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The Nursing Shortage

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THE PRICE OF HEALTH AND THE VALUE OF NURSING

In Oscar Wilde's 1892 play "Lady Windermere's Fan," one character famously observed that a cynic "knows the price of everything but the value of nothing." In fact, humanity has long struggled to match its expanding economic and intellectual resources with wisdom. Today, as we seek ways to apply our resources to the daunting global health challenges of the new century, we must not allow the value of the nursing care that is central to our efforts to be lost.

NURSING IN THE MANAGED CARE ERA

Today, the public's view of nursing presents an even greater paradox than it has in the past. Public opinion polls often show that nurses are trusted more than any other group of workers. Yet the nursing profession is mired in its worst global crisis since World War II—with drastic shortages in developed nations and havoc in some developing nations. Evidence suggests

that the immediate crisis is due in significant part to actions by policy makers, health facilities, and media outlets that undermine and in some cases threaten to dismantle the nursing profession as we know it, raising the specter of the "denursification" of health care systems. We call on all whose work affects these systems to take responsibility for the crisis, and to work diligently to resolve it. We urge nurses to work individually and collectively to awaken decision makers to these responsibilities, to educate the public, and to build the expertise and the will to take on key decision-making roles themselves, in order to effect positive change for their patients.

At the deepest level, we are in crisis now because of the widespread undervaluation of nursing. We believe that the crisis cannot be resolved until our societies learn what nurses really do, if they are permitted, for patients and society as a whole. The public, from policy makers to ordinary citizens, must understand far more about nurses' life-saving work in clinical practice, research, and policymaking. In our view, most of the mass media has been a daunting roadblock in this regard, failing to help decision-makers and society at large learn the truth about nursing, and continuing to reinforce common misunderstandings. Because this problem of collective understanding underlies most of the other major factors in the shortage, including the lack of resources for nursing practice, it is critical that we address the problem in order to develop and implement specific policy measures to resolve it.

The current nursing shortage is considered to have started in about 1998.[1, 2] Since then, there has been a great deal of discussion of the crisis by policy makers and the media, and some initial remedial measures have been implemented, notably in a few geographic areas. Yet little of lasting significance has been done to address the shortage—to say nothing of the doomsday scenarios we face in coming decades if current trends continue—at national and international levels.

This situation is not unprecedented. In fact, nursing has experienced cyclical shortages since the 1950s, which should not be surprising for a profession that is so challenging yet so poorly understood. Traditionally, statements that nurses were badly needed have been accompanied by studies and short-term measures to increase the number of nursing students, import foreign nurses, raise salaries (episodically), and bring back to the workforce nurses who had left for various reasons. In periods when hospitals have clamored for more nurses, schools of nursing have responded with shorter programs (e.g., Associate Degree and accelerated programs), and by expanding current programs to admit as many interested, qualified applicants as possible. In the past, these shortages have typically been followed by claims of oversupply of nurses,[3, 4] which in turn have led to reductions in nursing applicants to schools of nursing and subsequently, often within a few years, more outcries of shortages of nurses.

For example, the shortage of nurses in the 1980s was a major crisis. There were too few nurses to fill nursing positions, despite the extremely high rate of employment in the nursing workforce by RNs. Patients feared that there would be no nurse to care for them in American hospitals. Experience often confirmed these fears. Governmental and private groups convened meetings and authorized studies on the problem. Hospital administrators sought new solutions and offered higher salaries, bonuses, and other perquisites to help in recruitment and retention.

By the early 1990s, demand-side strategies had been put in place. These, for the first time, treated nurses according to economic models of response to shortage, which involved increasing salaries and improving conditions of work. As the strategies took hold, various studies showed the relationship among improving conditions of work and patient outcomes, recruitment and retention of nurses, and recruitment of students into nursing programs.[5]

At that time, the total nursing workforce was seen to be close to adequate and easily replenishable. Later, it was recognized that serious problems existed in the workplace that not only contributed to the nursing shortage, but in some cases were the primary cause. The current shortage is often attributed to the undesirability of the nursing "job" or as a natural result of the expansion of career options for women. Certainly such social changes have affected nursing recruitment, but the current crisis emerged from the interactions of decision makers in insurance companies and managed care systems confronting reimbursement limits and increased competition, a new strain of hospital CEO who was educated more in business than health, and some nurses in leadership positions who appeared to undervalue, or at least to be willing to implement measures undermining, their own profession. Indeed, all of the above actors appeared to undervalue nursing practice, and they came together to systematically impose cost-cutting that was often short-sighted and destructive of quality care. In particular, many hospitals cut nurse staffing, replacing some nurses with unlicensed personnel, saddled the remaining nurses with excessive administrative and non-nursing tasks, and decimated clinical nursing leadership by dismissing clinical nurse specialists, as well as nursing managers and nursing executives who resisted these changes in healthcare delivery at their institutions. The resulting nursing shortage continues despite modest, primarily supply-side efforts to address it because the dysfunctional care systems set in place a decade ago continue unabated in many areas. There is little positive evidence of the effectiveness of managed care approaches but the promotion of this model has continued unabated. For nursing, cost cutting approaches in hospitals specifically, often applied through the advice of expensive consulting organizations, have been disastrous and have created even greater problems than those which existed prior to restructuring.[6] Without major changes in the nursing workplace, these problems will hound us far into the 21st century, even as developed

