



# **Health Care's Human Crisis:**

# The American Nursing Shortage

Prepared by: Bobbi Kimball, R.N., M.B.A. | Edward O'Neil, Ph.D., M.P.A. | Health Workforce Solutions

For The Robert Wood Johnson Foundation | April 2002

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ROBERT WOOD  
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Bobbi Kimball, R.N., M.B.A.

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Health Workforce Solutions

April 2002

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# A Message from the President of The Robert Wood Johnson Foundation

How can a health care system function effectively without an adequate supply of front-line caregivers? What are the real reasons for the erosions we're seeing in the ranks of our nation's nurses? Is this just another one of nursing's periodic crises, or does it reflect more serious underlying concerns? And what can we do to reverse the tide of what will become, if left unaddressed, a major public health crisis?

We needed to find the answers to these questions.

It would be easy and comfortable to look to the old answers and call for familiar responses to this nursing shortage. After all, we've seen cycles of shortage and oversupply before. But as a foundation dedicated to improving the health and health care of all Americans, we have a mandate to ask hard questions, embrace the answers and find innovative solutions to match.

While we haven't yet seen a consumer backlash about the nursing crisis, I suspect that there is more dissatisfaction out there than we are willing to acknowledge. I believe that consumers don't just perceive the nursing shortage as an abstraction or a problem for hospital human resources departments to handle but are already feeling its detrimental effect on the quality of care that they receive at the bedside.

We must act soon.

Positive action requires good information, and this report provides an excellent basis upon which to start. By challenging us to re-examine some of our long-held assumptions about the nursing profession and its position within the health care system, this report lays the groundwork for change. It calls for the health professions and the many groups that have a stake in the issue to break out of their professional silos and work together to realize that change. And it envisions an exciting new future for nursing and the people who depend on its care.

The Robert Wood Johnson Foundation has had the privilege of learning from this report, and its contents will inform our efforts to foster solutions for improvement. I hope that you will find it as useful in your endeavors as we do in ours.

Steven A. Schroeder, M.D.  
President and CEO  
The Robert Wood Johnson Foundation

# Foreword

This study was originally commissioned by The Robert Wood Johnson Foundation to gain a better understanding of the causes of the nursing shortage in the United States and to help inform the Foundation's response to this perplexing problem. Even at the outset, the Foundation realized that, while it can play a role in shaping solutions, lasting change will require the joint efforts of the many groups that share concern about this problem—nurses and nursing profession leaders, nurse educators, health care industry leaders, labor organizations, policymakers and the philanthropic community, to name a few. In the spirit of encouraging and stimulating collaboration among all concerned stakeholders, the Foundation presents this report.

Researchers Bobbi Kimball, R.N., M.B.A., and Edward O'Neil, Ph.D., M.P.A., of Health Workforce Solutions, a human resources consulting firm in San Francisco, California, conducted the research and wrote the study, completing their work in August 2001. It should be noted that the report's contents reflect the views of the authors and not necessarily those of The Robert Wood Johnson Foundation.

In this report, the authors first explore the history of nursing and place it in its modern-day context within the health care system. Next, they examine the social, cultural and economic factors that drive the nursing shortage. The authors then look at other fields to see how they are coping with their own workforce shortages and point to some lessons that nursing can learn from these efforts. A review of a broad cross-section of reports produced in 2000 and 2001 about the nursing shortage follows. Findings from extensive interviews with representatives of each stakeholder group are then presented, providing a rare look at the range of approaches to the shortage and the efforts being made across sectors.

The authors continue with a study of 15 health care markets around the country. Here they assess the extent of the problem and find that a shortage is the rule rather than the exception. Next, they present results from focus groups of nurses conducted in three of these markets, which provide telling insights into the work environment and nurses' perceptions of their profession. The authors then provide a new way of looking at the range of responses that are currently being undertaken to address the nursing shortage: as necessary steps falling along the continuum of an evolving nursing profession. Their recommendations, including a call to create a National Forum to Advance Nursing, are both bold and visionary.

This report provides strong evidence that the current nursing shortage sharply differs from those of the past, although previous failures to address underlying issues weigh heavily in the current crisis. By issuing this report, The Robert Wood Johnson Foundation hopes to spark collaboration among the multitude of organizations that are concerned about this issue to find solutions to this very pressing health care and social problem.

Susan Hassmiller, Ph.D., R.N., F.A.A.N.  
Senior Program Officer  
The Robert Wood Johnson Foundation

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# Executive Summary

This study was originally commissioned by The Robert Wood Johnson Foundation to gain a better understanding of the nursing shortage in the United States and to help inform the Foundation's response. Early on, it became apparent to the Foundation that the broad reach of this study could help provide an important knowledge base for all groups that share concern about this problem and lead to more effective, cross-sector efforts to create solutions. In this spirit, the Foundation publishes *Health Care's Human Crisis: The American Nursing Shortage*.

**Researchers** Bobbi Kimball, R.N., M.B.A., and Edward O'Neil, Ph.D., M.P.A., of Health Workforce Solutions, a human resources consulting firm in San Francisco, California, conducted the research and wrote the study, completing their work in August 2001. It should be noted that the report's contents reflect the views of the authors and not necessarily those of The Robert Wood Johnson Foundation.

**This report** takes a broad look at the underlying factors that are driving the nursing shortage in the United States and summarizes the range of activities that a wide cross-section of organizations are currently undertaking to address it. It combines a short history of nursing with recommendations to advance the profession to a new level of practice and professionalism. It looks at other fields to see how they are coping with their own workforce shortages. An in-depth study of 15 markets throughout the country confirms that a widespread shortage does indeed exist and explores, through focus groups of nurses, perspectives from the front-lines. And a new way of looking at the many responses to the nursing shortage—as falling along the continuum of an evolving nursing profession—is proposed.

## Nursing: A Tradition of Service

Modern nursing emerged in the 19th century and found its place in the newly created hospital. While it played a major role in shaping the hospital, the profession never gained the independence and authority that the practice of medicine enjoyed. After World War II, with the explosion in new diagnostic and therapeutic technologies, major investments that spurred new hospital construction and growing health care expenditures, demand for nursing soared. The profession responded by increasing the sophistication of its practice and research and enlarging the capacity of its educational programs. The model of nursing practice, however, did not change.

