Published in final edited form as:
Nurs Forum. 2012 October ; 47(4): 260–267. doi:10.1111/j.1744-6198.2012.00283.x.

Quality improvement in nursing: Administrative mandate or professional responsibility?

Shigeko Izumi, PhD, RN
Assistant Professor, College of Nursing, Washington State University, Spokane, Washington USA

Abstract

For professionals, providing quality service and striving for excellence are ethical responsibilities. In many hospitals in the U.S., however, there is evidence indicating current quality improvement (QI) involving nurses is not always driven by their professional accountability and professional values. QI has become more an administrative mandate than an ethical standard for nurses. In this paper, the tension between QI as nurses' professional ethics and an administrative mandate will be described, and the implicit ideal-reality gap of QI will be examined. The threat to professional nursing posed by the current approach to QI will be examined, and ways to incorporate nursing professional values in a practical QI effort will be explored.

Keywords

nursing care; quality improvement; quality of healthcare; professional ethics

Introduction

With growing concern about hospital care quality and attention to the need for improvement of care, quality improvement (QI) has become an administrative mandate in U.S. hospitals. Although it is encouraging to see the shift of attention from cost containment alone to improvement of quality, the current approach to QI has the potential to undermine the professional values of nursing. In this paper, an implicit gap between QI as ideal nurses' professional accountability and the reality of current QI activities will be described. Further, this paper will examine potential threats the current QI approach poses to professional nursing, and explore possibilities for integrating nursing professional values in QI efforts.

Current Approaches to Quality Improvement

There are three interrelated but slightly different views about the cause of the healthcare quality problem: 1) Inefficient healthcare system, 2) lack of systematic quality evaluation, and 3) insufficient staffing. Each perceived cause leads to a different approach to improve quality of care (see table 1).

Inefficient System as a Cause of Quality Problem

From the late 1990s, the quality of healthcare has been a growing concern for many Americans and various reports made it clear that Americans were not receiving the quality

Corresponding author: Shigeko Izumi, Washington State University College of Nursing, P.O. Box 1495, Spokane, WA 99210-1495, (seiko.izumi@wsu.edu).

Early work of this manuscript was presented at International Centre for Nursing Ethics Conference 07/18/2008 at Yale University, New Heven, Connecticut, USA.

care they should be receiving (Chassin, Galvin, & The National Roundtable on Health Care Quality, 1998; Institute of Medicine, 2000, 2001; President's Advisory Commission, 1998). The Institute of Medicine (IOM) concluded that an underlying reason for inadequate quality of care was the outmoded and increasingly complex system in which healthcare was delivered (IOM, 2001).

To solve system-wide problems causing quality deterioration, the concept of quality improvement (QI) was introduced to healthcare from the manufacturing industry (Lighter, 1999). The QI model adopted in healthcare is based on principles that increase productivity, reduce costs, and make institutions more competitive (Bennett & Slavin, 2002).The model focuses on identifying defects and wastes in the hospital's service line and streamlining the process to produce better outcomes. The goal of QI in healthcare has focused on improving outcomes such as morbidity, medication errors, re-admission, length of stay, and mortality through streamlining treatment process.

Using the principles of the QI model from manufacturing industry, healthcare QI activities became highly centralized and tightly controlled by standards and regulations. Quality of care is perceived as a property of the system rather than a property of individual care providers. This QI model tends to disregard healthcare workers' expertise and professional judgment, replacing these instead with rules and protocols intended to streamline the complex system.

Lack of Systematic Quality Evaluation

Early on, lack of systematic evaluation tools was identified as a barrier to make measurable improvement on quality. Thus among the IOM QI recommendations (2001), issue of quality evaluation was addressed first, and evaluation tools were rapidly implemented. The evaluation of quality of care is aligned with payment policies and provides strong financial incentives for hospitals. The Joint Commission on Accreditation of Healthcare Organizations started including core quality measures in their accreditation. Hospital associations and health plans such as the Centers for Medicare and Medicaid Services (CMS) began asking hospitals to submit reports about hospital quality measures, and the data have been displayed on the public Hospital Quality Initiative (HQI) Web site (CMS, 2008). Financial incentives are provided for submitting quality evaluation data. Further the public nature of the HQI information pressures hospitals not only to participate in quality evaluation and disclose the data, but also to perform well to remain competitive in the industry (Draper, Felland, Liebhaber, & Melichar, 2008).