world populations age and care technology becomes increasingly complex. The Magnet Hospital movement and investments in hospital nursing by the Robert Wood Johnson Foundation and other private funders have accelerated hopes that workplace improvements will have a major impact on the supply of nurses in hospitals. However, experience in this first decade of the 21st Century has not been reassuring. The aging of the nursing workforce suggests that the problems ahead are even greater than have been forecast. In particular, the aging of nursing school faculties and the cutbacks in faculty numbers, irrespective of need, threaten to prevent us from educating enough new nurses—even if we can maintain the increasing interest by potential students observed in the past year or two.[1]

The changes managed care has wrought in the clinical nursing environment could scarcely have come at a worse time. Health delivery systems have changed immensely in recent years. Though much of the media continues to portray nurses as menial laborers with little education or value, nurses now have more credentials and work responsibilities than ever. Pervasive cost-cutting has reduced inpatients' length of stay and placed diverse constraints on caregiving overall. To be sure, some changes have been driven in part by patient demand. Care at home and in hospice, for example, may be preferred by patients and families. On the whole, these forces have resulted in major changes for patients throughout the course of a hospitalization, affecting the ebb and flow of admission to services required to discharge in a close to well status. Today's surgical patient may be admitted the morning of surgery and discharged soon after, with a variety of health needs to be met, at least ostensibly, at home by the patient herself or a family member. A medically ill person may be admitted during the crisis phase of illness, as occurred in the past. But now that patient may be discharged as soon as the most acute phase is over, still requiring care from nurses, aides, and family members.[7] While

inpatient length of stay (LOS) varies around the world, and the LOS in the US is shorter than in any other country, reductions in length of stay have occurred in many developed countries. The combination of sicker patients, frequent admissions and discharges, and fewer nursing resources make the average shift for many nurses a frantic rush to provide basic survival care. Of course, the full range of effects of these changes on the individual caregiver and on the system as a whole are complex, and they have not yet been studied sufficiently. Patients who are discharged more quickly presumably derive some benefit in reduced nosocomial infections. But one basic effect on nursing practice seems clear: countless nurses have found their working conditions untenable, and in response they have left the bedside, migrated to a more favorable geographic area, or left nursing entirely.

A GLOBAL NURSING SHORTAGE

The current nursing shortage is widespread, complex and dangerous. The "home-grown" shortages in many developed nations have been well-documented. But in many developing and even some developed nations, the indigenous lack of skilled nurses needed to care for individual patients and populations is exacerbated by out-migration. Although in some countries nurses are among the most educated professionals, the work of the world's estimated 12 million nurses is not well understood, even by other educated members of society. The fact is that nursing is a distinct scientific field and autonomous[8] profession whose skilled practitioners save lives and improve patient outcomes every day in a wide variety of settings. Of course, nursing education and practice vary in different nations. But globally there is still a vast gap between what skilled nurses really do and what the public thinks they do. As we have suggested, this is a fundamental factor underlying most of the more immediate apparent causes of the shortage. These causes include nurse short-staffing,[9] poor work conditions, inadequate resources for nursing research

and education, the aging nursing workforce, expanded career options for women, nursing's predominantly female nursing composition, the increasing complexity of health care and care technology, and the rapidly aging populations in developed nations. Because research shows that an inadequate quantity of skilled nurses in clinical settings has a significant negative impact on patient outcomes, including mortality, the nursing shortage is literally taking lives, and impairing the health and wellbeing of many millions of the world's people. It is thus a global public health crisis. [10]

In the 1990's, a number of factors combined to produce a new nursing shortage in the United States and in many other nations in the world.[10, 11, 12] As was discussed earlier, managed care systems and practices directed vital resources away from nursing practice. Many nurses, who remain sadly underempowered in the current health system, lacked the professional resources to fight effectively against these threats to their patients and themselves. Short-staffing and restructuring drove away many nurses who could no longer face their growing burnout and/or the realization that they could not meet their professional responsibilities to their patients.[13] By 2005, roughly half a million U.S. registered nurses (about one fifth of the national total) had chosen not to work in nursing.[14]