**With the** advent of the women's rights movement, which created more opportunity for all women, the nursing profession has become less attractive to women and has failed to draw men in large numbers. Cutbacks in hospital resources resulting from managed care have made nursing more stressful and even less desirable. Still wedded to the concept of service, the nursing profession has little professional autonomy and authority to improve that service. Until this paradigm changes, the structural shortage of nurses will remain.

## A Shifting Environment

The nursing shortage of today and the next two decades is driven by a much broader set of factors than previous shortages:

- **An aging population.** As baby boomers age, it is very likely that the demand for nursing care will increase and tax the health care system.
- **Fewer workers.** There are fewer younger people entering the workforce, which has already sparked a "war for talent."
- **An aging workforce.** The physical demands of nursing generally prevent individuals from working in the profession much past their mid-50s. With the average age of nurses being 44, many will retire in the next decade.
- **A mismatch on diversity.** The racial and ethnic makeup of the current nursing workforce does not reflect the



## Executive Summary

increasing diversity of the United States. To make the profession more reflective of the population and attract sufficient numbers of new nurses, recruitment from minority groups must be a priority.

- **More options for women.** Women have left nursing for other professions and not enough men have entered to take their place.
- **The generation gap.** Generation X, the prime source of young workers, perceives nursing as unappealing.
- **Work environment.** Fewer resources and greater demands have resulted in dissatisfaction and disillusionment among nurses.
- **Consumer activism.** Growing consumer empowerment, increasing awareness of medical errors and the backlash against managed care have led health care consumers to insist on vigilant participation in their care.
- **A ballooning health care system.** Competition, pressures in health care financing and a push for accountability do not bode well for a profession that lacks the authority to create change within the health care system.

## The War for Talent

The corporate sector, education, the military, and religious institutions all face worker shortages. The latter three have devised strategies to attract needed talent, strategies which the nursing profession could find beneficial:

- Redefining entry to the work or profession.
- Creating career paths that are sustainable.
- Focusing on those underrepresented in the current workforce.
- Making these careers attractive to 18- to 25-year-olds.
- Providing better recruitment and career information to prospective candidates.
- Upgrading the image of their work or professions.
- Creating integrated workforce recruitment and retention strategies.
- Creating public understanding of the worker shortage and the will for action.

## National Reports and Recommendations

This study examined a select but representative group of reports, white papers and issue briefs produced by a wide range of stakeholders in 2000 and 2001 and aimed at addressing the nursing shortage (see **Exhibit 4** for a complete list). The content and themes of these recent publications are summarized below:

**A different kind of shortage.** The current nursing shortage is quantitatively and qualitatively different from past shortages.

**Past solutions will fall short.** The majority of efforts to address the current nursing shortage, modeled on past market-driven solutions, provide only short-term fixes. Resources would be better spent on addressing the underlying issues driving the shortage.

**Public mission is threatened.** A shortage of nurses endangers quality of care and places patients at risk for increased illness and death. A long-term shortage could undermine the American health care system and emerge as a prominent public health issue.

**Impending workforce crisis.** The burden of care on nurses has increased, yet work-saving technologies have not been implemented. At the same time, new regulations and documentation requirements take nurses away from patient care. These work environment issues create formidable recruitment and retention challenges.

## Recommendations from the National Reports

1. Increase the supply of nurses through more effective recruitment.
2. Increase the supply of nurses through expanded educational capacity and opportunity.
3. Increase the supply and retention of nurses by regarding them as strategic assets and making positive changes in the work environment.
4. Increase the visibility of nurses' contributions to the quality of health care.

## Executive Summary

5. Expand career options and improve compensation for nurses.
6. Increase the reach of public-sector regulatory power.
7. Systematically compile workforce data for planning.
8. Strengthen nursing leadership.

While broad and comprehensive in their recommendations, many of these national reports fail to address the systemic issues that must be examined if lasting solutions to the nursing shortage are to be found.

## A Range of Stakeholder Strategies

The nursing shortage has aroused the intense interest of all sectors of the health care industry, not just the nursing profession, and an abundance of activity to address the issue is currently under way at national, state and local organization levels. To gain a broad understanding of these activities, extensive interviews with representatives from each stakeholder group were conducted (also see **Appendix B**) and supporting material was reviewed for this study. The major stakeholders and the focus of their efforts are listed below.

### National Professional Nursing Organizations

- Working together, respecting expertise, creating unity.
- Establishing common goals and objectives in all domains.
- Educating lawmakers, shaping legislation, influencing policy.
- Improving the professional image of nursing.

### Health Care Industry and Non-Nursing Professional Organizations

- Uniting efforts across sectors to address workforce challenges.
- Enlarging the supply of nurses.
- Educating policymakers, supporting legislation.
- Improving work conditions and collaboration among disciplines.
- Collecting outcomes data.

### Labor Organizations

- Strengthening collaborative labor efforts.
- Educating lawmakers and supporting legislation.
- Influencing compensation and work environment via contract language.
- Working toward more “partnership” agreements with employers.

### Legislatures

- Increasing the supply of nurses.
- Protecting the nursing workforce, improving safety.
- Obtaining data for planning.

### Government Entities

- Administering, monitoring and regulating as required.
- Collecting and tracking information for planning.
- Supporting workforce research.
- Analyzing and sharing information with key stakeholders.

### Nursing Education Organizations

- Increasing capacity, recruiting minorities.
- Improving educational and training opportunities for nurses.
- Expanding the range of teaching technologies.
- Enhancing collaboration between education and practice.
- Providing qualified faculty.

### Health Care Delivery Organizations

- Recruitment and retention.
- Partnering with schools, communities and regions.
- Improving the work environment.
- Developing nursing leadership.

## Executive Summary

### Staffing Organizations

- Growing their businesses.
- Improving benefits to staff.
- Increasing services to their clients.

### Philanthropic Organizations

- Understanding the underlying challenges.
- Identifying potential solutions.
- Adding value with focused resources.

## A Comparison of Markets

To assess the extent and character of the nursing shortage, this study conducted an examination of 15 markets across the country regarding population, economics, health provider characteristics, insurance status, nursing workforce, schools of nursing and temporary staffing agency demand (see section beginning on page 24 in the full report for data and discussion). Chief nursing officer (CNO) interviews were conducted in each market, and focus groups of nurses were conducted in three markets.