To evaluate quality of nursing care separate from overall hospital care, American Nurses Association (ANA) has developed nursing-sensitive indicators including nurse staffing information and patient care outcomes such as pressure ulcers, patient falls, and nosocomial infections (ANA, 1999). This information is currently collected and housed in the National Database of Nursing Quality Indicators® (NDNQI®: 2006). Unlike the HQI, NDNQI® provides hospital unit level national comparative data only to participating hospitals for their internal use in QI activities. Yet, participation to NDNQI® is often driven by administrative interests such as Magnet application, meeting the Joint Commission standards, or nurse retention/recruitment rather than internal motivation to improve quality of care by front-line nurses.

Data collected in the HQI, NDNQI®, and other quality measurements are thoughtful and empirically supported indicators of quality care that make comparison across institutions possible. They also provide benchmarks to hospital and nursing administrators to mark their improvement. However, because they are the measures requested by external QI entities and hospital or nursing administrators, not front-line workers, efforts to collect and use the data

to evaluate the quality of care has come to be viewed as an administrative mandatory activity.

Insufficient Staffing as a Cause of Quality Deterioration

Among nurses, quality of care is thought to be related to an inadequate patient-to-nurse ratio. From their perspectives, the primary cause of poor quality care is the substantial increase in nurses' workloads that came about with shortened lengths of patients' hospital stays, increased acuity of hospitalized patients, and insufficient nurse staffing as a result of cost containment and the nursing shortage (ANA, 1999; Erlen, 2004; Gordon, 2005; Ludwick & Silva, 2003; Shindul-Rothchild, et al., 1996). Nurses have been exhausted and dissatisfied, and perceive that they have less time to provide adequate nursing care, and patient safety has been compromised (Aiken, Clarke, Sloane, Sochalski, & Silber, 2002; Ludwick & Silva, 2003; Shindul-Rothchild, Long-Middleton, & Berry, 1997; Vahey, Aiken, Sloane, Clarke, & Vargas, 2004). A number of researchers have found relationships between nurse staffing and patients' outcomes (Aiken, Clarke, Sloane, Lake, & Cheney, 2008; Aiken, et al., 2002; Needleman et al., 2011; Sochalski, 2004; Vahey, et al., 2004). Aiken et al. (2002), for example, found that a higher patient-to-nurse ratio was associated with not only negative patient outcomes, but increased odds of nurses' burnout and job dissatisfaction, which leave nurses with feelings of disempowerment and moral distress. The resulting decline in morale leads to further deterioration of the quality of care they provide (Erlen, 2004). From nurses' perspective, insufficient staffing in today's healthcare system is a major cause of deterioration in hospital care quality.

Therefore, many quality improvement efforts in nursing have focused on decreasing the patient-to-nurse ratio. ANA worked to educate nurses, consumers, and policy makers about nursing contributions to quality care and the importance of keeping sufficient nurses at the bedside for safe and quality health care (ANA, 1999). Nursing-sensitive indicators, now part of NDNQI®, are developed as a tool to generate national data on the relationships between nurse staffing and patient outcomes.

Threats of Current QI Approaches to Professional Nursing

Clearly, significant quality problems exist in the U.S. healthcare system. Both healthcare institutions and the nursing profession have been rigorously trying to change the system to improve the quality of care. These efforts are needed and many nurses welcome the idea of QI. However, by following the rapid movement in recent QI activities without reflecting on the assumptions and the meaning of the activities for nursing professional values and practice, nurses may jeopardize their nursing values, and this can lead to, ultimately, a de-professionalization of nursing. Three particular pitfalls are identified as potential threats to the nursing profession in the QI approaches described above: the focus on quantity of nurses, safety as a quality standard, and QI as a mandatory activity.