Other factors have exacerbated the shortage. Women in most developed countries have come to enjoy a far greater range of career choices than in the past, and men are still not entering nursing in significant numbers. Indeed, men still comprise only about 6% of working U.S. and Canadian nurses.[14, 15] Poor relations with physicians, including lack of physician respect, disruptive physician behavior and major communication failures, continue to be a problem for nurses, especially where nurses' status is lower. As Suzanne Gordon[11] and others have noted,

most women in nursing have not made the gains in workplace empowerment that many of their sisters in other professions have[11]. Even so, in the last few years, interest in nursing has increased to some extent, due to a weak U.S. economy, a growing awareness that nursing offers plentiful, diverse positions with the chance to better lives, and pay that is good relative to the amount of formal training required. Unfortunately, a critical nursing faculty shortage driven by inadequate financial support has hampered efforts to train sufficient numbers of nurses; nursing schools have turned away or waitlisted many qualified applicants. Nursing research receives relatively little funding from the U.S. federal government, as it comprises 0.5% of the research budget of the National Institutes of Health.[16]

Available evidence indicates that the recent increase in interest in nursing in the U.S. has not been sufficient to end the current shortage nor do the numbers offer confidence for the future.[17] The U.S. continues to face an aging nursing workforce and an explosion in the need for skilled nursing, as the baby boom generation starts to retire, and health care and care technology grow increasingly complex. Most legislative efforts to combat the shortage have been very tentative, and none have had a significant impact nationwide. Federal measures to date, principally the Nurse Reinvestment Act,[18] have focused on short-term incentives to ease the financial burden of nursing education. A number of states have made more far-reaching efforts to address the shortage. California, along with the Australian state of Victoria, has taken the lead in implementing mandatory nurse staffing ratios. These ratios appear to have had a positive impact on patient care and nurse satisfaction, despite fierce and ongoing opposition from the hospital and insurance industries, who argue that specific ratios are impractical and may force hospitals to close.[19] Seven US states[20] including Massachusetts[21] and Florida are now considering legislation mandating specific ratios. Recently, bills have also been introduced in the US Congress to

address nurse staffing, including bills to limit mandatory overtime.[22] However, despite the efforts to date, it is projected that if current trends continue the United States will need to educate about 1.1 million new nurses by 2012--almost half the size of today's nursing workforce.[23] Unfortunately, if the shortage continues on anything like its current trajectory, it is likely to have catastrophic effects on the everyday health of the United States. It may also severely hamper the nation's ability to respond effectively to mass casualty events.

Globally, the nursing shortage is even more complex, as a November 2004 International Council of Nurses (ICN) report called *The Global Shortage of Registered Nurses: An Overview of Issues and Actions*[10] makes clear. That important report surveys the causes, nature and effects on patient care of nursing shortages throughout the world. It discusses the "critical challenges" of HIV/AIDS, internal and international nurse migration, and health sector reform and restructuring, and it makes general policy recommendations to address these critical problems. One of the most alarming trends discussed in the report (and many current news reports) is the migration of many of the most skilled developing world nurses to much better paying positions in developed nations with shortages, with a devastating impact on already overburdened health systems in the poorer nations. The report notes that the nurse:population ratio varies greatly in different nations. The average ratio in Europe is 10 times that in Africa and South East Asia, and one recent estimate is that sub-Saharan Africa is currently short of over 600,000 nurses needed to meet Millennium Development Goals. Some nations, particularly in Central and South America, actually have more physicians than nurses (in the U.S., there are about 600,000 physicians[24] and 2.7 million registered nurses[14]). Many nations also reportedly suffer from a poor distribution of nurses, with few nurses available in rural and remote areas. The ICN report stresses the considerable research showing the link between nurse staffing levels and positive care

outcomes.[10] In explaining the shortage, it notes that "[g]ender-based discrimination continues in many countries and cultures, with nursing being undervalued or downgraded as 'women's work.'"[10] The report concludes that "[w]ithout effective and sustained interventions, global shortages will persist, undermining attempts to improve care outcomes and the health of nations."[10]

BASIC ANALYTICAL APPROACHES TO UNDERSTANDING THE NURSING SHORTAGE: WHAT ARE WE SHORT OF?

To explore the dimensions of the global nursing shortage with a view toward potential solutions, it may be useful to consider different ways of viewing the shortage itself. We suggest that the shortage may be analyzed in at least four basic, overlapping ways: as a shortage of "willing nurses"; as a funding or perceived funding shortage; as a shortage of understanding that nurses are needed to deliver care; and as a nurse education and empowerment shortage.

