

Health Care at the Crossroads

Strategies for Addressing the Evolving Nursing Crisis



Joint Commission
on Accreditation of Healthcare Organizations

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A group of people in a meeting, with a man in a white lab coat pointing at a screen.

Joint Commission Public Policy Initiative

This white paper is the first work product of the Joint Commission's new Public Policy Initiative. Launched in 2001, this initiative seeks to address broad issues that have the potential to seriously undermine the provision of safe, high quality health care and, indeed, the health of the American people. These are issues which demand the attention and engagement of multiple publics if successful resolution is to be achieved.

For each of the identified public policy issues, the Joint Commission already has state-of-the-art standards in place. However, simple application of these standards, and other unidimensional efforts, will leave this country far short of its health care goals and objectives. Thus, this paper does not describe new Joint Commission requirements for health care organizations, nor even suggest that new requirements will be forthcoming in the future.

Rather, the Joint Commission has devised a public policy action plan that involves the gathering of information and multiple perspectives on the issue; formulation of comprehensive solutions; and assignment of accountabilities for these solutions. The execution of this plan includes the convening of roundtable discussions and national symposia, the issuance of this white paper, and active pursuit of the suggested recommendations.

This paper is a call to action for those who influence, develop or carry out policies that will lead the way to resolution of the issue. This is specifically in furtherance of the Joint Commission's stated mission to improve the safety and quality of health care provided to the public.

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Preamble

Speaking to a standing-room only crowd during a recent Joint Commission-hosted symposium on nurse staffing issues, Representative Carolyn McCarthy (D-NY), a nurse as well as a Congresswoman, said “In order to get anything done in Washington, you have to educate, educate, educate.” With this report – and its recommendations, the Joint Commission joins in the discussion and urgent call to action to address this nation’s growing shortage of nurses in acute care settings. In so doing, it seeks to build upon the thorough and thoughtful reports already issued by leadership organizations such as the American Nurses’ Association, the American Hospital Association, and the Robert Wood Johnson Foundation.

This report is more than an analysis, and even more than the recommendations that it contains. It is about accountabilities. The Joint Commission has recently developed and introduced cutting-edge staffing standards that create a new framework for measuring and improving nursing care. The Joint Commission is also taking major steps to reduce the documentation burden that so often falls on the shoulders of overworked nurses. This latter effort will undoubtedly require continuing attention and adjustment.

But there are others with accountabilities as well – hospital CEOs, public policy makers, nurse executives, schools of nursing, physicians, private industry, insurers, and still others. We as a country must understand not simply what needs to be done, but who specifically, alone or with others, is responsible for getting each task done.

This report focuses on hospitals because they are simply the logical starting point. They are the delivery system’s most complex setting of care, the greatest consumer of resources, the site where new advances in care (and their associated risks) are most commonly introduced, and the best example both of the problems underlying the nursing shortage and of the solutions most likely to bring about its resolution. Hopefully, what is learned and accomplished in the hospital setting will help to address the equally serious problems in nursing homes, home care, and other service venues.

This report has a singular focus on the nursing shortage. There are, of course, other compelling shortages of health care personnel – pharmacists, lab technicians and respiratory therapists, among them – each with its own set of issues and deserving of its own special focus. But the nursing shortage is, in many respects, the most extreme of these problems, and in the end, nurses are the primary source of care and support for patients at the most vulnerable points in their lives. The need for solutions to this problem is particularly urgent. That said, many recommendations contained in this report are directed to improving the health care workplace for the benefit of all who work there, and ultimately, for those whom they serve.

Introduction

Nearly every person's every health care experience involves the contribution of a registered nurse. Birth and death, and all the various forms of care in between, are attended by the knowledge, support and comforting of nurses. Few professions offer such a special opportunity for meaningful work as nursing. Yet, this country is facing a growing shortage of registered nurses. When there are too few nurses, patient safety is threatened and health care quality is diminished. Indeed, access even to the most critical care may be barred. And, the ability of the health system to respond to a mass casualty event is severely compromised. The impending crisis in nurse staffing has the potential to impact the very health and security of our society if definitive steps are not taken to address its underlying causes.

The shortage of registered nurses is already having ill effects on the U.S. health care delivery system: 90 percent of long term-care organizations lack sufficient nurse staffing to provide even the most basic of care;¹ home health care agencies are being forced to refuse new admissions;² and there are 126,000 nursing positions currently unfilled in hospitals across the country.³ And news of the shortage has reached the American public: 81 percent are aware that

there is a shortage, 93 percent believe that the shortage threatens the quality of care, and 65 percent view the shortage as a major problem.⁴ Further, the current nurse staffing shortage is burgeoning at a time when patient acuity is higher, care more complex, and demand for services often exceeds capacity.

But what is already a bad situation only threatens to worsen. The baby boom generation – all 78 million of them – are aging. More so than generations before them, baby boomers in their old age will have access to scientific advances and technologies that will help them live longer – if the health care delivery system can deliver. Given this anticipated additional demand for health care services, it is estimated that by 2020, there will be at least 400,000 fewer nurses available to provide care than will be needed.⁵

Aging right along with their baby boomer peers are nurses themselves. The average age of a working registered nurse today is 43.3, and that average age is increasing at a rate more than twice that of all other workforces in this country.⁶ Only 12 percent of registered nurses in the workforce are under the age of 30, a decline of 41 percent compared to a one percent decline for all other



The impending crisis in nurse staffing has the potential to impact the very health and security of our society if definitive steps are not taken to address its underlying causes.

occupations since 1983.⁷ By 2010, it is projected that the average age of the working registered nurse will be 50.⁸ As the growing numbers of nurses reach retirement, far too few are coming forward to fill their ranks.

Higher acuity patients plus fewer nurses to care for them is a prescription for danger. According to Joint Commission data, staffing levels have been a factor in 24 percent of the 1609 sentinel events – unanticipated events that result in death, injury or permanent loss of function – that have been reported to the Joint Commission as of March 2002. Other identified contributing factors, such as patient assessment, caregiver orientation and training, communication, and staff competency, implicate nursing problems as well. Conversely, several studies have shown the positive impacts on quality, costs and health outcomes when nurse staffing levels are optimized – fewer complications, fewer adverse events, shorter lengths of stay, lower mortality.^{9,10,11,12.}

In addition to its impacts on patient safety and health care quality, the nursing shortage is diminishing hospitals' capacity to treat patients. In a recent study conducted on behalf of the American Hospital Association, respondents reported that the nursing shortage has caused emergency department overcrowding in their hospitals (38%); diversion of emergency patients (25%); reduced number of staffed beds (23%); discontinuation of programs and services (17%); and cancellation of elective surgeries (10%). In this same study, nearly 60 percent of respondents

reported that nurses feel it is more difficult to provide quality care today because of workforce shortages.¹³

With its recent reports on patient safety and health care quality, the Institute of Medicine provided a call to action for the health care industry to substantially reduce the frequency of preventable medical errors and resulting adverse events. In the wake of these reports, health care organizations have rallied around the safety issue, introducing a variety of measures to reduce error. But what is being done to solve the nurse staffing problem, and the compromised patient safety and health care quality that lie in its wake?

With that question in mind, the Joint Commission convened a multi-disciplinary expert Roundtable on the Nursing Shortage to analyze the problem and, most importantly, to frame its solutions and identify accountabilities for these solutions. Roundtable participants focused on the principal factors that have contributed to the shortage, the growing threat of the nursing shortage to patient safety, and the priority solutions most likely to provide for a stable nursing workforce in the future.

Based on those discussions, the following recommendations are proposed for transforming the workplace, aligning nursing education and clinical experience, and providing financial incentives for health care organizations to invest in high quality nursing care.

1. Create Organizational Cultures of Retention

Adopt the characteristics of “Magnet” hospitals to foster a workplace that empowers and is respectful of nursing staff. Provide management training, as well as support, to nurse executives. Positively transform nursing work through the use of information and ergonomic technologies. Set staffing levels based on nurse competency and skill mix relative to patient mix and acuity. Adopt zero-tolerance policies for abusive behaviors by health care practitioners. Diversify the nursing workforce to broaden the base of potential workers.

