdonlyres/5C138711-ED76-4D6F-909F-B06E0309F36D/0/health_care_at_the_crossroads.pdf.

Joint Commission on Accreditation of Healthcare Organizations. (2006). *Staffing Effectiveness*. Retrieved on May 14, 2008 from www.jointcommission.org/AccreditationPrograms/AssistedLiving/Standards/FAQs/HRManagement/Planning/staff_effectiveness.htm.

Joint Commission. (December 2007). *ORYX*. Retrieved June 24, 2008 from www.jointcommission.org/AccreditationPrograms/BehavioralHealthCare/ORYX/facts_oryx.htm.

References

- Joint Commission. (2008). The Joint Commission Hospital Accreditation Program — 2009 Chapter: National Patient Safety Goals. Retrieved September 8, 2008 from www.jointcommission.org/NR/rdonlyres/31666E86-E7F4-423E-9BE8-F05BD1CB0AA8/0/09_NPSG_HAP.pdf
- Jolma, D.J. (1990). Relationship between Nursing Work Load and Turnover. *Nursing Economics*. 8(2), 110-114.
- Kane, R.L., Shamliyan, T.A., Mueller, C., Duval, S., Wilt, T.J. (2007). The association of registered nurse staffing levels and patient outcomes. *Medical Care*. 45, 1195-1204.
- Kerfoot, K. (2001). From motivation to inspiration leadership. *Pediatric Nursing*. 27, 530-1.
- Kerfoot, K. (2008). Leadership and learning from the politicians. *Nursing Economics*. 26(1), 59-60.
- Koerner, J., Wesley, M.L. (2008). Organizational culture: the silent political force. *Nurse Administration Quarterly*. 32(1), 49-56.
- Kouzes, J.M., and Posner, B.Z. (1995). Foster collaboration: Promoting cooperative goals and mutual trust. In: *The Leadership Challenge* (pp. 151-179). San Francisco: Jossey-Bass.
- Kovner, C., Jones, C., Zhan, C., Basu, J. (2002). Nurse staffing and postsurgical adverse events: an analysis of administrative data from a sample of U.S. hospitals, 1990-1996. *Health Services Research*. 37(3), 611-629.
- Lacey, S.R., Cox, K.S., Lorfing, K.C., Teasley, S.L., Carroll, C.A., Sexton, K. (2007). Nursing support, workload, and intent to stay in Magnet, Magnet-aspiring, and non-Magnet hospitals. *Journal of Nursing Administration*. 37(4), 199-205.
- Lang, T.A., Hodge, M., Olson, V., Romano, P.S., Kravitz, R.L. (2004). Nurse-patient ratios: a systematic review on the effects of nurse staffing on patient, employee, and hospital outcomes. *Journal of Nursing Administration*. 34(7/8), 326-337.
- Lawson, E., Price, C. (2003). The psychology of change management. *The McKinsey Quarterly*. Special edition: The Value in Organization. 31-41.
- Li, C., Bernoff, J. (2008). *Groundswell: Winning in a World Transformed by Social Technologies*. Cambridge, MA: Forrester Research, Inc.

- Lutz, S.L., Root, D. Nurses, consumer satisfaction, and pay for performance. *Healthcare Financial Management*. October 2007; 57-63.
- McAuley, K., Irwin, R.S. (2006.) Changing the work environment in intensive care units to achieve patient-focused care: the time has com. *American Journal of Critical Care*. 15(6), 541-548.
- Montalvo, I., Dunton, N. (Eds.) (2006). *Transforming Nursing Data into Quality Care: Profiles of Quality Improvement in U.S. Healthcare Facilities*. Silver Spring, MD: Nursesbooks.org.
- Needleman, J., Buerhaus, P.I., Mattke, S., Stewart, M., Zelevinsky, K. (February 28, 2001). *Nurse Staffing and Patient Outcomes in Hospitals: Final Report for Health Resources Services Administration*. Boston, MA: Harvard School of Public Health.
- Needleman, J., Buerhaus, P., Mattke, S., Stewart, M., Zelevinsky, K. Nurse-staffing levels and the quality of care in hospitals. (2002). *New England Journal of Medicine*. 346, 1715-22.
- Needleman, J., Buerhaus, P.I., Stewart, M., Zelevinsky, K., Mattke, S. (2006). Nurse staffing in hospitals: Is there a business case for quality? *Health Affairs*. 25(1), 204-211.
- Nursing Link. (July 30, 2007). Long term trends in average salaries/ earnings for RNs. Retrieved June 19, 2008 from www.nursinglink.com/careers/665-long-term-trends-in-average-salaries-earnings-for-rns.
- O'Brien-Pallas, L., Griffin, P., Shamian, J., Buchan, J., Duffield, C., Hughes, F., et al. (2006). The impact of nurse turnover on patient, nurse, and system outcomes: a pilot study and focus for a multicenter international study. *Policy, Politics, and Nursing Practice*. 7(3), 169-179.
- O'Rourke, M.W. (June 2006). Beyond Rhetoric to role accountability. *Nurse Leader*. 28-33,44.
- Person, S.D., Allison, J.J., Kiefe, C.I., Weaver, M.T., Williams, O.D., Centor, R.M., Weissman, N.W. (2004). Nurse staffing and mortality for Medicare patients with acute myocardial infarction. *Medical Care*. 42(1), 4-12.
- Ponte, P.R., Conlin, G., Conway, J.B., Grant, S., Medeiros, C.Nies, J., et al. (2003). Making patient-centered care come alive. *Journal of Nursing Administration*. 3(2), 82-90.