A "willing nurse" shortage

The most easily recognized type of nursing shortage is the simple lack of nurses to fill open, funded job vacancies, as many nations are now experiencing. The most obvious indicators of this are numerous available nursing jobs and difficulty in filling them. This kind of shortage may occur because the needed nurses simply do not exist, or because many existing nurses are not willing to provide care in the prevailing care environment, as is currently the case in many parts of the United States due to short-staffing and other factors. Thus, the current shortage may be described as being, at least in part, a "willing nurse" shortage.

A real or perceived funding shortage

A second type of shortage may occur where there is a lack or perceived lack of funds to finance and support nursing positions that are generally understood to be needed. For instance, a given health facility decision-maker may understand that a particular unit shift really needs five nurses, but have the funds for only three positions. This decision-maker may also realize that existing nurses need clinical support to operate effectively, and may even understand that inadequate support threatens patient outcomes, but still lack the funds to provide that support. This is the classic short-staffing scenario seen in the United States and elsewhere since the 1990's. In this case, nurses may be available and willing to work, but there do not exist the immediate funds (or the will to expend the funds) to pay for or support them.

A shortage of understanding that well-supported nurses are needed to deliver care

A third type of shortage may occur where there is a lack of general agreement or awareness that well-supported nurses are even needed to care for a given patient population. Once again, the current situation in the United States may to some extent reflect this type of shortage. Recent hospital restructuring has often entailed nurse short-staffing and resource cuts that seem to reflect a lack of awareness on the part of some decision-makers that an adequate quantity of skilled nursing is necessary. Research shows that it is cost-effective for hospitals to provide patients with adequate nursing care, which improves outcomes and reduces staff turnover.[25] It may take hospitals time to assimilate and act on this information.

Such shortages may be even more obvious in nations where relatively few nurses exist. In some nations, physicians may provide some of the monitoring and other care that nurses provide in nations like the United States. To the extent patients are not receiving the science-based

therapeutic care that skilled registered nurses provide, patient outcomes will reflect the lack of such care.

This third type of "nursing" shortage will require more than mere financial action. Instead, what is needed is a basic change in the way societies, particularly their decision-makers, actually think about nursing and health care generally. This would be a sea change. If the type of nurse:population ratio now seen as desirable in the most developed nations--roughly 1:100--were to be seen throughout the world, it could require something like 50 million additional nurses.

A nurse education and empowerment shortage

Finally, it might be argued that a fourth type of shortage occurs where a sufficient number of staff nurses exist, but many of these nurses have not received appropriate education and social empowerment to provide high quality care. Research has associated nursing staff who have more formal education and better work environments with significantly better patient outcomes.[26] This lack of nursing empowerment may be a problem in any nation or setting, though it may be more obvious in areas where training resources are scarce and prevailing social attitudes inhibit nurses from advocating for their patients or themselves.

Schools of nursing now report serious shortages in qualified faculty and in other vital resources, forming a critical barrier to the resolution of the shortage. According to the American Association of Colleges of Nursing (AACN), schools are unable to take qualified students because they do not have the faculty to handle expanded numbers. For the 2004-2005 year, the average age of doctorally-prepared, full-time U.S. nursing professors was 57.[27] Four out of five nursing schools report that they need additional faculty[28] and over 30,000 qualified students were

turned away last year because of insufficient faculty[29]. The conflation of these data portends a potential crisis in the coming years, as we see an aging clinical and academic nursing work force and a decline in enrollment of nursing students. Because nurses are key health care personnel and provide the services on which the entire health care system depends, the resultant increased burden of care has a negative impact on the whole system.

CONFRONTING THE ROOTS OF THE NURSING CRISIS

From the foregoing it is clear that the diverse aspects of the current nursing crisis erode the quality of care, burdening patients, families, nurses, other health care workers, and society as a whole. It is less obvious, even to many nurses, that a critical factor underlying the shortage is the huge gap between the actual nature and value of nursing, on the one hand, and what policymakers, career seekers and the public at large believe about the profession on the other. Because nursing continues to be regarded as a peripheral, menial job for women with few other options, it has not received adequate resources or respect. Short-term financial infusions such as scholarships and loan forgiveness, though helpful, will not fix this deeper problem. Even more potent measures to improve the poor workplace conditions that have driven the current crisis, such as staffing ratios and whistleblower protection, may be inadequate to enable nursing to assume its rightful place in evolving health systems. Indeed, such legislative measures will be difficult to fully implement and maintain without a drastic change in how the profession is regarded. Because studies have shown that the media has a significant impact on health-related views and actions,[30] nursing's generally poor, inaccurate media image is a major factor in the current crisis. In our view, the global nursing shortage cannot be resolved until public understanding of nursing dramatically improves.[11]