2. Bolster the Nursing Educational Infrastructure

Increase funding for nursing education, including endowments, scholarships and federal appropriations. Establish a standardized, post-graduate nursing residency program. Emphasize team-training in nursing education. Enhance support of nursing orientation, in-service and continuing education in hospitals. Create nursing career ladders commensurate with educational level and experience.

3. Establish Financial Incentives for Investing in Nursing

Make new federal monies available for health care organizations to invest in nursing services. Condition continued receipt of these monies on achievement of quantifiable, evidence-based, and standardized nursing sensitive goals. Align private payer and federal reimbursement incentives to reward effective nurse staffing.

This paper provides supporting documentation for its conclusions, describes specific recommendations, and assigns accountabilities for carrying out these recommendations.

I. Create a Culture of Retention

The State of the Workforce

Through most of the 1990s, cost constraints driven by managed care, reduced Medicare reimbursement, and private sector purchaser initiatives influenced hospitals to merge, reduce bed capacity, or even close. As a means to achieving efficiencies, many hospitals undertook organizational restructuring initiatives that had unforeseen impacts on nursing. In many cases, these restructuring initiatives affected nursing roles, workload, and nursing authority within the organization.¹⁴

In the preceding decades, the nursing profession had made great strides in developing strong leaders, establishing exemplary clinical and management practices, and achieving authority and support from hospital management, making possible the “magnet hospital” designation in the early 1980s.¹⁵ By the late 1990s, most of this progress had been lost. Characteristic of many restructuring initiatives were the replacement of registered nurses with less skilled workers, a diminishment of the nurse executive role, and the deployment of fewer nurse managers.¹⁶ The unintended results of these changes included a de-emphasis of the nurse-patient relationship, less time spent on direct care-giving, less mentoring of staff

nurses, and the undermining of the nurse executive’s clinical leadership.¹⁷ Further, increases in the nurse’s span of patient care responsibilities were not accompanied by identification and implementation of work process efficiencies. Nurses affected by restructuring initiatives reported higher levels of dissatisfaction and less meaningful nurse-patient relationships.¹⁸

The dissatisfaction of hospital nurses has persisted. In a recent study, 41 percent of nurses currently working reported being dissatisfied with their jobs; 43 percent scored high in a range of burn-out measures; and 22 percent were planning to leave their jobs in the next year. Of the latter group, 33 percent were under the age of 30.¹⁹

An American Nurses Association survey found that 55 percent of nurses, disheartened by their experience in the profession, would not recommend a nursing career to their children or friends.²⁰ And, at least one study has shown that if a hospital’s nurses are unhappy, chances are that their patients are unhappy as well. According to a Press Ganey and Associates report, there is an almost perfect correlation between hospital employee satisfaction and patient satisfaction.²¹



As nurses leave, this drives up hospital costs while driving down profitability, productivity, efficiency and quality.

The High Cost of High Turnover

Ultimately, nurse dissatisfaction costs the hospital dearly in high replacement costs, resulting increases in patient care costs, and lowered bottomlines. Most importantly, the evidence suggests that among the highest costs of high turnover is greater patient mortality.²²

According to a recent report from the Voluntary Hospitals of American (VHA), it costs approximately 100 percent of a nurse’s salary to fill a vacated nursing position. For a medical/surgical nurse, that averages about \$46,000; the cost is \$64,000 for a critical care nurse.²³ Assuming a turnover rate of 20 percent – the current average turnover rate among health care workers – a hospital employing 600 nurses at \$46,000 per nurse per year will spend \$5,520,000 a year in replacement costs.²⁴

Not surprisingly, high turnover is associated with higher costs per discharge. The VHA report determined that organizations with higher turnover rates – 21 percent or more – had a 36 percent higher cost per discharge rate than hospitals with low turnover rates

of 12 percent or less.²⁵ High turnover, in turn, led to lower profitability. Low turnover organizations averaged a 23 percent return on assets compared to a 17 percent return for high turnover organizations.²⁶

Organizations that are better able to retain their nurses also fare better on quality measures. Low turnover hospitals – at rates under 12 percent – had low risk-adjusted mortality scores as well as low severity-adjusted lengths-of-stay compared to hospitals with turnover rates that exceeded 22 percent.²⁷

As the VHA report suggests, there is a strong business case for creating a culture of retention. As nurses leave, this drives up hospital costs while driving down profitability, productivity, efficiency and quality. Monies spent on recruitment and replacement activities could obviously be better spent on creating workplace environments that value and reward employees, encourage employee loyalty, and ultimately support safe, high quality care.

Tactics	Accountability
<ul style="list-style-type: none"> • Create a culture of retention for nursing staff 	<ul style="list-style-type: none"> ➔ Hospital CEOs ➔ Trustees ➔ Physician Leaders ➔ Nurse Executives

Not a Great Place to Work

According to a Peter D. Hart Research Associates study (April 2001), the top reason why nurses leave patient care, besides retirement, is to seek a job that is less stressful and less physically demanding (56%). The Hart study also found that a significant number, 22 percent, are seeking more regular hours; 18 percent desire more money; and 14 percent want better advancement opportunities. When asked what the biggest problem with nursing is, respondents who were in active nursing practice cited understaffing (39%) and the stress and physical demands of the job (38%).

Nurses have been described as the “canaries in the coal mine.” Many have been sacrificed before the now widespread realization that there is something wrong with the work environment. Nurses leave hospitals because they are overworked and overburdened, often with tasks that were once the responsibilities of less skilled workers. They similarly

have neither the managerial support nor the control over their environments – through delegated authority -- to marshal and deploy scarce resources in order to manage the often challenging, and sometimes critical patient care situations which they may face at any hour of the day or night. In one study, only 29 percent of nurses reported that their administrations listen and respond to their concerns.²⁸ The rewards for their hard work are also lacking. Only 57 percent say that their salaries are adequate; only 32 percent report having advancement opportunities; and over 50 percent say that they have been subjected to verbal abuse on the job.²⁹

It’s Not the Patients

Overwhelmingly, nurses report that the most enjoyable aspect of being a nurse is helping patients and their families.³⁰ The majority of nurses (74%) said they would stay at their jobs if changes were made. Top among the identified desirable changes were increased staffing, less paperwork, and fewer administrative duties.³¹

Tactics	Accountability
<ul style="list-style-type: none"> • Adopt fair and competitive compensation and benefit packages for nursing staff • Minimize the paperwork and administrative burden that takes nursing time away from patient care 	<ul style="list-style-type: none"> ➔ Hospitals ➔ JCAHO ➔ Managed Care Companies ➔ CMS, OSHA, and other regulators, including State Agencies

The combination of too few nurses and nursing support personnel, coupled with excessive paperwork and administrative tasks, leaves too little time for nurses to spend on direct patient care. Care is literally being left undone. In a survey of nurses describing their last shifts, 31 percent reported that their patients did not receive necessary skin care; 20 percent said patients did not receive oral care; and 28 percent were not able to provide patients and their families with necessary education and instructions.³² As for providing comfort to their patients, 40 percent of nurses were not able to comfort or talk with their patients on their last shift.³³ Yet, of these same nurses, nearly 70 percent reported having to perform “non-nursing” tasks such as ordering, coordinating or performing ancillary services.³⁴ Shortages of ancillary personnel and other hospital workers, have created “scope creep” for the nurses’ role, adding supply chain management, housekeeping, food service and many other tasks that pull nurses away from patient care.

Nurses are also overwhelmed with paperwork and administrative duties. A study commissioned by the American Hospital Association found that for every hour of patient care, 30-60 minutes were spent on the subsequent paperwork.³⁵ This excessive paperwork derives from managed care and other payer requirements, OSHA and various other federal and state regulations, and Joint Commission standards compliance activities.

For its part, the Joint Commission, in early 2001, launched an in-depth review of its hospital standards and requirements for demonstrating compliance with those standards. A 20-member national task force comprising hospital leaders, clinicians, and technical experts, among others, is now finalizing its recommendations which are expected to result in sweeping changes to the standards and substantial reductions in the standards compliance burden, including paperwork. The streamlined accreditation requirements will be formally implemented on January 1, 2004. The impact of this initiative will be carefully monitored and if greater efforts are needed, they will be pursued.

