

State Commission on Patient Safety
Demographic Information

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I am providing testimony as a member of the organization listed above.

Short bio-sketch:

I have been a critical care nurse for twenty years. I received my PhD in Nursing from the University of Michigan in 2003. The dissertation was entitled, “Environmental and Personal Predictors of Professional Nursing Practice Behaviors in Hospital Settings.” I completed one study since the dissertation which examined the effects of the hospital environment and nurse/physician communication on nurses’ job satisfaction, a nursing outcome. I have two grants under review which, if funded, will investigate organizational and interpersonal determinants of patient outcomes (rates of pressure ulcer development, ventilator-associated pneumonias, blood stream infections, medication errors, and failure to rescue). In my role as assistant professor, I am thus developing a research program investigating how the hospital work environment affects nursing practice, as well as nurse and patient outcomes.

Milisa Manojlovich, RN, CCRN, PhD

Executive Summary

This testimony provides two recommendations to improve the safety of hospitalized patients, one based on nursing roles, and the other based on work environment factors required by nurses. The first recommendation to the Commission is to fund research into interventions to improve communication between nurses and physicians. In one 6 bed ICU, verbal miscommunication between nurses and physicians was responsible for 37% of all errors. In another ICU study, communication between nurses and physicians was the single factor most significantly associated with excess hospital mortality. Yet, there were too few studies overall linking nurse/physician communication to patient safety outcomes for the IOM to include recommendations in this area for their latest report on transforming the work environment of nurses. Since research examining the relationship between the nursing role of communicating with physicians and patient safety, is lacking, we may have to look to other disciplines for suggestions on improving communication that can be translatable to healthcare settings. For example, the United States Forest Service offers its fire fighters a five-step process for quick and effective communication, known as “STICC” (**S**ituation, **T**ask, **I**ntent, **C**oncern, **C**alibrate). Although not yet empirically tested, using “STICC” may be a useful intervention for improving communication between physicians and nurses, and it may contribute to patient safety.

The second recommendation to the Commission is to suggest to the Governor that legislation be enacted to offer a financial incentive to hospitals that seek and retain ANCC magnet recognition. Magnet hospitals are known for containing specific elements in the hospital work environment that contribute to nurses’ abilities to improve patient

outcomes. Organizational elements of magnet hospitals include: decentralized organizational structures, nurses' involvement in all levels of decision-making, and visible, supportive nursing leadership. These organizational features facilitate appropriate nursing judgment and actions necessary in dealing with highly unpredictable and complex patient care situations. Nurses in magnet hospitals experienced lower levels of burnout and higher levels of job satisfaction, and rated the quality of care they gave higher than nurses in non-magnet hospitals. Magnet hospitals have also been found to have lower Medicare mortality rates than non-magnet facilities, as well as lower mortality rates for AIDS patients. Despite the attraction to nurses, and compelling evidence of improved patient outcomes, magnet hospital recognition is not something most hospitals strive for (Aiken, Havens, & Sloane, 2000). The State of Michigan has only one hospital recognized with magnet hospital status, perhaps in part because of the rigorous process needed to acquire the ANCC credential. The ANCC credentialing process requires that a hospital meet 14 standards of nursing care which are evaluated in a multi-stage process of documentation, and through successful completion of an on-site evaluation by nurse experts (Aiken et al., 2000). The strategies identified above hint at the degree of organizational change that may be necessary before a hospital can seek magnet recognition designation. The entire process can take at least two years (American Nurses Credentialing Center [ANCC], 2003), and anecdotally can cost a hospital many thousands of dollars, although a cost-benefit analysis of the magnet recognition program has not yet been done (Aiken, 2002). Since patients are admitted to hospitals because they require 24 hour nursing care, it may be

more useful for hospitals to strive for the recognition program that recognizes a hospital for the quality of the nursing care it provides.

Running Head: ONE NURSE'S VOICE

Improving Patient Safety in Michigan: One Nurse's Voice

Written Testimony to the State Commission on Patient Safety

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by

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The recommendations in this testimony come from a critical care nurse with twenty years' experience, who is also a doctorally prepared nurse researcher studying how nurses' practice contributes to patient outcomes in the hospital environment. Any discussion of patient safety and how to improve it should include the voices of nurses, since nursing care has been described as "the fabric of the 24-hour surveillance system" for hospitalized patients (Sochalski, 2001, p. 14).

The most recent report from the Institute of Medicine (IOM), "Keeping patients safe: Transforming the work environment of nurses" (Page, 2004), identified both the critical role that nurses play in promoting patient safety, as well as specific elements in the work environment that nurses need to provide good care. This testimony will provide two recommendations to improve the safety of hospitalized patients, one based on nursing roles, and the other based on work environment factors required by nurses.