Nursing today is caught in paradox and irony. There is now major public concern about the erosion of care, and about nursing in particular, yet a casual disregard in many quarters of the basic steps that must be taken consistently to address the problems. On the one hand, some nurses have gained significant power in recent decades, from the small number of nurses who serve in the federal and state legislatures to the advanced practice nurses who have made meaningful strides in expanded scope of practice and obtaining third-party reimbursement. Some might find these developments amazing, given the weakness of nurses' national organizations, the difference in their political participation relative to that of physicians' associations, and the lack of serious media attention to nursing. Yet these achievements have not directly benefited bedside (hospital and home) nursing, and they have not prevented the crisis of a nursing shortage in those sectors. Clinical and educational funding for nursing is miniscule compared to the resources allocated to the medical and dental professions. And the intangible factors—for instance, whether middle class parents would like to see their sons or bright, ambitious daughters become nurses—remain stacked overwhelmingly against nursing. Of course, the power of nursing varies somewhat internationally. In some nations, nurses are the senior health officers and the representatives to world bodies such as the World Health Organization. But to one degree or another nurses' lack of significant policy influence is present throughout the world.[11] As we consider how to address the nursing crisis, it will be important to confront this troubling paradox.

However, there is an even deeper and more ironic paradox for nursing. The profession could be termed a public relations success in the sense that it has won the trust of the public, but a public relations failure in having been unable to translate that trust into tangible support for the profession, especially its bedside and educational components. In other words, with a few

notable exceptions, a profession built on patient advocacy has been unable to advocate effectively for itself.

Evidence that these deep problems of collective understanding continue to plague nursing can be found in countless everyday social interactions, and in even a cursory examination of television, newspaper and magazine articles and stories about who really counts in the health care scene. Where in former years nurses were featured at least to some extent on television, presumably to achieve male-female balance among the characters, this is no longer necessary now that women represent a high percentage of students in medicine. Women can be part of television plots (and the number of medical type shows has skyrocketed), but these women are now physician characters, though often performing characteristic nursing roles. Meanwhile, the nurses depicted tend to be background, and relegated to menial tasks. It would seem that to TV writers nurses no longer matter to patient health.

Problems rooted in basic misunderstandings that prevail even among the best-educated segments of society can be extremely complex. They require careful consideration of the sociological and historical antecedents which have created them. Indeed, if this was an easy problem to solve we would not experience the cycles of shortage and oversupply that seem to have characterized nursing practice for half a century. So given the problems we currently face and the complexity of finding lasting solutions, what are policy makers to do with the data and with the reports of patients and families? What guidelines can be proposed to influence policy and to ensure patient safety over the short and long term?

Most of the limited efforts to address the crisis to date have focused on increasing the immediate supply of nurses, and addressing the visible effects of short-staffing, low morale, and turnover on the immediate experience of patients and families. Public service communications,

such as the recent Johnson & Johnson Campaign for Nursing's Future, have helped to raise awareness of nursing careers. But the larger focus must be on what it will take to strengthen the long-term nursing supply pipeline. Achieving the right balance can be a challenge. For instance, if there is too little attention in such public messages to the concrete contributions nurses make to patient outcomes, as opposed to the familiar unskilled "caring" image, young people who want to contribute with their hearts and minds are discouraged from choosing a nursing career. But with greater attention to the financial opportunities and managerial aspects of nursing, youngsters may be persuaded that business content is more important than nursing content.

Indeed, the institutional and personal economic imperatives of the managed care era have influenced the evolution of certain types of nursing careers, despite the profession's traditional image as a "caring" one. It is interesting that most programs for nurse executives or mid-level nurse "managers" over the past decade have focused on preparing these nurses in business and management. Foundations and corporations have supported continuing education and masters and doctoral programs, which have either combined nursing and business or have offered the business content alone. The view of the funders has been that while these nurses were proficient in nursing and nursing care, they were deficient in understanding the business and managerial aspects of health care leadership. These views are now being integrated into undergraduate programs, with the idea that new graduates will have a better sense of the exigencies of the health care system and thus be better able to function as nurses in all the modalities in which they will work. But when these programs erode or downplay skilled professional bedside nursing care—they add to the problems front-line nurses are experiencing. Of course, nursing must adapt to the world in which it operates, and the integration of managerial and financial content is an important step in preparation of nursing leaders. However, such leaders should be the product of

a system that values quality care and uses sophisticated knowledge of finance to facilitate such care. Educational programs for nursing managers should include an MSN at a minimum, such as is the case with some MSN/MBA programs.[31] As we have seen in the last decade, quick fixes such as replacing skilled nurses with a cheap and disposable labor force and marginalizing nursing leaders with clinically supportive roles have led to a demoralized, less effective, and shrinking bedside nurse workforce. Given such failures of management to advance the major mission of health care institutions--the provision of quality care--it may be at least of equal importance to develop program content to ensure that future health care administrators understand more about the basic "business" they are entering.