A Safer Work Environment

In addition to the administrative and paperwork burdens that they bear, nurses are daily exposed to significant risks to their personal health and safety. Beyond the chronic fatigue, job-related injuries, including needlesticks, back injuries and physical assaults are common experiences on the job. According to a recent study by the American Nurses Association, more than 70 percent of surveyed nurses indicated that continuing severe stress and overwork were among their top health-related concerns. Forty percent of nurses reported having been injured on the job; 17 percent experienced physical assaults while working. Seventy-five percent of nurses surveyed stated that unsafe working conditions interfere with their ability to provide quality care.³⁶ Nearly 90 percent of surveyed nurses indicated that health and safety concerns influence the type of nursing work they do and their likelihood to continue to practice.³⁷

In addition, despite the availability of safe needle devices, 18 percent of the ANA survey respondents indicated that these devices were not provided at their facilities. Nearly 60 percent of respondents said that patient lifting and transfer devices to prevent back and other physical injuries were not provided by their organizations.³⁸

Since one-third of all workplace injuries are ergonomics-related,³⁹ the federal government is implementing a workplace ergonomics policy for voluntary adoption that will begin with nursing homes. Voluntary guidelines for nursing homes were released in April 2002. These are based on identified best practices that have been designed to, among other things, encourage the installation and use of lifting devices as an alternative to the lifting of patients by nurses and nurse aides.⁴⁰

With an aging nursing workforce and an increasingly corpulent population, health care organizations will find it a basic necessity to acquire ergonomic technologies that reduce the risk of physical strain and injury in the delivery of patient care. Such acquisitions must logically go hand-in-hand with efforts to increase staffing levels. If nurses are too few and, subsequently, too busy on a shift, a nurse may be reluctant to call on colleagues to pair up to turn or lift a patient, or to team up to prevent a disruptive patient from inflicting harm. If the staffing levels and work environments are not safe for the nurses, they will not be safe for the patients.

On-the-Job Abuse

Incidents of verbal abuse of nurses, typically by physicians, are unfortunately well known, even commonplace. Less well known is the impact of this disruptive behavior on nurse satisfaction and retention levels. A recent VHA study found that among nurses, physicians and health care executives, nurse-physician relationships were considered to be a significant issue at their hospitals and that disruptive behavior was a strong contributing factor to diminished nurse satisfaction and morale.⁴¹ More than 90 percent of respondents had witnessed a disruptive incident.⁴²

It is a small minority of physicians who behave badly toward their nurse colleagues. According to the VHA survey, an estimated 2-3 percent of the respondents' medical staffs were most commonly implicated. The study also found that, while individual physician personalities were commonly underlying factors in abusive incidents, specific triggers often precipitated events.⁴³ These included nurses telephoning or paging physicians, particularly during evenings or weekends, to question or clarify orders; orders carried out incorrectly or in an untimely manner; unexpected delays in care; difficulties with procedures or process flow; and changes in patient condition.⁴⁴

The impact of abusive incidents can have grave consequences for patients, as well. The abuse breeds intimidation, and may consequently inhibit nurses from communicating with physicians even when communication may be vital to the quality and safety of care. One such case, reported in *Hospitals and Health Networks* (March 2002), resulted in a fatal medication error when a nurse was rebuffed when she called a physician to clarify an order.

With growing awareness of the issue, more is being done to create “zero tolerance” workplaces. The Hennepin County (Minnesota) Medical Society has developed guidelines that promise to significantly reduce abusive behaviors.⁴⁵ Approximately 30 organizations have adopted the guidelines, and one, Kaiser Permanente in Colorado, says it has stamped out abuse in its 18 medical offices.⁴⁶ Experts suggest using a collaborative, educational approach to raise understanding and awareness of appropriate codes of conduct and enforcing the expected behaviors with a “three strikes and you’re out,” policy.⁴⁷

Safe Staffing Levels

Where there is little disagreement is around the relationship between nurse staffing levels and patient outcomes. Nurses are the front line of patient surveillance -- monitoring patients’ conditions, detecting problems, ready for rescue. Spread too thinly or lacking the appropriate skill set, the nurse is at risk of missing early signs of a problem, or missing the problem altogether. One recent study found that higher nurse staffing levels, particularly with a greater number of R.N.s in the staffing mix, correlated with a 3-to-12 percent reduction in certain adverse outcomes, including urinary tract infection, pneumonia, shock, and upper gastrointestinal bleeding.⁴⁸

Several studies have examined the relationship between nurse staffing levels and the risk of patient complications. One study, examining intensive care unit (ICU) nurse staffing and complications after abdominal aortic surgery, found that patients in hospitals

Tactics	Accountability
<ul style="list-style-type: none"> • Adopt zero-tolerance policies for abusive behaviors by physicians and other health care practitioners • Measure, analyze and improve staffing effectiveness 	<ul style="list-style-type: none"> ➔ Hospitals ➔ Physicians ➔ Hospitals

with fewer ICU nurses were more likely to have longer lengths of stay and postoperative complications.⁴⁹ A study of the impact of ICU nurse-to-patient ratios on patients who had undergone hepatectomy (liver excision) found that fewer nurses on the night shift resulted in an increased risk of complications, increased costs to the organization, and longer lengths of stay.⁵⁰ Several other studies have found positive associations between nurse staffing levels and patient outcomes, including lower catheter-related infections of the bloodstream, lower nosocomial infection rates in a pediatric cardiac ICU, and lower rates of decubitus ulcers, complaints and mortality.⁵¹ And another recent study provides evidence that nurse-to-patient ratios matter. A lower number of deaths were associated with a nurse ratio of one R.N. to six patients versus a ratio of one R.N. to ten patients.⁵²

When nurses were asked to report their perceptions of the staffing levels in their hospitals, only 34 percent said they had enough R.N.s to provide quality care; and still fewer, 33 percent, had enough staff to get their work done. Of these nurses, 83 percent had experienced an increase in the number of patients assigned to them.⁵³ Not surprisingly, nurses have also reported

dissatisfaction with the outcomes of their work and have real concerns about the risks to patients: only 36 percent describe the quality of care in their hospital as excellent; while 45 percent report that the quality of care has deteriorated in the last year; and 49 percent report receiving frequent complaints from patients and families.⁵⁴

Insufficient staffing not only adversely impacts health care quality and patient safety, it also compromises the safety of nurses themselves. The risk of having a needlestick injury is two-to-three times higher for nurses in hospitals with low staffing levels and/or poor working climates.⁵⁵

Current mandated ratios, related legislative proposals, and other nurse staffing initiatives are aimed primarily at adding to the supply of nurses. However, these efforts do not address other critical issues, such as nurse competency, skill mix in relation to patient acuity, and ancillary staff support. Because of the mounting evidence of the impact of staffing on health care outcomes, the Joint Commission has recently introduced new standards that will require health care organizations to assess their staffing effectiveness by continually screening for potential issues that can arise from inadequate or ineffective



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they will not be safe for the patients.**

staffing. These standards, the result of a two-year project that involved a panel of more than 100 experts in nursing and related disciplines, are designed to help health care organizations monitor and assess whether their staffing – both by nurses and by other health care practitioners and technical staff – includes the right numbers of caregivers of the requisite competency and skill mix to provide safe, high quality care.

In assessing nurse staffing effectiveness, the standards require organizations to use data from the use of nursing-sensitive clinical and human resources indicators, such as adverse drug events, patient falls, use of overtime, staff turnover rate, patient and family complaints, and staff injuries on the job. Organizations are required to select two each of human resources and clinical indicators, half of which must be taken from a list of 21 established indicators in these two areas. Although not mandating specific staffing levels or ratios, the Joint Commission standards do, in essence, require organizations to determine their own staffing ratios based on their own evidence and experience.

Nursing Leadership

The first principle for designing safe systems in health care organizations is – according to the IOM report *To Err is Human* — to provide leadership from the top-most level of the organization. The need to create a safe and effective nursing environment clearly parallels, and indeed overlaps, this IOM dictum.

