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TO: TEMPORARY CO-CHAIRPERSONS SENATOR JOE BOLKCOM AND SENATOR JAMES SEYMOUR, AND REPRESENTATIVE LINDA UPMEYER, AND MEMBERS OF THE NURSING STAFF IN HOSPITALS STUDY COMMITTEE

**FROM: RICHARD NELSON, SENIOR LEGAL COUNSEL
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**RE: NURSING STAFF IN HOSPITALS STUDY
COMMITTEE BACKGROUND INFORMATION**

I. INTRODUCTION.

The purpose of this memorandum is to provide background information for the members of the Nursing Staff in Hospitals Study Committee. The memorandum and its attachments include the charge and membership of the Committee, the meeting agenda, proposed rules, the names of the Legislative Services Agency staff assigned to the Committee, and additional discussion and attachments relating to nurse staffing in hospitals.

II. COMMITTEE CHARGE.

The Nursing Staff in Hospitals Study Committee was developed as a result of the passage of Senate Resolution 23 (attached) during the 2005 Legislative Session, which requested the Legislative Council to authorize "a study committee for the 2005 legislative interim to review the nurse staffing needs of the hospitals in this state and to make recommendations for options to improve hospital nurse staffing levels." Based on this, the Legislative Council established the committee and authorized one meeting day.

III. MEMBERSHIP AND STAFF.

Membership: Senators Joe Bolkcom and James Seymour, and Representative Linda Upmeyer, Temporary Co-chairpersons; Senators Dave Mulder and Amanda Ragan; and Representatives Walt Tomenga and Beth Wessel-Kroeschell.

Staff: Richard Nelson, Senior Legal Counsel (242-5822), and Kathy Hanlon, Senior Research Analyst (281-3847), Legal Services Division, and Lisa Burk, Legislative Analyst (281-7942), Fiscal Services Division, Legislative Services Agency.

IV. IMPETUS FOR COMMITTEE MEETING.

The issue of nurse staffing adequacy in hospitals has generated a significant amount of attention in recent years. The combined impact of rising health care costs, hospital cost-containment measures, higher patient acuity levels, and a nursing workforce which is limited in number and in many reports encountering increasingly untenable workplace demands and resulting job dissatisfaction have resulted in ongoing questions regarding the ability of nurses to provide and sustain an appropriate level of patient care. While there is general acknowledgment that the problem of adequate nurse staffing levels exists and may be intensifying, potential solutions to the problem have generated a substantial amount of debate. The debate centers around two primary issues:

A. Nurse Staffing Level Regulation.

Legislation mandating specified nurse-to-patient ratios has been introduced in several states, generally tied to particular specialty areas, but in the case of California, applicable to every patient care unit in every state hospital. Proponents of nurse staffing ratios assert that by mandating that hospitals will not exceed a specified nurse-to-patient threshold, the ability to provide acceptable patient care will be enhanced, hospital nurse staffing decisions controlled, and nurse frustration reduced. Opponents of nurse staffing ratios contend that the approach applies a rigid, "one-size-fits-all" methodology to staffing decisions, which should be determined not by statute or regulation but by nursing and hospital administration staff in the best position to assess fluctuating patient levels and needs. The following is a representative list of comments or arguments frequently advanced in support of both the advantages and disadvantages of state-mandated nurse staffing ratios. It should be noted that their inclusion is for the purpose of illustrating various statements, viewpoints, and opinions on the issue, and not an expression of agreement with the statements or an indication that they are necessarily correct:

1. Advantages:

- Studies have shown that a higher nurse-to-patient staffing ratio is associated with higher mortality rates and a greater incidence of complications and errors, lower job satisfaction, and more burnout among nurses, longer waiting times for medication and medical procedures, and inadequate time on the part of nurses to properly educate patients and families.
- In the absence of other regulation, laws do not exist governing whether adequate nurse staffing levels are being maintained. Ratios assure an adequate number of registered nurses on each shift and in each unit of a hospital to provide appropriate staffing levels for patient care.
- Ratios counteract variations in staffing decisions, ancillary staff availability, and equipment availability across hospitals and provide some measure of uniformity of nursing access.

- During the previous decade, health care providers have implemented aggressive measures to reduce health care costs, and nurse salaries, as one of the largest hospital personnel expenses, have faced aggressive cuts, with the result that registered nurse staffing levels are inadequate to protect the safety and quality of patient care, at a time when patient acuity and the use of sophisticated technology have increased, and the length of patient hospital stay has decreased. Ratios force hospitals to reverse this trend.
- There is no standardized system of reporting nurse staffing decisions or changes, and a lack of uniformity regarding nurse staffing requirements – allowing dramatic changes in staffing methodology to go unchecked.

2. Disadvantages:

- Some reports regarding the impact of the California legislation maintain that ratios are intensifying already fierce competition for nurses, driving up salaries, forcing many hospitals to close beds or divert patients from the emergency department to comply with the requirements, and that widespread variation exists in the ability of hospitals to comply.
- There is no scientific basis for determining the number of nurses needed on a shift – staffing decisions that best determine the needs of a particular patient population should only be made after careful consideration of the many rapid-changing factors within a particular health care environment.
- Licensed practical nurses and ancillary support staff will be forced out of jobs as hospitals comply with mandates, thereby losing flexibility in determining how best to provide patient care.
- Mandated nursing ratios do not make nurses materialize at a time when there is a nursing shortage, and a one-size-fits-all approach does not fully account for differences in the experience levels and skill mixes of nurses. In many situations, government demand does not match market supply, making compliance difficult.
- Rigid ratios do not take into account the ongoing assessment of patient needs, which can change not only from shift-to-shift but hour-to-hour.

Other proposed solutions to the nurse staffing adequacy problem either combine ratios with, or focus exclusively on, the requirement that hospitals develop and adhere to a nurse staffing plan. Generally, the plan would be developed with the input of hospital administrative staff and nurses, and would be subject to reporting requirements and penalties for noncompliance. Advocates of the nurse staffing plan approach point to the benefits of avoiding a one-size-fits-all methodology and involving on-the-scene hospital personnel in decision making, while providing regulation and oversight of hospital nurse staffing decisions. Proponents of the ratio approach, however, may assert that nurse staffing plans do not go far enough in uniformly guaranteeing the availability of a specified number of nurses per shift.

B. Mandatory Overtime Prohibition.

A second issue relating to nurse staffing adequacy concerns legislative efforts to prohibit mandatory overtime requirements for nurses by hospitals, based upon reports that some hospitals impose mandatory overtime in the wake of insufficient nurse staff availability, coupled with studies citing increasing error rates and possible health risks associated with extended nurse work shifts or number of hours worked per week. In general, mandatory overtime discussions exclude increased staffing requirements due to emergency or unexpected situations, and nurses working on an on-call basis, and would only prohibit mandatory, versus voluntarily, worked overtime. Nurses could not be subject to disciplinary action or termination for refusal to work in excess of a prescribed daily work shift or specified number of hours per period of work.

V. LEGISLATIVE PROPOSALS.

Other States. According to the American Nurses Association (ANA), 21 states initiated legislative or regulatory efforts to address nurse staffing shortage issues by imposing either nurse staffing plans or nurse-to-patient ratios during 2005, resulting in enactment or adoption in two of the states. Prior to 2005, the ANA reports that eight states have enacted or adopted such legislation or regulation, with California the most notable example, as previously mentioned. Efforts took the form of requiring nurse staffing plans in eight of the states introducing legislation in 2005, mandating nurse-to-patient ratios in six states, and applying a combination of the two approaches in 11 states, with a few states introducing more than one form or approach. The ANA further reports that legislation to prohibit mandatory overtime was introduced in 19 states in 2005, and that some form of such legislation has previously been enacted in 10 states.

Iowa. In Iowa, House File 2290 was introduced during the 2004 Legislative Session, which represented the "combined" form of nurse staffing level regulation by including both nurse staffing plan and nurse-to-patient ratio components. The bill specified nurse staffing standards, prohibited mandatory overtime, specified maximum hours that a health facility nurse may work or be on duty, provided for exceptions under a state of emergency, established requirements for a direct-care nurse work assignment policy, established rights for health facility nurses, and protected health facility nurses from retaliation for reporting or otherwise publicizing violations or suspected violations. The bill also provided for a private right of action for a nurse if a health facility violated the provisions of the bill, for public disclosure of violations, for regulatory oversight by the Department of Inspections and Appeals, and provided civil and criminal penalties. Additionally, the bill provided for the loss of reimbursement for a health facility under the Medical Assistance (Medicaid) Program for violations. Specific ratios were established for incorporation into a nurse staffing plan, which varied depending upon the type of unit, and constituted minimum staffing allocations. Previously, Senate File 174 was introduced during the 2003 Legislative Session, dealing strictly with the prohibition of mandatory overtime. Neither bill was voted out of committee.

Federal. At the federal level, the Quality Nursing Care Act of 2005 has been introduced in both houses of Congress, and represents something of a hybrid approach to nurse staffing regulation, providing for the establishment of minimum staffing ratios within a staffing system developed with the input of direct-care registered nurses or their representatives, but without specifying a specific numeric nurse-to-patient ratio. The

bill provides that in determining the appropriate level of staffing, decisions would reflect the number of patients and their acuity level, the number of patient admissions and discharges on each shift, and the training and experience level of staff providing patient care. The bill additionally provides that a nurse would not be required to provide patient care on a unit without having documented their professional capability to render such care on the unit, and provides for public posting and reporting of staffing information, whistle-blower protection, and penalty provisions. Additionally, the Safe Nursing and Patient Care Act of 2005, also introduced into both houses, establishes a limitation on the number of mandatory overtime hours worked for service providers receiving payments under the Medicare Program.

VI. ATTACHMENTS.

The following documents are attached to this background information:

- Attachment A Tentative Agenda for the October 18, 2005, meeting.
- Attachment B Proposed Committee Rules.
- Attachment C Legislation Requesting the Committee – SR 23.
- Attachment D Iowa Legislation Establishing Staffing Plans/Ratios – HF 2290.
- Attachment E Iowa Legislation Prohibiting Mandatory Overtime – SF 174.
- Attachment F Iowa Department of Public Health Summary Report of the Public Hearings on Nursing.
- Attachment G ANA Summary of State Staffing Plan and Ratio Proposals.
- Attachment H ANA Summary of State Mandatory Overtime Prohibition Proposals.
- Attachment I Nursing Organization Environment in Iowa – submitted by the Iowa Nurses Association in advance of meeting.
- Attachment J Position Statement on Principles for Determining Nurse Staffing – submitted by the Iowa Nurses Association in advance of meeting.
- Attachment K The California Experience – PowerPoint Presentation.
- Attachment L Nurse-to-Patient Ratios: Research and Reality – general discussion focusing on efforts in Massachusetts and California.
- Attachment M Journal of the American Medical Association – Aiken Research Study Summaries.
- Attachment N Hospital Nurse Staffing and Quality Care – research article.

**ATTACHMENT B
PROPOSED RULES
NURSING STAFF IN HOSPITALS
STUDY COMMITTEE**

1. A majority of the voting members of each house shall constitute a quorum, but a lesser number of members may adjourn or recess the Committee in the absence of a quorum.
2. A majority vote of those voting members present is necessary to carry any action; however, recommendations to the Legislative Council or General Assembly must be adopted by the affirmative votes of at least a majority of the members of each house.
3. Whenever Mason's Manual of Legislative Procedure does not conflict with the rules specifically adopted by the Committee, Mason's Manual of Legislative Procedure shall govern the deliberations of the Committee.
4. Meetings shall be set by motion before adjournment, or by call of the Co-chairpersons of the Committee if meetings are necessary before the date set in the motion.
5. Rules shall be adopted by the affirmative votes of at least a majority of the members of each house and may only be changed or suspended by a similar vote of the Committee.

Submitted

C

1 SENATE RESOLUTION NO. ____

2 BY BOLKCOM

3 A Resolution requesting the legislative council to
4 authorize an interim study committee to review the
5 nurse staffing needs of the hospitals in this state.

6 WHEREAS, the increasing acuity level of patients in
7 hospitals, the decreasing average length of patient
8 stay, and the use of new medical technologies have all
9 led to increases in the amount of care required for
10 patients while in a hospital; and

11 WHEREAS, there is a persistent shortage in the
12 number of qualified nurses willing to fill vacant
13 positions in hospitals; and

14 WHEREAS, research indicates that hospitals with low
15 nurse staffing levels tend to have higher rates of
16 poor patient outcomes; NOW THEREFORE,

17 BE IT RESOLVED BY THE SENATE, That the legislative
18 council is requested to authorize a study committee
19 for the 2005 legislative interim to review the nurse
20 staffing needs of the hospitals in this state and to
21 make recommendations for options to improve hospital
22 nurse staffing levels.

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HOUSE FILE _____

BY MURPHY, BUKTA, MASCHER,
HUNTER, JACOBY, LENSING,
WHITAKER, JOCHUM, OSTERHAUS,
SHOULTZ, T. TAYLOR, OLDSON,
CONNORS, and PETERSEN

Passed House, Date _____ Passed Senate, Date _____

Vote: Ayes _____ Nays _____ Vote: Ayes _____ Nays _____

Approved _____

A BILL FOR

1 An Act relating to health care delivery, including nurse staffing
2 requirements, and providing penalties.

3 BE IT ENACTED BY THE GENERAL ASSEMBLY OF THE STATE OF IOWA:

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1 Section 1. NEW SECTION. 135M.1 TITLE

2 This chapter shall be known and may be cited as the "Safe
3 Staffing for Quality Care Act".

4 Sec. 2. NEW SECTION. 135M.2 FINDINGS.

5 The general assembly finds that:

6 1. The state has a substantial interest in assuring that
7 delivery of health care services to patients in health
8 facilities located within this state is adequate and safe and
9 that health facilities retain sufficient nursing staff in
10 order to promote optimal health care outcomes.

11 2. Recent changes in health care delivery systems are
12 resulting in a higher acuity level among patients in health
13 facilities.

14 3. Inadequate hospital staffing results in dangerous
15 medical errors and patient infections. Registered nurses
16 constitute the highest percentage of direct health care staff
17 in acute care facilities and have a central role in health
18 care delivery.

19 4. Mandatory overtime and lengthy work hours for direct-
20 care nurses constitute a threat to the health and safety of
21 patients, adversely impact the general well-being of nurses
22 and their families, and result in greater turnover, which
23 increases long-term shortages of nursing personnel.

24 5. To ensure the adequate protection of and care for
25 patients in health facilities, it is essential that qualified
26 registered nurses be accessible and available to meet the
27 nursing needs of patients. Inadequate and poorly monitored
28 nurse staffing practices, which result in having too few
29 registered nurses available to provide care, jeopardize
30 delivery of quality health care services and adversely impact
31 the health of patients who enter hospitals and outpatient
32 emergency and surgical centers.

33 6. The basic principles of staffing in health care
34 facilities should focus on patient health care needs and be
35 based on consideration of patient acuity levels and services

1 necessary to ensure optimal outcomes.

2 7. While the focus of this chapter is registered nurses
3 who are principal caregivers, safe staffing practices
4 recognize the importance of all health care workers in
5 providing quality patient care. Establishing staffing
6 standards for registered nurses shall not be interpreted as
7 justifying the understaffing of other critical health care
8 workers, including licensed practical nurses and unlicensed
9 assistive personnel. Indeed, the availability of these other
10 health care workers enables registered nurses to focus on the
11 nursing care functions that only registered nurses, by law,
12 are permitted to perform, and thereby contributes to the goal
13 of attaining adequate staffing levels.

14 8. To ensure patient safety, adequate hospital patient
15 acuity measurements must be in place and must be followed.

16 9. Establishing staffing standards for registered nurses
17 in acute care facilities will ensure that health facilities
18 throughout the state operate in a manner that guarantees the
19 public safety and the delivery of quality health care
20 services.

21 10. In order to meet the staffing standards established in
22 this chapter, the state recognizes the need to create
23 incentives to increase the number of registered nurses within
24 the state.

25 Sec. 3. NEW SECTION. 135M.3 DEFINITIONS.

26 As used in this chapter, unless the context otherwise
27 requires:

28 1. "Acuity system" means an established measurement
29 instrument that does all of the following:

30 a. Predicts nursing care requirements for individual
31 patients based on severity of patient illness, need for
32 specialized equipment and technology, intensity of nursing
33 interventions required, and the complexity of clinical nursing
34 judgment needed to design, implement, and evaluate the
35 patient's nursing care plan.

- 1 b. Specifies the amount of nursing care needed, both in
2 number of direct-care nurses and in skill mix of nursing
3 personnel required, on a daily basis, for each patient in a
4 nursing department or unit.
- 5 c. Is stated in terms that readily can be used and
6 understood by direct-care nurses.
- 7 d. Takes into consideration the patient care services
8 provided not only by registered nurses but also by licensed
9 practical nurses and other health care personnel.
- 10 2. "Assessment tool" means a measurement system that
11 compares the staffing level in each nursing department or unit
12 against actual patient nursing care requirements in order to
13 review the accuracy of an acuity system.
- 14 3. "Critical care unit" means a unit of a hospital that is
15 established to safeguard and protect patients whose severity
16 of medical condition requires continuous monitoring and
17 complex nursing intervention.
- 18 4. "Declared state of emergency" means an officially
19 designated state of emergency that has been declared by a
20 federal, state, or local government official having authority
21 to declare that the state, county, municipality, or locality
22 is in a state of emergency, but does not include a state of
23 emergency which results from a labor dispute in the health
24 care industry.
- 25 5. "Department" means the department of inspections and
26 appeals.
- 27 6. "Direct-care nurse" and "direct-care nursing staff"
28 mean a registered nurse or nurses with direct responsibility
29 to oversee or carry out medical regimens, nursing, or other
30 bedside care for one or more patients.
- 31 7. "Documented staffing plan" means a detailed, written
32 plan that specifies the minimum number and classification of
33 direct-care nurses required in each nursing department or unit
34 in the health care facility for a given year, based on
35 reasonable projections derived from the patient census and

1 average acuity level within each department or unit during the
2 prior year, the department or unit size and geography, the
3 nature of services provided, and any foreseeable changes in
4 department or unit size or function during the current year.

5 8. "Extended care facility" means a home health care
6 agency, a hospice, or a long-term care nursing facility.

7 9. "Health facility" means an acute care hospital, an
8 outpatient surgical facility, or an institution operating as a
9 psychiatric hospital or operating a designated psychiatric
10 unit, regulated by the department.

11 10. "Nurse" means an individual licensed to practice
12 professional nursing.

13 11. "Nursing care" means care which falls within the scope
14 of practice set forth in chapter 152 or is otherwise
15 encompassed within recognized professional standards of
16 nursing practice, including assessment, nursing diagnosis,
17 planning, intervention, evaluation, and patient advocacy.

18 12. "Off-duty" means, with reference to a health facility
19 employee, that the individual has no restrictions placed on
20 the individual and is free of all duty on behalf of the health
21 facility.

22 13. "On-duty" means, with reference to a health facility
23 employee, that the individual is required to be available and
24 ready to perform services on request within or on behalf of
25 the health facility and includes any rest periods or breaks
26 during which the individual's ability to leave the health
27 facility is restricted either expressly or by work-related
28 circumstances beyond the individual's control.

29 14. "Outpatient surgical facility" means the same as
30 defined in section 135.61.

31 15. "Skill mix" means the combination of licensing,
32 specialty, and experience levels among direct-care nurses.

33 16. "Staffing level" means the actual numerical nurse-to-
34 patient ratio within a nursing department or unit.

35 17. "Unit" means a patient care component within a

1 facility as defined by the department.

2 Sec. 4. NEW SECTION. 135M.4 HEALTH FACILITY STAFFING
3 STANDARDS.

4 1. A health facility, other than an extended care
5 facility, shall ensure that it is staffed in a manner that
6 provides sufficient, appropriately qualified direct-care
7 nurses in each department or unit within the facility in order
8 to meet the individualized care needs of its patients and to
9 meet the requirements specified in this section.