In fact, given the events of the last decade, it is worth reminding ourselves that the business in health care is ***health care***. Over the next decades industrialized nations will find that much of the business of health care is the care of older people. This will put an even greater strain on the nursing work force. Apparent economies and financial profits, if gained at the expense of health, need to be questioned if not condemned. In particular, as we have seen, our focus on restructuring and containing the costs of health care systems must not obscure the value of nursing and the central role it plays in global health. For a profession whose true worth has never been well understood, this is an enormous challenge.

RECOMMENDATIONS AND CONCLUSIONS

In summary, the world now faces a critical nursing shortage characterized by deteriorating workplace conditions, massive migration from the bedside, and a lack of the educational resources needed to address the crisis. We believe the crisis is a result of inexorable economic pressures ruthlessly applied to a profession whose centrality to patient outcomes and overall health is not well understood even by elite sectors of global society, including the

influential mass media. Initial efforts to address the shortage have been tentative, and despite a recent increase in interest in nursing, there is no evidence that the long-term crisis has abated, as we face aging populations and increasingly complex health challenges. Resolution of the nursing crisis will require thoughtful action at the local, national and international levels, and wide participation in innovative and safe solutions.

Recommendations

Promising strategies for addressing the nursing shortage are multiple and varied. We believe they should focus on several key audiences, including governmental and professional regulators, the clinical and educational health care communities, the mass media, and the public at large.

Governmental and Professional Regulators[32]

Resolving the nursing crisis will likely require serious action by national and state governments, government health care payors, and nursing regulatory bodies (boards of nursing). Ideas that we believe are worth considering include:

- In states and nations where short-staffing of nurses in endemic, legislatures should consider minimum staffing requirements, such as those implemented in Victoria, Australia,[33] and California in the United States.[19] Research shows that nurse short-staffing has not only had a negative impact on patient outcomes, but also has driven nurses from the workforce. The government has an obligation not just to attract and educate nurses, but to see that they are retained in the workforce. Victoria has been able to recruit 5200 new nurses to its province since its minimum ratios have gone into effect in 2000,[34] showing that instituting ratios helps to bring nurses back into the workforce.

California has had a similar experience, despite fierce opposition to the ratios from most of the hospital industry and the current state executive.[19] In our view, staffing requirements should be based on indices of quality practices, achieving organizational outcomes, and ensuring the quality of care and of the nurse's work life. Applicable methods may be predicated on a measure of unit intensity, the population of patients, and the roles and responsibilities of nursing staff. Alternative legislation supported by the hospital industry that would make better staffing practice voluntary but impose disclosure requirements would likely be beneficial, but it may not be sufficient to resolve a public health problem in an area where there are significant barriers to such market-oriented solutions. Some day, when nursing has a level of power and public appreciation comparable to that of medicine, it may become clear that mandatory staffing legislation is unnecessary. That day is some time off.

- Legislation requiring that health care facilities report to the government and disclose to the public per-unit staffing ratios, staffing mix, and other key information as to nursing and related care. This could be a useful complement to staffing legislation. It could provide an important tool for government enforcement of staffing requirements, and allow the public to make more informed care decisions. Ideally, the public would have easy access to actual numbers of CNSs, RNs, LPNs, aides and others who deliver nursing care, the number of nurse supervisors and clinical educators, and the level of education of personnel on the floor. In addition, legislation must require identification badges for all institutional health workers that inform consumers of workers' positions and credentials. Patient confusion over the presence of nurses (as opposed to similarly dressed assistive personnel) has helped to conceal nurse short-staffing.

- National and state "whistleblower" protection should be enacted to protect health care workers who report unsafe practices, including short-staffing, to state agencies, legislators, media and advocacy groups. Such legislation is present in some form in a number of states in the U.S.[11]
- National and state limits on mandatory overtime, another important factor in the exodus of nurses from the bedside in the U.S., should be enacted.[35]
- Legislatures and regulators should strive to eliminate duplication of activities and records and drastically reduce the amount of documentation needed. An unintended consequence of many regulations is the emphasis on paperwork. Given the shortage of staff, increases in patient acuity, and the increasing complexity of care, bedside nurses should be freed from paperwork that is not critical to direct patient care.
- Other potentially salutary workplace changes include requiring health care employers to establish management/employee committees that include bedside nurses to address key practice and staffing issues.
- Capitation grants to schools of nursing, a response to past shortages, should be considered. If these are put in place, they should be targeted to programs preparing baccalaureate or higher degree graduates, either generically or in career ladders.
- Federal and state financial support for the education and training of nurses, including funding for nursing research, nursing educators, and clinical programs including formal residencies comparable to those of physicians, should be increased. Support to the infrastructure of university programs is vital.
- States should consider measures to help all registered nurses obtain a baccalaureate degree, with the ultimate future goal of a minimum baccalaureate entry requirement. Of

course, some may argue that this will divide the profession and exacerbate the shortage, but we agree with Suzanne Gordon that it is critical for nursing's long-term future to be seen as a profession of highly educated professionals, comparable to its peers in the health care setting. Research has also associated higher levels of nursing education with improved patient outcomes.[26]