Beyond their direct adverse effects on nursing practice, the restructuring initiatives of the 1990s had another lasting impact on hospital nursing. They unwittingly led to a demise in nursing leadership. This is no small problem in view of the fact that nurse executives, by the nature of their positions, must, almost on a daily basis, meet the often conflicting objectives of both the administrative and clinical staffs, and reconcile these conflicts in the best interests of both nurses and patients. Turning this problem around is a responsibility that will fall squarely on the shoulders of hospital management, physician, and trustee leaders.

Tactics	Accountability
<ul style="list-style-type: none"> • Provide the management training and resources nurse executives need to attain and maintain a culture of retention 	<p>➔ Hospitals</p>

Critical decision-making is an inherent responsibility of the professional nurse. Nurse executives should both be the recipient of delegated authority and provide it to the nurses whom they lead. Nurse executives can also play a pivotal role in team building, and in creating a culture of collaboration that demands and rewards safe, high-quality patient care.

The Joint Commission has long advocated for the authority of the nurse executive through its standards. First, the standards require that the nurse executive have the appropriate clinical credentials and managerial experience to warrant the authority.⁵⁶ Secondly, in exercising that authority, the nurse executive is expected to participate with the governing body, management, medical staff and other clinical leaders in the organization’s decision-making processes.⁵⁷

The delegation of authority by nurse executives to nursing unit leaders is a reflection of their confidence in the competence of their

staffs and an acknowledgement of the practical importance of such delegation and its related impact on staff morale. Having decision-making authority as to how their units are run, and how scarce resources are deployed by unit leaders says volumes about the standing and perceptions of nursing in a hospital. The empowerment of staff nurses, in turn, acknowledges their role in making real-time, critical decisions at the point of care. In the middle of the night, when there are no senior managers or nurse executives on duty, the decisions of nurses, in essence, control the patient outcomes.

In a changing and increasingly complex environment, nurse executives must be given opportunities for management training and development to acquire leadership skills, skills in managing scarce human resources, and skills in assessing the potential value of new technologies that support nursing care, among others. The effective application of these skills also needs to be rewarded.

Tactics	Accountability
<ul style="list-style-type: none"> • Delegate authority to nurse executives and other nurse managers, and, in turn, to staff nurses, for patient care and resource deployment decisions 	<ul style="list-style-type: none"> ➔ Hospital CEOs ➔ Nurse Executives

Because organizational change cannot occur without the commitment and engagement of organization leaders, some organizations are creating leadership incentive programs based on staffing measures.⁵⁸ Others have advocated for nursing representation on boards of trustees,⁵⁹ while still others are creating “nursing movements” within their organizations. The latter includes Sutter Health’s “RN Agenda” program to improve nursing satisfaction and the quality of work life through enhanced benefits and compensation; expanded opportunities for career growth; and continuing education and training.⁶⁰ Their agenda also includes raising the image of and interest in nursing in their community by promoting the profession in local schools.⁶¹

The return on investment
in nursing will be
reflected both in cost savings
and in improvements
in the safety and quality
of care provided.

The War for Talent

Among the many nurses who have left the direct patient care setting to seek “more regular hours,” many now work for managed care plans and insurance companies, pharmaceutical firms, health care technology and medical device vendors, and consulting firms, among others. These positions often offer nurses the opportunity for professional stimulation as well as a regular business week. No nights. No weekends. No mandatory overtime. These alternative nursing career options raise the level of competition for recruiting nurses to and retaining them in direct patient care settings.

One major source of nurse overwork and dissatisfaction is overtime. With many shifts short-staffed, nurse managers face the dilemma of either overworking staff or having too few nurses to care for patients. Sometimes the overtime shifts that result are explicitly mandatory; nurses are threatened with dismissal or with reporting to the State Board of Nursing for patient abandonment. But, more often, overtime is mandated through not-so-subtle coercion – “How can you leave your overworked colleagues and patients in such dire circumstances?” The use of overtime as a staffing shortage “solution” is pervasive. On average, nurses work an extra eight-and-a-half weeks of overtime per year.⁶² There are circumstances in which mandatory overtime may provide necessary and appropriate coverage, for example, in response to a disaster or mass casualty event. But in too many hospitals, overtime is routine, even sought

after by some nurses who depend on overtime wages to supplement their income. However, even these nurses consider mandatory overtime without advanced notice dangerous for themselves and for their patients because they cannot plan for enough sleep in advance.⁶³

To date, six states – Maine, Maryland, Minnesota, Oregon, New Jersey and Washington⁶⁴ -- have passed legislation to ban or limit mandatory overtime, and many other states are actively considering similar legislation. Most of this legislation limits mandatory overtime only as it applies to licensed nurses working in hospitals and provides employers with some leeway in requiring nurses to work beyond their scheduled shifts.⁶⁵ The Washington statute prohibits nurses from working more than 12 hours in a 24-hour period or more than 80 hours within 14 consecutive days.⁶⁶ The New Jersey law bars health care facilities -- including hospitals, nursing homes, assisted living facilities, home health agencies and psychiatric hospitals -- from mandating overtime for nurses except in cases of emergencies, and even then, the health care facility must show that it has exhausted all other possible remedies to meet staffing needs.⁶⁷

Filling Vacancies

The nursing shortage and the implications it has for health care over the coming decades has led to a flurry of nurse recruitment activities and proposals. Johnson and Johnson recently launched a \$20 million, two-year campaign that is using advertising to raise the image of nursing among the American public, and is providing scholarships for both students and aspiring nursing school faculty. Less constructive are efforts by hospitals to lure nurses away from other hospitals, an expensive practice that only perpetuates the nursing shortage. Forty-one percent of hospitals now report paying sign-on bonuses as a recruiting incentive.⁶⁸ One hospital in the Dallas-Fort Worth area offered pediatric nurses signing bonuses of \$15,000, higher starting salaries, and even enhanced benefits such as free child care as incentives to leave their current jobs.⁶⁹ It worked – pediatric nursing staffs at competing hospitals in the area were drained. However, signing bonuses do not create employee loyalty; instead they influence nurses to jump from job-to-job to achieve and maintain higher levels of income.

Hospitals have also tapped into the pools of nurses in other countries to fill the void, offering the opportunity of immigration to America as the primary incentive. But,

Tactics	Accountability
<ul style="list-style-type: none"> • Limit the use of mandatory overtime to emergency situations 	<p>➔ Hospitals</p>

recruitment of foreign nurses perpetuates the shortage on a global scale. Frequently targeted countries for nurse recruitment, such as Canada and Ireland, are now facing shortages of their own, and another, the Philippines, is experiencing a “brain drain” since the nurses leaving for the U.S. are typically the Philippines’ most experienced.⁷⁰

As an alternative means of meeting staffing needs, many hospitals are relying on nurses placed by temporary staffing agencies. The current nursing shortage has presented temporary staffing firms with record business – supplying five percent of nurses that work in hospitals nationwide and generating more than \$7 billion a year in revenue.⁷¹ Fifty-six percent of hospitals report they are using agency or traveling nurses to fill vacancies.⁷² One Oregon hospital has paid hundreds of thousands of dollars a week in temporary nurse fees – at \$54 an hour per nurse, \$20 more per hour than a permanent employee, inclusive of benefits and taxes.⁷³ The fact that temporary nurses earn more and can choose their own schedules makes temporary nursing an attractive option for nurses, and a source of dissatisfaction for the staff nurse working alongside them for less pay and little control over his or her work schedule.

While temporary nurses today are typically well educated and experienced, there are inherent risks in bringing nurses in who are unfamiliar with the hospital’s practices and policies. The *Chicago Tribune* reports that in Illinois, state disciplinary records show that temporary nurses have increasingly been the focus of medical error investigations which turn out to be related to a lack of knowledge of hospital procedures or unfamiliarity with patient ailments.⁷⁴

Bills passed by the House and Senate at the conclusion of 2001, both called the Nurse Reinvestment Act, focused on attracting people into nursing. In July 2002, these bills were reconciled, passed and sent to the President for signature. The legislation authorizes loans for nursing students willing to work in a facility having a nursing shortage, loans for nurses seeking advanced degrees to become nursing school faculty, grants for geriatric care training for nurses, grants for health facilities to aid in nurse recruitment, and federally sponsored public service announcements.⁷⁵



Having decision-making authority on how their units are run, and how scarce resources are deployed by unit leaders says volumes about the standing and perceptions of nursing in a hospital.