### Chief Nursing Officer Survey

The vast majority of CNOs (84 percent) report a nursing shortage, and 34 percent of these said they had vacancies across all sectors of the nursing workforce. Staffing shortages often result in emergency room diversion, delays in surgeries or admissions being denied, according to these CNOs. Unions represent 38 percent of staff in the hospitals where CNOs were interviewed. Strategies used to offset the nursing shortage in each market include wage increases, benefit increases, work environment improvements and changes in care delivery models. For the 16 percent of CNOs who reported no shortage, the hospitals of all but one have formalized programs that focus on the needs of their nursing staffs and offer them professional recognition.

### Findings from the Nurse Focus Groups

1. Most of the nurses plan to stay in nursing; however, they have concerns that as they age they will be unable to continue, given the heavy workloads and chaotic work environment.
2. The No. 1 concern of nurses in all of the groups was their increased daily workload.
3. Nurses are confused about the financial issues surrounding health care.
4. Nurses feel relatively powerless to change things they dislike in their work environment.
5. Nurse managers can make a significant difference in how nurses perceive their jobs.
6. Nurses feel that the image of nursing is poor in large part because of the poor work environment.
7. Nurses see little commitment from nursing schools and employers to adequately educate, train and orient new nurses. There is also limited support for continuing education.

Nurses made suggestions for addressing the shortage, which can be grouped into the following four broad categories:

### Workload and Work Environment

- Decrease individual workloads.
- Provide support staff: clerical, nurse technicians, transport technicians, etc.
- Empower nurse managers to be able to fully support their units.
- Listen and take action regarding concerns in the work environment.

### Financial

- Increase salaries.

### Respect and Support

- Encourage physicians to treat nurses as colleagues. Education and Professional Development
- Improve the orientation process.
- Provide paid continuing education.

**Executive Summary**

## A Continuum of Responses, An Evolving Profession

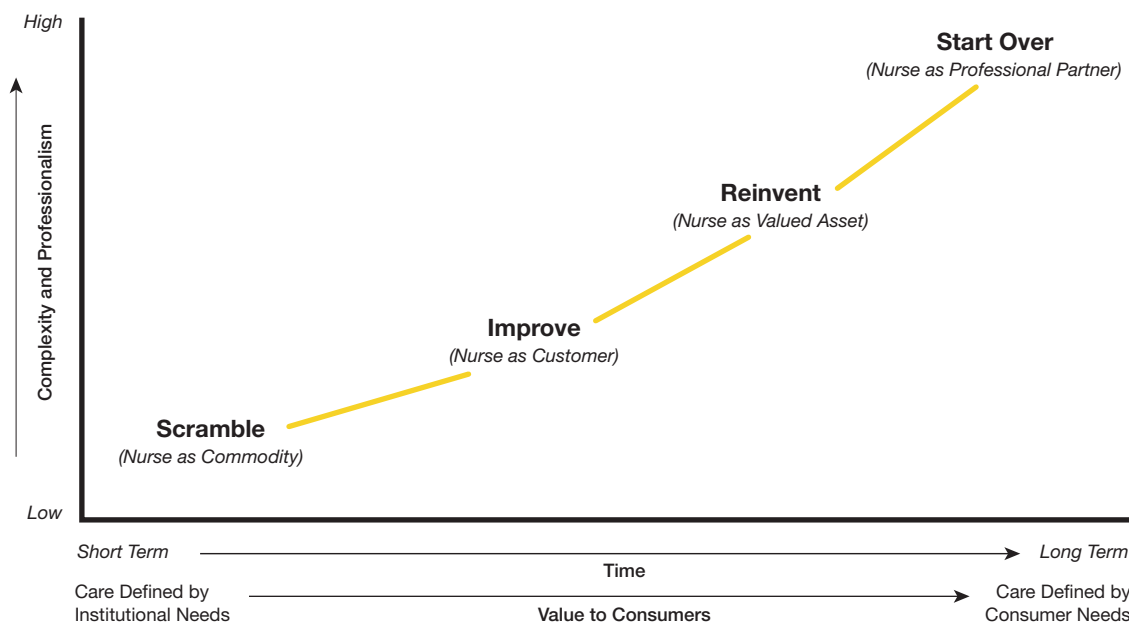
The compendium of activity that has emerged in response to the nursing shortage ranges from short-term fixes to long-term, future-directed interventions. These responses reflect the nursing profession's evolution from being a workforce commodity to becoming a vital, strategic asset that is necessary for the success of any health care organization or system.

**It can** be helpful to view this evolution and the current responses shaping it as a continuum represented

of health care professionals or institutions. As nurses progressively embrace more autonomy in their nursing practice, integrate the intelligent use of technology and come to better represent the diversity of the American public, their service becomes more responsive to consumers at a time when care is increasingly defined by the needs of consumers and their families.

**In the** Scramble stage, activities focus on nurse recruitment and monetary incentives. The Improve stage is characterized by activities that focus on increasing flexibility, improving the work environment, expanding educational opportunities, increasing diver-

Continuum of Responses to the Nursing Shortage



by four stages: Scramble (nurse as commodity); Improve (nurse as customer); Reinvent (nurse as valued asset); and Start Over (nurse as professional partner). While this evolution generally moves in a forward direction over time, it does not necessarily take a direct, linear path. In fact, the current actions to address the nursing shortage fall into all four of these stages. Still, the stages, illustrated below, reflect movement along an evolutionary path. As nursing evolves, it also becomes of greater value to consumers, for the earlier stages of systems of care are geared more to meet the needs

of health care professionals or institutions. In the Reinvent stage, activities focus on creating new nursing roles, career ladders and more professional work environments that integrate autonomy and decision-making. In the Start Over stage, nurses practice at the upper limits of their professional licenses and certifications, and activities involve creating entirely new models of care defined by consumer needs.

## Executive Summary

### Strategies and Recommendations for Action

This report describes the complex and enduring nature of the nursing shortage in the United States. It provides compelling evidence that this shortage is unlike any of those in the past and thus requires bold new solutions. It calls for a re-envisioning of the nursing profession itself, so that it can emerge from this crisis stronger and in equal partnership with the profession of medicine. Anything less consigns nursing, and the public that depends upon its care, to perpetual cycles of shortage and oversupply.