10 2. a. As a condition of licensure, each health facility,
11 annually, shall submit to the department a documented staffing
12 plan accompanied by a written certification that the staffing
13 plan is sufficient to provide adequate and appropriate
14 delivery of health care services to patients for the
15 subsequent year. The staffing plan shall do all of the
16 following:

17 (1) Meet the minimum requirements pursuant to paragraph
18 "b".

19 (2) Comply with all additional requirements established by
20 state or federal law or regulation.

21 (3) Identify and utilize an approved acuity system for
22 addressing fluctuations in actual patient acuity levels and
23 nursing care requirements that necessitate increased staffing
24 levels above the minimums specified in the plan.

25 (4) Factor in other unit or department activities such as
26 discharges, transfers and admissions, administrative and
27 support tasks that are expected to be performed by direct-care
28 nurses, in addition to direct nursing care activities.

29 (5) Factor in the staffing level of and services provided
30 by other health care personnel in meeting patient care needs.

31 (6) Identify the assessment tool used to validate the
32 acuity system relied on in the plan.

33 (7) Identify the system that will be used to document
34 actual staffing on a daily basis within each department or
35 unit.

1 (8) Include a written assessment of the accuracy of the
2 prior year's staffing plan compared with actual staffing
3 needs.

4 (9) Identify each nursing staff classification referenced
5 in the plan accompanied by a statement specifying minimum
6 qualifications for each referenced classification.

7 (10) Be developed in consultation with a majority of the
8 direct-care nursing staff within each department or unit or,
9 if the nursing staff is represented, with the applicable
10 recognized or certified collective bargaining representative
11 of the direct-care nursing staff.

12 b. The staffing plan shall incorporate, at a minimum, the
13 following direct-care nurse-to-patient ratios:

14 (1) For operating room and trauma emergency units: One
15 nurse to one patient.

16 (2) For all critical care areas, including emergency
17 critical care and all intensive care units, labor and delivery
18 units, and postanesthesia units: One nurse to two patients.

19 (3) For antepartum, emergency room, pediatrics, step-down,
20 and telemetry units: One nurse to three patients.

21 (4) For intermediate care nursery, medical or surgical,
22 and acute care psychiatric units: One nurse to four patients.

23 (5) For rehabilitation units: One nurse to five patients.

24 (6) For postpartum in three couplets and well-baby nursery
25 units: One nurse to six patients.

26 (7) For any units not listed in this paragraph "b",
27 including psychiatric units in facilities other than acute
28 care hospitals, such direct-care nurse-to-patient ratio as
29 established by the department.

30 c. The ratios established in paragraph "b" shall
31 constitute the minimum number of direct-care nurses to be
32 allocated within a department or unit. Additional direct-care
33 nurses shall be added and the ratio adjusted to ensure
34 adequate staffing of each nursing department or unit, in
35 accordance with an approved acuity system.

1 d. This subsection shall not be interpreted to preclude
2 the department from establishing and requiring a staffing plan
3 that provides for higher nurse-to-patient ratios than those
4 specified in paragraph "b".

5 e. The staffing plan shall not incorporate or assume that
6 nursing care functions required by state or federal law or
7 regulation, or accepted standards of practice to be performed
8 by a registered nurse, may be performed by other personnel.

9 Sec. 5. NEW SECTION. 135M.5 MANDATORY OVERTIME AND
10 EXCESSIVE DUTY HOURS.

11 1. a. Notwithstanding any other provision of law to the
12 contrary and subject only to the exceptions in this section, a
13 health facility shall not directly or indirectly mandate or
14 otherwise require a nurse to work or be in on-duty status, in
15 excess of any of the following:

16 (1) The scheduled work shift or duty period.

17 (2) Twelve hours in a twenty-four-hour period.

18 (3) Eighty hours in a fourteen-consecutive-day period.

19 b. As used in this section, "mandatory" or "mandate" means
20 any request which, if refused or declined by the health
21 facility nurse, may result in discharge, discipline, loss of
22 promotion, or other adverse employment consequence.

23 c. Nothing in this subsection is intended to prohibit a
24 health facility nurse from voluntarily working overtime.

25 2. a. A health facility nurse shall not work or be in on-
26 duty status in excess of sixteen hours in any twenty-four-hour
27 period.

28 b. A health facility nurse working sixteen hours in any
29 twenty-four-hour period shall be given at least eight
30 consecutive hours off duty before being required to return to
31 duty.

32 c. A health facility nurse shall not be required to work
33 or be on duty more than seven consecutive days without at
34 least one consecutive twenty-four-hour period off duty within
35 that time.

1 3. a. During a declared state of emergency in which a
2 health facility is requested or otherwise reasonably may be
3 expected to provide an exceptional level of emergency or other
4 medical services to the community, the mandatory overtime
5 prohibition specified in subsection 1, paragraph "a", shall
6 not apply to the following extent:

7 (1) Health facility nurses may be required to work or be
8 on duty up to the maximum hours limitation specified in
9 subsection 2, paragraph "a", provided the health facility has
10 taken the steps specified in paragraph "b" of this subsection.

11 (2) Prior to requiring any health facility nurse to work
12 mandatory overtime, the health facility shall make reasonable
13 efforts to fill the health facility's immediate staffing needs
14 through alternative efforts, including requesting off-duty
15 staff to voluntarily report to work, requesting on-duty staff
16 to volunteer for overtime hours, and recruiting per diem and
17 registry staff to report to work.

18 (3) The exemption under this paragraph "a" shall not
19 exceed the duration of the declared state of emergency or the
20 health facility's direct role in responding to medical needs
21 resulting from the declared state of emergency, whichever is
22 less.

23 b. During a declared state of emergency for which a health
24 facility is requested or otherwise reasonably may be expected
25 to provide an exceptional level of emergency or other medical
26 services to the community, the maximum hours limitation in
27 subsection 2, paragraph "a", shall be lifted to the following
28 extent:

29 (1) A health facility nurse may work or remain on duty for
30 more than the maximum hour limitations set forth in subsection
31 2, paragraph "a", provided that all of the following
32 conditions are met:

33 (a) The decision to work the additional time is
34 voluntarily made by the individual health facility nurse
35 affected.

1 (b) The health facility nurse is given at least one
2 uninterrupted four-hour rest period before commencing the
3 first sixteen hours of duty and an uninterrupted eight-hour
4 rest period at the completion of twenty-four hours of duty.

5 (c) A health facility nurse shall not work or remain on
6 duty for more than twenty-eight consecutive hours in a
7 seventy-two-hour period.

8 (d) A health facility nurse who has been on duty for more
9 than sixteen hours in a twenty-four-hour period who informs
10 the health facility that the nurse requires immediate rest
11 must be relieved from duty as soon as possible, consistent
12 with patient safety needs, and given at least eight
13 uninterrupted hours off duty before being required to return
14 for duty.

15 (2) As used in this paragraph "b", "rest period" means a
16 period in which an individual may be required to remain on the
17 premises of the health facility, but is not subject to
18 restraint or duty or responsibility for work or duty should
19 the occasion arise.

20 (3) The exemption in this paragraph "b" shall not exceed
21 the duration of the declared state of emergency or the health
22 facility's direct role in responding to medical needs
23 resulting from the declared state of emergency, whichever is
24 less.

25 4. A work shift schedule or overtime program established
26 pursuant to a collective bargaining agreement negotiated on
27 behalf of the health facility nurses by a bona fide labor
28 organization may provide for mandatory on-duty hours in excess
29 of those permitted under this section, provided adequate
30 measures are included in the agreement to ensure against
31 excessive fatigue on the part of the affected employees.

32 Sec. 6. NEW SECTION. 135M.6 DIRECT-CARE NURSE -- WORK
33 ASSIGNMENT POLICY.

34 1. As a condition of licensure, each health facility shall
35 adopt and disseminate to direct-care nursing staff a written

1 policy that complies with the requirements set forth in this
2 section detailing the circumstances under which a direct-care
3 nurse may refuse a work assignment. At a minimum, the work
4 assignment policy shall permit a direct-care nurse to refuse
5 an assignment for which:

6 a. The direct-care nurse is not prepared by education,
7 training, or experience to safely fulfill the assignment
8 without compromising or jeopardizing patient safety, the
9 direct-care nurse's ability to meet foreseeable patient needs,
10 or the direct-care nurse's license.

11 b. The direct-care nurse has volunteered to work overtime
12 but determines that the direct-care nurse's level of fatigue
13 or decreased alertness would compromise or jeopardize patient
14 safety, the direct-care nurse's ability to meet foreseeable
15 patient needs, or the direct-care nurse's license.

16 c. The assignment otherwise would violate requirements
17 specified in this chapter.

18 2. At a minimum, the work assignment policy shall contain
19 procedures for all of the following:

20 a. Reasonable requirements for prior notice to the nurse's
21 supervisor regarding the direct-care nurse's request and
22 supporting reasons for being relieved of the assignment or
23 continued duty.

24 b. If feasible, an opportunity for the supervisor to
25 review the specific conditions supporting the direct-care
26 nurse's request to be relieved of the assignment or continued
27 duty, and to decide whether to remedy the conditions, to
28 relieve the direct-care nurse of the assignment, or to deny
29 the direct-care nurse's request.

30 c. A process which permits the direct-care nurse to
31 exercise the right to refuse the assignment or continued on-
32 duty status when the supervisor denies the request to be
33 relieved if all of the following apply:

34 (1) The supervisor rejects the request without proposing a
35 remedy or the proposed remedy would be inadequate or untimely.

1 (2) The complaint and investigation process provided
2 through the department of inspections and appeals would be
3 untimely to address the concern.

4 (3) The direct-care nurse in good faith believes that the
5 assignment meets the conditions justifying refusal.

6 Sec. 7. NEW SECTION. 135M.7 HEALTH FACILITY NURSES --
7 RIGHTS.

8 1. A health facility shall not penalize or discriminate or
9 retaliate in any manner against a health facility nurse with
10 respect to compensation, terms, conditions, or privileges of
11 employment, who in good faith, individually, or in conjunction
12 with another person or persons does any of the following:

13 a. Reports a violation or suspected violation of this
14 chapter to a public regulatory agency, a private accreditation
15 body, or management personnel of the health facility.

16 b. Initiates, cooperates with, or otherwise participates
17 in an investigation or proceeding brought by a regulatory
18 agency or private accreditation body concerning matters
19 covered by this chapter.

20 c. Informs or discusses with other employees, with a
21 representative of the employees, with patients or a patient
22 representative, or with the public, violations or suspected
23 violations of this chapter.

24 d. Otherwise avails the nurse of the rights established in
25 this chapter.

26 2. For the purposes of this section, a health facility
27 nurse is deemed to act in good faith if the nurse reasonably
28 believes all of the following:

29 a. That the information reported or disclosed is true.

30 b. That a violation has occurred or may occur.

31 Sec. 8. NEW SECTION. 137M.8 VIOLATIONS -- RELIEF.

32 1. Any health facility that violates section 135M.5,
33 135M.6, or 135M.7 may be held liable to any nurse affected in
34 an action brought in a court of competent jurisdiction for
35 such legal or equitable relief as may be appropriate to

1 effectuate the purposes of this chapter, including but not
2 limited to reinstatement, promotion, payment of lost wages and
3 benefits, and payment of compensatory and consequential
4 damages resulting from the violation together with an equal
5 amount in liquidated damages. The court in such action shall,
6 in addition to any judgment awarded to the plaintiff, award
7 reasonable attorney fees and costs of action to be paid by the
8 defendant.

9 2. The nurse's right to institute a private action under
10 this section is not limited by any other rights granted under
11 this chapter.

12 Sec. 9. NEW SECTION. 135M.9 ENFORCEMENT -- PENALTIES.

13 1. A health facility shall post in a conspicuous place
14 readily accessible to the general public, a notice prepared by
15 the department of inspections and appeals specifying in
16 summary form the mandatory provisions of this chapter.

17 2. Mandatory and actual nurse staffing levels in each
18 nursing department or unit shall be posted daily in a
19 conspicuous place readily accessible to the general public.

20 3. a. Upon request, the health facility shall make copies
21 of the staffing plan, filed with the department of inspections
22 and appeals, available to the general public.

23 b. Each nursing department or unit within a health
24 facility shall post or otherwise make readily available to the
25 nursing staff, during each work shift, all of the following:

26 (1) A copy of the current staffing plan for that
27 department or unit.

28 (2) Documentation of the number of direct-care nursing
29 staff required to be present during the shift, based on the
30 approved adopted acuity system.

31 (3) Documentation of the actual number of direct-care
32 nursing staff present during the shift.

33 4. The department of inspections and appeals shall enforce
34 this chapter and shall adopt rules necessary for enforcement.
35 At a minimum, the rules shall provide for:

- 1 a. Unannounced, random compliance site visits to health
2 facilities.
- 3 b. An accessible and confidential system for the public
4 and nursing staff to report a health facility's failure to
5 comply with this chapter.
- 6 c. A systematic means for investigating and correcting
7 violations of this chapter.
- 8 d. Public access to information regarding reports of
9 inspections, results, deficiencies, and corrections.
- 10 e. A process for imposing penalties for violations of the
11 staffing requirements of this chapter.
- 12 5. The department of inspections and appeals and the
13 department of workforce development shall have concurrent
14 jurisdiction to ensure compliance with this chapter and to
15 implement rules and regulations as necessary or appropriate to
16 carry out this function.
- 17 6. A determination that a health facility has violated
18 this chapter may result in revocation of the health facility's
19 licensure.
- 20 7. a. A health facility that violates any staffing
21 requirements specified section 135M.4 is subject to a fine of
22 not less than fifteen thousand dollars per day, per violation,
23 for each day that the violation occurs or continues.
- 24 b. A health facility that fails to post a notice required
25 under this chapter is subject to a fine of one thousand
26 dollars per day for each day that the required notice is not
27 posted.
- 28 c. A health facility that violates the mandatory overtime
29 provisions of section 135M.5, the work assignment provisions
30 of section 135M.6, or the nurses' rights provisions of section
31 135M.7 is subject to a fine of fifteen thousand dollars per
32 violation.
- 33 d. A person or health facility that fails to report or
34 falsifies information, or coerces, threatens, intimidates, or
35 otherwise influences another person to fail to report or to

1 falsify information required to be reported under this
2 chapter, is subject to a fine of up to fifteen thousand
3 dollars for each such incident.

4 8. Upon investigation, the department of inspections and
5 appeals shall notify the health facility of all deficiencies
6 in the facility's compliance with this chapter and the rules
7 adopted under this chapter. The notice may include an order
8 to take corrective action within a specified time period,
9 including but not limited to any of the following:

10 a. Revising the facility staffing plan.

11 b. Reducing the number of patients within a nursing
12 department or unit.

13 c. Temporarily closing a nursing department or unit to any
14 further patient admissions until corrections are made.

15 d. Temporarily transferring patients to another nursing
16 department or unit within the facility until corrections are
17 made.

18 9. a. The department of inspections and appeals may issue
19 an order of correction as follows:

20 (1) On an emergency basis, without prior notice or
21 opportunity for a hearing, if an investigation determines that
22 patient care is being compromised in a manner that poses an
23 immediate jeopardy to the health or safety of patients.

24 (2) In accordance with the provisions for suspension of
25 licensure of a health facility in chapter 135B.

26 b. The order of correction shall be in writing and shall
27 contain a statement of the reasons for the order.

28 c. Upon the failure of a health facility to comply with an
29 order of correction in a timely manner, the department of
30 inspections and appeals may take such action the department
31 deems appropriate, including but not limited to:

32 (1) Appointing an administrative overseer for the
33 facility.

34 (2) Closing the facility or unit to patient admissions.

35 (3) Placing the health facility's emergency room on bypass

1 status.

2 (4) Revoking the health facility's license.

3 10. Any person who willfully violates this chapter in a
4 manner that evidences a pattern or practice of violations
5 which is likely to have a serious and adverse impact on
6 patient care or the potential for serious injury or death for
7 patients or employees is guilty of an aggravated misdemeanor.

8 11. a. A determination that a health facility has
9 violated the provisions of this chapter shall result in an
10 order of reimbursement to the medical assistance program or in
11 termination from participation in the medical assistance
12 program for a period of time to be determined by the
13 department of inspections and appeals in consultation with the
14 department of human services.

15 b. A health facility that falsifies or causes to be
16 falsified documentation required by this chapter shall be
17 prohibited from receiving any medical assistance reimbursement
18 for a period of six months.

19 EXPLANATION

20 This bill relates to staffing requirements for health
21 facilities. For the purposes of the bill, "health facility"
22 means an acute care hospital, an outpatient surgical facility,
23 or an institution operating as a psychiatric hospital or
24 operating a designated psychiatric unit, regulated by the
25 department of inspections and appeals.

26 The bill specifies nurse staffing standards, prohibits
27 mandatory overtime, specifies maximum hours that a health
28 facility nurse may work or be on duty, provides for exceptions
29 under a state of emergency, establishes requirements for a
30 direct-care nurse work assignment policy, establishes rights
31 for health facility nurses, and protects health facility
32 nurses from retaliation for reporting or otherwise publicizing
33 violations or suspected violations.

34 The bill provides for a private right of action for a nurse
35 if a health facility violates the provisions of the bill,

1 provides for public disclosure of violations of the bill,
2 provides for regulatory oversight by the department of
3 inspections and appeals, provides civil penalties, and
4 provides a criminal penalty of an aggravated misdemeanor which
5 carries with it a maximum penalty not to exceed two years and
6 a fine of at least \$500 but not to exceed \$5,000 for a willful
7 violation of the Code chapter that evidences a pattern or
8 practice of violation and is likely to have serious and
9 adverse impact on patient care or the potential for serious
10 injury or death for patients or employees. The bill also
11 provides for the loss of reimbursement for a health facility
12 under the medical assistance program for violation of the
13 chapter.

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SENATE FILE _____
BY LUNDBY

Passed Senate, Date _____ Passed House, Date _____
Vote: Ayes _____ Nays _____ Vote: Ayes _____ Nays _____
Approved _____

A BILL FOR

1 An Act relating to health facility staffing, and providing civil
2 penalties.

3 BE IT ENACTED BY THE GENERAL ASSEMBLY OF THE STATE OF IOWA:

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1 Section 1. NEW SECTION. 135M.1 DEFINITIONS.

2 For the purposes of this chapter, unless the context
3 otherwise requires:

4 1. "Emergent circumstances" means any of the following:

5 a. An officially designated state of emergency that has
6 been declared by a federal, state, or local government
7 official having authority to declare that the state, county,
8 municipality, or locality is in a state of emergency.

9 b. Circumstances resulting in activation of a health
10 facility disaster plan.

11 c. Any unforeseen disaster or catastrophic event that
12 substantially affects or increases the need for health care
13 services.

14 "Emergent circumstances" does not include circumstances
15 resulting from a labor dispute in the health care industry.

16 2. "Employee" means an individual employed by a health
17 facility who is involved in providing direct care to patients
18 or clinical services.

19 3. "Employer" means a person acting directly or indirectly
20 on behalf of a health facility. "Employer" includes the state
21 and political subdivisions of the state.

22 4. "Health facility" means a hospital as defined in
23 section 135B.1, a health care facility as defined in section
24 135C.1, a hospice program as defined in section 135J.1, or any
25 other health care institution that operates twenty-four hours
26 per day, seven days per week.

27 5. "On-call time" means time spent by an employee who is
28 not working on the premises of the health facility but who is
29 compensated for availability or who, as a condition of
30 employment, has agreed to be available to return to the
31 premises of the health facility on short notice if the need
32 arises.

33 6. "Overtime" means hours worked in excess of an agreed
34 upon, predetermined, and regularly scheduled work shift, not
35 to exceed twelve hours in a consecutive twenty-four-hour

1 period or eighty hours in a consecutive fourteen-day period.