Mandated Ratios

In an effort to create a safety net of nurses and ensure minimum levels of nurse staffing, nursing labor unions have long advocated for mandated nurse-to-patient ratios. California has now become the bellwether state for just such a mandate. Having passed legislation in 1999 to set minimum staffing levels, California recently announced the proposed formula that will be in effect for hospitals throughout the state by July, 2003: one nurse for every six patients on general medical/surgical units (one nurse for five patients 18 months after implementation); one pediatric nurse for every four children; one obstetric nurse for every two laboring women; one nurse for every four emergency patients; one nurse for every two critical care patients, and one nurse for every trauma patient. Ratios are also delineated for operating rooms, neonatal ICUs, intermediate care and well-baby nurseries, post-anesthesia units, burn units, step-down and telemetry units, and psychiatric units. The ratios will undergo extensive public comment during statewide hearings in 2002.

The California legislation has been applauded by the California Nurses Association, the Service Employees International Union (SEIU), and the United Nurses Association of California (UNAC); however, some leaders in these groups are still actively seeking even stricter levels for selected ratios.⁷⁶

At the same time, the new California law has its antagonists. Concerned about the costs involved in complying with the ratios as well as other practical obstacles, the California Healthcare Association, on behalf of its member hospitals, opposed the legislation.⁷⁷ In addition to costs, one practical obstacle is California’s extremely short supply of nurses. California ranks 49th among states in its share of registered nurses – 544 per 100,000 residents.⁷⁸ The California Healthcare Association estimates that it will cost California hospitals \$400 million a year in added wages and benefits and the hiring of at least 5,000 nurses in order to comply with the mandated ratios.⁷⁹

Despite these challenges, Kaiser Permanente, among the largest of California’s health care employers, endorsed a UNAC/SEIU staffing ratio proposal of one medical-surgical nurse to four patients – a goal more stringent than the California mandate. Kaiser Permanente anticipates that the additional staffing cost will range from \$140 million to \$200 million per year; however, the organization also expects to achieve savings through reduced nursing turnover and improved patient outcomes.⁸⁰ In fact, Kaiser Permanente hopes to become an “employer of choice” among nurses.⁸¹

Tactics	Accountability
<ul style="list-style-type: none"> • Set staffing levels based on competency and skill mix applicable to patient mix and acuity 	<p>➔ Hospitals</p>

To help hospitals in their recruitment efforts, California Governor Gray Davis has pledged \$60 million to train 5,100 nurses over the next three years. This includes funds earmarked for hospital-based, community college, and state university education and training, and a statewide advertising campaign to recruit nurses.⁸²

Even though the California mandate was precedent setting and has inspired the drafting of similar legislation in Massachusetts, Oregon and other states⁸³, many other nurses and health professionals across the country do not support mandated ratios as a solution. They are concerned that mandated ratios do not account for the differing skill sets of nurses or the acuity of patients. Ratios also do not account for the numbers and skills of ancillary staff available to support patient care activities. Mandated ratios may lead to greater numbers of bedside nurses, but this could be at the cost of fewer ancillary support staff. In such a scenario, nurses, with more to do beyond the scope of nursing care, could still be thinly spread and even less satisfied with what they are being asked to do.

Improving Work Flow

Health care today is highly complex – a mass of wiring and tubing can nearly obscure the ICU patient underneath; and medications have so proliferated that by one estimate, 20,000 medication orders are written each day on the inpatient units of an urban hospital.⁸⁴ This is an environment rife with the potential for error. There are, however, emerging clinical information systems and other technologies that can improve safety, reduce paperwork and provide nurses with more time to spend on care-giving. Organizations that have adopted these technologies, such as electronic medical records and automated drug-dispensing machines, have reported gains in nurse satisfaction, retention and productivity, and have reduced the risk of health care errors.

One organization that deployed an electronic medical record reported that nurses in the charge nurse role spend 2.75 fewer hours per shift on the medication administration process, while other nurses spend one hour less.⁸⁵ Charting, which is typically done at the end of the nurse’s shift, is done automatically as a by-product of the care

Tactics	Accountability
<ul style="list-style-type: none"> • Adopt information, ergonomic and other technologies designed to improve work-flow and reduce risks of error and injury 	<p>➔ Hospitals</p>

process, which for one hospital, has translated into a \$1.2 million savings in nursing time. This time has been reallocated to direct patient care and skill development training.⁸⁶ Another hospital that provided nurses with an automated medication record accessible on a handheld device was able to reduce medication errors by 79 percent and save \$300,000 per year.⁸⁷ Other technologies, such as bar coding and scanning, and robotics can reduce nursing time spent on supply management and documentation, and facilitate safe and efficient medication administration, even in the face of shortages of pharmacy and ancillary personnel.

While nursing staff members have much to gain from such technology, nurse executives and unit staff are seldom involved in the purchasing decisions. This undermines the ability of the organization to maximize its benefits from technology investments.

The health care industry has lagged behind other industries in the adoption of information technology. Its value lays both in the opportunities for error reduction and productivity gains, and in the enticements it offers for the recruitment and retention of nursing staff. For younger generations raised in the “Information Age,” working without information technology support is inconceivable. By improving work flow and permitting the devotion of more time to direct caregiving, information technology can improve the quality of life for nurses and the quality of care for patients.

In its 2001 report, “Crossing the Quality Chasm,” the Institute of Medicine called for the widespread adoption of information technologies to support the redesign of the health care system. In line with the IOM’s aims, the Medication Errors Reduction Act of 2002 proposes to provide hospitals and skilled nursing facilities with financial assistance -- \$100 million a year for ten years -- for the purchase or development of technologies to reduce adverse events and improve patient safety. Parallel bills have now been introduced in the House and Senate, but prospects for passage of this legislation this year are uncertain.

Winning Characteristics

Some hospitals fare better in recruiting and retaining nurses than others. Top-level management that provides nurses with delegated authority, adequate staffing, competitive compensation and a collaborative culture have a built-in resistance to cyclical nursing shortages – theirs is too good a place to work to leave.

The characteristics of some of these winning hospitals – called magnet hospitals -- were first studied in 1983 through a project sponsored by the American Academy of Nursing.⁸⁸ That original research and subsequent studies showed that the nurses working in these magnet hospitals had strong support from the leadership of the organization. This was reflected in the level of autonomy nurses were provided to practice within the scope of their capabilities; nursing control over support services and personnel, and other resources necessary

to the provision of high-quality care; and effective, constructive communications between nurses and physicians.⁸⁹ Nurses in magnet hospitals were also found to have lower levels of emotional exhaustion, which is a leading indicator of likely nurse turnover.⁹⁰

In 1993, the American Nurses Credentialing Center (ANCC), inspired by the original magnet hospitals, established the Magnet Services Recognition Program to recognize hospitals that had achieved excellence in providing nursing services.⁹¹ The recognition program is based on standards that address assessment, diagnosis, identification of outcomes, implementation and evaluation of process improvements, and professional performance. The latter covers quality of care, administration, education, collaboration, ethics, research and resource utilization.⁹² To date, the ANCC magnet program has certified 50 hospitals in the U.S., and is now expanding internationally.

The ANCC magnet hospital program has had proven success in raising the standards of nursing practice, even beyond the performance levels achieved by the original magnet hospitals.⁹³ The characteristics of ANCC magnet hospitals include high nurse-to-patient ratios, substantial nurse autonomy

and control over the practice setting, positive nurse and physician relationships, nurse participation in organizational policy decisions, and strong nursing leadership.⁹⁴

Not only are nurses in magnet hospitals more likely to rate their care environment as excellent, but there is also evidence that patient outcomes are better in magnet hospitals.⁹⁵ In one study, AIDS patients in magnet hospitals had a significantly lower mortality rate than AIDS patients in dedicated AIDS units or in scattered bed arrangements in non-magnet hospitals.⁹⁶ The magnet hospitals' better outcomes in this instance were attributed to their higher nurse-to-patient ratios.⁹⁷

That magnet hospitals have higher nurse-to-patient ratios is an indication that, at the highest levels of the organization, the essential role of nursing in providing high quality care is recognized, since specific nurse-to-patient ratios are not a requirement for magnet status.⁹⁸ This higher level of staffing, though, does lead to higher labor costs. However, in a cost/benefit analysis of magnet hospitals, length-of-stay for AIDS patients was shorter on average than in non-magnet hospitals.⁹⁹ Magnet hospitals also experience less utilization of intensive care units and lower



Some hospitals fare better in recruiting and retaining nurses than others—theirs is too good a place to work to leave.

ancillary costs, perhaps reflecting a lower frequency of adverse patient events and earlier nursing interventions for incipient problems in magnet hospitals.¹⁰⁰ In addition, the modest nursing staff turnover in magnet hospitals translates into significant reductions in recruitment and orientation costs.