**The authors** therefore recommend that a National Forum to Advance Nursing be created. An independent body, the Forum would draw together a wide range of stakeholders to address the nursing shortage and broader related health and social issues. In an effort to build upon the vast number of activities that are already under way, and to acknowledge their critical value, the Forum would focus on helping nursing achieve later evolutionary stages of the profession. The philanthropic sector is uniquely situated to provide crucial leadership and resources to help create and fund this Forum, but it cannot act alone. The Forum's success would require the active, collaborative participation of all groups that share concern about the nursing shortage, including nurses and nursing profession leaders, educators, health care industry leaders, labor unions, government, the array of collective national organizations, as well as consumers, to name just a few.

#### **The National Forum to Advance Nursing would focus efforts in the following strategic areas:**

1. Creating new nursing models; developing and piloting new ideas that address both the nursing shortage and broader health and social issues; advancing the study of nursing's contribution to health care outcomes and consumer satisfaction; and creating entirely new models of health care provision.
2. Reinventing nursing education and work environments to address the needs and values of—and to appeal to—a new generation of nurses.
3. Establishing a national nursing workforce measurement and data collection system.
4. Creating a clearinghouse of effective strategies to advance cultural change within the nursing profession.

**As consumers** are directly affected by the nursing shortage, they should be engaged as equal partners and stakeholders in each of the Forum's four strategic areas.

**If lessons** from the nursing shortage are any guide, addressing a systemic problem requires the input of all those who have a stake in that system. The National Forum to Advance Nursing would provide the necessary structure to bring together all stakeholders in a collective effort to develop meaningful, lasting solutions to the American nursing shortage.

# A Tradition of Service

The history of nursing in the 20th century is, in part, a series of accommodations to a cycle of growth and contraction in health care, which was driven by broad social and technological changes. One can write this history by examining the series of reports produced by the nursing and health professions of the various crises they faced, or one can look deeper for the themes and issues that emerge throughout the history of the nursing profession. This report will take the latter path.

**Modern nursing** emerged as a part of a broader “culture of professionalism” that began to develop throughout western democracies in the second half of the 19th century. While several professions were ancient—teaching, law, medicine and theology—some that were newer arose around traditional work—nursing, social work and public administration. Others were shaped by new knowledge and technology, such as engineering and specialized scientific disciplines. At their heart, all of the professions, whether old or new, sought to bring science and rationalism to the service of society. The professional response was also born from the values of the new middle class, including scientific rationality, progressivism, government reform and at least some desire to temper and direct market forces. As a result, most professions had a close association with the dominant culture within each country and, not surprisingly, came to be viewed by many immigrants as pathways to acceptability and acculturation, even if immigrants were often forced to wait a generation before being accepted by the professions. The rise of professionalism was also marked by the establishment of educational standards and legally defined, but professionally controlled, entry into and regulation of practice (Bledstein, 1976). Nursing closely followed this pattern of professionalism.

“As care moved out of the home, it moved into the newly emergent hospital, first as a welfare institution and then as a charity or not-for-profit organization that sought to bring its services to a larger, more middle-class population.”



**The location** for the practice of nursing forms a second historical pillar. As care moved out of the home, it moved into the newly emergent hospital, first as a welfare institution and then as a charity or not-for-profit organization that sought to bring its services to a larger, more middle-class population. The organization and order of care was driven not by market forces, but by a commitment to bring science and method to service. Hospitals were created and supported by charitable religious institutions, public agencies at all levels tied to service of particular populations, and by the professions of medicine and nursing themselves, both together and independently.

**The rise** of the modern professional structure within the hospital treated the two dominant health professions differently. Some of the best evidence of this pattern is found in the Flexner report, a landmark publication that helped define the future of the medical profession (Flexner, 1910), and the Goldmark report, the first widely recognized national report on nursing (Goldmark, 1923). While both were in the tradition of the professional revolution, Flexner envisioned the medical profession as one with growing independence derived from the authority of the burgeoning science of medicine. Goldmark, on the other hand, envisioned a future for nursing that lacked the independence and enfranchisement of medicine—one that would remain tethered to the work of the hospital and physician.



## A Tradition of Service

**The skills** and focus of nursing transcended the confines of the hospital, however, and one of the early dynamics in the profession was a broader orientation to social change and improvement. Medicine and public health parted in the United States at the beginning of the 20th century, with medicine's increasing use of the lens of biology and the disease model to focus on the individual needs of patients as they presented with various ailments and public health's early victories in population health through sanitation, food standards, diet and, later, immunization and safety (Starr, 1982). Nursing made less of a distinction between individual and population health, continuing to demonstrate both a willingness and an ability to understand health in a framework of systems or even a broad public context. Such an orientation carried over easily to practice patterns with individuals. Moreover, the professional dedication to service and the fact that nurses were employed almost exclusively in service organizations, whether hospital or public agency, reinforced this defining quality of nursing.

**Despite nurses'** overwhelming commitment to serve, there was little that they could provide through the first half of the 20th century beyond comfort and cleanliness. For the most part, they remained tied to the hospital for both training and practice and were not seen as a vital part of the intellectual future of health care (Friss, 1994). As the scientific revolution in health came to fruition in mid-century and grew rapidly through technological advancement afterward, it had a profound impact on the nursing profession (Schwartz, 1998). Out of the crucible of World War II, new diagnostic and therapeutic technologies led to the increasing sophistication of nursing practice. At the same time, the postwar prosperity raised public expectations and created more demand for nursing service.



Spurred by this demand and federal and state support, new hospitals went up in communities at an unprecedented rate.

**The Brown** report of 1948 recognized the growing sophistication of the services provided by nurses and the demand for those services by the public (Brown, 1948). It viewed the nursing shortage not as a problem of nursing educational capacity, worker supply or wages, but as a problem with the structure of the profession itself. It noted that the nursing model failed to distinguish between nurses practicing at higher versus lower levels of care—and failed to bestow commensurate professional rewards—and that nursing education failed to prepare nurses to enter the profession at clearly defined levels of competency and experience. The report made a far

more complex set of recommendations than had ever been advanced, but they were never enacted. The many paths of entry to the profession and the lack of definition of nursing practice are as contentious as ever, and have made profound contributions to the creation of the current structural shortage of nurses.

**Many of** the changes in health care in the post-World War II era can be traced to the increasing investments in technologies from the public and private sectors, which transformed hospitals and created demands for workers of all types, especially nurses (Ruzek et al., 1996). This garden was cultivated by health care budgets that grew from about 5.5 percent of the gross domestic product in 1960 to almost 14 percent by the century's end. Increasingly, hospitals began to resemble big businesses, and by the 1980s a fair number had shed their missions of being strictly service organizations and entered the for-profit world.