2 Sec. 2. NEW SECTION. 135M.2 OVERTIME PROHIBITED --
3 EXCEPTIONS.

4 1. Notwithstanding any other provision to law to the
5 contrary and subject only to the exceptions in this section, a
6 health facility shall not directly or indirectly mandate or
7 otherwise require, and any contract or other agreement
8 executed after July 1, 2003, shall not contain a mandate, that
9 a health facility employee work overtime.

10 2. This section does not prohibit a health facility
11 employee from voluntarily working overtime, and refusal to
12 accept overtime work shall not be grounds for discrimination,
13 dismissal, discharge, allegations of patient abandonment by a
14 licensing board, or any other penalty or employment decision
15 adverse to the employee.

16 3. This section shall not apply to overtime that occurs
17 due to any of the following:

18 a. Emergent circumstances.

19 b. Prescheduled on-call time.

20 c. Completion of patient care already in progress when the
21 absence of the employee would have an adverse effect on the
22 patient.

23 Sec. 3. NEW SECTION. 135M.3 PENALTIES.

24 1. An employer who violates chapter 91A is subject to the
25 civil penalties prescribed in section 91A.12, except that the
26 maximum civil penalty is one thousand dollars for each
27 violation. Each violation of this chapter is a separate
28 violation.

29 2. The penalty prescribed in subsection 1 shall be trebled
30 for a third or subsequent violation of this chapter within a
31 calendar year.

32 3. In addition to the civil penalty, an employer found in
33 violation of this chapter shall pay reasonable attorney fees
34 and court costs associated with the action.

35 4. In any action brought under this chapter, the fact that

1 an employee worked in excess of twelve hours in a consecutive
2 twenty-four-hour period or eighty hours in a consecutive
3 fourteen-day period is a prima facie violation of this
4 chapter.

5 5. Notwithstanding section 91A.12, subsection 1, an
6 employee who reports a violation under this chapter which
7 results in assessment of a civil penalty may receive up to
8 twenty percent of the amount assessed.

9 Sec. 4. HEALTH CARE WORKFORCE -- REVIEW. The department
10 of workforce development, in cooperation with the department
11 of inspections and appeals, the Iowa department of public
12 health, and the state health policy commission, shall conduct
13 a review of health care workforce conditions, including
14 overtime and staffing errors. The department of workforce
15 development shall submit a report of findings and
16 recommendations to the general assembly and the governor no
17 later than January 15, 2004.

18 EXPLANATION

19 This bill prohibits a health facility from mandating or
20 otherwise requiring a health facility employee to work
21 overtime. "Overtime" is defined as hours worked in excess of
22 an agreed upon, predetermined, and regularly scheduled work
23 shift, not to exceed 12 hours in a consecutive 24-hour period
24 or 80 hours in a consecutive 14-day period.

25 The bill does not prohibit a health facility employee from
26 voluntarily working overtime, but provides that refusal to
27 accept overtime work is not grounds for discrimination,
28 dismissal, discharge, allegations of patient abandonment by a
29 licensing board, or any other penalty or employment decision
30 adverse to the employee.

31 The prohibition against overtime work does not apply to
32 emergent circumstances, prescheduled on-call time, or
33 completion of patient care already in progress when the
34 absence of the employee would have an adverse effect on the
35 patient.

1 An employer who violates the bill violates Code chapter 91A
2 and is subject to a maximum civil penalty of \$1,000 for each
3 violation, each violation of the bill being a separate
4 violation. The penalty prescribed is to be trebled for a
5 third or subsequent violation within a calendar year. In
6 addition to the civil penalty, an employer found in violation
7 is to pay reasonable attorney fees and court costs associated
8 with the action. In any action brought, the fact that an
9 employee worked in excess of 12 hours in a consecutive 24-hour
10 period or 80 hours in a consecutive 14-day period is a prima
11 facie violation of this chapter. An employee who reports a
12 violation which results in assessment of a civil penalty may
13 receive up to 20 percent of the amount assessed.

14 The bill also directs the department of workforce
15 development, in cooperation with the department of inspections
16 and appeals, the Iowa department of public health, and the
17 state health policy commission, to conduct a review of health
18 care workforce conditions, including overtime and staffing
19 errors. The department of workforce development is to submit
20 a report of findings and recommendations to the general
21 assembly and the governor no later than January 15, 2004.

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Iowa Department of Public Health

Advancing Health Through the Generations

Thomas J. Vilsack
Governor

Sally J. Pederson
Lt. Governor

Mary Mincer Hansen, R.N.,PhD.
Director

Summary Report of the Public Hearings on Nursing October 18, 2005

The Iowa Department of Public Health conducted three public hearings in September 2005 to seek input on the issues of nurse staffing shortages and the use of mandatory overtime in response to Recommendation 4-8 of the Governor's Task Force on the Nursing Shortage. The hearings provided an opportunity for nurses and others to address workplace conditions that impact recruitment and retention of quality health care providers, patient safety, and workplace safety. The Department published a press release identifying the purpose, schedule and process of the hearings on August 15, 2005.

The hearings were conducted through the Iowa Communications Network (ICN) on September 1 (12:00 – 2:00 p.m.), September 6 (5:30 – 7:30 p.m.), and September 14 (12:00 – 2:00 p.m.). Iowa Department of Public Health staff members served as facilitators at three origination sites and 12 remote sites. Origination sites included Des Moines, Iowa City, and Carroll. Additional sites included Sheldon, Peosta, West Burlington, Council Bluffs, Davenport, Mason City, Creston, Emmetsburg, Sioux City, Ottumwa, Waterloo, and Fort Dodge. The Advisory Committee for the Center for Health Workforce Planning, Bureau of Health Care Access, Division of Health Promotion and Chronic Disease Prevention recommended the hearing sites and schedule.

A total of 277 individuals signed attendance forms at the public hearings. Oral comments were limited to two minutes on a site rotation basis. When all participants at each site had an opportunity to present one comment, additional two-minute comments were invited until every site facilitator confirmed that no participant wished to make a statement. Over 400 written comments were submitted. Written comments submitted by September 28, 2005 were scanned verbatim into an electronic file and converted to CD format for storage and public information.

Common Concerns

Participants included nurses throughout the state of Iowa who clearly articulated their long-term commitment to the provision of safe, high quality nursing care to clients and their families, and to the nursing profession. Individuals who participated in the hearings and submitted written comments included nurses who provide direct care to patients, nurse executives, nurse managers and supervisors, hospital and college administrators, nurse educators, nursing students, and retired nurses. Many submitted comments on behalf of professional colleagues, their employing institution, or a professional organization. Others spoke on their own behalf. Several common concerns were identified regardless of job description, age, years of nursing practice in Iowa, employing institution, or geographical location. They include the following:

1. **Maintaining safe, high quality patient care as the highest priority.** Participants provided personal experiences, research findings, and professional position statements that link patient safety to an adequate supply of nurses to accommodate sicker patients, shorter hospital stays, computerization, new procedures, and budget constraints. Many emphasized the need for time at the bedside to assess patients at risk for sudden changes in condition, falls, and skin breakdown, and to educate patients and their families about treatments plans and medications before discharge. Staff nurses and executives alike identified the need for adequate staffing to accommodate fluctuating census and patient acuity levels on an hour-to-hour basis every day of the year.
2. **Low reimbursement rates in Iowa despite high quality care.** Many participants linked Iowa's low reimbursement rates for Medicare and insufficient Medicaid funding to low wages for Iowa nurses compared to all U.S. states, but especially neighboring states that recruit new and experienced nurses from Iowa. Many asked that the state legislature focus on reimbursement issues to assure the survival of Iowa's hospitals and an adequate supply of nurses to meet the health needs of Iowans. Others submitted testimonials that identified they have personally seen the negative impact lack of Medicaid funding has on patients and families, and stated their interest in learning what they, as nurses, can do to rectify the situation in Iowa.
3. **A call for shared governance among staff nurses, managers, and administrators.** Participants identified an overarching goal of shared leadership and governance through decision-making processes in which bedside nurses evaluate and respond to the drivers of patient care intensity. While the method to address this need differed, most participants agreed staffing decisions should be based on many variables, including individual patient needs, patient acuity levels, technological demands, staff competency, skill mix, practice standards, facility design, health care regulations, and accreditation requirements. Others identified the need for staff nurses to work together with their nurse executives to set high standards and achievable benchmarks.
4. **Impact of the national nursing shortage in Iowa.** Some nurses said their colleagues who provide direct patient care leave the bedside because they are burnt out physically, mentally, and emotionally. At times of high census and very sick patients, some described themselves as frustrated, fatigued, overwhelmed, discouraged, forgetful, and irritable at work and home. Some said Iowa hospitals deal with staffing and overtime issues very differently, and recommended rewarding those hospitals that "do the right thing." Many requested support to prepare qualified nursing faculty to accommodate waiting lists and increased enrollments in Iowa's nursing schools, in order to produce replacement nurses for the large number of experienced nurses who will retire in the next decade. Others requested support to retain experienced nurses at the bedside.
5. **Impact of budget cuts on bedside nurses.** Nurses with many years of experience identified the changes they have seen in their ability to focus on patient needs when health care becomes budget driven. A nurse with over 50 years of experience decried the decline in patient contact that occurs when nurses are rewarded for production rather than care. Some nurses described how budget cuts in other departments, including pharmacy, dietary, and central supply, result in less time for patient assessment and teaching. Others linked attrition from the profession, fewer new nurses, and low job satisfaction to situations in which finances dictate care.

Legislation to Regulate Nurse Staffing Ratios

While participant comments revealed many common concerns, they provided different perspectives on methods to resolve workplace issues that impact nurses. The primary dichotomy occurred among those who seek to set nurse-to-patient ratios into law, and those who oppose such legislation. This discussion followed action on the part of the State of California to legislate staffing ratios, and legislation introduced into the U.S. Congress that would set medical and surgical ratios at 1:4 nationwide.

The following summary comments are representative of those provided through the public hearing process on the issue of legislation to regulate nurse staffing ratios in Iowa. The overwhelming majority of oral comments opposed government intervention in the regulation of nursing staffing and/or overtime as a strategy to relieve nursing shortages and improve quality of patient care. A total of 158 written comments specified opposition to legislation. A total of 180 written comments compiled and submitted by the Service Employees International Union Nurse Alliance Local 199 stated a 1:4 ratio would improve staffing in some instances.

In Opposition to Establishing Nurse to Patient Ratios through Legislation	In Support of Establishing Nurse to Patient Ratios through Legislation
Iowa hospitals rank #6 nationally in quality of care despite very low reimbursement rates. On-site clinical judgments made by qualified professionals, not ratios, assure quality care.	Ratios are a major force in patient outcomes. They allow nurses to accommodate fluctuations in patient census and are needed to address patient acuity levels and safe care.
Safe care is monitored and documented by the nursing leadership in Iowa hospitals using national benchmarks.	Nurses and patient safety are at risk because Iowa has no laws to maintain adequate nurse staffing levels.
Ratios lead to canceling surgeries, diverting ambulances, and denying care to patients.	Staffing ratios will provide a safety net for patients in Iowa's hospitals.
Ratios interfere with shared governance by focusing on numbers, not quality.	Ratios are needed in hospitals where there is little or no shared governance.
Ratios will increase dissatisfaction and "tie the hands" of nurses.	Ratios will reduce stress and turnover among nursing staff.
Ratios are too simplistic.	Ratios are a starting point.
Legislation cannot replace staffing decisions that require judgment, critical thinking, and flexibility on the part of both nurse managers and the staff nurse who is providing care.	Legislation may assist nurses to provide the level of care they are trained to give, but cannot when challenged to stay focused, organized, and able to prioritize.
Adding a new level of bureaucracy will not improve health care. It will worsen the nursing shortage by taking the ability to determine appropriate staffing from Iowa's professionals who understand nursing competencies, the care environment, patient diagnoses, co-morbidities, the financial challenges of rural hospitals, and the importance of the health care team in assuring good patient outcomes.	Legislating ratios can alleviate the nursing shortage that is anticipated in Iowa by improving recruitment and retention in those institutions where bedside nurses are not included, or do not perceive their input is valued, in staffing decisions. Without a law, hospitals respond to financial issues and cannot be counted upon assure adequate nurse staffing levels.

A synopsis of recurring topics submitted by those who oppose legislation follows. In this instance, the respondents included 158 nurses and others who identified themselves by name and institution, and/or submitted signed letters. Many stated they represented a specific institution or professional organization. Respondents included bedside nurses, nurse executives, and nurse educators.

- Surveys of Iowa hospitals indicate shared leadership and governance are valued and widespread. Iowa hospitals are not experiencing high nurse vacancy or turnover rates, and manage patient acuity and fluctuating volumes successfully through innovative strategies, including flexible staffing and rapid response teams. Success is evaluated through patient satisfaction, quality indicators, and staff retention rates.
- Establishing ratios that potentially result in denying care due to inadequate staffing place Iowa's hospitals at risk for noncompliance with existing legislation, specifically the Emergency Medical Treatment and Active Labor Law (EMTALA). EMTALA is a statute that governs when and how a patient may be (1) refused treatment or (2) transferred from one hospital to another when he/she is in an unstable medical condition.
- Iowa hospitals and other health facilities are heavily regulated. New regulations pertaining to nurse staffing will increase human resource and financial burdens in a rural state with a high percentage of critical access hospitals that provide high quality patient care despite low Medicare reimbursement rates. In its 2002 report, Governor Tom Vilsack's Task Force on the Nursing Shortage did not recommend legislation of staffing ratios. Likewise, in its 2003 document, *Keeping Patients Safe - Transforming the Work Environment of Nurses*, the Institute of Medicine did not recommend legislation of staffing ratios. In the absence of proof that legislated nurse-patient ratios improve quality of patient care or relieve nursing shortages, these added burdens are not in the best interest of Iowans.
- Research demonstrates that reducing nurse-to-patient ratios requires an increase in total nurse working hours in an already tight labor market. If all hospitals in one state simultaneously adopted ratios as a result of legislation, there is evidence substantial wage pressure would ensue. Reimbursement that is stagnant, at best, combined with costly advances in technology and pharmaceuticals have created financial crisis for hospitals. If hospitals are forced to raise wages that draw nurses away from nursing homes, clinics and home care, Iowa's rural hospitals will suffer because they cannot compete with larger hospitals' salaries and benefits. At the same time, the nursing supply in non-hospital settings will be depleted.

A synopsis of recurring topics submitted by those who support a 1:4 nurse to patient ratio on medical-surgical floors follows. In this instance, some provided oral comments and signed letters. The overwhelming majority of respondents addressed specific questions on pre-printed forms submitted to the Iowa Department of Public Health by SEIU Local 199, supplemented by personal testimonials. Of a total of 278 respondents in the latter category, 87 identified themselves by name and institution. Many specifically requested their name and institution's identity be withheld. A few stated they believed they would be fired or subjected to discipline if they revealed their own or employer's identities. One respondent said some nurses had been prohibited from speaking publicly by a hospital director.

Question #1: The State of California has set into law nurse-to-patient ratios, and legislation introduced into Congress would set medical and surgical ratios at 1:4 nationwide. Having these ratios at my hospital would make staffing on my unit:

- Better 180
- Worse 26
- About the same 39
- No reply 35

Question #2: Have you seen the impact that lack of funding for Medicaid has had on your patients? (This question did not appear on all form letters.)

- Yes 117
- No 28
- No reply 18

Question #3: Would you be interested in learning more about what you can do to help keep funding to the Medicaid program which helps so many low income families and our patients? (This question did not appear on all form letters.)

- Yes 104
- No 32
- No reply 30

Question #4: I am interested in learning more about how I can help make improvements in my workplace and elsewhere by becoming more active in our union. (This option did not appear on all form letters.)

- Yes 28
- No 32
- No reply 85

Note: In addressing the issue of ratios, many respondents worked in hospital specialty units such as intensive care, obstetrics, and emergency care where nurse-to-patient ratios are lower than 1:4, frequently 1:1 or 1:2. They indicated that they were satisfied with their staffing but spoke out for colleagues in other units, some of whom reported ratios of 1:8 or higher.

Question #5: Specifically, here's how patient care and my job as a nurse would be affected by changing the nurse-to-patient ratio in my unit:

- Patients are placed in life threatening positions and nurses "work scared" when patient needs exceed the capability of qualified, hard-working nurses to provide safe care. Thorough assessments, patient histories, timely medication administration, teaching and counseling, communication with other team members, skin care, ambulation, infection control, and time for difficult patients is equally important on evening and night shifts when fewer staff are available, and on medical-surgical, orthopedic, cardiac, rehabilitation, and oncology units when stable conditions can deteriorate quickly.

- Nurse-to-patient ratios are not the sole solution to assuring safe care. However, patients' lives are put in the balance when employers treat them like a business and use words like "productivity," when doctors are reluctant to return patients from intensive care units to floors where staffing is low, when nurses feel compelled to work for 18-23 consecutive hours in high risk areas, when patients apologize for asking for help, when nurses can provide only 20 minutes of care to patients each day, and when nurses fear retaliation for reporting when bad things happen. One nurse wrote, "Even the most highly motivated and hardest working RNs have a limit to their caring capacity and too often have to sacrifice quality care to achieve minimum care and patient safety."
- While ratios may improve staffing in some areas it is important to recognize if ratios change the skill mix may change as well, providing nurses fewer assistive personnel. Legislating a ratio of 1:4 increases the fear that nurses would be required to accept four patients even when the severity of the patients' conditions makes that unsafe.

Mandatory Overtime

A second polarizing topic addressed the use of mandatory overtime as a strategy to accommodate periods of high patient census and acuity levels. Overtime means hours worked in excess of scheduled hours and is a common occurrence in nursing. Excess hours may be scheduled with the employee and include incentive hours offered by an employer or requested by an employee. *Mandatory overtime* generally refers to situations in which employees are required to work additional hours under the threat of being fired or disciplined if they refuse.

The Iowa Organization of Nurse Leaders states mandatory overtime does not include "staffing up" for unforeseen emergencies, such as mass casualties or snowstorms, or scheduled "on call" time when a nurse may be paged to come into work as defined in the job description.

Participant comments addressed nurses' and employers' perceptions regarding the existence of mandatory overtime in Iowa and the need for legislation to regulate the use of overtime hours to assure safe nurse staffing levels.

Is mandatory overtime used in Iowa as a nurse staffing strategy?

1. Several comments identified that overtime hours are not mandated. They described overtime as voluntary and compensated, often according to special pay programs. They stated success in addressing fluctuating acuity and census levels without mandating overtime is evidenced in low nurse turnover rates. Some staff nurses stated they had never been mandated to work unscheduled excess hours. These participants stated their opposition to legislation regulating the use of overtime hours.
2. Some nurses stated overtime hours are mandated in their institution despite statements to the contrary. One said staff benchmarks or grids are not adequate to meet patient needs. Another called for hospitals to provide measures of patient satisfaction, nurse satisfaction, nursing use of overtime, and turnover rates. One nurse said she spoke for nurse colleagues who were told that speaking publicly about overtime, staff ratios, and other issues would place their jobs in jeopardy.

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The participants expressed appreciation for the opportunity to present facts, experiences, concerns, and requests to Governor Vilsack and the Iowa legislature. Many addressed the role of state legislators in recognizing and prioritizing actions that will promote recruitment and retention of nurses, assure patient safety, and improve workplace safety. These comments fell into the following categories.

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a nurse to go over even one shift's activity, it would not take them long to understand just how dangerous that type of legislation would be.”

4. **Address the nursing shortage head-on.** Participants asked legislators to focus on the issues facing nurses and their employers that will encourage Iowans to enter and be successful in Iowa's nursing workforce. These include the following recommendations:

- Address Medicare and Medicaid reimbursement to Iowa's hospitals and other health facilities to attract and retain nurses through competitive wages and progressive work environments.
- Build the capacity of Iowa's hospitals and other health facilities to improve technology and facility design.
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- Assist hospitals and other health facilities to support changes in the work environment that allow older nurses to remain at the bedside.
- Reduce regulatory burdens on hospitals and other health care facilities.
- Standardize documentation requirements and insurance forms.
- Promote tax breaks and childcare assistance for nurses.
- Improve health and retirement benefits to nurses.
- Increase funding to middle and high school programs that prepare students for entry into the nursing profession.
- Support programs to recruit men and minorities into the nursing field.
- Provide funding to healthcare organizations that offer clinical practice settings for nursing students, graduate nurse internships, and customized orientation programs.