The Focus on Quantity of Nurses

A number of studies have provided evidence that a higher patient-to-nurse ratio is associated with a higher patient mortality rate and other negative quality outcomes (Aiken, et al., 2008; Aiken, et al., 2002; Needleman et al., 2011; Sochalski, 2004; Vahey, et al., 2004). Yet, the argument that an increased number of nurses will improve quality of care needs careful consideration. Having sufficient number of nurses in a unit is critical to secure the safety and quality of care. But we also have to ask whether it is *only* the number of nurses that matters. The question is whether quality, competence, and expertise of the nurses should matter too. Although several researchers have found that nurses with more education, more experience, full-time commitment, and better communication skills help to decrease medical error,

patient fall rate, and mortality (Aiken, Clarke, Cheung, Sloane, & Silber, 2003; Blegen, Vaughn, & Goode, 2001; Estabrooks, Midodzi, Cummings, Ricker, & Giovannetti, 2005), the quality of nurses is rarely discussed in current QI efforts. By simply equating quality of care with the quantity of nurses, we may represent nurses as laborers for whom only the headcount matters, not professionals with expertise and specialty knowledge.

This may be a pitfall of the manufacturing QI model as well. As Jennings noted (2003), QI following a manufacturing model does not count on healthcare workers' expertise and professional judgment to provide quality care. Instead, it recommends using rules and protocols to navigate the complex system and make clinical judgment to achieve agreed upon quality care. Does it mean that quality care can be achieved if the nurses know how to follow protocols rather than use their own professional knowledge and judgment in their practice?

IOM's approach for QI using the manufacturing model, of course, is based on the assumption that all healthcare workers meet their own professional standards. However, in a 2003 report, the IOM concluded that healthcare professionals were not being adequately prepared to provide the highest quality care possible (IOM, 2003). It discussed the need to return to professional core values and reinforce the professional standards to provide high quality and safe care (O'Rourke, 2006). Unfortunately, in nursing, there has been little consideration to define quality nursing care and set professional standards for quality care (Izumi, Baggs, & Knafl, 2010). Focusing on quantity of nurses without specifying professional standards for quality nursing care would jeopardize the professional status of nursing and turn nursing practice into labor where quality of workers does not matter.

Safety as a Quality Indicator

Nurses need to give careful consideration to what quality nursing care is and how to measure it. Current quality indicators for nursing (ANA, 1999) focus on a narrow aspect of quality: safety. The IOM identified safety as one of six core dimensions of quality (safety, effectiveness, patient-centeredness, timeliness, equity, and efficiency) (Cronenwett et al., 2007; IOM, 2001), and quality measure such as the HQI Web site by CMS include evaluation of safety outcomes as well as effectiveness of care process and patient-centered care. However, in nursing, quality is measured primarily in the form of safety outcomes. Safety is important, yet only one dimension of multifaceted quality care. Evaluation of quality of nursing care should include other dimensions of quality while reflecting on the process through which care is provided and the nursing values underlying the practice.

Nurses experience the threat to patient safety first hand. They are concerned that the current hospital environment often does not allow them to provide safe care. Because safety is a minimum quality need to be assured, it is understandable that the first quality benchmark nurses want to address is patient safety. However, nursing leaders need to keep in mind that safety indicators are a *minimum* standard for nursing practice; they are indicators for quality assurance, not quality improvement. That is, these indicators neither tell nurses how to improve their care nor inspire them to improve that care. Nurses need to keep patients safe, but also have an ethical responsibility to provide good care beyond minimum requirements and strive for the higher goal of excellence (ANA, 2008; Baily, Bottrell, Lynn, Jennings, & Hastings, 2006; Jameton, 1984). By limiting quality indicators to safety outcomes, there is a risk of setting up nurses to work towards a minimum standard and disregard other aspects of quality nursing care that would appreciate nursing's professional values and inspire nurses to pursue excellence in their practice.