References

- Porter-O'Grady T. (2005, Web edition). Implementing Shared Governance: Creating a Professional Organization. Accessed June 18, 2008 from www.tpgassociates.com/SharedGovernance.htm.
- Potter, P., Barr, N., McSweeney, M., Sledge, J. (2003). Identifying nurse staffing and patient outcome relationships: A guide for change in care delivery. *Nursing Economics*. 21(4), 158-166.
- Pronovost, P.J., Dang, D., Dorman, T., Lipsett, P.A., Garrett, E., Jenckes, M., Bass, E.B. (2001). Intensive care unit nurse staffing and the risk for complications after abdominal aortic surgery. *Effective Clinical Practice*. 4(5), 199-206.
- Saba, V.K., McCormick, K.A. (2006). *Essentials of Nursing Informatics*. New York, NY: McGraw-Hill.
- Sabet, L. (2005). *Adopting Online Nurse Scheduling and Staffing Systems*. California Healthcare Foundation.
- Shaver, K.H., Lacey, L.M. (2003). Job and career satisfaction among staff nurses: effects of job setting and environment. *Journal of Nursing Administration*. 33(3), 166-72.
- Smith, T., Conant Rees, H.L. Making family-centered care a reality. (2000). *Seminars in Nursing Management*. 8(3), 136-142.
- Stone, P.W., Du, Y., Cowell, R., Amsterdam, N., Helfrich, T.A., Linn, R.W., et al. (2006). Comparison on nurse, system and quality patient care outcomes in 8-hour and 12-hour shifts. *Medical Care*. 44, 1099-1106.
- Stone, P.W., Mooney-Kane, C., Larson, E.L., Horan, T., Glance, L.G., Zwanziger, J., Dick, A.W. (2007). Nurse working conditions and patient safety outcomes. *Medical Care*. 45, 571-578.
- Stordeur, S., D'Hoore, W. (2007). Organizational configuration of hospitals succeeding in attracting and retaining nurses. *Journal of Advanced Nursing*. 57(1), 45-58.
- Taunton, R.L., Kleinbeck, S.V.M., Stafford, R., Woods, C.Q., Bott, M.J. (1994). Patient outcomes: are they linked to registered nurse absenteeism, separation, or workload? *Journal of Nursing Administration*. 24(4S), 48-55.
- Teahan, B. (1998.) Implementation of a self-scheduling system: a solution to more than just schedules! *Journal of Nursing Management*. 6, 361-368.

- Ulrich, B.T., Woods, D., Hart, K.A., Lavandero, R., Lettett, J., Taylor, D. (2007). Critical care nurses' work environments: value of excellence in Beacon units and Magnet organizations. *Critical Care Nurse*. 27(3), 1-10.
- Unruh, L. Licensed nurse staffing and adverse events in hospitals. (2003). *Medical Care*. 41(1),142-152.
- US Department of Labor. Bureau of Labor Statistics. (2008). Occupational Employment and Wages, May 2007. Retrieved June 19, 2008 from www.bls.gov/oes/current/oes291111.htm#nat.
- Vahey, D.C., Aiken, L.H., Sloane, D.M., Clarke, S.P., Vargas, D. (2004). Nurse burnout and patient satisfaction. *Medical Care*. 42(2 Suppl), II57-66.
- Valentine, N.M., Nash, J., Hughes, D., Douglas, K. (2008). Achieving effective staffing through a shared decision-making approach to open-shift management. *Journal of Nursing Administration*. 38(7/8), 331-335.
- Van Slyck, A., Johnson, K.R. (2001). Using patient acuity data to manage patient care outcomes and patient care costs. *Outcomes Management for Nursing Practice*. 5(1):36-40.
- Wagner, S.E. (March 2006). From satisfied to engaged. *Nursing Management*. 25-29.
- Wolf, G., Triolo, P., Reid Ponte, P. (2008). Magnet recognition program: the next generation. *Journal of Nursing Administration*. 38, 200-204.