However, before addressing nursing roles and environmental influences on nursing practice, the Commission needs to be aware of one initiative to improve patient safety that is already underway in other states. The quality of patient care has been shown to suffer when staffing levels are poor (Lichtig, Knauf, & Milholland, 1999), demonstrating that when there are not enough nurses to provide care, patient safety may suffer. The research link between staffing levels and patient outcomes is so strong that legislative efforts to mandate minimum staffing levels are underway in California and New York. Unfortunately, the current nursing shortage suggests that finding nurses to fill gaps in staffing may not be easy (Berliner & Ginzberg, 2002). Therefore, aspects of nursing other than staffing levels need to be addressed to adequately assure that hospitalized patients are safely cared for, and this researcher is NOT recommending

that Michigan follow the example set by other states and mandate minimum staffing levels.

The first recommendation to the Commission concerns the nursing role of communication with physicians. Nurses and physicians together make up the largest group of health care providers, and both disciplines daily must confront complex problems for which there are no easy solutions (Keenan, Cooke, & Hillis, 1998). However, communication between the professions does not flow as it should (Greenfield, 1999). For example, in one 6 bed ICU, verbal miscommunication between nurses and physicians was responsible for 37% of all errors (Donchin, Gopher, Olin, Badihi, Biesky, Sprung, et al., 1995). In another ICU study, communication between nurses and physicians was the single factor most significantly associated with excess hospital mortality (Knaus, Draper, Wagner, & Zimmerman, 1986). In the classic study on ICU outcomes, hospitals that reported good communication between nurses and physicians experienced lower than expected mortality rates, while those that reported poor communication experienced significantly higher than expected mortality rates (Knaus et al., 1986).

Pronovost, Berenholtz, Dorman, Lipsett, Simmonds, and Haraden (2003) developed and tested an intervention to improve communication between nurses and physicians. According to the authors, use of a daily goals form structured communication so that nurses and physicians were able to understand and agree upon the goals of care for each patient in the ICU, which resulted in a decreased length of stay in the ICU. These findings suggest a link between improved interdisciplinary communication and decreased length of stay (LOS), an important outcome (Pronovost

et al., 2003). However, specific communication elements were not identified or tested, making it difficult to ascertain exactly how communication contributed to the decreased LOS.

Use of the daily goals sheet is part of the Keystone ICU project currently underway in Michigan hospitals. Yet, anecdotally in at least one ICU, the daily goals sheet is developed by the medical staff and left on a clipboard to inform nurses of the medical plan. There is no collaboration between nurses and physicians to develop the plan, so that the daily goals sheet may not function as the communication clarifier it was intended to be. Thus, other strategies to improve communication between nurses and physicians need to be developed, and improving communication between physicians and nurses may be a useful strategy that can contribute to patient safety.

There were too few studies overall linking nurse/physician communication to patient safety outcomes for the IOM to include recommendations in this area for their latest report on transforming the work environment of nurses (A. S. Hinshaw, personal communication, May 4, 2004). Since research examining the relationship between the nursing role of communicating with physicians and patient safety, is lacking, we may have to look to other disciplines for suggestions on improving communication that can be translatable to healthcare settings. For example, the United States Forest Service offers its fire fighters a five-step process for quick and effective communication, known as "STICC":

Situation: Here's what I think we face;

Task: Here's what I think we should do;

Intent: Here's why;

Concern: Here's what we should keep our eye on;

Calibrate: Now talk to me. Tell me if you don't understand, cannot do it, or see something I do not. (Sutcliffe, Lewton, & Rosenthal, 2004, p.193).

Although not yet empirically tested, using "STICC" may be a useful intervention for improving communication between physicians and nurses, and it may contribute to patient safety. Therefore, the first recommendation to the Commission is to fund research into interventions to improve communication between nurses and physicians.

The second recommendation to the Commission concerns work environment factors required by nurses to provide quality care. When specific elements in the work environment are present, nurses are able to provide good care (Page, 2004), and reduce patient mortality (Aiken, Clarke, Cheung, Sloane, & Silber, 2003). Organizational elements have been identified and are characteristic of magnet hospitals, which are known for providing excellent nursing care and therefore acting as magnets, drawing nurses to them. The current American Nurses Credentialing Center's (ANCC) Magnet Recognition program arose out of a descriptive study begun in 1981 that sought to answer two questions: what organizational variables and nursing services contributed to the attraction and retention of professional nursing staff; and what combination of variables produced exemplary nursing practice and nursing satisfaction (McClure, Poulin, Sovie, & Wandelt, 2002)? There were serious methodological concerns with the original study (selection processes of originally tagged "magnet hospitals", for example), but results so intrigued nursing investigators, that ongoing research into whether or not certain hospitals could attract and retain qualified nurses, as well as what environmental

factors contributed to professional nursing practice, continues to this day (Kramer & Schmalenberg, 2003).