QI as a Mandatory Activity

Including nurses in QI activities merely as collectors of mandatory data and not inviting their ideas to improve quality also carries a threat to the profession. There are increasing internal and external demands for hospitals to participate in a wide range of QI activities (Draper, et al., 2008). The decisions about which QI activities to carry out are made by administrators. Because nurses are integral to a hospitalized patient's care and part of the hospital system, nurses are often asked by hospital administrators to collect and document (often duplicative) data for various QI activities (Cassil, 2008). When QI activities are top-down mandatory orders, not internally driven by nurses' professional ownership and accountability for their practice, the QI activity may become an employee obligation rather than a professional responsibility and nurses may lose interest in improving the quality of their care. The individual nurses may be converted from an educated, professional, and well-situated change agent striving to excellence into a laborer who completes assigned tasks and provides prescribed care that is sufficient to meet minimum standards. Nurses and the profession itself may lose sight of their professional responsibilities to improve the quality of their care if they passively follow mandatory QI activities that do not improve nursing care or allow nurses to use their professional knowledge to make autonomous decisions.

Aligning QI with Nursing Professional Values

Providing quality care that meets a high standard is an ethical responsibility of healthcare professionals. Nurses have a longstanding commitment to improve the quality of care they provide (Lang et al., 2004); and long before healthcare quality became a national concern nurses recognized and expressed concerns about inappropriate healthcare systems jeopardizing the quality of care and their patients' lives (Gordon, 1997). Therefore, as individuals and as professionals, nurses have welcomed the increased interest in healthcare quality across the nation and disciplines. It gives them hope that finally their concerns will be heard, their patients will be safe, and they will be able to provide care they can be proud of. QI could be a force to redesign the American healthcare system for the benefit of all stakeholders including patients and their families, nurses, physicians, other clinicians, healthcare administrators, and payers. This is an opportunity for the nursing profession to take the lead in redesigning a failing healthcare system using nursing expertise in patient care. Yet, QI could be a double-edged sword for nurses. Strong forces for rapid change can put nurses' professional values in jeopardy if we do not carefully consider the meanings, assumptions, and impact of QI activities for nursing.

To make the current force for quality improvement align with nursing professional values and for nurses to participate in QI as meaningful members of the team of healthcare providers, we first need to understand what constitutes quality nursing care. In spite of the high level of interest in the quality of nursing care, there is no broadly accepted definition of quality nursing care (Izumi, et al., 2010). Although quality has been thought to be socially constructed, with different meanings for different people and professional groups (Gunther & Alligood, 2002; Koch, 1992), nursing often borrows the definition of quality of healthcare in medicine and has not developed its own definition of quality nursing care. Without a clear definition of quality nursing care, nursing is incapable of explaining what constitute quality nursing care. Therefore, we do not know what competencies and professional standards specific to quality to look for and how to measure and evaluate the quality of nursing care. Nurses need to revisit what values make nursing professional and clarify the standards for quality nursing care accordingly. It will help to avoid two pitfalls addressed above. By setting a standard and clarifying attributes expected for professional nurses, we will be able to count not only the quantity but *quality* of nurses contribute to quality of care. Also it will provide a conceptual framework to develop tools to evaluate quality of nursing care in addition to safety measure.

Second, developing a system where front-line nurses' concerns and ideas about QI are heard and reflected in the QI strategies is crucial. Nurses on the front line often have first-hand knowledge about what is working and what is not. They also know how their clinical settings work. Transforming Care at the Bedside (TCAB) is an example of using nurses' practical knowledge and skills to improve quality of care at point-of-service. TCAB is an initiative led by the Robert Wood Johnson Foundation and the Institute for Healthcare Improvement, and focuses on improving the delivery of care in medical/surgical units by encouraging front-line workers, such as nurses, to take leadership to make system changes in their particular settings (Rutherford, Lee, & Greiner, 2004). Recognizing and recruiting front-line nurses' knowledge and skills as resources for QI empowers nurses and inspires them to strive toward excellence beyond minimum safety. Empowered nurses can promote changes in culture and the structure of their unit to conduct QI activities tailored to the point-of-service. Nurses educated as a professional champion their ethical responsibility to provide safe and quality care. To date, implementation of TCAB in hospitals is still limited, but TCAB can be a model to promote a system where nurses' knowledge and skills can be used to make QI activities meaningful to the particular settings.

