

Listed below are the recommendations from the November 4, 2003 Institute of Medicine Report on Nursing Environments and Patient Safety. They were obtained from the IOM website at : <http://www.iom.edu/report.asp?id=16173> The full report is due to be published in late February or early March. Included in the recommendations are issues of concern and interest to WHA members.

## **Keeping Patients Safe: Transforming the Environment for Nurses**

IOM Nov 5, 2003

### REPORT RECOMMENDATIONS

#### **1) Transformational Leadership and Evidence-based Management**

Recommendations in this section address the need for creating work environments that are ‘most conducive’ to patient safety by addressing leadership and management structure and processes.

*Recommendation 4-1.* Health Care Organizations (HCOs) should acquire nurse leaders for all levels of management (e.g., at the organization-wide and patient care unit levels) who will:

- Participate in executive decisions within the HCO.
- Represent nursing staff to organization management and facilitate their mutual trust.
- Achieve effective communication between nursing and other clinical leadership.
- Facilitate input of direct-care nursing staff into operational decision making and the design of work processes and work flow.
- Be provided with organizational resources to support the acquisition, management, and dissemination to nursing staff of the knowledge needed to support their clinical decision making and actions.

*Recommendation 4-2.* Leaders of HCO should take action to identify and minimize the potential adverse effects of their decisions on patient safety by:

- Educating board members and senior, midlevel, and line managers about the link between management practices and safety.
- Emphasizing safety to the same extent as productivity and financial goals in internal management planning and reports and in public reports to stakeholders.

*Recommendation 4-3.* HCOs should employ management structures and processes throughout the organization that:

- Provide ongoing vigilance in balancing efficiency and safety.
- Demonstrate trust in workers and promote trust by workers.
- Actively manage the process of change.
- Engage workers in nonhierarchical decision making and in the design of work processes and work flow.
- Establish the organization as a “learning organization.”

*Recommendation 4-4.* Professional associations, philanthropic organizations, and other organizational leaders within the health care industry should sponsor collaboratives that incorporate multiple academic and other research-based organizations to support HCOs in the identification and adoption of evidence-based management practices.

## **2) Maximizing Workforce Capability**

Recommendations in this section relate to mechanisms for determining staffing, knowledge and skill level of staff and the need for collaboration among health care providers.

*Recommendation 5-1.* The U.S. Department of Health and Human Service (DHHS) should update existing regulations established in 1990 that specify minimum standards for registered and licensed nurse staffing in nursing homes. Update minimum standards should:

- Require the presence of at least one RN within the facility at all times.
- Specify staffing levels that increase as the number of patients increase, and that are based on the findings and recommendations of the DHHS reports to Congress, *Appropriateness of Minimum Nurse Staffing Ratios in Nursing Homes - Phase II Final Report*.
- Address staffing levels for nurse assistants, who provide the majority of patient care.

*Recommendation 5-2.* Hospitals and nursing homes should employ nurse staffing practices that identify needed nurse staffing for each patient care unit per shift. These practices should:

- Incorporate estimates of patient volume that count admissions, discharges, and “less than full-day” patients in addition to a census of patients at point in time.
- Involve direct-care nursing staff in determining and evaluating the approaches used to determine appropriate unit staffing levels for each shift.
- Provide for staffing “elasticity” or “slack” within each shift's scheduling to accommodate unpredicted variations in patient volume and acuity and resulting workload. Methods used to provide slack should give preference to scheduling excess staff and creating cross-trained float pools within the HCO. Use of nurses from external agencies should be avoided.
- Empower nursing unit staff to regulate unit work flow and set criteria for unit closures to new admissions and transfers as nursing workload and staffing necessitate.
- Involve direct-care nursing staff in identifying the causes of nursing staff turnover and in developing methods to improve nursing staff retention.

*Recommendation 5-3.* Hospitals and nursing homes should perform ongoing evaluation of the effectiveness of their nurse staffing practices with respect to patient safety, and increase internal oversight of their staffing methods, levels, and effects patient safety whenever staffing falls below the following levels for a 24-hour day:

- In hospital ICUs - one licensed for every 2 patients (12 hours of licensed nursing staff per patient day).

- In nursing homes, for long-stay residence - one RN for every 32 patients (0.75 hours per patient), one licensed nurse for every 18 patients (1.3 hours per resident day), and one nurse assistant for every 8.5 patients (2.8 hours per resident day).