Aiken and colleagues have extended the magnet hospital research to the investigation of how magnet hospital properties influence nurse and patient outcomes. Specific elements in the hospital work environment that contribute to nurses' abilities to improve patient outcomes include: decentralized organizational structures, nurses' involvement in all levels of decision-making, and visible, supportive nursing leadership (Aiken et al., 2001). These organizational features facilitate appropriate nursing judgment and actions necessary in dealing with highly unpredictable and complex patient care situations. Nurses in magnet hospitals experienced lower levels of burnout and higher levels of job satisfaction, and rated the quality of care they gave higher than nurses in non-magnet hospitals (Aiken, Havens, & Sloane, 2000). In addition, nurses are more likely to practice according to professional standards when organizational features associated with magnet hospital status are present (Scott, Sochalski, & Aiken, 1999). Magnet hospitals have also been found to have lower medicare mortality rates than non-magnet facilities (Aiken, Smith, & Lake, 1994), as well as lower mortality rates for AIDS patients (Aiken, Sloane, Lake, Sochalski, & Weber, 1999). As Aiken (2002) states, "The magnet hospital concept has endured for more than two decades as the single most successful organizational reform to attract and retain highly qualified professional nurses in hospital practice" (p. 77).

Major strategies for an organization seeking the magnet recognition credential need to include: (a) adequate staffing levels, that can be achieved through building a planned mix of experienced, new, and agency or float nurses; (b) strong, visible nursing

leadership at both top and unit levels of the organization to set expectations and support independent actions of the nursing staff; (c) decentralizing decision making for patient care decisions to front line clinicians; (d) a shared governance structure for nurses that provides committees or councils on which nurses serve, and through which they make both patient care decisions as well as unit and hospital program and policy decisions; (e) a decentralized hospital administrative structure, in which responsibility for patient care rests with staff nurse and their unit managers; and finally (f) improved communication processes between nurses, physicians and administrators, by having nursing involvement on hospital wide committees, such as policy and procedures (Hinshaw, 2002).

Despite the attraction to nurses, and compelling evidence of improved patient outcomes, magnet hospital recognition is not something most hospitals strive for (Aiken, Havens, & Sloane, 2000). The State of Michigan has only one hospital recognized with magnet hospital status, perhaps in part because of the rigorous process needed to acquire the ANCC credential. The ANCC credentialing process requires that a hospital meet 14 standards of nursing care which are evaluated in a multi-stage process of documentation, and through successful completion of an on-site evaluation by nurse experts (Aiken et al., 2000). The strategies identified above hint at the degree of organizational change that may be necessary before a hospital can seek magnet recognition designation. The entire process can take at least two years (American Nurses Credentialing Center [ANCC], 2003), and anecdotally can cost a hospital many thousands of dollars, although a cost-benefit analysis of the magnet recognition program has not yet been done (Aiken, 2002).

Therefore, the second recommendation to the Commission is to suggest to the Governor that legislation be enacted to offer a financial incentive to hospitals that seek and retain ANCC magnet recognition. Although the Malcolm Baldrige National Quality Award is touted as the nation's highest honor for quality and performance excellence, research to date has not been able to link the award to patient safety or other patient outcomes (Goldstein & Schweikhart, 2002). Since patients are admitted to hospitals because they require 24 hour nursing care, it may be more useful for hospitals to strive for the recognition program that recognizes a hospital for the quality of the nursing care it provides.

Although the etiology of lapses in patient safety is complex and not yet fully understood, the time for resolution of this vexing problem has long past. Those of us who practice in hospitals knew long before "To Err is Human" came out in 2000 that patient safety is not what it should be (Kohn, Corrigan, & Donaldson, 2000). Reason's (1990) model of human error (also known as the "Swiss chess model") captures our interest because it does such a good job of explaining how errors occur. Using Reason's theory or other theories to research ways to improve patient safety are necessary to be able to produce evidence-based interventions. The recommendations in this testimony are biased towards nurses and the care that they provide, but perhaps the time has come to heed what nurse have to say regarding patient safety. Thank you for your attention.