The Magnet Recognition Program® is another example of a system that aligns nurses' professional values and expertise with quality improvement in healthcare (Aiken, Havens, & Sloane, 2000; ANA, 2009). One of the characteristics of the Magnet hospitals is administrative support to promote quality nursing care. Without administrative support, implementation of nurse-initiated QI such as TCAB is difficult. In addition, regardless of whether institutions receive the Magnet recognition or not, it is critical to create a system to reflect inputs from front-line nurses into hospital administration because they are the eyes and hands of quality improvement. This can allow hospital administration to make effective changes to meet external quality benchmarks, and also to make necessary changes to solve and improve quality problems internal to particular settings. If the hospital administrators are serious about improving quality of their care, they need to invest in bringing nursing expertise into their administrative strategies.

The third and last recommendation is intertwined with the others. For nurses to improve the quality of care they provide and take an active role in QI activities, they need to be not only clinically competent, but also capable of working in a team as a change agent to improve quality of care. Are we preparing nurses to fulfill this expectation? Nurses need to be creative and effective to provide quality care even when there are fewer than the ideal number of nurses on a unit (Benner, Sutphen, Leonard, & Day, 2010).They need to be effective to address problems and make changes in their unit with limited resources (IOM, 2011). To educate nurses who can meet these expectations, it is vital to re-examine the content and process of nursing education. The Quality and Safety Education for Nurses (QSEN) project provides a resource for nursing faculty to incorporate the knowledge, skills, and attitudes necessary to continuously improve the healthcare systems into their educational curriculum (Cronenwett, Sherwood, & Gelmon, 2009). Yet, the knowledge and skills included in QSEN are still mostly focusing on safety and not inclusive of all aspects of quality nursing care. Therefore, it is critical to examine what constitutes quality nursing care and set a clear professional standard to guide educational curriculum to create strong nurses who can not only practice safely, but embody nursing values in the QI of the current healthcare system.

When QI activities are aligned with nurses' professional values, nurses, as providers of bedside care and professionals, can be a major force in making meaningful changes in quality improvement. As professionals who self-regulate with the pursuit of excellence, nurses have an ethical responsibility to achieve standards higher than the minimum requirement. To thrive as professionals while meeting demands for QI, nurses need to reflect

on their professional values and ethical responsibilities, and identify what qualities they need to improve and how to improve them instead of passively accepting mandatory QI activities. This will help nurses refocus on the value of nursing and take more active roles to improve the quality of care.

Acknowledgments

The author would like to thank Drs. Judith G. Baggs, Kathleen A. Knafl, and Deborah Eldredge for their constructive inputs through the development of this manuscript.

Funding information: This study was funded by a National Institute of Nursing Research (F32NR010644) and Sigma Theta Tau Beta Psi Chapter Research Award. The content is solely the responsibility of the author and does not necessarily represent the official views of the National Institute of Nursing Research or the National Institutes of Health.

References

Aiken LH, Clarke SP, Cheung RB, Sloane DM, Silber JH. Educational levels of hospital nurses and surgical patient mortality. Journal of the American Medical Association. 2003; 290(12):1617–1623. [PubMed: 14506121]

Aiken LH, Clarke SP, Sloane DM, Lake ET, Cheney T. Effects of hospital care environment on patient mortality and nurse outcomes. The Journal of Nursing Administration. 2008; 38(5):223–229. [PubMed: 18469615]

Aiken LH, Clarke SP, Sloane DM, Sochalski J, Silber JH. Hospital nurse staffing and patient mortality, nurse burnout, and job dissatisfaction. JAMA. 2002; 288(16):1987–1999. [PubMed: 12387650]

Aiken LH, Havens DS, Sloane DM. The Magnet Nursing Services Recognition Program: a comparison of two groups of Magnet Hospitals. American Journal of Nursing. 2000; 100(3):26–36. [PubMed: 10738398]

American Nurses Association. ANA indicator history. 1999. Retrieved from http://nursingworld.org/MainMenuCategories/ThePracticeofProfessionalNursing/PatientSafetyQuality/Research-Measurement/The-National-Database/Nursing-Sensitive-Indicators_1/ANA-Indicator-History.aspx

American Nurses Association. Guide to the code of ethics for nurses: Interpretation and application. Silver Spring MD: American Nurses Association; 2008.