Appendix A

CONFERENCE PARTICIPANTS LISTED IN ALPHABETICAL ORDER

Rhonda Anderson, RN, DNSc, FAAN, FACHE

Pediatric Administrator/Pediatric Service Line Administrator, *Banner Health*

Margarita Baggett, RN, MSN

CNO, *UCSDMC*

Suzanne Bakken, DNS, RN, FAAN

Professor, *Columbia University*

Alan Bernstein, MS, RN Program Director Professional Practice, *Department of Veterans Affairs, Office of Nursing Services*

Carol Bradley, MS, RN

CNO, *Tenet CA*

Peter Buerhaus, PhD, RN, FAAN

Professor, *Vanderbilt University*

Carol Ann Cavouras, MS, RN, CNAA

Workforce Specialist

Pat Chambers, RN, MBA

Southern California Regional Coordinator, *California Institute for Nursing and Health Care, ACNL Board Liaison*

Thomas R. Clancy, MBA, PhD, RN

Clinical Professor, *School of Nursing, University of Minnesota*, Vice President, *Mercy Hospital, Iowa City*

Deborah Crist-Grundman, RN, BSN

Executive Strategist, *Concerro*

Leah Curtin, DSc(h), RN, FAAN

Clinical Professor of Nursing, *University of Cincinnati*, *College of Nursing and Health*

Kathy Dawson, RN, MSN, AVP

Sr. Director Patient Care Services, *Tri-City Medical Center*

Holly De Groot, PhD, RN, FAAN

CEO, *Catalyst Systems*

Connie White Delaney, PhD, RN, FAAN, FACMI

Dean & Professor School of Nursing, *University of Minnesota*

Tony Disser, RN, MS
Senior VP of Clinical Operations, Hospital Division, *Kindred Healthcare*

Kathy Douglas, RN, MHA
CNO, *Concerro*

Mary Ellen Doyle, BSN, MBA
CNO, *St. Luke's, Kansas City*

Suellyn Ellerbe, RN, MN, CNAA
COO/CNO, *Tri-City Medical Center*

Kevin Fahsholtz
Product Management, *Premier*

Mary Foley, RN, MS
Associate Clinical Professor, *UCSF*, past President, *ANA*

Dianne L. Haas, PhD, RN
Interim VP Patient Care Services and CNO, *Baptist Health System*

Doug Hughes, RN, BSN, MBA
Director of Nursing, *Paoli Hospital, Mainline Health*

Marsha Hughes Rease, MSN, MSOD, RN
Consultant, *Change Management and Organizational Development*

Judy Husted, RN, MS, CNAA-BC
Executive Director Patient Care Services, *Kaiser Permanente*, AONE Representative

Carol Huston, RN, MSN, DPA, FAAN
President, *Sigma Theta Tau International*

Debra Janikowski, MSN, RN, CAN, BC
Director of the *Institute for Credentialing Innovation, American Nurses Credentialing Center*

Karlene Kerfoot, PhD, RN, CNAA, FAAN
VP, Chief Clinical Officer, *Aurora Health Care*

Karen K. Kirby, RN, MSN
President/CEO, *Kirby Bates Associates*

JoEllen Koerner, RN, PhD, FAAN
CEO, Nurse *MetriX, Inc*, past President, *AONE*

Appendix A

CONFERENCE PARTICIPANTS LISTED IN ALPHABETICAL ORDER

Janelle Krueger, RN, MBA, CCRN
Patient Classification System Clinical Consultant, *Kindred Healthcare-Hospital Division*

Linda Leavell, RN, PhD
National Patient Care Services, *Kaiser Permanente*

Pat Levan, RN, MS Director
National Accounts, *Concerro*

Mary R. Lopez, MSN, RN
VP Quality Initiatives, *Hospital Council of Northern and Central California*

Vicki Lundmark, PhD
Director for Research, *American Nurses Credentialing Center*

Frankie Manning, RN, MAN
CNO, *VA Puget Sound*

Jan McCoy, MSN, RN, CNA
VP Patient Care Services/CNO, *Cape Canaveral Hospital, Health First*