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The Iowa Department of Public Health extends appreciation to the nurses and others who participated in the public hearings and submitted written comments addressing issues that impact the recruitment and retention of nurses, patient safety, and workplace safety, to the many individuals who facilitated the statewide hearings, and to the legislative committee that was convened in October 2005 for inviting a report of the hearings.

To purchase a copy of written comments on CD please contact the Iowa Department of Public Health, Bureau of Health Care Access at bcooper@idph.state.ia.us.



Iowa Department of Public Health

Advancing Health Through the Generations

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Governor

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Summary Report of the Public Hearings on Nursing October 18, 2005

The Iowa Department of Public Health conducted three public hearings in September 2005 to seek input on the issues of nurse staffing shortages and the use of mandatory overtime in response to Recommendation 4-8 of the Governor's Task Force on the Nursing Shortage. The hearings provided an opportunity for nurses and others to address workplace conditions that impact recruitment and retention of quality health care providers, patient safety, and workplace safety. The Department published a press release identifying the purpose, schedule and process of the hearings on August 15, 2005.

The hearings were conducted through the Iowa Communications Network (ICN) on September 1 (12:00 – 2:00 p.m.), September 6 (5:30 –7:30 p.m.), and September 14 (12:00 – 2:00 p.m.). Iowa Department of Public Health staff members served as facilitators at three origination sites and 12 remote sites. Origination sites included Des Moines, Iowa City, and Carroll. Additional sites included Sheldon, Peosta, West Burlington, Council Bluffs, Davenport, Mason City, Creston, Emmetsburg, Sioux City, Ottumwa, Waterloo, and Fort Dodge. The Advisory Committee for the Center for Health Workforce Planning, Bureau of Health Care Access, Division of Health Promotion and Chronic Disease Prevention recommended the hearing sites and schedule.

A total of 277 individuals signed attendance forms at the public hearings. Oral comments were limited to two minutes on a site rotation basis. When all participants at each site had an opportunity to present one comment, additional two-minute comments were invited until every site facilitator confirmed that no participant wished to make a statement. Over 400 written comments were submitted. Written comments submitted by September 28, 2005 were scanned verbatim into an electronic file and converted to CD format for storage and public information.

Common Concerns

Participants included nurses throughout the state of Iowa who clearly articulated their long-term commitment to the provision of safe, high quality nursing care to clients and their families, and to the nursing profession. Individuals who participated in the hearings and submitted written comments included nurses who provide direct care to patients, nurse executives, nurse managers and supervisors, hospital and college administrators, nurse educators, nursing students, and retired nurses. Many submitted comments on behalf of professional colleagues, their employing institution, or a professional organization. Others spoke on their own behalf. Several common concerns were identified regardless of job description, age, years of nursing practice in Iowa, employing institution, or geographical location. They include the following:

1. **Maintaining safe, high quality patient care as the highest priority.** Participants provided personal experiences, research findings, and professional position statements that link patient safety to an adequate supply of nurses to accommodate sicker patients, shorter hospital stays, computerization, new procedures, and budget constraints. Many emphasized the need for time at the bedside to assess patients at risk for sudden changes in condition, falls, and skin breakdown, and to educate patients and their families about treatments plans and medications before discharge. Staff nurses and executives alike identified the need for adequate staffing to accommodate fluctuating census and patient acuity levels on an hour-to-hour basis every day of the year.
2. **Low reimbursement rates in Iowa despite high quality care.** Many participants linked Iowa's low reimbursement rates for Medicare and insufficient Medicaid funding to low wages for Iowa nurses compared to all U.S. states, but especially neighboring states that recruit new and experienced nurses from Iowa. Many asked that the state legislature focus on reimbursement issues to assure the survival of Iowa's hospitals and an adequate supply of nurses to meet the health needs of Iowans. Others submitted testimonials that identified they have personally seen the negative impact lack of Medicaid funding has on patients and families, and stated their interest in learning what they, as nurses, can do to rectify the situation in Iowa.
3. **A call for shared governance among staff nurses, managers, and administrators.** Participants identified an overarching goal of shared leadership and governance through decision-making processes in which bedside nurses evaluate and respond to the drivers of patient care intensity. While the method to address this need differed, most participants agreed staffing decisions should be based on many variables, including individual patient needs, patient acuity levels, technological demands, staff competency, skill mix, practice standards, facility design, health care regulations, and accreditation requirements. Others identified the need for staff nurses to work together with their nurse executives to set high standards and achievable benchmarks.
4. **Impact of the national nursing shortage in Iowa.** Some nurses said their colleagues who provide direct patient care leave the bedside because they are burnt out physically, mentally, and emotionally. At times of high census and very sick patients, some described themselves as frustrated, fatigued, overwhelmed, discouraged, forgetful, and irritable at work and home. Some said Iowa hospitals deal with staffing and overtime issues very differently, and recommended rewarding those hospitals that "do the right thing." Many requested support to prepare qualified nursing faculty to accommodate waiting lists and increased enrollments in Iowa's nursing schools, in order to produce replacement nurses for the large number of experienced nurses who will retire in the next decade. Others requested support to retain experienced nurses at the bedside.
5. **Impact of budget cuts on bedside nurses.** Nurses with many years of experience identified the changes they have seen in their ability to focus on patient needs when health care becomes budget driven. A nurse with over 50 years of experience decried the decline in patient contact that occurs when nurses are rewarded for production rather than care. Some nurses described how budget cuts in other departments, including pharmacy, dietary, and central supply, result in less time for patient assessment and teaching. Others linked attrition from the profession, fewer new nurses, and low job satisfaction to situations in which finances dictate care.

Legislation to Regulate Nurse Staffing Ratios

While participant comments revealed many common concerns, they provided different perspectives on methods to resolve workplace issues that impact nurses. The primary dichotomy occurred among those who seek to set nurse-to-patient ratios into law, and those who oppose such legislation. This discussion followed action on the part of the State of California to legislate staffing ratios, and legislation introduced into the U.S. Congress that would set medical and surgical ratios at 1:4 nationwide.

The following summary comments are representative of those provided through the public hearing process on the issue of legislation to regulate nurse staffing ratios in Iowa. The overwhelming majority of oral comments opposed government intervention in the regulation of nursing staffing and/or overtime as a strategy to relieve nursing shortages and improve quality of patient care. A total of 158 written comments specified opposition to legislation. A total of 180 written comments compiled and submitted by the Service Employees International Union Nurse Alliance Local 199 stated a 1:4 ratio would improve staffing in some instances.

In Opposition to Establishing Nurse to Patient Ratios through Legislation	In Support of Establishing Nurse to Patient Ratios through Legislation
Iowa hospitals rank #6 nationally in quality of care despite very low reimbursement rates. On-site clinical judgments made by qualified professionals, not ratios, assure quality care.	Ratios are a major force in patient outcomes. They allow nurses to accommodate fluctuations in patient census and are needed to address patient acuity levels and safe care.
Safe care is monitored and documented by the nursing leadership in Iowa hospitals using national benchmarks.	Nurses and patient safety are at risk because Iowa has no laws to maintain adequate nurse staffing levels.
Ratios lead to canceling surgeries, diverting ambulances, and denying care to patients.	Staffing ratios will provide a safety net for patients in Iowa's hospitals.
Ratios interfere with shared governance by focusing on numbers, not quality.	Ratios are needed in hospitals where there is little or no shared governance.
Ratios will increase dissatisfaction and "tie the hands" of nurses.	Ratios will reduce stress and turnover among nursing staff.
Ratios are too simplistic.	Ratios are a starting point.
Legislation cannot replace staffing decisions that require judgment, critical thinking, and flexibility on the part of both nurse managers and the staff nurse who is providing care.	Legislation may assist nurses to provide the level of care they are trained to give, but cannot when challenged to stay focused, organized, and able to prioritize.
Adding a new level of bureaucracy will not improve health care. It will worsen the nursing shortage by taking the ability to determine appropriate staffing from Iowa's professionals who understand nursing competencies, the care environment, patient diagnoses, co-morbidities, the financial challenges of rural hospitals, and the importance of the health care team in assuring good patient outcomes.	Legislating ratios can alleviate the nursing shortage that is anticipated in Iowa by improving recruitment and retention in those institutions where bedside nurses are not included, or do not perceive their input is valued, in staffing decisions. Without a law, hospitals respond to financial issues and cannot be counted upon assure adequate nurse staffing levels.

Question #1: The State of California has set into law nurse-to-patient ratios, and legislation introduced into Congress would set medical and surgical ratios at 1:4 nationwide. Having these ratios at my hospital would make staffing on my unit:

- Better 180
- Worse 26
- About the same 39
- No reply 35

Question #2: Have you seen the impact that lack of funding for Medicaid has had on your patients? (This question did not appear on all form letters.)

- Yes 117
- No 28
- No reply 18

Question #3: Would you be interested in learning more about what you can do to help keep funding to the Medicaid program which helps so many low income families and our patients? (This question did not appear on all form letters.)

- Yes 104
- No 32
- No reply 30

Question #4: I am interested in learning more about how I can help make improvements in my workplace and elsewhere by becoming more active in our union. (This option did not appear on all form letters.)

- Yes 28
- No 32
- No reply 85

Note: In addressing the issue of ratios, many respondents worked in hospital specialty units such as intensive care, obstetrics, and emergency care where nurse-to-patient ratios are lower than 1:4, frequently 1:1 or 1:2. They indicated that they were satisfied with their staffing but spoke out for colleagues in other units, some of whom reported ratios of 1:8 or higher.

Question #5: Specifically, here's how patient care and my job as a nurse would be affected by changing the nurse-to-patient ratio in my unit:

- Patients are placed in life threatening positions and nurses "work scared" when patient needs exceed the capability of qualified, hard-working nurses to provide safe care. Thorough assessments, patient histories, timely medication administration, teaching and counseling, communication with other team members, skin care, ambulation, infection control, and time for difficult patients is equally important on evening and night shifts when fewer staff are available, and on medical-surgical, orthopedic, cardiac, rehabilitation, and oncology units when stable conditions can deteriorate quickly.

A synopsis of recurring topics submitted by those who oppose legislation follows. In this instance, the respondents included 158 nurses and others who identified themselves by name and institution, and/or submitted signed letters. Many stated they represented a specific institution or professional organization. Respondents included bedside nurses, nurse executives, and nurse educators.

- Surveys of Iowa hospitals indicate shared leadership and governance are valued and widespread. Iowa hospitals are not experiencing high nurse vacancy or turnover rates, and manage patient acuity and fluctuating volumes successfully through innovative strategies, including flexible staffing and rapid response teams. Success is evaluated through patient satisfaction, quality indicators, and staff retention rates.
- Establishing ratios that potentially result in denying care due to inadequate staffing place Iowa's hospitals at risk for noncompliance with existing legislation, specifically the Emergency Medical Treatment and Active Labor Law (EMTALA). EMTALA is a statute that governs when and how a patient may be (1) refused treatment or (2) transferred from one hospital to another when he/she is in an unstable medical condition.
- Iowa hospitals and other health facilities are heavily regulated. New regulations pertaining to nurse staffing will increase human resource and financial burdens in a rural state with a high percentage of critical access hospitals that provide high quality patient care despite low Medicare reimbursement rates. In its 2002 report, Governor Tom Vilsack's Task Force on the Nursing Shortage did not recommend legislation of staffing ratios. Likewise, in its 2003 document, *Keeping Patients Safe - Transforming the Work Environment of Nurses*, the Institute of Medicine did not recommend legislation of staffing ratios. In the absence of proof that legislated nurse-patient ratios improve quality of patient care or relieve nursing shortages, these added burdens are not in the best interest of Iowans.
- Research demonstrates that reducing nurse-to-patient ratios requires an increase in total nurse working hours in an already tight labor market. If all hospitals in one state simultaneously adopted ratios as a result of legislation, there is evidence substantial wage pressure would ensue. Reimbursement that is stagnant, at best, combined with costly advances in technology and pharmaceuticals have created financial crisis for hospitals. If hospitals are forced to raise wages that draw nurses away from nursing homes, clinics and home care, Iowa's rural hospitals will suffer because they cannot compete with larger hospitals' salaries and benefits. At the same time, the nursing supply in non-hospital settings will be depleted.

A synopsis of recurring topics submitted by those who support a 1:4 nurse to patient ratio on medical-surgical floors follows. In this instance, some provided oral comments and signed letters. The overwhelming majority of respondents addressed specific questions on pre-printed forms submitted to the Iowa Department of Public Health by SEIU Local 199, supplemented by personal testimonials. Of a total of 278 respondents in the latter category, 87 identified themselves by name and institution. Many specifically requested their name and institution's identity be withheld. A few stated they believed they would be fired or subjected to discipline if they revealed their own or employer's identities. One respondent said some nurses had been prohibited from speaking publicly by a hospital director.

- Nurse-to-patient ratios are not the sole solution to assuring safe care. However, patients' lives are put in the balance when employers treat them like a business and use words like "productivity," when doctors are reluctant to return patients from intensive care units to floors where staffing is low, when nurses feel compelled to work for 18-23 consecutive hours in high risk areas, when patients apologize for asking for help, when nurses can provide only 20 minutes of care to patients each day, and when nurses fear retaliation for reporting when bad things happen. One nurse wrote, "Even the most highly motivated and hardest working RNs have a limit to their caring capacity and too often have to sacrifice quality care to achieve minimum care and patient safety."
- While ratios may improve staffing in some areas it is important to recognize if ratios change the skill mix may change as well, providing nurses fewer assistive personnel. Legislating a ratio of 1:4 increases the fear that nurses would be required to accept four patients even when the severity of the patients' conditions makes that unsafe.

Mandatory Overtime

A second polarizing topic addressed the use of mandatory overtime as a strategy to accommodate periods of high patient census and acuity levels. Overtime means hours worked in excess of scheduled hours and is a common occurrence in nursing. Excess hours may be scheduled with the employee and include incentive hours offered by an employer or requested by an employee. *Mandatory overtime* generally refers to situations in which employees are required to work additional hours under the threat of being fired or disciplined if they refuse.

The Iowa Organization of Nurse Leaders states mandatory overtime does not include "staffing up" for unforeseen emergencies, such as mass casualties or snowstorms, or scheduled "on call" time when a nurse may be paged to come into work as defined in the job description.

Participant comments addressed nurses' and employers' perceptions regarding the existence of mandatory overtime in Iowa and the need for legislation to regulate the use of overtime hours to assure safe nurse staffing levels.

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Acknowledgement

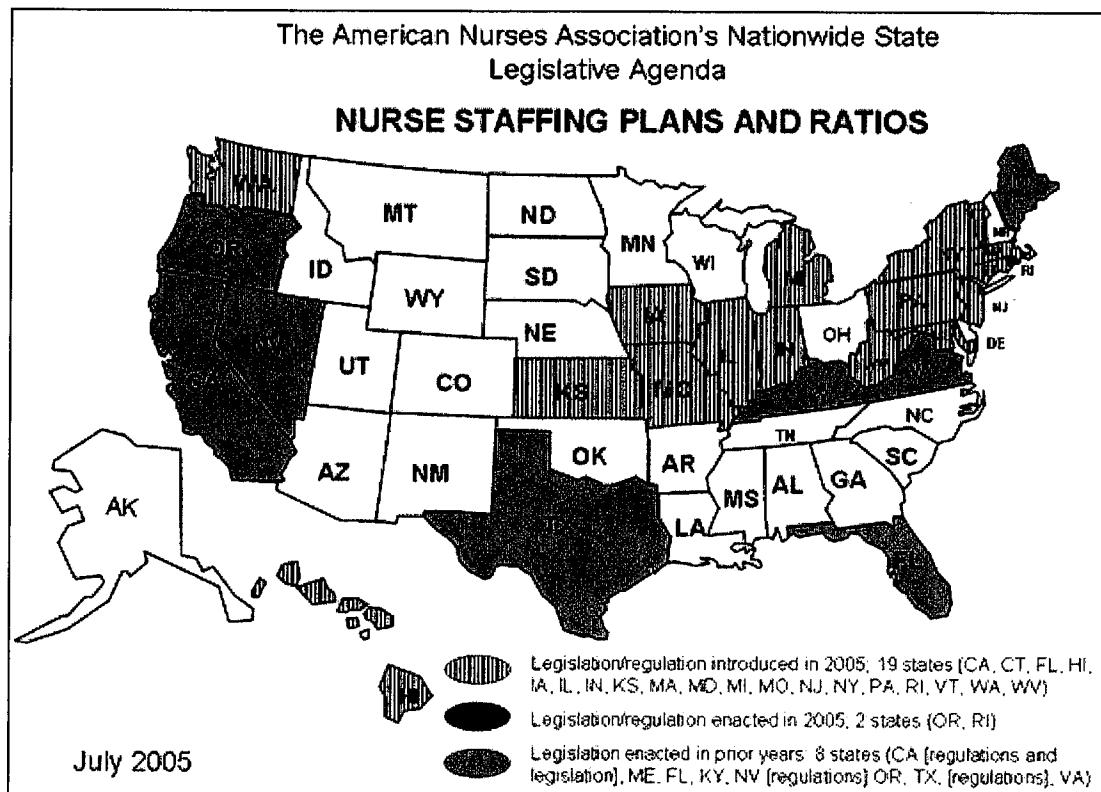
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ANA STATE GOVERNMENT RELATIONS

2005 Legislation: Staffing Plans and Ratios (updated 7/05)



Background: Staffing Plans and Ratios

Market forces have not resolved the issues of patient safety and quality of care related to nurse staffing. Massive reductions in nursing budgets have resulted in fewer nurses working longer hours, while caring for sicker patients. Nurses therefore, have requested the assistance of elected officials on the state and federal level to protect patients by holding hospitals accountable for the provision of adequate nurse staffing through legislative or regulatory means. Three general approaches to assure sufficient nurse staffing have been proposed. The first is to require and hold hospitals accountable for implementation of **nurse staffing plans**, with input from practicing nurses, to assure safe nurse to patient ratios are based on patient need and other criteria. The second approach is for legislators to mandate **specific nurse to patient ratios** in legislation or regulation. The third approach is a combination of nurse staffing plans and legislated nurse to patient ratios.

Nurse Staffing Plans

The American Nurses Association (ANA) and State Nurses Associations are promoting legislation to hold hospitals accountable for the development and implementation of valid and reliable nurse staffing plans. These plans are based upon ANA's *Principles for Nurse Staffing* which provide recommendations on appropriate staffing and require nurses to be an integral part of the nurse staffing plan development and decision-making process. This is not a "one size fits all" approach to

staffing but instead provides hospitals with the flexibility of tailoring nurse staffing to the specific needs of patients based on factors including how sick the patient is, the experience of the nursing staff, technology, and support services available to the nurses. This flexibility does not negate the accountability of hospitals to ensure safe and effective nurse staffing. States are looking at enforcement measures ranging from termination or suspension of a facility's license to public disclosure of violations to fees, penalties and private right of action suits.

In addition to state legislation, ANA has developed federal legislation, S 71, The Registered Nurse Safe Staffing Act. It was introduced by Senator Inouye (D-HI), and its companion bill, HR 1372 was introduced by Representative Lois Capps (D-CA) and Robert Simmons (R-CT). The bills require hospitals to develop and implement staffing plans as a condition of participation in Medicare.