- Governmental health care payors should consider testing reimbursement structures that allow bedside nurses to bill separately for their services, or at least that treat nursing as a distinct professional service reimbursable in a way that is comparable to physician care. This would increase understanding and valuation of nursing among the health care financing system and the public. We recommend a clear differentiation of nursing credentials in this payment structure with professional educational qualifications required.
- All government entities and their constituents in the United States should consider moving toward a system of taxpayer-funded universal health care, which many nurses believe would greatly empower bedside nurses, improve health, and save money.

The Clinical and Educational Health Care Community

Another vital audience for reform measures are those who work in clinical and educational health care settings, including the trustees and administrators of health facilities and nursing schools, physicians and other health professionals, nursing associations and unions, and of course nurses themselves. Most of the potential regulatory measures discussed above would require support from at least some the clinical and educational health care community. Moreover, many of the potential regulatory measures above, notably improvements in the

working conditions for nurses, can be implemented at the institutional level even in the absence of formal legal requirements. Specific recommendations include the following:

- The clinical care community should consider whether the Magnet program[36], under which hospitals may win recognition for meeting certain standards that are deemed to indicate a positive nurse practice environment, should be implemented in their institutions, and whether the program should be strengthened. The program, run by an affiliate of the American Nurses Association, has been widely praised for raising the critical issues of nurses' working conditions and participation in clinical decision making. But it has also experienced serious criticism, notably from unions, as making little real difference at the patient care level.
- Hospital trustees and administrators are particularly important in resolving the nursing crisis. These leaders should learn about the vital role nursing plays in patient outcomes, and ask tough questions about their facilities. Trustees of institutions that exist primarily to provide nursing care, as hospitals do, should ask recognize the need for nurses as members of their Boards of Directors, with a special focus on clinical nurses. They should also ask whether nurses have a meaningful say in institutional decision-making, or whether nursing leaders have been marginalized or saddled with the supervision of non-nursing departments. Leaders, including trustees, should ask whether the institution is delivering appropriate care at the bedside, whether each unit is adequately staffed with nurses, and whether the hospital should seek Magnet status. Would the hospital qualify as a Magnet hospital? Is the Magnet program sufficient to resolve the problems at the bedside? Is every patient assigned a single accountable nurse for the period of the hospital stay who is reachable by the patient and family? Hospital leaders, including trustees, must recognize

that patient outcomes have a direct relationship to the strength of bedside nursing. Such outcomes include expected vs. actual mortality, nosocomial infections, patient injuries from falls, physical restraint use, decubitus ulcers, urinary tract infections, and patient satisfaction.

- Nursing managers, like physician managers, should have clinical responsibilities as well as management responsibilities. Of course, nursing managers would need to receive administrative assistance, but this is no different from the situation of physician managers. This kind of reform seems advisable because in the United States, many nursing managers have been seen as divorced from clinical and staffing conditions in the managed care era, and as unwilling or unable to resist the dismantling of nursing care, including short-staffing, mandatory overtime, and replacement of nurses with unlicensed personnel. Such clinical involvement could also improve care and raise the stature of nursing managers.
- Administrators and nursing managers should consider implementing formal residencies for bedside nurses comparable to those physicians undertake, in order to improve care, empower nursing clinicians, and increase understanding of the importance and difficulty of bedside nursing. The American Association of Colleges of Nursing and several academic teaching hospitals have sponsored a pilot program for such residencies.[11]
- Foundations with an interest in health care should be more active in educating trustees and other hospital executives as to the importance of strong, well-supported bedside nursing to patient outcomes and overall cost containment.
- Major corporations involved in health care, including pharmaceutical companies, should be encouraged by nurses, nursing organizations, and others to pressure health care providers and the media to improve the workplace conditions and public understanding of nursing.