## A Tradition of Service

**Nursing responded** to the challenges of growth in size and sophistication by increasing the capacity of nursing education programs, expanding opportunities for baccalaureate training and introducing a vast array of advanced practice nursing programs. But as a profession, nursing was still tied to the hospital without having the independence that other professions enjoyed. The potential of more professional autonomy remained, but little existed in actual practice. Throughout the '70s and '80s there were nagging shortages of nurses, but the analysis at both the public and private levels looked to labor market and wage solutions, not change in the professional and practice models.

**The last** 50 years of nursing history must be considered within the context of women's rights. With this movement creating more opportunity for all women in education and in the workforce, it should not be surprising that the nursing professional model, which circumscribes nurses' autonomy, authority and opportunities, has become less attractive to women and has generally failed to attract men in substantial numbers. Efforts by nurses to expand their power through collective bargaining, an increasing trend, have largely failed to produce changes in the nursing model and the nurse's standing within the health care system. While the movement to managed care promised to restructure care in ways that would allow nurses to use their skills to improve the performance of the system, to date it has instead removed resources and failed to produce such restructuring, making the plight of the working nurse even more unsustainable.

**Still wedded** to service, but without the independence or accountability to be able actually to improve that service, nursing has dramatically advanced the education and research base of the profession, but for a variety of reasons remains outside the very decision-making processes that could improve the system. Until this paradigm changes, the structural shortage of nurses will remain.



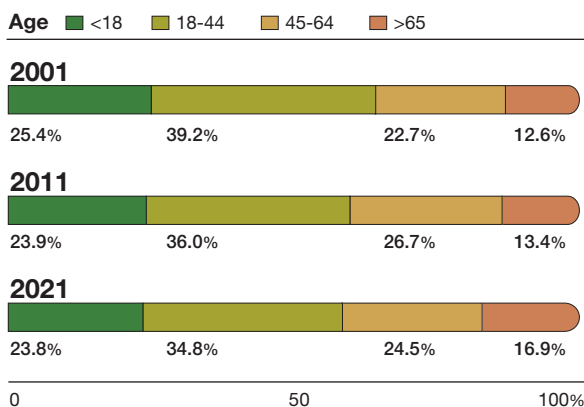
# A Shifting Environment

Most ages believe that their problems and opportunities are unique. With the perspective of time, however, recognizable patterns of similarity emerge. Since the midpoint of the last century, nursing supply has generally followed a cycle of abundance coming on the heels of shortage, each occurrence seeming to be unique, but viewed over the decades appearing very much alike. For the most part, nursing shortages since the 1950s were produced by a system of health care that was growing dramatically in size and in technological complexity to meet expanded demand. This remained the driving factor even with the rise of women's rights, for while the movement began in the 1960s, its impact was decades in the making.

As the health care system grew, it outstripped the capacity of the educational and employment systems to supply adequate numbers of new workers such as nurses. The supply sector struggled to catch up, but it often overshot the demand, creating periods of excess

## Exhibit 1

Percentage of the U.S. Population by Age Group, 2001 to 2021



Sources: U.S. Bureau of Labor Statistics, 1998; U.S. Census Bureau, 1998.



“ In order to develop effective initiatives to address the nursing shortage, it is essential to understand what new realities exist and how they interact to shape the overall environment of nursing today. ”

capacity. This mismatch, coupled with unemployment brought on by the workings of the business cycle, adequately explains most of the nursing supply issues of the past.

The nursing supply crisis of today and of the next two decades is driven by a richer and broader set of factors, making it more complex than previous periods of over- and undersupply in nursing. In order to develop effective initiatives to address the nursing shortage, it is essential to understand what new realities exist and how they interact to shape the overall environment of nursing today.

**Demography: an aging population.** As Exhibit 1 establishes, the greatest challenge for the nursing profession and the U.S. health care system in general over the next few decades is caring for the aging baby boom generation. There are dangers, of course, in any straight-line projection of resource use, but by any estimation, as the boomers enter their elder years, when consumption of health care resources rises, they will tax the health system as it is currently arrayed. This stress comes without factoring in longer life expectancies or the expense and complexity associated with new technological developments. It may be that this generation will live longer and only experience illness

## A Shifting Environment

very late in life, but it is highly likely that many of the services currently provided by the nursing professional will be in growing demand.

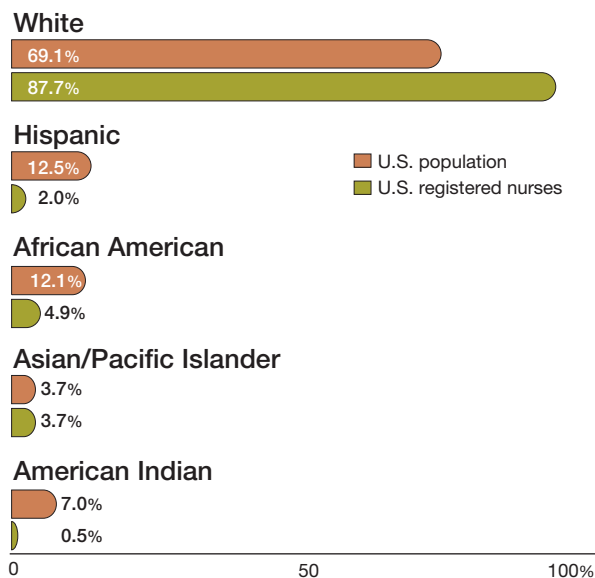
**Demography: fewer workers.** The reverse side of the aging boomers is a contraction in the relative size of the generation that immediately follows them. This smaller cohort is already driving a “war for talent” throughout every part of the U.S. economy as businesses prepare themselves to compete not just for workers, but for those workers who have the basic and technological skills to make their organizations successful. The combination of fewer workers and greater demands for their skills will create shortages at every level of health care.

**Demography: an aging workforce.** As the population ages, the existing nursing workforce will, of course, age as well. In a profession in which much of the work still involves a great deal of physically demanding activity, it is often neither desirable nor possible to work much beyond one’s mid-50s. The average age of nurses in the United States is 44 (ERIC Digest, 2000). This means that a large portion of the existing nursing workforce will be faced with retirement over the next decade if new roles and career paths are not developed for them.