In 2005, **OR** legislation was enacted that strengthens landmark patient protection legislation that became law in 2002. The bill requires hospitals to develop and implement a written hospital-wide staffing plan for nursing services. The staffing plan shall include the number, qualifications and categories of nursing staff needed for all units and be developed by a committee composed of an equal number of hospital managers and direct care registered nurses. The bill also requires that staffing plans be consistent with nationally recognized evidence-based specialty standards and guidelines. Current law provides civil penalties for hospitals which violate the law and random audits of hospitals by the Oregon Health Division. In addition to pushing for the enactment of this legislation, the Oregon Nurses Association has published a guide and developed a training program on how to solve inadequate hospital nurse staffing.

RI enacted legislation requires every licensed hospital to annually submit a core-staffing plan to the department of health in January of each year. The plan must specify for each patient care unit and each shift, the number of registered nurses, licensed practical nurses, and/or certified nursing assistants who shall ordinarily be assigned to provide direct patient care and the average number of patients upon which such staffing levels are based. The following eight states have introduced legislation this year addressing nurse staffing plans including **HI, IN, MA, MD, NY, VT, WA and WV**.

In 2004, no legislation addressing nurse staffing plans was enacted.

In 2003, **NV** enacted legislation that would require the Legislative Committee on Health Care to appoint a subcommittee to conduct an interim study on nurse staffing.

2002 regulations adopted in **TX** require hospitals to (under the administrative authority of a chief nursing officer and in accordance with an advisory committee comprised of nurse members) adopt, implement and enforce a written staffing plan. This plan must be consistent with standards established by the Texas nurse licensing boards and based upon the nursing profession's code of ethics. Patient outcomes related to nursing care will be evaluated to determine the adequacy of the staffing plan. Last year a **FL** bill also passed that specified the establishment of a minimum staffing standards and quality requirements for a subacute pediatric transition care center to be operated as a 2-year pilot program.

2001 legislation enacted in **OR** requires hospitals to develop and implement nurse staffing plans and establish internal review processes. Random audits of hospitals for compliance are mandatory and failure to comply will result in civil penalties or revocation of licensure. In 1998, legislation was passed by **KY** and **VA** to set appropriate staffing methodology and in 1995, regulations were developed in **CA** calling for institutions to develop valid staffing systems and in **NV** regulations were adopted a few years later.

Nurse to Patient Ratios

Another legislative approach to address nurse staffing is to mandate specific nurse to patient ratio legislation. In 1999, legislation was enacted in **CA** calling for regulations to be adopted that would define the same unit specific nurse to patient ratios to be utilized in all nursing units in all California hospitals. Currently, a few states now require specific ratios in specialty areas such as intensive care and labor and delivery units, but none require ratios in every patient care unit in every hospital as

required in the California regulations. California Governor Arnold Schwarzenegger suspended the law scheduled to take effect January 1, 2005 that would have required one nurse for every five patients in medical-surgical units, a change from the current ratio of one nurse for every six patients. A judge ruled that the governor's administration overstepped its authority and barred the administration from delaying the implementation of the staffing ratios.

No nurse to patient ratio legislation has been enacted so far this year however legislation has been introduced in **CA, CT, KS, NJ and NY**.

Nurse Staffing Plans and Nurse to Patient Ratios

No legislation has been enacted so far this year however legislation has been introduced this year in **CT, FL, IA, IL, KS, MA, MD, MO, PA, RI and VT**.

In 2004, **ME** enacted legislation that removed language requiring minimum nurse to patient staffing ratios that would be increased as patient needs demand as determined by an established patient staffing system. Instead, the bill directed the Maine Quality Forum Advisory Council to make recommendations to the legislature by January 2005 related to minimum staffing ratios. In their December 3, 2004 report, the Forum stated that there is no reliable scientific evidence that mandated registered nurse to patient staffing ratios are a guarantor of quality and safety of in-patient care. The Forum instead recommends the collection of 15 nurse-sensitive indicators to assess the quality of care in **ME** in patient hospital settings. They concluded that effectiveness for hospitals and the Division of Licensing and Certification could be achieved by the standardization of staffing plans and acuity tools. Minimum ratios will not be implemented in Maine at this time.

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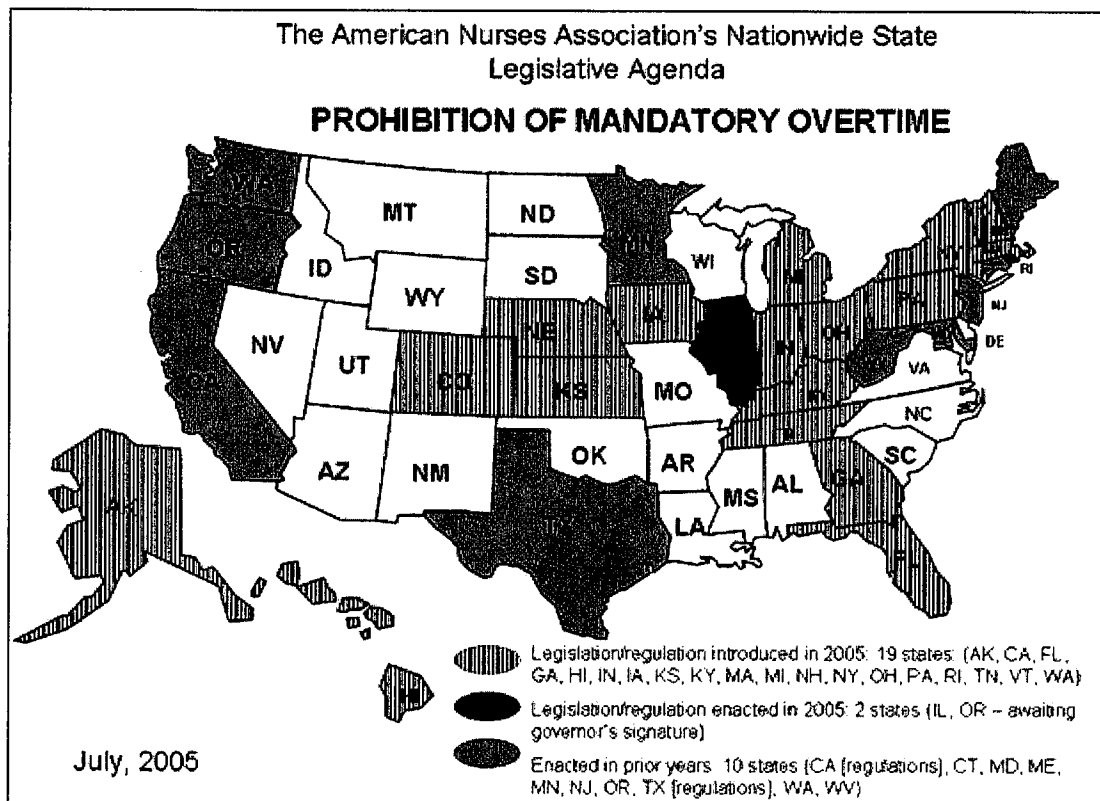
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ANA STATE GOVERNMENT RELATIONS

2005 Legislation: Mandatory Overtime (updated 7/05)



Background: Mandatory Overtime

Mandatory overtime is a difficult problem for RNs and health care facilities. Because of inadequate RN staffing, employers have used mandatory overtime to staff facilities often as a cost savings factor. Nurses are concerned about the health effects of long term overtime and the quality of care being provided. Research indicates that risks of making an error were significantly increased when work shifts were longer than 12 hours, when nurses worked overtime, or when they worked more than 40 hours per week.¹

As part of the American Nurses Association's (ANA) Nationwide State Legislative Agenda on the nurse staffing crisis, State Nurses Associations support the enactment of mandatory overtime legislation in state legislatures and regulatory agencies. ANA is also pursuing the enactment of federal legislation to prohibit mandatory overtime. The Safe Nursing and Patient Care Act of 2005 (HR 791/S 351) www.anapoliticalpower.org has been introduced in the House and Senate and would prohibit the requirement that a nurse work more than 12 hours in a 24 hour period and 80 hours in a consecutive 14 day period, except under certain circumstances.

In 2005, legislation to prohibit mandatory overtime was introduced in the following 19 states: **AL, CA, FL, GA, HI, IN, IA, KS, KY, MA, MI, NH, NY, OH, PA, RI, TN, VT and WA**. The Illinois Nurses Association was instrumental in the passage of legislation in IL that allows hospitals to mandate a nurse to work overtime only in unforeseen emergent circumstances. Even if they must do so, no

nurse may work more than 4 hours beyond her/his regularly scheduled work shift. A nurse may not be punished for refusing to work overtime, and if a nurse works 12 hours there must be an 8 hour rest period before working again. This bill awaits the governor's signature. The Oregon Nurses Association was successful in amending OR mandatory overtime law (enacted in 2001) by prohibiting a hospital from requiring a nurse to work more than 48 hours in a week or more than 12 consecutive hours in a 24-hour period. There are a few specific exceptions to the limits on mandatory overtime. Nothing in the bill prevents voluntary overtime. This bill also awaits the governor's signature.

In 2004, **WV** enacted legislation prohibiting a hospital from mandating a nurse to accept an assignment of overtime. The commissioner of labor is charged with the enforcement of the law and shall administer a penalty for any violations. **CT** enacted legislation prohibits a hospital from requiring a nurse to work in excess of a predetermined scheduled work shift except in certain circumstances such as participating in a surgical procedure until the procedure is completed, public health emergency etc. Legislation was also introduced in **FL, GA, HI, IA, IL, MA, MI, MO, NY, OH, PA, RI, TN, VT, and WA.**

In 2003, three states, **LA, NV** and **WV**, enacted legislation requiring the establishment of study committees to further explore the issue. 22 other states introduced prohibition of mandatory overtime legislation/regulation designed to set maximum hours of work per day/week with protected right of refusal for work time requested in excess of predetermined maximums.

In 2002, the following states enacted prohibition of mandatory overtime legislation: **MD** law states that an employer may not require a nurse to work more than the regularly scheduled hours according the predetermined work schedule. There are some exceptions including an emergency situation that could not be reasonably anticipated and if a nurse has critical skills and expertise that are required for the work. **MN** law prohibits action against a nurse who refuses mandatory overtime because it would jeopardize patient safety. **NJ** enacted legislation prevents a health care facility from requiring an employee to work in excess of an agreed to, predetermined and regularly scheduled daily work shift, not to exceed 40 hours per week. **TX** regulations require hospitals to develop policy and procedures for mandatory overtime. **WA's** new language states that acceptance of mandatory overtime by a nurse is strictly voluntary and refusal is not grounds for adverse actions against the nurse.

Legislation enacted in 2001 in **ME** would prevent a nurse from being disciplined for refusing to work more than 12 consecutive hours except in certain circumstances and must be given 10 consecutive hours off following overtime. **OR** enacted legislation prevents a nurse from being required to work more than 2 hours beyond a regularly scheduled shift or 16 hours in a 24 hour time period. Regulations adopted in **CA** prior to 2001 prevent an employee scheduled to work a 12 hour shift from working more than 12 hours in a 24 hour period except in a health care emergency.

¹ Rogers A, et al. The working hours of hospital staff nurses and patient safety. Health Affairs 2004;23(4):202-12.

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1

**IONL/INA Position Statement on
Principles for Determining Nurse Staffing
Adopted July 18, 2005**

Iowa Organization Nurse Leaders and Iowa Nurses Association in a collaborative effort to address appropriate nurse staffing have developed this position statement.

In any health care setting appropriate nurse staffing can only be achieved through a decision making process in which nurses themselves evaluate and respond to the drivers of patient care intensity. This evaluation and response must be made in light of the nursing organization's capacity to provide professional services. The components of appropriate staffing include the hours of nursing care and the appropriate mix of professional and non-professional providers.

#1 Authority and accountability for all nurse staffing decisions within the organization must rest with the nurse executive who will work in direct collaboration with the clinical direct care professionals in each specialty. Expertise in nursing is a foundation of appropriate staffing decisions.

#2. An effective system of appropriate staffing strives to match patient care requirements with nursing care resources each shift, each day. Patient care needs must determine the level of staffing.

#3 The daily determination of appropriate staffing requires objective information concerning patient care needs, skills of available staff, and budgeted resources, coupled with expert clinical judgment about the specific patient care requirements on any particular day. Appropriate staffing requires mechanisms to increase staffing in response to greater care requirements and to decrease staffing in response to reduced care requirements. Further required is a collaboration approach to managing patient flow within the organization when the demand for patient admissions exceeds the available nursing resources.

#4 The nursing standards, developed by the nationally recognized professional nursing associations to address appropriate staffing, must be considered in developing staffing plans within organizations.

#5 Clinical Nurses recognize the prerequisites to providing a meaningful voice in determining appropriate staffing include an awareness of the fiscal realities of the current health care environment, and a willingness to play an active role in assuring the efficient and effective use of resources through the pursuit of improved approaches to patient care.

#6 The continuous pursuit of evidence-based best practices is an obligation of the profession. Benchmarking with other organizations must be an ongoing comprehensive endeavor in determining appropriate staffing.

Comparisons of multiple variables, in addition to “hours of care”, should be considered in a broader organizational context.

#7 Ongoing evaluation of outcomes is also a necessary element in insuring the provision of quality care. At a minimum, this should include collection and analysis of data related to nurse sensitive outcomes such as length of stay and rates for urinary tract infection, pressure injury, post-operative infections, and pneumonia (ANA 2000) and their correlation with other patient care trends.

#8 All organizations must evaluate staffing as it relates to patient safety, actual or potential adverse patient outcomes, and quality of work life.

Key Drivers of Intensity of Patient Care Requirements:

1. The acuity, complexity and case mix of the patient situation are the primary determinants of patient care requirements.
2. There is a direct relationship between the length of stay in the acute setting and the intensity of care requirements. For every day the length of stay is decreased, nursing workload is increased by greater than 27% (The Advisory Board, 2002)
3. Intensity of patient care is increased by admissions, discharges and transfers in a given day, the greater the intensity. Midnight census does not accurately reflect nursing workload.

Key Drivers of the Capacity of the Nursing Organization to Provide Patient Care:

1. The experience/expertise of the nurse directly influences individual capacity to provide patient care. Generally, the greater the expertise of the nurse, the greater the capacity to manage, both in terms of the number and complexity of patients.
2. The support systems available to nurses in the practice setting directly impact the capacity to provide professional services within the organization. Nurses whose work is supported by effective housekeeping, pharmacy, food and supply systems, as examples, have a greater capacity to provide professional services than those who are forced to spend time compensating for inadequate support.
3. The effectiveness of the system of care, particularly documentation and other non-direct care requirements, directly impacts the capacity of the nursing organization to provide professional services. Cumbersome systems that pull nurses away from the patient detract from the capacity to provide patient care.
4. The geography and unit design in which nurses practice influence the capacity to provide professional services. The ability to readily visualize and access patients enhances capacity. The demand for larger and more private patient care spaces (essential to meeting the expectations of today’s active consumer,) detracts from the capacity of the nursing organization to provide professional services.

Reference: Wisconsin Organization Nurse Executives, Guiding Principles in Determining Appropriate Nurse Staffing, November 2004

Nursing Organization Environment in Iowa
October 2005

Organization that represents management and staff

The American Nurses Association and its state affiliate, Iowa Nurses Association are the **umbrella** professional society for membership of registered nurses in the state of Iowa. The Iowa Nurses Association is a 501 (c)(6) organization whose bylaws allow for representation of only the registered nurse.

Membership is open to all registered nurses in all practice settings. Therefore, registered nurses including but not limited to: staff nurses, nurse executives, nurse educators, school nurses, physician office clinic nurses, nursing home nurses, home health nurses, public health nurses and advanced practice nurses (ARNPs-advanced registered nurse practitioners: nurse practitioners, certified nurse midwives, certified registered nurse anesthetists and clinical nurse specialists) are eligible for membership in ANA and INA.

The American Nurses Association and its state affiliate organizations are the national organizations of registered nurses that have developed over the past one hundred eight (108 in 2005) years, the **standards of nursing practice** for numerous practice settings, a **societal contract** (*Nursing's Social Policy Statement*) and an **ethical code** (*Code of Ethics for Nurses with Interpretive Statements*). It has a legacy of activism for nurses, and the basic workplace protections in a wide variety of settings.

ANA through its "workplace advocacy arm"- Center for the American Nurse (Center) and Iowa Nurses Association represents registered nurses for all work environment settings where there is no collective bargaining relationship between staff and management. Much work has been focused on nursing research including the development of the "magnet" concept where registered nurses are drawn to the work environment because of the positive workplace features.

ANA in 1946 started the "collective bargaining arm" which today is known as the United American Nurses (UAN). It represents registered nurses for collective bargaining and Iowa Nurses Association through its *Economic and General Welfare commission (EGW)* represents six collective bargaining units in both the public employer and private employer sectors, the earliest since 1965.

Other Organizations that represent staff nurses especially for collective bargaining

AFSCME- American Federation of State, County and Municipal Employees represents nurses as well as other employees in Iowa publicly owned settings including the State of Iowa facilities where patient care services are provided.

CNA -California Nurses Association split from affiliation with the American Nurses Association in 1995. Its National Nurse Organizing Committee (NNOC) is California-based but has been seeking to expand in other states and most recently did in Illinois. The California affiliate of the American Nurses Association is ANA/C (American Nurses Association/California.)

MNA -Massachusetts Nurses Association and Maine Nurses Association split from affiliation with the American Nurses Association in 1997. The American Nurses Association affiliate is MARN (Massachusetts Association of Registered Nurses) and ANA-ME (American Nurses Association-Maine).

PPME- Painters and Allied Trades are registered with the PERB (Public Employee Relations Board) to represent a few patient care units in Iowa.

SEIU- Service Employees International Union is a national organization for employees in various employment settings, including health care; not necessarily just registered nurses. They recently pulled out of the AFL-CIO – "national house of labor". They have organized several large hospitals in Iowa.

UAW – United Auto Workers is a national organization and represents nurses in several nursing homes.

UFCW- United Food and Commercial Workers represents nurses in the hospital setting.

New England Public Policy Center and the Massachusetts Health Policy Forum

NURSE-TO-PATIENT RATIOS:

Research and Reality



NEPPC
Conference Report Series No. 05-1
July 2005



July 2005

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For background information and the summary policy brief, see:

www.bos.frb.org/economic/neppc/conf.htm



NURSE-TO-PATIENT RATIOS: Research and Reality

On March 30, 2005, nurses, hospital administrators, health care researchers, legislators, and policy advisors gathered together to evaluate options for improving patient safety and nursing conditions in Massachusetts hospitals. They were participating in a conference co-sponsored by the Massachusetts Health Policy Forum and the New England Public Policy Center (NEPPC) of the Federal Reserve Bank of Boston. "Nurse-to-Patient Ratios: Research and Reality" focused particularly on the pros and cons of establishing minimum nurse-to-patient ratios, a legislative initiative currently under consideration in Massachusetts. This report, written by NEPPC researcher Brad Hershbein, summarizes the conference proceedings.

Two competing bills under consideration by the Massachusetts legislature would improve patient safety and nursing conditions through different approaches. One bill, sponsored by Rep. Christine Canavan, would legislate minimum nurse-to-patient ratios. The other, sponsored by Sen. Richard Moore, would attempt to increase the supply of nurses and better track and disseminate information on patient outcomes and nurse workloads. (See summaries of the two bills on page 10.)

"Nurse-to-Patient Ratios: Research and Reality" explored many issues related to these two bills. At the end of the conference, much disagreement remained, but moderators Stuart Altman, professor of national health policy at the Heller School for Social Policy and Management at Brandeis University, and Robert Tannenwald, director of the New England Public Policy Center at the Federal Reserve Bank of Boston, found some common themes among participants:

- The number of staff nurses and their

skill play a critical role in patient outcomes across a range of conditions in the hospital setting.

- Patient outcomes depend not only on the kind and severity of patients' illnesses, but also on human resources factors such as the mix of nurses, doctors, and auxiliary personnel, and on the work environment or culture of the hospital.
- The nursing shortage in the state and nation presents challenges for hospitals in changing the number and mix of staff nurses.
- Research has not yet shown, and may be unable to show, the optimal nurse-to-patient ratio.