*Recommendation 5-4.* DHHS should implement a nationwide, publicly accessible system for collecting and managing valid and reliable staffing and turnover data from hospitals and nursing homes. Information on individual hospital and nursing home staffing at the level of individual nursing units and the facility in the aggregate should be disclosed routinely to the public.

- Federal and state nursing home report cards should include standardized, case-mix-adjusted information on the average hours per patient day of RN, licensed, and nurse assistant care provided to residents and a comparison with federal and state standards.

- During the next 3 years, public and private sponsors of the new hospital report card to be located on the federal government website should undertake an initiative (in collaboration with experts in acute hospital care, nurse staffing, and consumer information) to develop, test, and implement measures of hospital nurse staffing levels for the public.

*Recommendation 5-5.* HCOs should dedicate budgetary resources equal to a defined percentage of nursing payroll to support nursing staff in their ongoing acquisition and maintenance of knowledge and skills. These resources should be sufficient for and used to implement policies and practices that:

- Assign experienced nursing staff to precept nurses newly practicing in a clinical area to address knowledge and skill gaps.

- Annually ensure that each licensed nurse and nurse assistant has an individualized plan and resources for educational development within health care.

- Provide education and training of staff as new technology or changes in the workplace are introduced.

- Provide decision support technology identified with the active involvement of direct-care nursing staff to enable point-of-care learning.

- Disseminate to individual staff organizational learning as captured in clinical tools, algorithms, and pathways.

*Recommendation 5-6.* HCOs should take action to support interdisciplinary collaboration by adopting such interdisciplinary practice mechanisms as interdisciplinary rounds, and by providing ongoing formal education and training in interdisciplinary collaboration for all health care providers on a regularly scheduled, continuous basis (e.g., monthly, quarterly, or semiannually).

### **3) Design of Work and Workspace to Prevent and Mitigate Errors**

Recommendations within this section address fatigue related to excess work, work design and the burden of documentation.

*Recommendation 6-1.* To reduce error-producing fatigue, state regulatory bodies

should prohibit nursing staff from providing patient care in any combination of scheduled shifts, mandatory overtime, or voluntary overtime in excess of 12 hours in any given 24-hour period and in excess of 60 hours per 7-day period. To this end:

- HCOs and labor organizations representing nursing staff should establish policies and practices designed to prevent nurses who provide direct patient care from working longer than 12 hours in a 24-hour period and in excess of 60 hours per 7-day period.
- Schools of nursing, state boards of nursing, and HCOs should educate nurses about the threats to patient safety caused by fatigue.

*Recommendation 6-2.* HCOs should provide nursing leadership with resources that enable them to design the nursing work environment and care processes to reduce errors. These efforts must directly involve direct-care nurses throughout all phases of the work design and should concentrate on errors associated with:

- Surveillance of patient health status.
- Patient transfers and other patient hand-offs.
- Complex patient care processes.
- Non-value added activities performed by nurses, such as locating and obtaining supplies, looking for personnel, completing redundant and unnecessary documentation, and compensating for poor communication systems.

*Recommendation 6-3.* HCOS should address handwashing and medication administration among their first work design initiatives.

*Recommendations 6-4.* Regulators; leaders in health care; and experts in nursing, law, informatics, and related disciplines should jointly convene to identify strategies for safely reducing the burden associated with patient and work-related documentation.

#### **4) Creating and Sustaining a Culture of Safety**

Recommendations in this section speak to the need to create a Culture of Safety. Such cultures 1) recognize that the majority of errors are created by systemic organizational defects in work processes, not by blameworthy individuals; 2) support staff; and 3) foster continuous learning by the organization as a whole and its employees.

*Recommendation 7-1.* HCO boards of directors, managerial leadership, and labor partners should create and sustain cultures of safety by implementing the recommendation presented previously and by:

- Specifying short- and long-term safety objectives.
- Continuously reviewing success in meeting these objectives and providing feedback at all levels.
- Conducting an annual, confidential survey of nursing and other health care workers to assess the extent to which a culture of safety exists.
- Instituting a deidentified, fair, and just reporting system for errors and near misses.
- Engaging in ongoing employee training in error detection, analysis, and reduction.