American Nurses Association. Nursing administration: Scope and standards of practice. Silver Spring American Nurses Association; 2009.

Baily MA, Bottrell M, Lynn J, Jennings B, Hastings C. The ethics of using QI methods to improve health care quality and safety. Hastings Center Report. 2006; 36(4):S1–S40. [PubMed: 16898359]

Benner, P.; Sutphen, M.; Leonard, V.; Day, L. Educating nurses: A call for radical transformation. Stanford, CA: Jossey-Bass; 2010.

Bennett, L.; Slavin, L. Continuous quality improvement: What every health care manager needs to know. 2002. Retrieved from http://www.case.edu/med/epidbio/mphp439/CQI.htm

Blegen MA, Vaughn TE, Goode CJ. Nurse experience and education: Effect on quality of care. Journal of Nursing Administration. 2001; 31(1):33–39. [PubMed: 11198839]

Cassil, A. Demands on nurses grow as hospital quality improvement activities increase. News release. 2008. March 20, 2008). Retrieved from http://www.hschange.org/CONTENT/973/

Center for Medicare & Medicaid Services. Hospital Quality Initiative Overview. 2008. Retrieved from https://www.cms.gov/HospitalQualityInits/Downloads/Hospitaloverview.pdf

Chassin MR, Galvin RW. The National Roundtable on Health Care Quality. The urgent need to improve health care quality. JAMA. 1998; 280(11):1000–1005. [PubMed: 9749483]

Cronenwett L, Sherwood G, Barnsteiner J, Disch J, Johnson J, Mitchell P. Quality and Safety Education for Nurses. Nursing Outlook. 2007; 55(3):122–131. [PubMed: 17524799]

Cronenwett L, Sherwood G, Gelmon SB. Improving quality and safety education: The QSEN Learning Collaborative. Nursing Outlook. 2009; 57(6):304–312. [PubMed: 19942031]

Draper, DA.; Felland, LE.; Liebhaber, A.; Melichar, L. Research Brief. Vol. Vol. 3. Washington DC: The Center for Studying Health System Change; 2008. The role of nurses in hospital quality improvement; p. 1-8.

Erlen JA. Wanted - Nurses: ethical issues and the nursing shortage. Orthopaedic Nursing. 2004; 23(4): 289–292. [PubMed: 15379181]

Estabrooks CA, Midodzi WK, Cummings GC, Ricker KL, Giovannetti P. The impact of hospital nursing characteristics on 30-day motality. Nursing Research. 2005; 54(2):74–84. [PubMed: 15778649]

Gordon, S. Life support: three nurses on the front lines. Boston, Mass.: Little, Brown and Company; 1997.

Gordon, S. Nursing against the odds: How health care cost cutting, media stereotypes, and medical hubris undermine nurses and patient care. Ithaca, New York: Cornell University Press; 2005.

Gunther M, Alligood MR. A discipline-specific determination of high quality nursing care. Journal of Advanced Nursing. 2002; 38(4):353–359. [PubMed: 11985686]

Institute of Medicine. To err is human: building a safer health system. Washington DC: National Academy Press; 2000.

Institute of Medicine. Crossing the quality chasm: A new health system for the 21st century. Washington, DC: National Academy Press; 2001.

Institute of Medicine. Health professions education: a bridge to quality. Washington, DC: National Academies Press; 2003.

Institute of Medicine. Future of nursing: Leading change, advancing health. Washington, DC: The National Academiy of Science; 2011.

Izumi S, Baggs JG, Knafl KA. Quality nursing care for hospitalized patients with advanced illness: Concept development. Research in Nursing & Health. 2010; 33:299–315. [PubMed: 20572095]

Jameton, A. Nursing practice: The ethical issues. Englewood Cliffs: Prentice-Hall, Inc.; 1984.