Enforcement of any nurse staffing reform will be challenging, as the usual penalties for noncompliance, such as fines, could have a detrimental effect on access to care.

Should Government intervene to require nurse-to patient ratios in hospitals?

- Regardless of the path that nurse staffing reform takes, the government, hospitals, nurses, doctors, insurance companies, and patients must put aside their differences and work together to make the reform successful.

These agreements, however, are often obscured by the dueling among various groups on the nature of the relationship between nurses and hospitals, on the extent to which there is public support for ratios, and on the estimates of what ratios would cost. Conference participants explored in great detail the evidence underlying these issues. This brief synthesizes their presentations and comments on the current nursing

shortage, the working environment that hospitals and nurses face, and the potential benefits and costs of various proposals to improve conditions for both patients and the nurses that care for them.

The Nursing Shortage

Nursing shortages are not new. At the conference, Peter Buerhaus, a nursing professor at Vanderbilt, identified several peri-

While most nursing shortages last only a year or two, the current one is in its eighth year.

ods of nursing shortage over the last 40 years, with most lasting only a year or two. But the current shortage appears to be different. It began in 1998 and, now into its eighth year, has lasted longer than any previous recorded nursing shortage. And the problem is not likely to abate: The Bureau of Health Professions predicts that the current shortage of 150,000 nurses nationwide will by 2020 grow to 800,000 nurses—numbers, says Buerhaus, that are unsustainable under the current structure of health care.

Although the numbers demonstrate a real and growing problem, the situation is not yet critical, especially in Massachusetts. With over 92,000 active registered nurses, the Commonwealth is fortunate to have more RNs per capita than any other state and can draw upon not only Massachusetts nursing graduates but also those from nearby New England states. Furthermore, between 2001 and 2003, the worst years of the nursing shortage and a time of poor job

growth across the economy, hospitals nationwide increased their employment of registered nurses by 183,000, much more than normally would be expected, according to Buerhaus. Even within Massachusetts, which lost proportionately more jobs than most states during the slowdown, full-time RN hires have grown faster than patient volume over the last five years, says Karen Moore, president of the Massachusetts Organization of Nurse Executives. Still, despite this good news, the Health Resources and Services Administration forecasts the state's current unmet demand for registered nurses will rise from 5,000 to 25,000 by 2020.

The reasons for the current nursing shortage are numerous and complex. Not everyone agrees on all the factors that have contributed to the shortage, but several are either substantiated by data or commonly accepted by experts. These include:

Demographics – As the population as a whole continues to grow older, the demand for nurses will only increase. In fact, the Bureau of Labor Statistics forecasts that registered nursing will be the fastest-growing occupation between now and 2012, as Americans' health care needs and hospital visits and admissions rise. Yet lower birth rates during the 1970s, Buerhaus pointed out, have meant that in the last 15 years there simply have been fewer young people available to choose nursing as a career. Correspondingly, the median age of registered nurses increased from 35 years in 1980 to 45 years in 2000, higher than the median age of the workforce overall, and this difference is expected to persist over the next 20 years. Many nursing leaders worry whether older nurses will be able to work through arthritis, back pain, and the long hours of

GLOSSARY

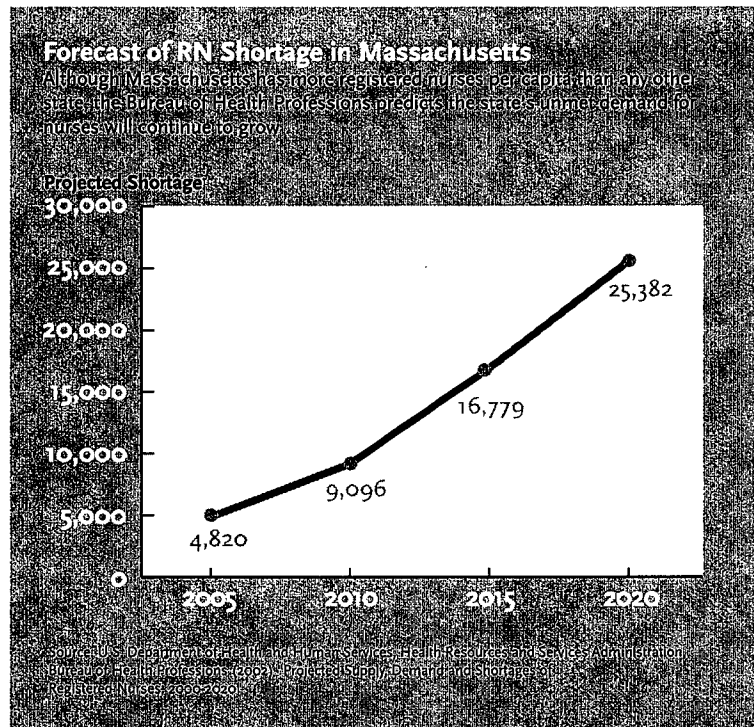
ANA — American Nurses Association
ANCC — American Nurses Credentialing Center
FAAN — Fellow of the American Academy of Nursing
FACHE — Fellow of the American College of Healthcare Executives
IOM — Institute of Medicine
JCAHO — Joint Commission on the Accreditation of Healthcare Organizations
MARN — Massachusetts Association of Registered Nurses
MHA — Massachusetts Hospitals Association
MNA — Massachusetts Nurses Association
MONE — Massachusetts Organization for Nurse Executives

standing that the job requires.

Other job opportunities – In the 1960s and into the 1970s, the three most common jobs for a working woman were secretary, teacher, and nurse. The women's rights movement that gained traction in the 1970s fundamentally changed that dynamic, opening up far more career possibilities for women than had existed previously. True, more men entered the nursing profession at this time as well, but nursing is still more than 92 percent female. The allure of occupational choice, especially as compensation for registered nurses began to lag behind that of other professional occupations, left a smaller nursing pool.

Insufficient capacity in nursing education – Growth in the number and size of nursing programs has not kept up with the demand for nurses. Buerhaus estimates that between 40,000 and 50,000 qualified applicants are turned away from nursing programs each year because there is no room for them. Part of this problem is money—nursing schools cannot raise funds easily to expand, and prospective students have few public nursing schools to choose from relative to more expensive, private institutions. Another part of the problem is a dearth of nursing faculty. At the conference, Senator Richard Moore, chair of the Commonwealth's joint committee on health care financing, argued that this latter issue is particularly acute in Massachusetts, and that pay disparities between nurses at the bedside and nurses in the classroom play a big part.

Changes in hospital care – Jean Ann Seago, an associate professor at UCSF, mentioned that as part of the managed care reforms during the 1990s, hospitals altered their admittance practices. Changes in technology, payment structures, and incentives encouraged them to admit only the sickest patients and to send the patients home or to rehabilitation facilities more quickly than before. As a result, patients were in the hospital only during the most acute phase of their illness or injury, making hospital patients sicker on average than they had been 15 years earlier. Additionally, many hospitals began hiring more unlicensed assistive personnel that licensed nurses then had to train and supervise. Thus, even if the number of nurses had remained con-



stant, the work intensity for hospital nurses still would have increased.

Hospital budget constraints – In FY 2004, 42 percent of Massachusetts's hospitals operated in the red, and the picture was not much better nationwide. Many hospitals rely heavily on public or charitable support and simply cannot afford to hire more nurses. While several chief nursing officers commented that they have been trying to raise nurse staff levels, they compete with other areas of hospital administration for a relatively small discretionary pie.

Nurses are leaving the profession – A series of research studies over the last several years unequivocally shows that many nurses are not happy with their work conditions and are more likely to quit because of this dissatisfaction. One nurse remarked: "Every time I'm not able to turn a fragile post-op hip replacement patient, not able to assess the skin frequently, not able to assess the breath sounds frequently, I go home cringing." It is not precisely clear what factors have caused these high levels of nurse dissatisfaction and whether or not the situation is improving. But it is clear that the issue is a critical one. How to improve current working conditions of nurses was probably the most contentious topic raised at the forum.

Nurses on the front lines

What are nurses' working conditions? The short answer from the conference participants is: not nearly as good as they should be, but perhaps somewhat better than a few years ago. With the managed care revolution of the 1990s and the concomitant goal of cost-cutting came cutbacks in much of the direct patient care infrastructure that nurses rely on to do their job. Many types of support services and specialty units were downsized or eliminated, RN staffing was cut, mandatory overtime became common, and hospitals began to substitute cheaper, less-credentialed staff for licensed RNs. Massachusetts in particular took a heavy blow: After its nurse staffing fell 27 percent during the 1980s, the steepest decline in the nation, the number of licensed nurses only weakly recovered in the 1990s.

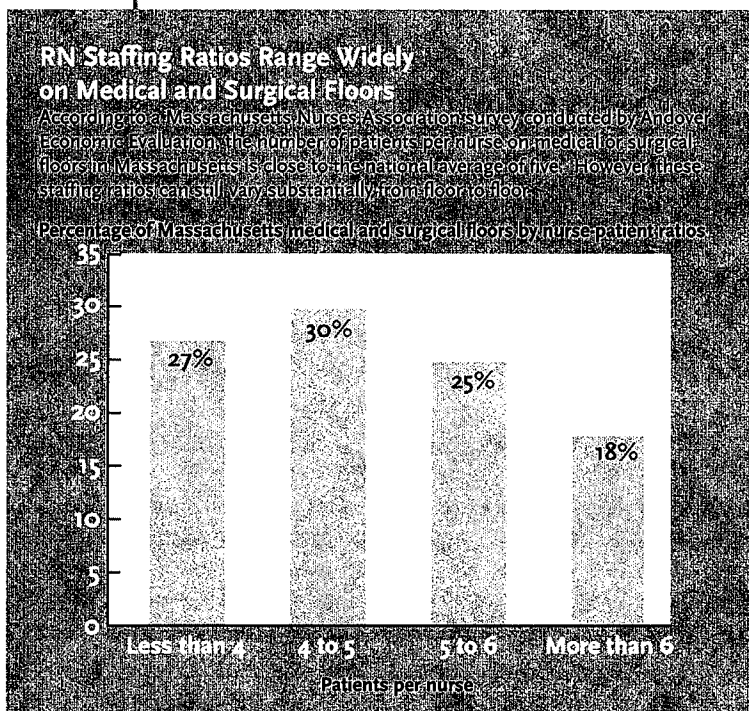
Not surprisingly, the severity and rapidity of these changes hit nurses hard. In the early 1990s, 41 percent of hospital nurses expressed job dissatisfaction—three times the rate of all professional workers nationwide—and 43 percent reported high levels of job burnout, according to a nurse survey published in *Health Affairs* by Julie Sochalski, an associate professor at the University of Pennsylvania. Further, almost half the nurses felt that quality of care was

deteriorating, whether it was the care that they themselves were able to provide or care provided in the hospital overall. Julie Sochalski and her colleague Linda Aiken found that an increase of one patient in a nurse's load was associated with a 23 percent increase in the chance of burnout, a 15 percent decrease in job satisfaction, and ultimately a greater likelihood of nurse turnover.

Ten years later, the picture the data portray is not quite so grim and actually hints at some improvement. A recent 2004 survey highlighted at the conference by Peter Buerhaus shows that the percentage of nurses who cite the work environment as the prime reason for the nursing shortage declined from 26 percent in 2002 to 17 percent in 2004. Likewise, salary and benefits as a reason fell from 54 percent to 40 percent, and undesirable work hours fell from 40 percent to 31 percent. The 2004 survey also reveals that nurses were more likely to feel that management recognized the importance of family and personal life, that they were satisfied being a nurse, and that they would recommend the profession to others.

Despite this seemingly good news, the personal stories of some nurses at the conference suggest the data may not be telling the whole story, at least in Massachusetts. One nurse pointed out that although he works at a hospital that follows the Massachusetts Hospital Association's (MHA's) nascent voluntary staff-monitoring plan, he is routinely responsible for four to five patients coming straight from the ICU, and that situations in which there are three to four nurses for 40 beds on the night shift are not uncommon. Another nurse agreed with this assessment and added that she remembered a study by the Massachusetts Board of Registration in Nursing finding the primary reason nurses were leaving was that they felt the workload was creating unsafe conditions, a sentiment she clearly shared.

Indeed, the current hurried pace in health care not only leaves some nurses feeling guilty about being unable to deliver quality care, but also increases the risk of mishaps for which they might be held professionally liable. According to Massachusetts Representative Christine Canavan, a registered nurse, current staffing structures also jeopardize nurses' ability to know their patients and deliver personalized



CALIFORNIA: The Experiment State

California is the first, and so far the only, state to legislatively require minimum nurse-to-patient ratios. In the heyday of the 1990s, when the economy was booming and managed-care health care reform was a watercooler topic, the nation's most populous state (and, incidentally, one with relatively few nurses per capita) decided that it should increase nurse staffing by mandating minimum ratios. Driving this movement was the fact that in the 1970s California had instituted minimum nurse ratios for intensive care units, which are widely viewed as successful today, and in the early 1990s had devised a loose, hospital-defined patient classification system, which is thought to be unsuccessful and in need of change because of poor design. Legislation went into effect in 1999 instructing the California Department of Health Services (CHDS) to devise minimum nurse ratios for the different specialty units of the state's 450 acute care hospitals. With recommendations ranging from a minimum of one nurse per 10 patients from the hospitals' association to one nurse per three patients from one of the nurses' associations, CDHS in 2002 picked an initial ratio of 1:6 for medical and surgical units that would move to 1:5 after a year. The 1:6 ratio ultimately went into effect in January 2004 after a few legal battles, and further legal actions delayed implementation of the 1:5 ratio until March 2005. The California regulations allow that up to 50 percent of nurse staffing on most hospital units can be achieved with LVNs, the equivalent of LPNs in Massachusetts.

With the rollout of ratios still quite recent, the effects are not yet clear. "It's probably too early to weigh benefits and costs of ratios because we can't really measure the benefits yet," says Joanne Spetz, a researcher at the University of California, San Francisco, who has studied California's law. What little is known, adds Spetz, is that California's enforcement of the law through CDHS is weak. The department cannot issue fines; instead, it can only require the violator to submit a plan of remedy. Even if the state's law had more teeth on paper, an environment of

care, affecting both patient outcomes and nurses' job satisfaction. Rep. Canavan added, "We have nurses that are leaving the bedside, and they're leaving because they cannot work in the dangerous conditions they're in—because if they lose their license they can never work [as nurses] again." No one at the conference could recall a nurse recently losing his or her license.

How does Massachusetts fare on these accounts? A Massachusetts Nurses Association (MNA) survey by Thomas

state fiscal deficits would limit the chance for additional funds to cover the costs of stricter enforcement. Not surprisingly, perhaps, an investigation by the L.A. Times found that half of the 28 hospitals inspected through September 2004 were not in compliance with the ratios at all times. More stringent enforcement may come from Medicare and Medicaid regulations, which can deny reimbursement to hospitals that demonstrate a pattern of willful violation of state or federal regulations. And the threat of malpractice lawsuits may deter hospitals from egregious violations, as California's malpractice cap does not apply to cases of gross negligence.

The news is not all disappointing, however. Spetz maintains that most hospitals are now trying to meet the mandatory ratios, noting that although most hospitals initially fought them, those that agreed to meet them or exceed them saw their nursing job applications surge. Additionally, some chief nursing officers have quietly admitted to liking the ratios; they feel the bargaining power of nurse managers has increased enough that they can get the funding for the staff levels that they have always wanted.

Is it possible, as Federal Reserve Bank of Boston economist Robert Tannenwald suggested at the conference, that "a radically new rule can catalyze constructive action"? If so, it certainly must be done carefully. Massachusetts' Proposition 2 _ emerged as a more nuanced, flexible, and successful take on property tax limitations than California's earlier Proposition 13 because Massachusetts analyzed the strengths and weaknesses of California's experiment before acting. Perhaps the Commonwealth will do the same on measures for improving nurse staffing in hospitals.

For more information on the California experience and for a side-by-side comparison of ratios in California compared to proposed ratios in Massachusetts, visit www.sihp.brandeis.edu/mhpf, Forum #25.

Grannemann of Andover Economic Evaluation reveals that nurse staffing levels in the state are similar to the national average, with about one nurse per five patients on medical and surgical floors. Statewide, one-sixth of these floors had nurse-to-patient ratios of less than 1 to 6 and one-quarter had ratios of greater than 1 to 4, with Boston-area hospitals more likely to have fewer patients per nurse. Of course, it is also likely that Boston-area hospital patients are sicker on average than patients

in the rest of the state (call it the winner's curse of top hospitals), so it is difficult to draw definitive conclusions from these figures. But, according to Karen Moore, 83 percent of Massachusetts patients in a recent survey gave their hospitals the highest ranking for quality of care, suggesting that existing nurse staffing ratios aren't having disastrous effects on patient outcomes. This is not to say, however, that the status quo could not be improved.

Would more nurses help?

The implications of nurses' working environments on patient safety can be quite serious indeed. Two-thirds of the respondents in a 2003 survey of MNA members believed that insufficient nursing care led to serious medical complications, many of which resulted in patient deaths. Nearly 90 percent of the nurses surveyed felt that they were being forced to care for too many patients at once. In addition, numerous studies—by organizations as diverse as the Joint Commission on the Accreditation of Healthcare Organizations, the Agency for Health Research and Quality, and those published in the *New England Journal of Medicine*, have linked lower nurse staffing levels with patients' increased risk of pneumonia, urinary tract infection, post-operative infection, sepsis, ulcers, gastrointestinal bleeding, cardiac arrest, longer hospital stay, and, in some cases, death.

However, these studies vary in methodology. Some measure nurse staffing levels as nurse-hours per patient-day while others compare the percent of nursing staff that are RNs; some use state-level data while others use national data; some explore results at the hospital level while others analyze specific specialty floors. These different approaches make the results difficult to compare precisely. In addition, numerous other factors affect a patient's health besides nurses, including hospital organization, proper medical equipment, and number of support staff. These other factors cloud estimates of how effective more nurses might be. For example, if there are more nurses per patient in well-run hospitals, and these hospitals have a lower incidence of urinary tract infections of admitted patients, is this result because there are more nurses, because the hospital is better organized, or because the patients are sim-

ply different? It is hard to say.

Despite such methodological uncertainties, the weight of the evidence concerning the impact of higher nurse staffing ratios on patient outcomes is quite persuasive—some would argue, conclusive. For example, Jack Needleman, associate professor at UCLA, argued that “given the variety of studies, the robustness, the plausible clinical pathways that have been used to explain these results, [they] go beyond association to causality.” Needleman's own research, which tries to control for some of the difficulties just mentioned, estimates that switching a nurse's load from the level of the bottom quarter to that of the top quarter of hospitals nationally—a reduction of roughly one patient per nurse—lowers the risk of adverse outcomes such as shock and infection and decreases hospital length of stay by between 3 percent and 12 percent.

However, even if those numbers are accepted at face value (and Needleman advocates caution when using them), they still leave many questions unanswered. We do not know whether a reduction of that magnitude would occur if nurse loads changed from eight patients per day to seven patients per day, as would be more feasible in smaller hospitals, or whether there would be a reduction at all if nurse loads fell from four patients to three. It is also possible, as the MNA argues, that hiring more nurses would have an even greater positive effect than these studies suggest, because nurses' long-term stress levels would fall once they knew their workload would be more manageable, and less-stressed nurses could provide better care. In short, current research cannot determine what the optimal nursing level should be because there is not one number that works at all times under all circumstances—there is just too much variation in the severity of cases, staff skills, nurses' experience, and a host of other variables for there to be a single, one-size-fits-all ratio. What the research can determine is that patient outcomes can likely be improved—at least somewhat—with more nurses.

What would it cost?

The answer to how expensive additional nurses would be depends on the person you ask. Needleman predicts a nationwide

cost of about \$680 million to raise the proportion of nurses who are full RNs to the current national 75th percentile. He feels that this modest switching from licensed practical nurses (LPNs) to RNs would pay for itself through reduced costs to hospitals and insurers. If hospitals decided instead to increase nurse staffing overall to the 75th percentile level of one nurse per five patients averaged over the day, Needleman forecasts an upfront price tag over \$6 billion, with only one-fourth recouped through financial savings, for a net cost of about 1.5 percent of hospitals' current expenditures.