Kathleen McCormick, PhD, RN, FAAN, FACMI
Chief Scientist, VP, *SAIC*

Maureen McHatten, MBA, RN
Executive Director, *Team Tenet, Southern California*

Justine Medina, RN, MS
Director, Professional Programs & Practice, *American Association of Critical-Care Nurses*

Isis Montalvo, RN, MS, MBA
Manager, Nursing Practice and Policy, *American Nurses Association*

Jack Needleman, PhD, FAAN
Associate Professor, *UCLA School of Public Health*

Maria O'Rourke, DNSc, RN, FAAN, CHC
President/CEO, *Maria W. O'Rourke Inc.*

Bob Patterson, RN, MSN
Administrative Director, *California Institute for Nursing and Health Care*

Jean A. Riley, RN, MHSM, NE-BC

Management Development Consultant, *ECHO*

Albert Saiz, PhD

Assistant Professor, *The Wharton School*

Mary Ann Scott, RN, BSN, MSN

Director of Nursing Knowledge International, *Sigma Theta Tau International*

Kim Sharkey, RN, MBA, CNAA

CNO, *St Joseph's Atlanta*

Pamela Shellner, RN, MAOM

Clinical Practice Specialist, *American Association of Critical-Care Nurses*

Roy L. Simpson, RN, CMAC, FNAP, FAAN

Vice President, *Cerner Corporation*

Patricia Stone, PhD, MPH, RN

Associate Professor, *Columbia University*

Shara Sutherlin, RN, BSN, MBA

CNE, *Providence Alaska Medical Center*

Cynthia Sweeney, MSN, RN, CNOR

Assistant Director, *Institute for Credentialing Innovation, American Nurses Credentialing Center*

Mona Tucker, MA, SPHR

Director HR, *St Luke's The Woodlands Medical Center*

Ann VanSlyck, MSN, RN, CNAA, FAAN

Patient Acuity, *Staffing & Productivity Expert*

Bruce S. Weinberg, MPPA

Executive Director-Nursing Business Operations, *St John's Mercy Medical Center*

Nancy Valentine, PhD, DSc(h), MPH, RN, FAAN, FNAP

Corporate CNO, *Mainline Health*

Nancy Zismann, RN, BSN, MSOL

Assistant VP Patient Care Services, *Sun Health Boswell Hospital*

Appendix B

ROUNDTABLE ON EXCELLENCE AND EVIDENCE IN STAFFING

What does excellence in staffing mean and what can organizations do to achieve and maintain it? In March 2008, a group of nursing and health-care leaders (see list of contributors, Appendix A) from the health service, policy, and research sectors gathered for a day-long invitational round table on Excellence and Evidence in Staffing to consider these questions. The group included nurse leaders, chief executives, and finance managers from community and academic tertiary hospitals; leaders from academia and professional nursing organizations; researchers whose work has expanded the understanding of nursing care and healthcare outcomes; and consultants and chief executives from organizations that provide services to the healthcare industry and that healthcare leaders look to for counsel and advice.

By design, the day-long event was a working meeting and participants were charged with completing a set of specific tasks. To ensure that the voices of all participants were heard, the group was divided into seven working groups, each consisting of representatives from the health service, policy, and research sectors. After listening to presentations on staffing research, the working groups gathered to complete the following tasks:

- Formulate a definition of excellence in staffing: Working individually, the members of each working group identified key elements they believed should be included in a definition of excellence in staffing. After listening to one another's ideas, group members selected the "must have" elements and formulated these into a definition.
- Identify the top ten best practices that support the definition of excellence in staffing: As before, working group members created their own, individual lists of the top ten best practices

they believed would support their group's definition of excellence in staffing and shared their ideas with one another. They then worked together to formulate a list of agreed-upon best practices.

- Identify critical elements of an evidence-based staffing framework or model, along with recommendations for further research, design, and collaboration: Finally, working group participants were asked to list five critical elements of an evidence-based staffing framework or model and to share the list with their group. Using these lists, each working group drafted a model for excellence in staffing and identified which elements in the model required further research and how the research might be accomplished.

Throughout the day, the working groups shared the results of their discussions with the full roundtable and summarized their recommendations in reports that were collected at the end of the meeting. These reports, along with observations offered by round table participants and findings from the literature, form the basis for this white paper.



BECOME AN ACTIVE PARTICIPANT.

Access, comment, contribute to this work at
www.ideaconnect2.com