The Joint Commission is an advocate for the ANCC’s Magnet Services Recognition Program because of the positive impact the program has had in creating workplace cultures and nursing practices that support patient safety and high quality care. The Joint Commission is now considering special recognition of magnet hospital designations on the Joint Commission accreditation certificates for these hospitals.

The Next Generation

The current risk/reward quotient for choosing nursing as a profession has not been lost on those that would be the next generation of America’s nurses. Women have traditionally comprised the profession – in 2000, only six percent of nursing positions were held by men¹⁰¹ -- but women have more career options today than in years past. Among these options, nursing, with relatively stagnant salaries and few career paths, in an industry perceived to be low on technology and high on bureaucracy¹⁰² frequently falls short.

One study found that in 1999, five percent of female college freshman and less than .05 percent of men identified nursing as being among their top career choices.¹⁰³ For women, this represented a decline of roughly 40 percent since 1973.¹⁰⁴ It is worth noting, however, that a similar decline has been seen in other female-dominated occupations, such as primary and secondary school teaching.¹⁰⁵ The proportion of women indicating a probable career as a physician or dentist was 6.5

Tactics	Accountability
<ul style="list-style-type: none"> • Recognize and reward hospitals that adopt the basic characteristics of “magnet” hospitals • Diversify the workforce to broaden the base of potential workers and to improve patient safety and health care quality for patients of all origins and backgrounds 	<ul style="list-style-type: none"> ➔ Joint Commission ➔ American Nurses Credentialing Center ➔ Hospitals ➔ Federal, State and Private Sector Scholarship Programs ➔ Nursing School Hospitals ➔ Nursing Leaders

percent, slightly higher than the 4.5 percent of men.¹⁰⁶ Women were also twice as likely to choose business over nursing as a probable career (10%), although still at a lower rate than men (15%). Both genders show equal propensity to become lawyers (3.5 percent).¹⁰⁷

There have recently been modest signs of progress in attracting more individuals to nursing. Enrollment levels in nursing schools, in decline for the previous six years, have recently shown a 3.7 percent rise.¹⁰⁸ This rise can be attributed in part to the growth in the unemployment rate as a consequence of the current economic recession – more people now have time both to go back to school and to rethink their career options. In the face of a tight job market, a career option that virtually guarantees a job may be especially appealing. The small lift in attraction may relate as well to the country’s “call to service” following the September 11 terrorist attacks. Still, even with these gains, there are today roughly 21,000 fewer nursing students than in 1995.¹⁰⁹

The current nursing shortage has brought new attention to the future potential pool of health care workers. For instance, the Department of Health and Human Services recently launched a campaign, “Kids Into Health Careers,” that is aimed at helping parents, teachers and community organizations promote health care careers, especially to minority students. Minorities are substantially under-represented in the nursing workforce, which is 87 percent white compared to the 72 percent of the overall population that is white.¹¹⁰

Another recent Institute of Medicine study shows that, overall, racial and ethnic minorities receive lower quality health care than non-minorities regardless of economic and insurance status.¹¹¹ The report further found that during care encounters, health care provider stereotyping and biases contributed to this unequal treatment.¹¹² Among its conclusions, the Institute of Medicine report cites the opportunity to improve care through appropriate increases in the numbers of ethnic and minority health care professionals.¹¹³



The Joint Commission is an advocate for the ANCC’s Magnet Services Recognition Program because of the positive impact the program has had in creating workplace cultures and nursing practices that support patient safety and high quality care

Create a Culture of Retention

Tactics	Accountability
<ul style="list-style-type: none"> • Create a culture of retention for nursing staff. 	<ul style="list-style-type: none"> ➔ Hospital CEOs ➔ Trustees ➔ Physician Leaders ➔ Nurse executives
<ul style="list-style-type: none"> • Provide the management training and resources nurse executives need to attain and maintain a culture of retention. 	<ul style="list-style-type: none"> ➔ Hospitals ➔ Nursing Leaders
<ul style="list-style-type: none"> • Delegate authority to nurse executives and other nurse managers, and to staff nurses, for patient care and resource deployment decisions. 	<ul style="list-style-type: none"> ➔ Hospital CEOs ➔ Nurse executives
<ul style="list-style-type: none"> • Recognize and reward hospitals that adopt the basic characteristics of “Magnet” hospitals. 	<ul style="list-style-type: none"> ➔ Joint Commission ➔ American Nurses Credentialing Center
<ul style="list-style-type: none"> • Set staffing levels based on competency and skill mix applicable to patient mix and acuity. 	<ul style="list-style-type: none"> ➔ Hospitals
<ul style="list-style-type: none"> • Measure, analyze and improve staffing effectiveness. 	<ul style="list-style-type: none"> ➔ Hospitals
<ul style="list-style-type: none"> • Adopt zero-tolerance policies for abusive behaviors by physicians and other health care practitioners. 	<ul style="list-style-type: none"> ➔ Hospitals ➔ Physicians

Create a Culture of Retention

Tactics	Accountability
<ul style="list-style-type: none"> • Minimize the paperwork and administrative burden that takes nursing time away from patient care. • Limit the use of mandatory overtime to emergency situations. • Diversify the workforce to broaden the base of potential workers and to improve patient safety and health care quality for patients of all origins and backgrounds. • Adopt information, ergonomic and other technologies designed to improve workflow and reduce risks of error and injury. • Adopt fair and competitive compensation and benefit packages for nursing staff. 	<ul style="list-style-type: none"> ➔ JCAHO ➔ Managed Care Companies ➔ CMS, OSHA, and other regulators, including State Agencies ➔ Hospitals ➔ Hospitals ➔ Federal, State and Private Sector Scholarship Programs ➔ Nursing schools ➔ Hospitals ➔ Hospitals

Bolster the Nursing Educational Infrastructure

Educators on the Endangered List

While there are far fewer nursing students than will be needed to meet the increasing demand for professional nurses, there are, paradoxically, more than can be accommodated by the numbers of nurse faculty members. The shortage of nurses is indeed mirrored by a corresponding shortage of nursing faculty. Prospective nursing students are being turned away from nursing schools across the country because of inadequate educator capacity. In all, nursing schools turned away 5,000 qualified baccalaureate program applicants in 2001.¹¹⁴ In the Southeast, 18 percent of nursing faculty members are due to retire between 2002 and 2006.¹¹⁵ In Georgia alone, 25 percent of nursing school faculty will have retired or resigned in that same timeframe.¹¹⁶ Indeed, nursing school faculty members are “aging in place,” at an average age of 51,¹¹⁷ eight years older than the average age of the bedside nurse. Alarming, doctorally prepared faculty are even older, with an average age of 56 for professors; 54 for associate professors; and 50 for assistant professors.¹¹⁸ As nursing educator attrition continues, it is unclear where the future nursing school faculty will come from.

The American Association of Colleges of Nurses (AACN) reports that while doctoral programs supply the majority of the pool of nurse educators, doctoral nursing enrollments have been virtually flat, growing by only 1.5 percent from 2000 to 2001. According to the AACN, relatively low-paying salaries in the academic setting are not competitive with higher-paying opportunities in clinical and private research settings.

Modest Federal Funding

Federal funding of nursing education is provided primarily under the Nursing Education Act, Title VIII of the Public Health Service Act. In 2001, \$78 million were appropriated to fund basic and advanced nursing education, as well as scholarships and loans for disadvantaged and minority students considering health careers. Compared to federal funding of medical education -- \$9 billion in direct and indirect graduate medical education payments to hospitals alone in 2002 -- nursing education is receiving a very modest level of federal support.¹¹⁹ The Nurse Reinvestment Act, which includes provisions for repaying the student loans of nurses who seek advanced degrees and serve as nurse faculty, will likely add another small amount to this modest pot of money.