Despite the proposed legislation in Massachusetts stipulating a more stringent standard averaging one nurse per four patients, the upfront cost for the state would be proportionally similar because of the state's already relatively high number of nurses per patient. Thomas Grannemann, using results from the Massachusetts nurses study conducted on behalf of the MNA, estimates the projected cost at around \$270 million, or 1.9 percent of net patient services revenue. (If these numbers are adjusted to recoup savings through reduced costs the way Jack Needleman did, the proportional savings, though not strictly comparable, are similar.) Another cost estimate from the MHA puts the ballpark estimate slightly higher, at between \$250 million and \$450 million.

All of these estimates, however, rest on the assumption that there are plenty of nurses standing by, ready and waiting to be hired at the current going rate. Regrettably, this is not the case. With an ongoing nursing shortage and many nurses still complaining of poor working conditions, it is likely that something would need to change to attract enough nurses to increase nurse staffing levels. Exactly what would need to change, and by how much, is a source of contention. Many researchers believe a wage hike is needed to bring in more nurses, and, although the specific increase hasn't been pinpointed, research presented by Joanne Spetz, an associate professor at UCSF's school of nursing, suggests the magnitude of this hike could be as much as 66 percent, inflation-adjusted, over the next 12 years. Although an MNA survey suggests low nurse wages may be less of a problem in Massachusetts than nationally, even small increases could be costly. With every 10 per-

cent pay raise corresponding approximately to an additional \$180 million in costs for Massachusetts, according to economist Jim Howell, the earlier expense estimates could still easily double or triple. On the other hand, many ratio advocates feel wage increases could be kept small, since more reasonable workloads might prevent nurses from leaving the bedside and encourage more nurses either to return to or enter the profession. No research can tell us ahead of time which result will occur, so the debate over the need for higher nurse wages so far is limited to conjectures.

Moreover, even if one could accurately predict how much wages would need to increase to fill all the vacant nursing slots, the cost estimates for more nurse staffing still suffer from several complications. They cannot fully control for additional savings that research suggests could result, including higher quality of care, reduced rehospitalization, declines in the cost of worker's compensation from fatigue-induced injuries,

On the medical and surgical units of the state's hospitals, there are about five patients per nurse—similar to the national average.

potential savings from less nurse turnover (estimated at between \$25,000 and \$75,000 per nurse), and fewer lost workdays. The effect of these benefits could be substantial, possibly even enough to make higher ratios ultimately cost-neutral. Conversely, the cost to train and socialize an influx of new, probably less-experienced nurses to specific hospitals could also be substantial. How do these effects play out on net costs? Again, we simply do not know.

Additionally, not all hospitals would be able to afford to hire more nurses. Hospitals that currently have fewer nurses per patient, those that are already operating at a deficit (42 percent of the state's hospitals in FY 2004), and those that are not connected with major universities and accompanying revenue-raising capacity will all face great difficulty in increasing nurse staffing levels,

argued Jim Howell. Overwhelmingly, these hospitals are the small, community hospitals outside of major urban areas. In Howell's opinion, the cost burden on small hospitals—in either hiring nurses to meet the ratios or suffering fines for noncompliance—would be great enough to put several of them on the brink of closure. If such is the case, then mandatory ratios could end up restricting access to care for the people who arguably need it most—patients in non-metropolitan areas who already lack the options

in medical care that their urban counterparts have. Would this scenario come to pass? The evidence from California, admittedly a very different state from Massachusetts, seems mixed and not dire (see sidebar on the impact of California's nurse-to-patient ratio legislation on page 7). Nevertheless, stricter nurse staffing requirements would probably stress some hospitals more than others. It is unknown whether or how the hospitals would try to cope with minimum ratios—consolidation, appeals for state aid, and lawsuits have all been mentioned as possibilities—and who would bear the ultimate cost of these choices.

MASSACHUSETTS LEGISLATION ON THE TABLE

by Katherine Kranz Lewis

Research Associate, The Heller School, Brandeis University

An Act Ensuring Patient Safety, proposed by Rep. Christine Canavan (D-Brockton), is currently under consideration in the Massachusetts legislature. This bill would guarantee minimum registered nurse staffing levels in acute care hospitals across the state. This is a much stronger provision than in California, which has less stringent ratios and where up to 50 percent of staffing, with some exceptions, can be met with the equivalent of LPNs. Under the Massachusetts bill, the Department of Public Health would be responsible for enforcing the regulations and also for establishing a patient classification system to adjust staffing levels based upon patient needs. Such a system already exists in California, but it has not been adequately enforced or implemented, reportedly rendering it rather ineffective.

SB 1260 is an alternative piece of legislation introduced by Senator Richard Moore (D-Uxbridge) that would include acute and chronic disease hospitals. Facilities would be required, under this law, to create staffing formulas based upon patient and nurse characteristics. These formulas would then be made available to the public. Nurse-sensitive patient outcome measures, including patient care hours per patient day, would be selected by the Betsy Lehman Center from the National Quality Forum. The Center would both develop the annual reporting process and publicly report hospital-specific performance measures, aggregated industry trends, and best practices developed from the annual reports. The bill also includes incentives to increase the supply of nurses: \$30 million earmarked for the Clara Barton Nursing Excellence Trust Fund for student loan repayments and funding for faculty, scholarships, and mentoring services; increased nursing workforce data collection and dissemination; and improved accountability from hospitals in terms of staffing levels.

For more information on the Massachusetts bills, visit www.sihp.brandeis.edu/mhpf, Forum #25.

Are there alternatives to ratios?

Hospitals have already taken strides toward improving patient safety and working conditions for nurses. Some, for instance, have attained what is known as magnet status, a special accreditation from the American Nurses Credentialing Center, an affiliate of the American Nurses Association. Magnet status signifies that a hospital is on the cutting edge of quality care. Hospitals must apply through a lengthy process and demonstrate that they meet all ANA regulations and government statutes, possess experienced and influential nurse leadership, allow and encourage nurse feedback without retribution, haven't committed unfair labor practices, collect data on patient outcomes, and, most important, maintain an excellent record of patient care. Only 100 or so hospitals nationwide are magnet-certified, and only three (Mass General, Winchester, and Jordan Hospital in Plymouth) are in Massachusetts, though many others are working toward this accreditation. These hospitals employed what measures they thought necessary to improve staff work environments and levels of care and earned a mark of distinction, all without government intervention.

Another potential solution being implemented in the Commonwealth is Massachusetts Patients First, an initiative of MHA and the Massachusetts Organization of Nurse Executives in which hospitals pledge to provide proper staffing and work environments to meet patient needs, work toward improving patient access to care, and agree to release performance measures to the public. Nearly half of the 131 certified

hospitals in Massachusetts have signed on to this program since its rollout six months ago, and more hospitals are expected to join in the future.

These innovative, voluntary approaches have promise, but some nurses doubt that they will be sufficient to solve the problem. The presence of a few magnet hospitals, for example, still leaves millions of patients at thousands of hospitals that do not meet magnet qualifications, many of them in poorer, non-urban areas. In the words of one nurse at the conference: "What seems to be coming out [are] more and more solutions to create exceptional hospitals...We need to create a minimum standard of safety and from that...work on the quality issue." Many nurses—and others at the conference—agree. Another challenge facing cooperative programs is their reliance on trust between hospitals and the nurses in their employ, trust that the managed care reform of the 1990s eroded, according to Joyce Clifford, president and CEO of The Institute for Nursing Healthcare Leadership. Recent surveys have shown that trust between nurses and the hospitals that employ them is still far from recovered. Karen Moore, representing nurse executives, was optimistic about trust being rebuilt, citing the 40 state hospitals applying for magnet status. Julie Pinkham, executive director of the MNA, was less sanguine, mentioning that a dozen years of hospital management disregarding nurses' input on staffing decisions has left nurses skeptical of voluntary plans, favoring instead the "blunt instrument" of minimum nurse staffing regulation. Indeed, an additional shortcoming of voluntary initiatives is that they are, well, voluntary. "Regulation itself does not guarantee excellence," Joyce Clifford warned, but, according to many participants, hospital pledges that are not backed up by firm commitments and accountability may not do so either.

Other possible interventions go further than voluntary programs but stop short of mandatory staffing ratios. Both advocates and opponents of minimum nurse staffing ratios give wide support to the public reporting on a regular basis of a range of hospital performance measurements, particularly nurse-sensitive patient outcomes. The idea is that if patients knew which hospitals

have better patient outcome records, they would be more likely to go to those hospitals. Since research has shown that higher nurse staffing is associated with better patient outcomes, competition for patients would compel hospitals to staff nurses at market driven and publicly acceptable levels. However, while better consumer information is clearly laudable, it is not clear that public reporting alone would improve patient outcomes or increase nurse staffing. Although patients may "shop" hospitals the way consumers shop for the best deals, medical emergencies or expense can limit patients to the most convenient hospital, not necessarily the one with the best record. Further, even if competition does take hold, as initiatives such as Patients First propose, hospitals may be able to improve patient outcomes with other, cheaper initiatives besides more nurses, such as technology expansion or organizational change. While this would benefit patients, it would not necessarily alleviate heavy nurse workloads.

Another popular alternative is the creation of a state-wide patient classification system, which would provide a rubric to gauge the severity of a patient's condition and the care he or she needs for a range of maladies. If the balance of patients on the floor have particularly critical conditions and require a high level of care, then nurse staffing would have to be higher than on a less care-intensive unit. This measure would seem to help both patients and nurses, but it, too, has its shortcomings. Scheduling could be problematic, for example, if several high-need patients are admitted into a unit quickly. Will there be nurses on call, ready to rush into duty at a moment's notice? Conversely, if the floor is quiet, will scheduled nurses be dismissed from their shifts? Moreover, enforcement can be tricky, as a classification scheme requires detailed calculations to ensure that staffing is adequate at all times. While good on paper, the logistics of a patient classification system may prove challenging, as the case of California (box on page 7) illustrates.

Of course, as Peter Buerhaus pointed out, the common fallacy of these initiatives is that they are designed with the expectation that regulating the process will lead to the desired outcome. None ensures that the desired outcome is, in fact, reached.

Buerhaus argued that a better solution would be to establish an incentive structure for hospitals to achieve better patient outcomes and more manageable nurse workloads. If hospitals were rewarded, for instance, for delivering better patient care, whether by the government or the market, then better patient care would result. Such a strategy would directly target the problem—patient outcomes and nurses' working conditions in need of improvement—while allowing hospitals the flexibility to do so in the best way possible for them.

Public voice and public responsibility

The current debate on how to improve nurse staffing and patient outcomes has mostly been between staff nurses on one side and hospital administrators and nurse executives on the other. The groups that would be affected most by any change—the health insurers who currently pay for health-care and the patients and potential patients who ultimately receive the care and pay for it through premiums and co-pays—have been on the sidelines of the issue, if present at all.

The MNA and MHA have both attempted to glean some insight into public sentiment on this issue. But much like the opinions on how much money more nurses would cost, the public's attitude on how best to improve patient care in hospitals depends on whom you ask and how you ask them. A survey of former hospital patients sponsored by MNA and reported at the conference found a 50-30 split in the percentage of respondents favoring minimum nurse-to-patient ratios over the posting and reporting of nurse staffing plans as the "better approach to addressing the nurse staffing issue." A dueling survey of registered voters sponsored by MHA broke 56-21 in favor of letting "hospitals, together with nurses, draw upon their own nurse staffing plans and publicly report those plans to an independent entity" over mandating ratios. What to make of the dichotomy? Probably not much. These results demonstrate as much the power of wording and issue framing as they do of how people actually feel. They therefore do not provide much guidance on what the public really wants and even less on how much the public is pre-

pared to pay for better care.

Moderator Stuart Altman of Brandeis suggested that, in fact, the public may not be able or willing to answer these kinds of questions adequately since they largely leave the decisions on how much and what kind of care they need to health care professionals. The public will start to take notice, however, if they see costs increase dramatically or if they become concerned about the quality of their care. And in their roles as both health care consumers and taxpayers, they will press for a solution that achieves results without breaking the bank, possibly to the detriment of nurses or hospitals. Both these groups have a responsibility to care for patients to the best of their ability, and both are committed to providing quality care. Thus it is in the interest of hospitals and nurses to work together to find a common solution rather than pressing for their own interests. As Altman remarked: "You're both right...as a past patient and probably a future patient, I look to the professionals not only at the bedside but also the people who are responsible for administering the nurses and the people that run the hospital...to tell me what the right care is. And I would hope that as we move forward with this legislation...collectively the bedside nurse, the nurse administrators, and the hospital administrators can decide what's best."



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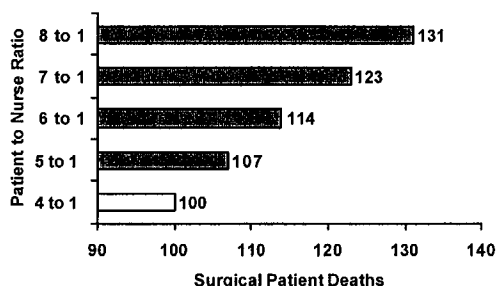
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Penn Research Finds More Patients Die In Hospitals with Lower Nurse Staffing

(Philadelphia, PA)— In the first study of its kind, University of Pennsylvania researchers have determined that patients who have common surgeries in hospitals with the worst nurse staffing levels have an up to 31% increased chance of dying. More nurses at the bedside could save thousands of patient lives each year, as reported today in *The Journal of the American Medical Association (JAMA)*.

The Penn researchers found that every additional patient in an average hospital nurse's workload increased the risk of death in surgical patients by 7%. Patients with life-threatening complications were also less likely to be rescued in hospitals where nurses' patient loads were heavier. The findings impact the national legislative agenda. More than 20 states have enacted or are considering nurse-staffing legislation.

For every 100 surgical patients who die in hospitals with 4:1 patient ratios, the number that would die in hospitals with higher ratios would be:



"Nurses report greater job dissatisfaction and emotional exhaustion when they're responsible for more patients than they can safely care for. Failure to retain nurses contributes to avoidable patient deaths," said Linda Aiken, PhD, RN, director of the Center for Health Outcomes and Policy Research at the University of Pennsylvania School of Nursing. "Patients facing planned hospitalization should inquire about nurse-to-patient ratios and choose their hospitals accordingly." Hospital nurse staffing levels vary widely, usually from four patients per nurse on most unit types to up to 10 or more.

—more—

**NURSE STAFFING AND PATIENT MORTALITY
TAKE 2 OF 2**

Specifically, the Penn nursing researchers found that:

- If all hospitals in the nation staffed at 8 patients per nurse rather than four, the risk of hospital deaths would increase by 31 percent, roughly translating to as many as 20,000 avoidable deaths in the U.S. annually. Some 4 million surgeries like the ones studied are performed each year.
- Having too few nurses may actually cost more because of the high costs of replacing burnt-out nurses and higher costs of caring for patients with poor outcomes.
- Adding two patients to a nurse already caring for four, increases the risk of death by 14 percent, adding four increases the risk by 31 percent.

"It is clear that nurses are saving lives," said Dr. Aiken. "Nurses are the front line of surveillance and early detection of potentially life-threatening problems."

The report, "Hospital Nurse Staffing and Patient Mortality, Nurse Burnout, and Job Dissatisfaction," concluded in the October 23/30 issue of *JAMA*: "When taken together, the impacts of staffing on patient and nurse outcomes suggest that by investing in registered nurse staffing, hospitals may avert both preventable mortality and . . . problems with low nurse retention in hospital practice.

The study, funded by the National Institute of Nursing Research of the National Institutes of Health, examined data collected from 168 hospitals, 232,342 surgical patients, and 10,184 nurses in Pennsylvania from 1998 to 1999. The researchers examined data on relatively common general surgeries (e.g. gall bladder), orthopedic surgeries (e.g. knee or hip replacement), and vascular surgeries, excluding cardiac surgery such as coronary bypass. Some routine but emergency surgeries were included, such as appendectomies.



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Hospital Nurse Staffing and Patient Mortality, Nurse Burnout, and Job Dissatisfaction

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Context The worsening hospital nurse shortage and recent California legislation mandating minimum hospital patient-to-nurse ratios demand an understanding of how nurse staffing levels affect patient outcomes and nurse retention in hospital practice.

Objective To determine the association between the patient-to-nurse ratio and patient mortality, failure-to-rescue (deaths following complications) among surgical patients, and factors related to nurse retention.

Design, Setting, and Participants Cross-sectional analyses of linked data from 10 184 staff nurses surveyed, 232 342 general, orthopedic, and vascular surgery patients discharged from the hospital between April 1, 1998, and November 30, 1999, and administrative data from 168 nonfederal adult general hospitals in Pennsylvania.

Topic Collections

- Quality of Care
- Nursing Care
- Topic Collections

Main Outcome Measures Risk-adjusted patient mortality and failure-to-rescue within 30 days admission, and nurse-reported job dissatisfaction and job-related burnout.

Results After adjusting for patient and hospital characteristics (size, teaching status, and teaching level), each additional patient per nurse was associated with a 7% (odds ratio [OR], 1.07; 95% confidence interval [CI], 1.03-1.12) increase in the likelihood of dying within 30 days of admission and a 7% (OR, 1.07; 95% CI, 1.02-1.11) increase in the odds of failure-to-rescue. After adjusting for nurse and hospital characteristics, each additional patient per nurse was associated with a 23% (OR, 1.23; 95% CI 1.34) increase in the odds of burnout and a 15% (OR, 1.15; 95% CI, 1.07-1.25) increase in the odds of job dissatisfaction.

Conclusions In hospitals with high patient-to-nurse ratios, surgical patients experience higher adjusted 30-day mortality and failure-to-rescue rates, and nurses are more likely to experience job dissatisfaction.

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Research in Action, Issue 14

Hospital Nurse Staffing and Quality of Care

Hospitals with low nurse staffing levels tend to have higher rates of poor patient outcomes such as pneumonia, shock, cardiac arrest, and urinary tract infections, according to research funded by the Agency for Healthcare Research and Quality (AHRQ) and others.

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By Mark W. Stanton, M.A.

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Introduction

Although hospitals with low nurse staffing levels tend to have higher rates of poor patient outcomes, increasing staffing levels is not easy. Major factors contributing to lower staffing levels include the needs of today's higher acuity patients for more care and a nationwide gap between the number of available positions and the number of registered nurses (RNs) qualified and willing to fill them. This is evident from an average vacancy rate of 13 percent.

This report summarizes the findings of AHRQ-funded and other research on the relationship of nurse staffing levels to adverse patient outcomes. This valuable information can be used by decisionmakers to make more informed choices in terms of adjusting nurse staffing levels and increasing nurse recruitment while optimizing quality of care and improving nurse satisfaction.

Making a Difference

- [Lower levels of hospital nurse staffing are associated with more adverse outcomes.](#)
- [Patients have higher acuity, yet the skill levels of the nursing staff have declined.](#)
- [Higher acuity patients and added responsibilities increase nurse workload.](#)

- Avoidable adverse outcomes such as pneumonia can raise treatment costs by up to \$28,000.
- Hiring more RNs does not decrease profits.
- Higher levels of nurse staffing could have positive impact on both quality of care and nurse satisfaction.

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Background

Periods of high vacancy rates for RNs in hospitals have come and gone, but the current shortage is different. According to a 2002 report by the workforce commission of the American Hospital Association, the nursing shortage "reflects fundamental changes in population demographics, career expectations, work attitudes and worker dissatisfaction."¹ In fact, the present situation may well continue over the next two decades. A Federal Government study predicts that hospital nursing vacancies will reach 800,000, or 29 percent, by 2020.² The number of nurses is expected to grow by only 6 percent by 2020, while demand for nursing care is expected to grow by 40 percent.