**Demography: mismatched on diversity.** Lately there has been much celebration of the growing diversity of the U.S. population, captured in the 2000 census. As laudable as this shift is, it creates another demographic challenge for nursing, for while there is growing recognition of the value both to patients and society of having cultural competency and equitable representation in the health professions (Dower et al., 2001), there remains a mismatch in ethnic distribution between the U.S. population and that of registered nurses. This is especially true for Hispanics and African Americans, as indicated in **Exhibit 2**. The under-30 population, from which new nurses will be recruited, is even more diverse, which will create even greater dislocation if nurses from this generation are not successfully recruited into the profession.

### Exhibit 2

U.S. Population and U.S. Registered Nurses by Race/Ethnicity, 2000



Sources: U.S. Census Bureau. *Profiles of General Demographic Characteristics, 2000*. Washington, D.C., May 2001; and Division of Nursing, Health Resources and Services Administration. *National Sample Survey of Registered Nurses*. Washington, D.C., 2000.

**Values: labor force participation and options for women.** In the United States, labor force participation by women has grown consistently since the mid-1950s. Shadowing this change has been a slower erosion of the limitations in work choices that were once imposed on women by rule or societal expectation. As these norms have changed, women have moved out of or simply not entered traditional occupations and professions. In some cases, technological innovations such as information technology have lessened the demands for many of these jobs, and in others, men have moved in to take some of the work. But in nursing, women have departed for other work, men have not entered and to date there have not been major technological innovations that have changed the work.

**Values: Generation X.** Another important shift in values is captured in **Exhibit 3**. The generation born roughly between 1961 and 1981, commonly called Generation X, has a distinctive set of values and expectations concerning work (Generation X Project, 2001). These are contrasted with a profile of how the principal

## A Shifting Environment

### Exhibit 3

Generation X Desires for Work and Its Perceptions of Hospitals

Desire for Work	Perceptions of Hospitals
Service-oriented	On strike, laid off, “angels of mercy”
Anti-institutional	Work in large, cold, unresponsive institutions
Not hierarchical	Work is stressful, highly structured and “un-fun”
Flexible, welcoming change	Lacks the high-tech access associated with medicine
A diverse workforce	Tied to a professional career, not open to change
Using technology	
Developing new skills	
Community work	

Source: Center for the Health Professions, University of California, San Francisco, 2001.

employer of nurses, the hospital, is seen by this generation. In the coming “war for talent,” responding to these values as work is realigned and remade will be one of the critical components of success. If the nursing profession and principal nursing workplace remain at odds with this shift in generational values, they will contribute more to the problem than the solution.

**Work environment: internal ravages of a system in transition.** For the past decade or so, the health care system has moved unevenly to become more accountable for outcomes while at the same time having fewer resources with which to do its work. This adjustment has produced enormous stress and dislocation, and will continue to create both, making health care employment more contentious and taxing than before. Hospitals have been the epicenter of much of this transition, which has translated into work environments for nurses that are more demanding, less fulfilling and more stressful. These circumstances have impeded many nurses from providing care that meets their standards of competence and professionalism. The resulting dissatisfaction and disillusionment has led to difficulty in retaining and recruiting new nurses in many settings.

**Consumers: awakening to a new role.** Until recently, health care consumers were passive players in the overall delivery of health care services. Instructed

to be compliant by health professionals or institutions, consumers could either comply or exit the system that was failing to follow prescribed regimens of care. For many reasons, among them lack of information, few formal feedback mechanisms and provider resistance, consumers had little opportunity to express satisfaction or dissatisfaction with the quality of care they received.

**This situation** is changing.

Social movements that have empowered marginalized groups, such as minorities, women, and gays and lesbians, have paved the way for health care consumers—people with AIDS, women with breast cancer, family caregivers and consumers in general—to take a more active role in their own health care and that of their loved ones. Moreover, many providers now value responsiveness to “the consumer” as the compass that should guide organizations to strategic success. In the past, consumers often remained silent partly from a widespread belief that the American health care system always produced the highest quality care possible. A growing body of evidence has shocked the public into realizing that the health care system produces serious, and sometimes fatal, errors. Finally, the backlash against managed care practices that create financial pressure to limit and deny care has convinced many people that active and vigilant consumer participation is the only way to ensure that the health care system acts in the best interests of patients.

**The health care system: an economic elephant.** The American health care system has been enormously successful over the past five decades in developing highly specialized lifesaving diagnostic and therapeutic technologies and deploying them to most of the population. At the same time, it has also come to consume a large portion of the nation’s annual income. This huge resource base has supported a collection of

## A Shifting Environment

professional, organizational and institutional resources that have carried on the work of health care in a manner that ranges from collaboration to competition to outright conflict. A growing body of evidence indicates that the latter two approaches may not be the best way to organize and deploy so vital a resource as health care.

**In this** environment, the nursing profession has suffered. In most cases, nursing is not recognized as a value-added service, such as physician consultation, because it has always been included in the cost of hospital care along with linens and food. The traditional subjugation of the nursing profession gave rise to the current financing mechanism, which makes it difficult, if not impossible, to quantify the value that nursing service adds and to compensate for it accordingly.

**As the** health care system is increasingly held more accountable for the quality of care it provides, those individuals and professions that contribute to improvements will likewise receive recognition and rewards. For nursing to receive appropriate recognition and rewards for its contributions to the improvement of patient care, the profession must develop measures that capture nursing's contributions and demonstrate the impact that they make to the financial well-being of health care institutions. In this new environment that rewards innovation, the relationship of nursing to the organization and financing of care must move from one of subservience to that of valued partner.

**The movement** to managed care has also promoted new mechanisms for financing health care which, as noted above, have created tremendous stress for hospitals and nurses in particular. Under the old indemnity model of health insurance, health care services were paid for with little, if any, review by health plans. Managed care introduced capitated financing, in which health plans placed strict limits on resources and providers were held accountable for their use of these resources. While this system helped hold down costs in the mid-1990s, cost increases in health care have once again begun to outpace the Consumer Price Index.