Tactics	Accountability
<ul style="list-style-type: none"> • Fund nurse faculty positions and student scholarships for all levels of nursing education 	<ul style="list-style-type: none"> ➔ Federal and State Governments ➔ Private Industry ➔ Foundations

Beyond federal funding, there are private sector efforts underway to fill nursing schools with both faculty and students. The Florida International University School of Nursing has partnered with its area hospitals to fund both faculty and student education programs. One hospital pays for a medical/surgical nurse faculty position, while another hospital is funding a pediatric nursing faculty member. Other area hospitals are funding specific education programs, such as a nurse anesthetist program and a program to prepare foreign-trained physicians to become nurses. Area hospitals are also pitching in to fund the school’s recruitment campaign that is targeting high school students.¹²⁰

Schools of nursing, as with other educational programs, have long relied on corporate, private foundation, and individual philanthropy for the endowment of faculty positions and chairs. A new grant from the Josiah Macy Foundation to the University of Michigan is funding the education of individuals seeking doctoral nursing degrees. More such initiatives are sorely needed.

Too Little Training

The issues around nursing education extend into the practice setting. Whether a nurse graduates from a two-year, three-year or four-year nursing program, the transition into practice is quick, with little time for mentoring or on-the-job training. Indeed, with many shifts short-staffed today, managers are reluctant to pull experienced nurses away from patient care activities to serve as trainers and mentors.¹²¹ According to a report in the *Chicago Tribune*, half of all hospitals have reduced orientation programs for newly graduated nurses.¹²² Once hired, new nurses receive an average of 30 days of training, in contrast with the three months of hands-on training provided five years ago.¹²³

New nurses begin practice feeling unprepared, and, in fact, too often they are. In two recent studies from the National Council of State Boards of Nursing¹²⁴, which asked entry-level nurses and employers of newly licensed nurses to rate the adequacy of nurses’ preparation to perform a variety of patient care tasks, both groups ranked the adequacy of preparation low. Employers’ rankings were much lower for every variable.

Tactics	Accountability
<ul style="list-style-type: none"> • Increase federal funding for nursing education through the Nurse Education Act and Medicare monies appropriated for clinical education • Provide fast-track, low-cost opportunities for nurses to achieve higher levels of education 	<ul style="list-style-type: none"> ➔ Federal Government ➔ Nursing Schools ➔ Hospitals ➔ Private Industry ➔ Foundations

Among these tasks, the ability of new nurses to respond to emergency situations, supervise the care provided by others, and perform psychomotor skills were rated at the lowest levels.

There is what has been described as a “continental divide” between nursing education and nursing practice. In the academic setting, nurses, like other health professional disciplines, are educated in a silo. This problem is compounded by the lack of awareness of nursing faculty about actual nursing practice today; the virtual absence of clinical experience from the nursing school curriculum; and the lack of involvement of nurse clinicians in the education process.

The professional knowledge of new nurses about physicians, pharmacists, allied health professionals and others is in the abstract until they are plunged into the reality of the workplace. Yet, nurses are the pivotal providers of care, often responsible in the end for coordinating all of the actual care received by the patient. Nurses’ ability to fulfill this role successfully is dependent on their knowledge, professional confidence, and ability to interact effectively with all members of the care-giving team. Team

training, both at the undergraduate and post-graduate levels, is increasingly becoming a critical curricular need.

At a time when patients are sicker, care delivery more complex, and nurses thinly spread, new nurses are entering a highly stressful environment. Where the Flexner Report of 1910 made hands-on training obligatory for newly graduated medical students, no such requirement exists for nursing.

Isolated nursing residency programs have been created at various hospitals and academic centers, particularly for specialty training. However, these programs vary in length, structure and content, reflecting their inherently “home grown” nature. Graduate medical education, which is funded in substantial part through the Medicare program, is standardized by discipline under the purview of the Accreditation Council for Graduate Medical Education. For nursing, there are no structured residency programs, no standards, no oversight body to assume that the standards are met, and no funding.

Structured post-graduate training programs for nurses could provide the opportunity for skill-building in real clinical settings, just as residencies do for young physicians. Such

Tactics	Accountability
<ul style="list-style-type: none"> • Emphasize team-training in undergraduate and post-graduate nurse education and training programs 	<ul style="list-style-type: none"> ➔ Nursing Schools ➔ Medical Schools ➔ Allied Health Schools ➔ Hospitals

experience would smooth the transition from nursing schools and help to build the confidence and competence of the trainees before they fully enter nursing practice. The content, length and structure of these residency programs could vary as a function of levels of undergraduate preparation as well as the roles eventually to be assumed by the trainees. Establishment of standardized nursing residency programs would require collaboration between schools of nursing and hospitals, the creation of an appropriate accrediting or certifying body, and identification of stable funding sources.

A residency program model is currently being implemented through a partnership between the American Association of Colleges of Nursing (AACN) and the University HealthSystem Consortium (UHC). Currently a demonstration project offering standardized curricula across five UHC-member academic medical centers, the UHC/AACN one-year residency program is for baccalaureate degree nurses. In addition to developing clinical judgment and leadership skills for new nurses at the point of care, the goal of the residency program is to strengthen the trainee's commitment to practice in the inpatient setting by making that first critical year a positive working and learning experience.

The residency program also includes an outcomes measurement component so that its impact on the care provided by first-year nurses can be measured.

Upon successful completion of the UHC/AACN residency demonstration project, the program is to be offered to all UHC member organizations. This important demonstration project could serve as the critical model for more broadly based nursing residency programs.

Orientation, In-Service and Continuing Education

Another fall-out of budget constraints and the hospital restructuring of the 1990s has been the reduction of hospital educational budgets to support orientation for newly hired nurses, and ongoing in-service training and continuing education for nurses. Considering the pace at which new drugs, procedures and technologies are being introduced, hospitals can ill afford – on a patient safety basis alone – to underfund these critical education and training needs. To help meet those needs, computer-based training, simulation programs, and distance learning opportunities provide alternative means for nurse training that may require less time and resources than traditional



There is what has been described as a “continental divide” between nursing education and nursing practice.

classroom-style education. Nurses themselves should also be involved in selecting content priorities for their in-service and continuing education.

Commensurate Career Paths

Nurses enter the workforce with a variety of educational experiences, although these different skill and competency levels are not necessarily recognized – through compensation and role differentials – in the work setting. This serves as a disincentive for nurses to raise their educational levels. The majority of registered nurses enter the workforce with an associates’ degree. According to National Council of State Boards of Nursing data, among 2001 graduates taking the NCLEX-RN® exam – the national licensure exam for all entry-level registered nurses -- 60 percent hold associates’ degrees, 36 percent have bachelor degrees, and just over three percent graduated from a diploma program. Despite a small enrollment increase in baccalaureate degree nursing programs -- 3.7 percent in 2001 -- enrollment in all programs is down 17 percent since 1995.¹²⁵

With the increase in patient acuity in inpatient settings, the National Advisory Council on Nurse Education and Practice has recommended that by 2010, at least two-thirds of all registered nurses hold

baccalaureate or higher degrees.¹²⁶ However, the degree to which this dictum becomes reality will depend substantially on creation of incentives in the workplace for nurses to achieve a higher level of education. The profession must also be more successful in attracting younger nurses – who are known to be more likely to graduate from baccalaureate programs than associate degree programs.¹²⁷

Initiatives underway to provide scholarships and fast-track educational opportunities for nurses to advance their education can help nurses to overcome some of the obstacles – such as time and money – to going back to school. For instance, the Robert Wood Johnson Foundation is funding an initiative led by the District of Columbia Consortium for Nursing Education and Practice that will help nurses advance their education through an accelerated, low-cost program.¹²⁸