- All health care clinicians would benefit from cross-disciplinary training in effective and respectful communication, as has been implemented in other industries.[11] This is especially important where one category of worker in a diverse team, such as physicians, has traditionally held disproportionate power in the conduct of team activities.
- Physicians should receive expanded training in the nature and importance of nursing practice at medical school and in residency training. In particular, physicians ought to learn the role of nurses in the treatments they prescribe. They should also be informed about major nursing practice areas that are outside the scope of their practice but vital to patient outcomes. Good (and bad) nursing care often occurs without notice or comment by physicians. Physicians do not wish unskilled workers to provide the care their hospitalized patients require, yet few seem to be aware of the contributions of nurses to their own practices, and few have actively called for improved working conditions for nurses. Too many physicians with influence in government, academia, clinical settings and the media ignore nursing contributions and reinforce the common perception that physicians provide all significant care.
- Nurses should be encouraged to act collectively and forcefully to change the conditions that have driven so many from the bedside. This means, as Bernice Buresh and Suzanne Gordon have eloquently said, moving "from silence to voice."[37] It means thinking deeply about why nursing is undervalued, and taking a far more active role in educating the government, health care institutions, the larger health care community, the media, and the public about the concrete contributions of nursing to patient outcomes and social health. Nurses and their representative organizations in particular must do what they can to advocate for the reforms discussed in this paper with which they agree; this can often be done most effectively

through professional organizations, including associations, unions and advocacy groups. And nurses should work to encourage accurate and complete media depictions of the profession and its achievements, and to discourage perpetuation of the inaccurate stereotypes that have held the profession back, including the physician handmaiden and the unskilled angel.

The Media

Nurses all over the world have similar problems with the media, which has a major influence on health-related thoughts and actions, especially those of young people. [38] Because the nursing crisis is rooted in the widespread undervaluation of the profession, taking concerted action to improve the media's highly distorted account of nursing is vital. Nurses should do so through their representative institutions. These include professional associations, unions, and advocacy groups like the Center for Nursing Advocacy, which is based in the United States but monitors and works to influence the media globally. Helping the Center influence the media in your nation, or even starting your own organization to do so, would be an excellent strategy. Nurses can also influence the media individually through phone calls, emails, letters, and seminars. Readers can learn more at www.nursingadvocacy.org/action

- Nurses must teach the news media that nurses play a critical role in patient outcomes in the full variety of practice settings, from the emergency room to long-term rehabilitation to advanced practice nursing. Nurses should also press the media to cover health stories with the recognition that nursing is as important as medicine to patient outcomes, and to cover nursing achievements, including research, as the newsworthy events that they are. Nurses should urge journalists to

seek out more nurses as expert sources, instead of relying on physicians alone, as now occurs even on issues that are the province of nurses.

- Nurses should also pressure the influential entertainment and advertising industries to portray nursing accurately. Negative stereotypes must be eliminated and nursing characters--not physician characters--should be shown to be doing nursing work. Television shows, which continue to foster powerful misimpressions in millions of viewers around the world, must be persuaded to seek out technical *and* media experts in nursing to aid in the creation of shows and television scripts.

The Public

The public at large is arguably the most vital of all audiences for potential reforms, because in democracies it is the public that (at least in theory) directs the allocation of economic and human resources. All of the above actors are ultimately responsible to the public, and it is the public's view of nursing that, in the end, controls the resources nursing receives.

- Most of the potential governmental measures discussed above would require support from the public. Staffing reform, as the experience in California suggests, may require especially strong and sustained public support.
- The public would benefit from public service campaigns and programs about the true importance of nursing sponsored and implemented by partnerships involving many of the above actors, including government, educational institutions, the health care community, and the media. The content of such projects should be directed by nurses with expertise in nursing media issues.

- A final broad-based issue concerns the changing nature of the public itself. The dramatic growth in industrialized nations in the number of older adults with multiple chronic health problems poses an increase in the need for skilled, educated nurses to care for these patients and their families. Currently, enormous resources are devoted to maintaining life virtually at all costs, and in many cases with little regard for the actual wishes of patients and families. Physicians often approach disease in the elderly in a way that is similar to their approach to middle-aged populations--prescribing cure-at-all-cost therapies that may worsen quality of life and the death process. Nurses often take a more holistic approach, working with patients and families to firmly identify their wishes and promote more peaceful deaths. Because of the power disparity between medicine and nursing, the nursing model is too often stifled, and patients commonly linger in more pain than they need to and often in expensive ICU beds. Because we face an aging population of unprecedented proportions, we must develop better strategies to allow patients to maintain dignity at the end of their lives. In addition to its humanitarian benefits, such a shift would result in significant savings of vital resources.

Conclusion

Health care is changing rapidly. In the long-term future, health care systems and practices may differ dramatically from those in place today, and this is obviously true of nursing. But as long as society wants skilled health guardians who save lives and improve outcomes under a holistic practice model, as long as it wants practical guidance in achieving health, the issues raised here will be critical. We believe nursing can and should play a central role in the future of health care. Whether it will is, in many ways, a question of price and value.

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