**Several forces** acting within and upon the health care system—an aging population, new health care technologies and more market-oriented approaches to health care—all of which put an upward pressure on costs, are likely to shape the future of nursing. Corporate and individual purchasers in the public and private sectors will attempt to balance these increases with their desire to maintain access, choice and quality. Changes in the way health care is financed are certain to come, but it is unlikely that there will be a return to the type of managed care that appeared in the early 1990s. None of this bodes well for a profession that is already undervalued and overworked.

**In this** uncertain environment, the nursing profession and its allies within the health care system must work to raise consciousness about the real value that nurses add to health care and produce empirical evidence to prove it. The days of treating nursing as a commodity must end, and the nursing profession must take the lead in changing this paradigm.



# What Others Know About the War for Talent

## The Corporate Sector

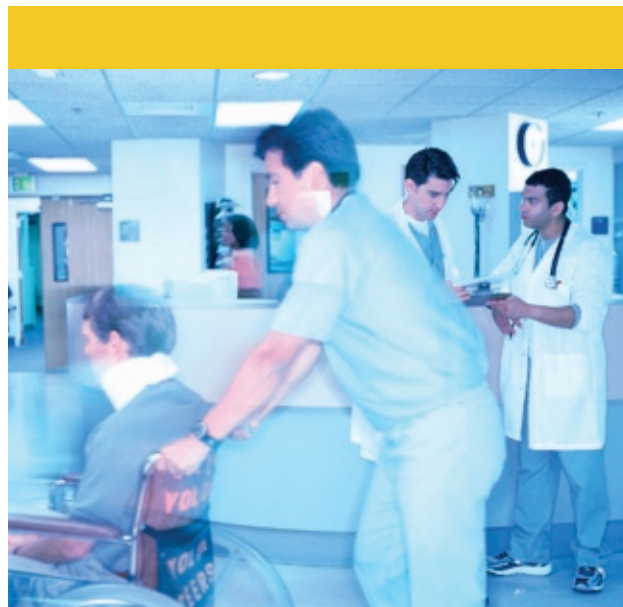
Beginning approximately five years ago, several national management-consulting firms in the United States began discussing the impending war for talent. The war as they saw it would be driven by several key realities.

**First and** foremost was the brutal demographic reality—the baby boom generation would soon be followed by the baby bust. Before the boomers' children reached adulthood—they are now just entering college—there would be a major decline in the number of people in the U.S. workforce age 25 to 40. Businesses that depend on workers in this age range would simply have fewer candidates to choose from.

**Second, businesses** would face increasingly stringent standards, mostly driven by the growing demands of customers, but also by new regulations and global competition. To remain competitive in this new environment, they would need to secure and retain the best workers possible.

**Third, workers** would need to possess new skills. At a time of rapid technological change, employees would need to be technologically literate. They would need to be highly adaptable to changing organizational structures and possess communications skills and a perspective that makes individuals ready for global competition.

**Finally, in** this new sellers' market for talent, the nature of work itself would change. In part, this would represent the shift in the values of new workers, but it would also speak to the need to carefully examine how work is done, how it could be improved and in what ways it might be reinvented.



“ Each of these sectors—education, the military and religion—face staffing shortages similar to those in the nursing profession, and their efforts also have much in common.”

**These realities** have driven many, if not most, corporations to now view their capacity to attract, retain and fully utilize their workforce as a strategic goal. Without success in this arena there will be little chance that they will be able to remain competitive. Many executives now consider access to talent to be as important as access to capital or technology and, in fact, deem their intellectual capital to be more valuable than their other assets.

**In response,** the private sector has taken several steps that may have relevance for health care as it considers how to respond to this challenge. The first step has been to elevate the human resource perspective to the highest level of strategic importance. Several companies have created a chief talent officer role to focus efforts on identifying needed talent, developing systems to attract and maintain it, and fully utilizing it to achieve strategic goals. Companies have also created tools for incorporating human resource variables into their planning processes. These tools allow them to assess the cost and quality of a company's products or services based on employee factors, such as skill sets.

## What Others Know About the War for Talent

**These planning** efforts in the corporate sector have led to a much greater readiness for what is known as “substitution.” The most widespread manifestation of substitution has been the use of information technology to replace staff positions. This may be best evidenced by changes in employment patterns in commercial banking as ATMs made possible combinations of more services and convenience and fewer tellers. Substitution can also take the form of shipping jobs offshore. The service industry, for example, has often moved work such as data entry or software engineering to other countries with a lower-wage labor force.

**Corporations have** responded to these realities by making the workplace more accommodating to workers' needs. These efforts range from the institution of casual dress codes, making job sharing, part-time employment and sabbaticals more available, all the way to attempts to upgrade the management and leadership skills of first-line managers. In general, these activities focus on designing the structure of the workplace, and indeed the work itself, around the needs of employees. In their most radical manifestation, the worker is seen as a customer or a valued asset. This is a new perspective for many organizations, and it seems to be making a difference in their ability to attract and maintain critically important workers.



## Education

Perhaps no sector of society resembles nursing quite so much as K–12 education. Teacher education has been dominated by women for many years, is a service profession practiced by employed professionals who work for the most part in large public institutions, requires baccalaureate-level training for entry, has experienced significant salary compression and faces enormous workforce challenges in the coming decade. Approximately 3.1 million K–12 teachers and 2.6 million nurses are currently employed in their respective professions. Both populations are estimated to be approximately

87 percent white, and 74 percent of teachers and more than 90 percent of nurses are women. The average age for both professions is 44 nationally (ERIC Digest, 2000).

**One estimate** of the nation's need for new teachers over the next decade exceeds 2 million (Yasin, 1998). This is driven by several factors: the need to replace an aging teacher workforce; growing numbers of young students, particularly with the influx of immigrants in the last decade; more intensive use of teachers to improve quality by reducing class size; and pressure to bring new skills into the classroom, particularly in math, science and bilingual education. The sector has responded in several important ways.

**One effort**, advocated by the Commission on Teaching and America's Future, chaired by Governor Jim Hunt of North Carolina, is the improvement of the status of teachers. This private-sector commission has called for higher standards for teachers and for linking rewards to successful student performance. It has also developed recommendations to improve teacher education and support structures, such as developing retraining institutes and online courses in schools as a way to improve teacher performance. In addition, the commission has promoted this new approach to teaching as justification to young people to enter the profession. Founded in 1994, the commission has created state partnerships, worked directly with urban school districts, helped stimulate the development of regional centers for excellence and, in general, promoted its overall idea of improving the quality of the profession.