Many nurses have taken advantage of new opportunities to pursue expanded clinical competency and responsibility as means to advance their careers. Advanced practice nursing roles, such as nurse practitioners and certified registered nurse anesthetists, have experienced steady growth in their ranks¹²⁹ --- potentially as a result of increased federal funding. Enrollment in nurse practitioner programs has risen from fewer than 4,000 students in 1992 to more than 20,000 in 1997.¹³⁰

Tactics	Accountability
<ul style="list-style-type: none"> Enhance hospital budgets for nursing orientation, in-service and continuing education. 	<p>➔ Hospitals</p>

Recommendations for Bolstering the Nursing Educational Infrastructure:

Tactics	Accountability
<ul style="list-style-type: none"> • Fund nurse faculty positions and student scholarships for all levels of nursing education. 	<ul style="list-style-type: none"> ➔ Federal and State Governments ➔ Private Industry ➔ Foundations
<ul style="list-style-type: none"> • Increase federal funding for nursing education through the Nurse Education Act and Medicare monies appropriated for clinical education. 	<ul style="list-style-type: none"> ➔ Federal Government
<ul style="list-style-type: none"> • Provide fast-track, low-cost opportunities for nurses to achieve higher levels of education. 	<ul style="list-style-type: none"> ➔ Nursing Schools ➔ Hospitals ➔ Private Industry ➔ Foundations
<ul style="list-style-type: none"> • Establish standardized post-graduate nurse residency programs, a nursing equivalent of the Accreditation Council for Graduate Medical Education, and funding to support this training. 	<ul style="list-style-type: none"> ➔ Nursing Schools in Partnership with Hospitals ➔ Federal government
<ul style="list-style-type: none"> • Emphasize team-training in undergraduate and post-graduate nurse education and training programs. 	<ul style="list-style-type: none"> ➔ Nursing Schools ➔ Medical Schools ➔ Allied Health Schools ➔ Hospitals
<ul style="list-style-type: none"> • Enhance hospital budgets for nursing orientation, in-service and continuing education. 	<ul style="list-style-type: none"> ➔ Hospitals
<ul style="list-style-type: none"> • Create nursing career ladders commensurate with educational level, training, and experience. 	<ul style="list-style-type: none"> ➔ Hospitals ➔ Nursing Schools

Establish Financial Incentives for Investing in Nursing

An Alignment of Incentives

While there is clearly a business case for creating a culture of nursing staff retention – based on lower turnover, lower costs, higher profitability, better outcomes – there is just as clear a need for the investment of new dollars in hospitals to establish a new base of response capacity. Once staffed to accommodate peak demands – over two decades ago – hospitals today are regularly stretched beyond capacity, substantially increasing the risks to patient safety and resulting in emergency department overcrowding and ambulance diversions. Further, the potential surge capacity in the face of mass casualties has virtually disappeared. There are other needs – described throughout this paper – as well, including investments in in-service education, mentoring of new nurses, technology, and even basic salary and benefit packages.

Despite Congressional efforts to return to hospitals and other provider organizations some of the excessive cost savings achieved through the Balanced Budget Act of 1997, these are largely too little too late, and none of this funding has been targeted specifically to nurse staffing and patient safety issues. A recent Wall Street analysis,¹³¹ which suggests that hospitals are today achieving quite adequate margins, simply overlooks the fact that many hospitals have established new steady states where the current levels of health care errors and adverse events are viewed as acceptable correlates of the delivery of complex services, and all that can be achieved with available resources.

Hospitals have few incentives to invest in nursing staff, and to improve patient safety and health care quality. They are reimbursed for the nursing care provided in their institutions through patient bed and board charges. In other words, they are paid the same whether, for instance, their medical/surgical nurse-to-patient ratios are one-to-four or one-to-ten. There are no incentives or even expectations built into the payment system — either through public or private payers — that encourage an optimal number of nurses or even safe care.

In an effort to provide some incentives for safe, high-quality care, the Leapfrog Group, supported by the Business Roundtable and a small number of other private payers, are establishing differential reimbursement schemes based on patient safety and quality measures. But none of these measures directly relate to nursing services. Rather, they focus on the work of the physician, e.g., required ICU intensivist staffing, computerized physician order entry.

Hospitals today operate in an environment of financial constraint, competing demands for internal investment, and a constant juggling of priorities. As Robert Steinbrook wrote in a recent *New England Journal of Medicine* article, these tensions “will be difficult, if not impossible, to resolve, particularly if additional funds do not become available.”¹³²

Reimbursement that Rewards

In order for hospitals to be truly able to invest in nursing and to resolve the problems that have led to the impending nurse staffing crisis, new federal monies, specifically targeted for nursing, need to be made available. In addition, public and private payers need to align reimbursement policies with indices of adequacy of numbers of nurses and the quality of services they provide. If reimbursement were tied to the quality of nursing services and related measures of patient safety and clinical outcomes, nurses would, in effect, move from the cost side of the balance sheet to the asset side. That is, good nursing care would be recognized and rewarded.

There are a number of possible approaches to revising current reimbursement policy. Each has its own complexities, strengths and weaknesses, and political implications. It is beyond the scope of this paper to analyze or recommend specific reimbursement options; however, the following principles should be used to guide the development of new reimbursement policy in this area:

- In order to make a difference, significant new monies must be devoted to addressing the nurse workforce issue in hospitals.
- The reimbursement approach must be targeted to the recruitment and retention of nurses and must reward the effective use of nursing personnel. Failing such carefully crafted linkages, the new funds will not reach their target.
- While this paper addresses nurse staffing in hospitals, these principles apply to all types of health care provider organizations.
- The reimbursement approach needs to be framed in an incentive context that requires hospitals to meet certain quantifiable and standardized criteria or specific goals.
- After the first year of distributing the new monies, hospitals must be able to demonstrate that these criteria and goals are being met as a condition of continued eligibility for these incentive payments.
- The National Quality Forum should be asked to identify performance measures that can be used to assess the effective use of nursing personnel, including nursing-sensitive indicators that address both patient safety and health care quality issues. These measures should be useful for determining the continued need for, and the appropriate distribution of, monies directed to the nursing shortage problem.



There are no incentives or even expectations built in to the payment system — either through public or private payers — that encourage an optimal number of nurses or even safe care

Recommendations for Establishing Financial Incentives for Investing in Nursing:

Tactics	Accountability
<ul style="list-style-type: none"> • Make new federal monies available for hospitals and other health care organizations for investment in nursing services. • Condition the continued receipt of new federal monies by hospitals and other provider organizations on the demonstrated achievement of specified quantifiable and standardized criteria and goals. • Base the new reimbursement incentives on evidence-based, nursing-sensitive indicators. • Align private payer and federal reimbursement incentives to reward effective nurse staffing. 	<ul style="list-style-type: none"> ➔ Federal Government ➔ Federal Government ➔ Federal Government ➔ National Quality Forum ➔ Health Care Purchasers

Conclusion

The demographics of the nursing profession – aging nurses, aging faculty, fewer new entries – and the demographics of society writ large – aging baby boomers intent on living longer with complex medical interventions – are on a calamitous course. Fortunately, it is not too late to change this course.

Too few nurses to care for critically ill patients for shorter lengths-of-stay characterizes the stressful work environment in most of America's hospitals. The factors that have undermined the desirability of nursing as a career must be eliminated. Workplaces can be improved through redesigned work processes, effective staffing and scheduling, adoption of information and ergonomic technologies, and, most importantly, workplace cultures that empower, value and reward nurses.

Nursing schools need an infusion of resources, both from the public and private sectors, to create new faculty positions and develop new faculty. Through academic/clinical partnerships, a standardized nursing residency program can appropriately prepare nurses to provide safe, high quality care in the complex and challenging environments of today's hospitals.

Just as important, staffing goals must recognize the realities of today's care environment that, by default, tolerates substandard care and an inability to meet peak demands. This is the clinical outcome of conscious public policy that has progressively ratcheted down the delivery system's capabilities. This must change.

Finally, in answer to the nurses intent on leaving the profession and those unwillingly to replace them, hospitals must create cultures of retention in their workplaces, and their successes in this regard must be documented and rewarded.

All of the recommendations in this paper are achievable.

If they are met, the future outlook for the nursing profession and for the provision of safe, high quality care in this nation's hospitals will brighten considerably.

Acknowledgements

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