- Implementing procedures for analyzing errors and providing feedback to direct-care workers.
- Instituting rewards and incentives for error reduction.

*Recommendation 7-2.* The National Council of State Boards of Nursing, in consultation with patient safety experts and health care leaders, should undertake an initiative to design uniform processes across states for better distinguishing human errors from willful negligence and intentional misconduct, along with guidelines for their application by state boards of nursing and other state regulatory bodies having authority over nursing.

*Recommendation 7-3.* Congress should pass legislation to extend peer review to data related to patient safety and quality improvement that are collected and analyzed by HCOs for internal use or shared with other solely for purposes of improving safety and quality.

## **5) Additional Research Necessitates Ongoing Chang**

Recommendations in this section address the need for ongoing research around the delivery of health services and patient safety.

*Recommendation 8-1.* Federal agencies and private foundations should support research in the following areas to provide HCOs with the additional information they need to continue to strengthen nurse work environments for patient safety:

- Studies and development of methods to better describe, both qualitatively and quantitatively, the work nurses perform in different care settings.
- Descriptive studies of nursing-related errors.
- Design, application, and evaluation (including financial costs and savings) of safer and more efficient work processes and workspace, including the application of information technology.
- Development and testing of a standardized approach to measuring patient acuity.
- Determination of safe staffing levels within different types of nursing units.
- Development and testing of methods to help night shift workers compensate for fatigue.
- Research on the effects of successive work days and sustained work hours on patient safety.
- Development and evaluation of models of collaborative care, including care by teams.

**Institute of Medicine  
Committee on Work Environment for Nurses and Patient Safety**

Committee Membership:

Donald Steinwachs, PhD, Committee Chair  
Professor and Chair of the Department of Health Policy and Management, Johns  
Hopkins University Bloomberg School of Public Health

Ada Sue Hinshaw, PhD, RN, FAAN Vice Chairperson  
Dean School of Nursing, University of Michigan

Joy Durfee Caulkin, PhD, Professor Emeritus of Nursing at the University of Calgary,  
Canada and health care consultant.

Marilyn Chow, DNS, RN, FAAN  
Vice President, Patient Care Services, California Division for Kaiser Permanente

Paul Clayton, PhD  
Chief Medical Informatics Officer, Intermountain Health Care  
Professor Medical Informatics, University of Utah

Mary Lou de Leon Siantz, RN, PhD, FAAN  
Professor and Associate Dean for Research, Georgetown University School of Nursing  
and Health Studies

Charlene Harrington, PhD, RN, FAAN  
Professor of Sociology and Nursing, Department of Social and Behavioral Sciences,  
School of Nursing, University of California, San Francisco

David Hickam, MD, MPH  
Professor, Department of Medicine, Oregon Health Science University  
Staff Physician, Portland Veterans Affairs Medical Center

Gwendylon Johnson, MA, RNC  
Staff Nurse, Howard University Hospital

David Kobus, PhD  
Certified Professional Ergonomist

Andrew Kramer, MD  
Professor of Medicine and Head of the Division of Health Care Policy and Research,  
Department of Medicine, University of Colorado

Pamela Mitchell, PhD, RN, FAAN  
Associate Dean for Research and Professor of Biobehavioral Nursing and Health Care  
Systems, University of Washington School of Nursing

Audrey Nelson, PhD, RN, FAAN

Director, Veterans Health Administration (VHA) Patient Safety Center of Inquiry

Director, VHA Health Services Research on Patient Safety Outcomes

Director, Suncoast Development Research Evaluation Center on Safe Patient

Transitions

Edward O'Neil, PhD

Professor of Family and Community Medicine and Dental Public Health, University of California at San Francisco

Director, Center for the Health Professions

William Pierskalla, PhD

Professor, Department of Operation and Technology Management, Anderson Graduate School of Management, University of California at Los Angeles

Karlene Roberts, PhD

Professor, Haas School of Business, University of California at Berkeley

Denise Rousseau, PhD

H. J. Heinz II Professor of Organizational Behavior, Carnegie Mellon University

Professor, Heinz School of Public Policy and Management

Professor, Graduate School of Industrial Administration

William C. Rupp, MD

President and Chief Executive Officer of Immanuel St. Joseph's-Mayo Health

System Vice Chair of the Mayo Health System