The most recent research shows a jump of 100,000 RNs, or 9 percent, in the hospital RN workforce between 2001 and 2002 because of increased demand, higher pay, and a weakening economy. However, since almost all of the increase came from RNs over age 50 who returned to the workforce and a greater influx of foreign-born RNs, this does not alter the structural features in the long term: the aging of the nurse population and the increasing unwillingness of young women to consider nursing as a profession.³

Today's difficulties are further complicated by other changes in hospital care, such as new medical technologies and a declining average length of stay, that have led to increases in the amount of care required by patients while they are in the hospital. New medical technologies allow many less seriously ill patients who previously would have received inpatient surgical care to receive care in outpatient settings. Also, patients who in the past would have continued the early stages of their recovery in the hospital, today are discharged to skilled nursing facilities or to home. During the period 1980-2000, the average length of an inpatient hospital stay fell from 7.5 days to 4.9 days.⁴ An important consequence of these changes is that hospitals have a higher overall concentration of sick people who need more care.

Various groups, including the American Hospital Association, the Joint Commission on the Accreditation of Healthcare Organizations, and the Institute of Medicine (IOM), have expressed their concerns about the evolving nursing crisis. The IOM issued a report in 1996 that recognized the importance of determining the appropriate nurse-patient ratios and distribution of skills for ensuring that patients receive quality health care.⁵ Its report highlighted the fact that research on the relationship between the level of staffing by nurses in hospitals and patients' outcomes has been inconclusive. The IOM's analysis of staffing and quality of care in hospitals concluded by calling for "a systematic effort... at the national level to collect and analyze current and relevant data and develop a research and evaluation agenda so that informed policy development, implementation and evaluation are undertaken in a timely manner." To begin to meet that need, AHRQ-funded research and other research have pursued a number of different paths.

The Nurse Workforce and Nurse Staffing Levels

The nurse workforce consists of licensed nurses—registered nurses (RNs) and licensed practical nurses (LPNs)—and nurses' aides (NAs). Both RNs and LPNs are licensed by the State in which they are employed. RNs assess patient needs, develop patient care plans, and administer medications and treatments; LPNs carry out specified nursing duties under the direction of RNs. Nurses' aides typically carry out nonspecialized duties and personal care activities. RNs, LPNs, and nurses' aides all provide direct patient care.

RNs have obtained their education through three different routes: 3-year diploma programs, 2-year associate degree programs, and 4-year baccalaureate degree programs. Almost a third of all RNs have a baccalaureate degree, and 7.6 percent of hospital nurses have advanced practice credentials (either a master's or doctoral degree). LPNs receive 12-18-month training programs that emphasize technical nursing tasks. Nurses' aides are not licensed but many acquire certified nurse aide or nursing assistant (CNA) status after proving they have certain skills related to the requirements of particular positions.

Nurse staffing is measured in one of two basic ways:

- Nursing hours per patient per day.
- The nurse to patient ratio.

"Nursing hours" may refer to RNs only; to RNs and LPNs; or to RNs, LPNs, and nurses' aides.

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Hospital Nurse Staffing and Nursing-Sensitive Outcomes

Hospital nurse staffing is a matter of major concern because of the effects it can have on patient safety and quality of care. Nursing-sensitive outcomes are one indicator of quality of care and may be defined as "variable patient or family caregiver state, condition, or perception responsive to nursing intervention."⁶ Some adverse patient outcomes potentially sensitive to nursing care are urinary tract infections (UTIs), pneumonia, shock, upper gastrointestinal bleeding, longer hospital stays, failure to rescue, and 30-day mortality.^A Most research has focused on adverse rather than positive patient outcomes for the simple reason that adverse outcomes are much more likely to be documented in the medical record.

A broad array of research on this topic has found an association between lower nurse staffing levels and higher rates of some adverse patient outcomes. A new evidence report entitled *The Effect of Health Care Working Conditions on Patient Safety*, produced by an AHRQ-funded Evidence-based Practice Center (EPC), reviewed 26 studies on the relationship between nurse staffing levels and measures of patient safety.^B Most of the studies examined nurse staffing levels and adverse occurrences in the hospital setting, including in-hospital deaths and nonfatal adverse outcomes such as nosocomial infections, pressure ulcers, or falls. The EPC's researchers found that lower nurse-to-patient ratios were associated with higher rates of nonfatal adverse outcomes.⁷ This was true at both the hospital level and the nursing unit level. With regard to in-hospital deaths, however, the evidence does not consistently show that lower nurse staffing levels are associated with higher mortality.

Lower Staffing Levels Are Linked to Higher Adverse Outcome Rates

The EPC report included five studies funded by AHRQ that examined the relationship between adverse patient outcomes and hospital nurse staffing. All five studies found at least some association between lower nurse staffing levels and one or more types of adverse patient outcomes.

How often do such adverse "nursing-sensitive" patient outcomes occur in hospital care? Different studies report varying adverse event rates, which vary by the type of patient (medical or surgical) as well as other factors. For example, UTIs occur in from 1.9 percent to 6.3 percent of surgical patients and pneumonia in 1.2 percent to 2.6 percent of surgical patients.⁸⁻¹⁰

The largest of these studies on nurse staffing (jointly funded by AHRQ, the Health Resources and Services Administration, the Centers for Medicare & Medicaid Services, and the National Institute of Nursing Research) examined the records of 5 million medical patients and 1.1 million surgical patients who had been treated at 799 hospitals during 1993.^{8,9} Among the study's principal findings:

- In hospitals with high RN staffing, medical patients had lower rates of five adverse patient outcomes (UTIs, pneumonia, shock, upper gastrointestinal bleeding, and longer hospital stay) than patients in hospitals with low RN staffing.⁹
- Major surgery patients in hospitals with high RN staffing had lower rates of two patient outcomes (UTIs and failure to rescue).
- Higher rates of RN staffing were associated with a 3- to 12-percent reduction in adverse outcomes, depending on the outcome.
- Higher staffing at all levels of nursing was associated with a 2- to 25-percent reduction in adverse outcomes, depending on the outcome.

Table 1 illustrates some of the major findings. For example, the researchers found that medical patients in hospitals with high RN staffing were 4-12 percent less likely to develop UTIs than medical patients in the comparison group. Medical patients in hospitals with high levels of total nurse staffing (RNs, LPNs, and aides) were 4-25 percent less likely to develop UTIs than patients in the comparison group.

A similar analysis was performed for the smaller group of surgical patients (Table 2). Surgical patients in hospitals with high RN staffing had a 5-6 percent lower rate of UTIs and a 4-6 percent lower rate of failure to rescue than surgical patients in the comparison group.⁹

A second study, funded jointly by AHRQ and the National Science Foundation, examined licensed nurse staffing (RNs and LPNs) and adverse outcomes among both medical and surgical patients in Pennsylvania acute-care hospitals.¹¹ It found a lower incidence of nearly all adverse outcomes it studied in hospitals with more licensed nurses. For example, a 10-percent increase in the number of licensed nurses is estimated to decrease lung collapse by 1.5 percent, pressure ulcers by 2 percent, falls by 3 percent, and UTIs by less than 1 percent. Also, with a 10-percent higher proportion of licensed nurses, there was a 2-percent lower incidence of pressure ulcers.¹¹

Pneumonia Rates Are Especially Sensitive to Staffing Levels

Three AHRQ-funded studies found a significant correlation between lower nurse staffing levels and higher rates of pneumonia.

- The first study found that adding half an hour of RN staffing per patient day could reduce pneumonia in surgical patients by over 4 percent.¹² This study covered 589 hospitals in 10 States during 1993.
- A second study by the same researchers also found that fewer RN hours per patient day were significantly correlated with a higher incidence of pneumonia.¹³ The study examined administrative data on post-surgical patients in 11 States during 1990-96.
- A study of nurse staffing levels and adverse outcomes in California found that an increase of 1

hour worked by RNs per patient day was associated with an 8.9-percent decrease in the odds of a surgical patient's contracting pneumonia.⁸

- This study also found that a 10-percent increase in RN proportion was associated with a 9.5-percent decrease in the odds of pneumonia.

The researchers in the California study believe that the strong relationship between RN staffing and pneumonia can be attributed to the heavy responsibility RNs have for respiratory care in surgical patients. This study examined the effects of nurse staffing on adverse outcomes in 232 acute care hospitals from 1996 to 1999.⁵ Unlike many earlier studies, the California study included only adverse outcomes that were not present at admission.⁷

Mortality May Be Associated with Staffing Levels

Although studies overall are not consistent in demonstrating that higher nursing workload is associated with higher patient mortality, two recent AHRQ-funded studies have found that 30-day mortality and an increase in the likelihood of failure to rescue are higher when nurse staffing levels are lower.

- The first study found that each additional surgical patient per nurse was associated with a 7-percent higher likelihood of dying within 30 days of admission and a 7-percent higher likelihood of failure to rescue. In the 168 hospitals with a mean patient-to-nurse ratio ranging from 4:1 to 8:1, 4,535 of 232,342 patients died within 30 days of being admitted. If the patient-nurse ratio had been as low as 4:1 in the 168 hospitals, then possibly only 4,000 patients might have died, and had the ratio been as high as 8:1, more than 5,000 might have died.¹⁴
- A second study found that 30-day mortality rates among AIDS patients were lower where there was both a higher nurse-patient ratio and an AIDS specialty physician service. For example, the study found that an increase of 0.25 nurse per patient day would produce a 20-percent decrease in 30-day mortality.¹⁵

Nurse staffing may be measured by educational level as well as by the number and proportion of RNs in the nursing staff. A third AHRQ-funded study found that a 10-percent increase in the proportion of nurses holding a bachelor's degree was associated with a 5-percent decrease in both the likelihood of surgical patients dying within 30 days of admission and the odds of failure to rescue.¹⁶

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Nurse Workload and Job Dissatisfaction

The studies discussed have documented the connection between lower levels of nurse staffing and higher rates of adverse events. Complementing those studies are a number of other studies addressing the growing nurse workload and rising rates of burnout and job dissatisfaction. One study, jointly funded by AHRQ and the National Science Foundation, examined the relationship between nurse staffing and hospital patient acuity (the average severity of illness of the inpatient population) in Pennsylvania hospitals.¹¹ Acuity determines how much care a patient needs: the higher the acuity, the more care is required. This study found:

- A 21-percent increase in hospital patient acuity between 1991 and 1996.
- No net change in the number of employed licensed nurses.
- A total decrease of 14.2 percent in the ratio of licensed nursing staff to acuity-adjusted patient

days of care because of the increase in patient acuity.⁶

In addition, the skill mix of the nursing staff shifted as hospitals increased the number of nurses' aides. As a result, RNs acquired more supervisory responsibilities that took them away from the bedside at a time when their patients needed more bedside nursing care.⁴

Concerns arising from increased patient acuity and the assumption of additional supervisory responsibilities appear to be directly related to job dissatisfaction expressed by nurses in various opinion surveys. For example, a 1999 AHRQ-funded study surveyed 13,471 nurses in Pennsylvania. Among the principal findings:

- Among those surveyed, 40 percent were dissatisfied with their jobs. This is much higher than the 10-15 percent levels of dissatisfaction registered by other professionals and by workers in general in the United States.
- Only 35.7 percent of the nurses surveyed described the quality of care on their unit as excellent.
- A large proportion of nurses, 44.8 percent, said that there had been deterioration in the quality of care in their hospital during the past year.
- Of the nurses surveyed, 83 percent reported that there had been an increase in the number of patients assigned to them during the previous year.
- Only 34.4 percent of nurses believed that there are enough RNs to provide high-quality care.
- Only 33.4 percent believed that there are enough staff to get the work done.

In addition to increased patient acuity, nurse perceptions of inadequate staffing levels are probably related to their being expected to perform non-nursing tasks such as delivering and retrieving food trays; housekeeping duties; transporting patients; and ordering, coordinating, or performing ancillary services.^{17,18}

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Cost Impacts of Adverse Events

While inadequate staffing levels place heavy burdens on the nursing staff and adverse events are painful for patients, there is also a considerable financial cost to be considered. An AHRQ-funded study found that all adverse events studied (pneumonia, pressure ulcer, UTI, wound infection, patient fall/injury, sepsis, and adverse drug event) were associated with increased costs. For example, the cost of care for patients who developed pneumonia while in the hospital rose by 84 percent. Treating pneumonia raised total treatment costs by \$22,390-\$28,505, while the length of stay increased 5.1-5.4 days and the probability of death rose 4.67-5.5 percent.⁸ Pressure ulcers, another category of adverse patient event sensitive to nursing care, are estimated to cost \$8.5 billion per year.¹⁹

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Strategies for Improvement

Many stakeholders within the health care system, especially Federal and State governments, hospitals and hospital organizations, nurse associations, foundations, and accreditation organizations, are aware of the lack of qualified nursing staff and related problems and are actively seeking solutions.

On the Federal level, in 2002, Congress passed the Nurse Reinvestment Act, which has put into effect various measures to improve the recruitment and retention of nurses. The Act establishes a National Nurse Service Corps to give scholarships and loans to nursing students if they are willing to serve in hospitals with critical shortages of nurses for a 2-year period. It also sets up a loan forgiveness program for nurses receiving advanced degrees who will teach at nursing schools. In addition, it offers nurses continuing education, geriatric training, and "career ladder" programs for job advancement, as well as internship and mentor programs.

State governments have also gotten involved. For example, the State of California has legislated minimum nurse staffing ratios and a number of other States are considering similar legislation. However, one analysis suggests that such measures may generate opportunity costs that are not easily measured and that may outweigh their benefits.^{1,20} For example, hospitals may cut spending for other personnel, such as unlicensed caregivers, housekeepers, and other support staff. The amount of non-nursing work performed by RNs in inpatient units could increase, and investments in medical technology and facilities to improve the quality of care could be deferred.

Hospitals that increase their nurse staffing ratios either across all units or within individual units have reason to be concerned about the impact of such steps on their finances. However, a new study finds that increased staffing of RNs does not significantly decrease a hospital's profit, even though it boosts the hospital's operating costs. A 1-percent increase in RN full-time equivalents increased operating expenses by about 0.25 percent but resulted in no statistically significant effect on profit margins. In contrast, higher levels of non-nurse staffing caused higher operating expenses as well as lower profits.²¹

The National Quality Forum, a private, not-for-profit group of public and private health care organizations created to develop and implement a national strategy for health care quality measurement and reporting, has been actively developing national voluntary consensus standards for nursing-sensitive performance measurement. Such measures can help to evaluate the extent to which the lack of qualified nursing staff is affecting the quality of health care. They can also help to identify opportunities to improve nursing performance.²²

In a recent report on strategies to address the evolving nursing crisis, the Joint Commission on the Accreditation of Healthcare Organizations proposed bolstering the nursing educational infrastructure through team training in nursing education, enhancing support of nursing orientation, in-service and continuing education in hospitals, and creating nursing career ladders based on educational level and experience. It also supports adopting the characteristics of "magnet hospitals," such as setting staffing levels based on nurse competency and skill mix relative to patient mix and acuity.²³ In addition, it proposes establishing financial incentives for health care organizations to invest in nursing services.²³

In its latest report on patient safety, issued in draft form in November 2003, the Institute of Medicine identified workforce deployment patterns in the typical work environment of nurses as contributing to many serious threats to patient safety. Among various measures it called for was the involvement of the direct-care nursing staff in determining and evaluating the approaches used to determine appropriate unit staffing levels for each shift.²⁴

AHRQ-Funded Research on Nurse Staffing and Quality of Care

Nurse Staffing and Quality of Care. Grant No. HS09958. Harvard University (Co-funded by Health

Resources and Services Administration, Centers for Medicare & Medicaid Services, National Institute of Nursing Research).

This project examined the relationship between the amount of care provided by hospital nurses and patient outcomes.

Nurse Staffing and Quality of Hospital Patient Care. Grant No. HS09991. University of Central Florida.

This project examined changes in licensed nurse staffing in Pennsylvania hospitals from 1991 to 1997 and assessed the relationship of licensed nurse staff to patient adverse events.

Outcomes of Hospital Dedicated AIDS Units. Grant No. HS08603. University of Pennsylvania.

This project compared differences in AIDS patients' 30-day mortality and satisfaction with care in dedicated AIDS units, magnet hospitals, and scattered-bed units in hospitals with and without dedicated AIDS units.

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The Patient Safety Initiative and Hospital Nurse Staffing

Hospital nurse staffing has an important relationship to patient safety and quality of care. Under a broad initiative focusing on patient safety issues, AHRQ has funded a group of projects on understanding the impact of working conditions on patient safety.⁶ Seven projects (\$2.5 million) related to hospital nurse staffing are included in this category. Researchers are examining the critical issues of how staffing, fatigue, stress, sleep deprivation, organizational culture, shift work, and other factors can lead to errors. These issues—which have been studied extensively in aviation, manufacturing, and other industries—have not been closely studied in health care settings.

Thus far, under this initiative, three studies have been completed. One study examined the effects of nurse staffing on adverse outcomes, morbidity, mortality, and medical costs.⁸ A second study developed an evidence report with an objective of identifying and summarizing evidence from the scientific literature on the effects of health care working conditions on patient safety. In addition to workforce staffing, it discussed workflow design, personal and social working conditions, the physical environment, and organizational factors.⁷ A third study of the work environment for nurses and patient safety identified key aspects of the work environment for nurses—including extended hours and workload—that likely have an impact on patient safety, and identified potential improvements in health care working conditions that could result in enhanced patient safety.²⁴

Other ongoing studies include:

- An examination of the impact of unit-level nurse workload on patient safety. This project is assessing the relationship between medical errors and daily changes in the working conditions in hospitals—including nurse staffing ratios, workload, and skill mix. Results are expected in early 2004.
- A study of hospital nurses' working conditions and patient outcomes. This project is examining the relationship between the occurrence of adverse patient outcomes and nursing care delivery models, job strain, risk of injury, and hospitals' use of overtime and contract nurses.
- A study of the impact of nurses' working conditions on medication safety. The aim of this study is to describe how nurses' working conditions, workload (e.g., shift length and patient assignment), actions taken (e.g., adherence to standards and actions that prevent adverse drug effects), and organizational variables affecting nurses are related to the safety and quality of the care they provide. The working conditions under study include physical environment, safety

climate, automation, and staffing levels.

- A study of the relation of hospital workload to patient safety. This study is examining the association between hospital activity/workload and rates of adverse drug events to assess whether the workload should be limited or the processes during times of high workload pressure should be reengineered to improve patient safety. Investigators are also developing new methods for identifying adverse events using electronic medical records.

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Conclusion

The largest of the studies discussed here found significant associations between lower levels of nurse staffing and higher rates of pneumonia, upper gastrointestinal bleeding, shock/cardiac arrest, urinary tract infections, and failure to rescue.^{6,7} Other studies found associations between lower staffing levels and pneumonia, lung collapse, falls, pressure ulcers, thrombosis after major surgery, pulmonary compromise after surgery, longer hospital stays, and 30-day mortality. However, researchers stress that, at present, such "nursing-sensitive" adverse outcomes should be viewed more as indicators or sentinel outcomes than as measures of the full impact of nurse staffing on patient outcomes.

Research findings indicating what minimal nurse staffing ratios should be either within the hospital or within its various subunits are not available. Researchers believe that more accurate and consistent measures of acuity and quality and more complete data on staffing for all types of nursing personnel are needed to explain the complex relationship between nurse staffing and the quality of care.¹³ The findings thus far can have a positive impact if used to educate and inform interested parties on how quality of care is changing and how it is linked to the contributions of nurses.

Some hospitals may choose to increase nurse staffing levels. According to the authors of one study: "The implications of doing nothing to improve nurse staffing in low staffed hospitals are that a large number of patients will suffer avoidable adverse outcomes and patients will continue to incur higher costs than are necessary."¹⁹ Finally, policymakers may want to monitor developments in nurse staffing issues closely in order to determine if additional legislative changes are needed to increase nursing supply and reduce adverse patient outcomes.

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