Appendix: References

- Aiken, L. H. (2002). Superior outcomes for magnet hospitals: The evidence base. In M. L. McClure & A. S. Hinshaw (Eds.), *Magnet hospitals revisited: Attraction and retention of professional nurses*. Washington, D C: American Nurses Publishing.
- Aiken, L. H., Clarke, S. P., Cheung, R. B., Sloane, D. M., & Silber, J. H. (2003). Educational levels of hospital nurses and surgical patient mortality. *JAMA*, *290*(12), 1617-1623.
- Aiken, L. H., Clarke, S. P., Sloane, D. M., Sochalski, J. A., Busse, R., Clarke, H., et al. (2001). Nurses' reports on hospital care in five countries. *Health Affairs*, *20*(3), 43-53.
- Aiken, L. H., Havens, D. S., & Sloane, D. M. (2000). The magnet nursing services recognition program: a comparison of two groups of magnet hospitals. *AJN*, *100*(3), 26-35.
- Aiken, L. H., Sloane, D., Lake, E. T., Sochalski, J., & Weber, A. L. (1999). Organization and outcomes of inpatient AIDS care. *Medical Care*, *37*(8), 760-772.
- Aiken, L. H., Smith, H. L., & Lake, E. T. (1994). Lower medicare mortality among a set of hospitals known for good nursing care. *Medical Care*, *32*(8), 771-787.
- American Nurses Credentialing Center (2003). The Magnet Hospital Recognition Program. Retrieved 10/4/04 from:
<http://www.nursingworld.org/ancc/magnet/faqs.html>
- Berliner, H. S. & Ginzberg, E. (2002). Why this hospital nursing shortage is different. *JAMA*, *288*(21), 2742-2744.

- Donchin, Y., Gopher, D., Olin, M., Badihi, Y., Biesky, M., Sprung, C. L., et al. (1995). A look into the nature and causes of human errors in the intensive care unit. *Critical Care Medicine*, 23(2), 294-300.
- Goldstein, S. M. & Schweikhart, S. B. (2002). Empirical support for the Baldrige Award framework in U. S. hospitals. *Health Care Management Review*, 27(1), 62-76.
- Greenfield, L. J. (1999). Doctors and nurses: A troubled partnership. *Annals of Surgery*, 230(3), 279-288.
- Hinshaw, A. S. (2002). Building magnetism into health organizations. In M. L. McClure & A. S. Hinshaw (Eds.), *Magnet hospitals revisited: Attraction and retention of professional nurses*. Washington, D C: American Nurses Publishing.
- Keenan, G. M., Cooke, R., & Hillis, S. L. (1998). Norms and nurse management of conflicts: Keys to understanding nurse-physician collaboration. *Research in Nursing and Health*, 21, 59-72.
- Knaus, W. A., Draper, E. A., Wagner, D. P., & Zimmerman, J. E. (1986). An evaluation of outcome from intensive care in major medical centers. *Annals of Internal Medicine*, 104, 410-418.
- Kohn, L. T., Corrigan, J. M., & Donaldson, M. S. (Eds.). (2000). *To Err is Human: Building a Safer Health System*. Washington D. C.: National Academies Press.
- Kramer, M. & Schmalenberg, C. E. (2003), Magnet hospital nurses describe control over nursing practice. *Western Journal of Nursing Research*, 25(4), 434-452.
- Lichtig, L. K., Knauf, R. A., & Milholland, D. K. (1999). Some impacts of nursing on acute care hospital outcomes. *JONA*, 29(2), 25-33.

- McClure, M. L., Poulin, M. A., Sovie, M. A., & Wandelt, M. A. (2002). Magnet hospitals: attraction and retention of professional nurses (the original study). In M. L. McClure & A. S. Hinshaw (Eds.), *Magnet hospitals revisited: Attraction and retention of professional nurses*. Washington, D C: American Nurses Publishing.
- Page, A. (Ed.). (2004). *Keeping Patients Safe: Transforming the Work Environment of Nurses*. Washington, D. C.: National Academies Press.
- Pronovost, P., Berenholtz, S., Dorman, T., Lipsett, P. A., Simmonds, T., & Haraden, C. (2003). Improving communication in the ICU using daily goals. *Journal of Critical Care, 18*(2), 71-75.
- Reason, J. (!990). *Human Error*. Cambridge, UK: Cambridge University Press.
- Scott, J. G., Sochalski, J., & Aiken, L. H. (1999). Review of magnet hospital research: Findings and implications for professional nursing practice. *JONA, 29*(1), 9-19.
- Sochalski, J. (2001). Quality of care, nurse staffing, and patient outcomes. *Policy, Politics, & Nursing Practice, 2*(1), 9-18.
- Sutcliffe, K. M., Lewton, E., & Rosenthal, M. M. (2004). Communication failures: An insidious contributor to medical mishaps. *Academic Medicine, 79*(2), 186-194.