Jennings B. Two faces of health care quality improvement. Hastings Center Report. 2003; 13(1):13. [PubMed: 12613381]

Koch T. A review of nursing quality assurance. Journal of Advanced Nursing. 1992; 17:785–794. [PubMed: 1644974]

Lang NM, Mitchell PH, Hinshaw AS, Jennings BM, Lamb GS, Mark BA. Measuring and improving health care quality. Medical Care. 2004; 42(2, Suppl.):II1–II3.

Lighter, D. Continuous quality improvement: What every health care manager needs to knowIn. In: Stahl, M.; Dean, P., editors. The physician's essential MBA. Gaithersburg, Maryland: Aspen Publications; 1999. p. 265

Ludwick R, Silva MC. Errors, the nursing shortage and ethics: Survey results. Online Journal of Issues in Nursing. 2003; 8(3):14–24.

National Database of Nursing Quality Indicators (NDNQI). National Database of Nursing Quality Indicators. 2006. Retrieved from https://www.nursingquality.org/Default.aspx

Needleman J, Buerhaus P, Pankratz S, Leibson CL, Stevens SR, Harris M. Nurse staffing and inpatient hospital mortality. The New England Journal of Medicine. 2011; 364:1037–1045. [PubMed: 21410372]

O'Rourke MW. Beyond rhetoric to role accountability: a practical and professional model of practice. Nurse Leader. 2006; 4(3):28.

President's Advisory Commission on Consumer Protection and Quality in Health Care Industry. Quality first: Better health care for all Americans. 1998. Retrieved from http://www.hcqualitycommission.gov/final/execsum.html

Rutherford, P.; Lee, BC.; Greiner, A. Transforming care at the bedside. 2004. Retrieved from http://www.ihi.org/IHI/Results/WhitePapers/TransformingCareattheBedsideWhitePaper.htm

Shindul-Rothchild J, Berry D, Long-Middleton E. Where have all the nurses gone? Final results of our patient care survey. American Journal of Nursing. 1996; 96(11):24–39.

Shindul-Rothchild J, Long-Middleton E, Berry D. 10 keys to quality care. American Journal of Nursing. 1997; 97(11):35–43.

Sochalski J. Is more better?: The relationship between nurse staffing and the quality of nursing care in hospitals. Medical Care. 2004; 42(2 suppl):II-67–II-73. [PubMed: 14734944]

Vahey DC, Aiken LH, Sloane DM, Clarke SP, Vargas D. Nurse burnout and patient satisfaction. Medical Care. 2004; 42(2 suppl):II-57–II-66. [PubMed: 14734943]

Table 1

Causes of Quality Problems and Approaches to Quality Improvement

Causes of Quality Problems	Supporting Evidence	Approaches to Quality Improvement
1. Inefficient healthcare system	• "Quality First" President's Advisory Commission on consumer Protection and Quality in Health Care Industry (1998) • "To err is human" IOM (2000) • "Crossing the quality chasm" IOM (2001)	• Introduce concept of QI from manufacturing industry • Streamlining process to produce better outcomes • Replacing professional judgment with rules and protocols
2. Lack of systematic evaluation	• "Crossing the quality chasm" Institute of Medicine (2001) • JCAHO added quality measures in their accreditation criteria (2002) • CMS invited and later requested hospitals to submit and publish data regarding hospital quality measures (HQI; 2008) • ANA collects national data related to nursing care quality (NDNQI)	• Provide financial incentives to do better on quality measures • Disclose quality information to public for competition • Provide national benchmarks to evaluate quality of care
3. Insufficient staffing	• Insufficient nurse staffing causes poor quality of care (ANA, 1999) • Higher patient-nurse ratio was associated with negative patient outcomes (Aiken et al, 2002) • Low RN staffing was associated with increased mortality (Needleman et al., 2011)	• Decreasing patient-to-nurse ratio (E.g., mandated minimum staffing ration in California) • Educating public about nursing contribution to quality care • Expanding admissions to nursing schools to increase workforce