**Other efforts** to expand the number of teachers involve redefining the entry pathway to the profession, with particular emphasis on recruiting adults in career fields outside teaching who may have taken early retirement. States and municipalities have developed alternative ways for such professionals to gain teaching

## What Others Know About the War for Talent

or provisional teaching credentials. Attractive pension benefits and informational campaigns to prospective candidates have also been created to increase nontraditional entry into K–12 teaching. One visible program is the federally sponsored Troops to Teachers initiative, which aims to recruit retiring or retired armed services personnel to become teachers. Since its creation in 1994, it has established placement offices in 24 states and boosted visibility for the program among veterans and school districts <[www.recruitingteachers.org](http://www.recruitingteachers.org)>.

**Several national** efforts address the shortage of teachers by recruiting underrepresented minorities.

While 36 percent of the students in the United States are people of color, that group constitutes only 13 percent of teachers. Some barriers to entry to the profession for minority groups include competition for these professionals from other employers, the high cost of college and the perception shared by many of these individuals that schools are unattractive places to work. The United Negro College Fund has launched an initiative to address this issue, and several federal programs, including Students in Service to the Nation and the State Teach Program, provide resources and support to encourage minority students to pursue teaching as a profession (Yasin and Albert, 1999).

**A system** that needs to recruit 200,000 new teachers each year has to use all available technology and networks of organizations to provide recruitment information to as many prospective teachers as possible. Providing better information about the teaching profession to prospective candidates has been an arena of increasing activity at the state and national level. One of the oldest and most active of these efforts is the Recruiting New Teachers program, begun in 1986. The organization works to improve esteem for the teaching profession, and it also provides a great deal of information to prospective teachers as well as the organizations that hire and train them. This information focuses on

careers, recruiting practices and alternative ways that people can enter the profession. Much of this information is provided on its Web site <[www.rnt.org](http://www.rnt.org)>, but traditional conferences and mailings also form part of its activities.

## The Military

The recruitment process and potential pool of applicants for the military service vary considerably from those of nursing and teaching. While there may be a common service orientation to all three, the military focuses its recruitment for the enlisted ranks on young, precollege workers who are not likely to make a career of the service. Once as dominated by men as nursing is by women, the services have radically redefined the role of the female recruit and have benefited from a larger catchment pool. The military has also successfully attracted minorities that are underrepresented in other professions, particularly African Americans and Hispanics. The examples here draw from the Army, which has traditionally had the most difficulty with recruitment of all the armed services.



**The Army** is faced with redefining itself for a younger generation that understands itself as more independent, less likely to join any organization, more oriented to technical skills and open to diverse work settings. The Army of One media campaign focuses on all of these characteristics, delivering the messages in the highly interactive Internet-based medium, in addition to broadcast and print media. The effort has yielded a response that exceeded expectations even in the expanding economy prior to the events of the fall of 2001.

**As the** Army's mission and available technological resources to achieve it change, so do the numbers of soldiers needed and the skills they must possess. Adjusting the numbers and skills mix has become another strategy pursued by the Army. Over the past



## What Others Know About the War for Talent

decade, it has traded a smaller force in uniform for one that is better paid and more skilled. The benefit structures have also been realigned to attract and promote those individuals who possess or wish to develop the technical skills identified by the Army as critical for its future. Behind all of these moves is, of course, a classic shift from labor to technology (Levy et al., 2001). Finally, the Army has recognized that its ability to define, attract, train and retain a workforce to meet its needs in this century is heavily dependent on its ability to mount an integrated workforce recruitment and retention strategy. The Army's strategy involves identifying and understanding the pool of potential recruits, designing a campaign to attract them to the service, and creating appealing benefits to retain them there. It is perhaps best captured in *Enlisted Management Policies and Practices: A Review of the Literature* prepared by the RAND Corporation and published in 2001 (Kirby and Naftel, 2001). The publication describes the Army's integrated effort across several major commands, which has effectively addressed such diverse issues as changing mission, new technology, new generational expectations and a changing social environment.



## Religion

The calling to the service of God is not untouched by the war for talent. As clergy members age, social expectations change, competition from other careers grows and the appeal of such a vocation erodes, many of the nation's churches, temples and mosques are facing the prospect of empty pulpits and bemas. The trend runs from the most liberal of Reform Judaism congregations to evangelical Protestant faiths. Like nursing, entry into the clergy may be gained through many pathways compared to other professions and requires an orientation to service. Unlike nursing, it calls for considerable independence of operation and has been dominated by men. Clergies are widely distributed and employed in

a vast array of very independent institutions that have strong ties to communities.

**Given this** orientation, it is not surprising that many of the attempts to recruit new clergy members are focused on creating interest on the local level. In most faiths, these efforts have focused on how congregations can assist members of their community in making the decision to enter the clergy. Their target groups range from younger people to underrepresented minorities to those making midcareer transitions, but all the programs use the strength of the local religious organization to identify, encourage, support and attract the person

who is interested in moving into religious work. One good example of this is the Episcopal Church's effort to attract younger people into the ministry. The Gathering the NeXt Generation project makes information about entering the clergy available to local churches, but leaves the work up to those congregations <[www.episcopalchurch.org](http://www.episcopalchurch.org)>.

**Some research** indicates that some people feel a vocation to the ministry but are deterred by certain dimensions of the lifestyle, such as low pay, compulsory mobility and the need for service in rural areas. Addressing professional lifestyle concerns has become a matter of interest in several faiths, although many efforts have focused on areas such as avoiding burnout and addressing the causes that lead to it. Recommendations include careful definition of role, better clergy-congregation relations, more organizational support and spiritual counseling for clergy (Heller, 2001). For instance, the Episcopal Church has expanded its efforts at incorporating the laity into the pastoral work of the church to provide additional support for the clergy.

**Finally, as** with teaching and nursing, the religious organizations of the nation recognize the need to redouble their efforts to recruit underrepresented



## What Others Know About the War for Talent

minorities. These efforts typically try to identify when and where congregations are underserved and to align programs to recruit and support congregants to pursue the training needed to enter service. Most of the major Protestant denominations have expanded their out-reach activities to these groups.

**Each of** these sectors—education, the military and religion—face staffing shortages similar to those in the nursing profession, and their efforts also have much in common. Each, however, is tailored to address the particular challenges, structures and opportunities that characterize each sector. In review, their common strategies include:

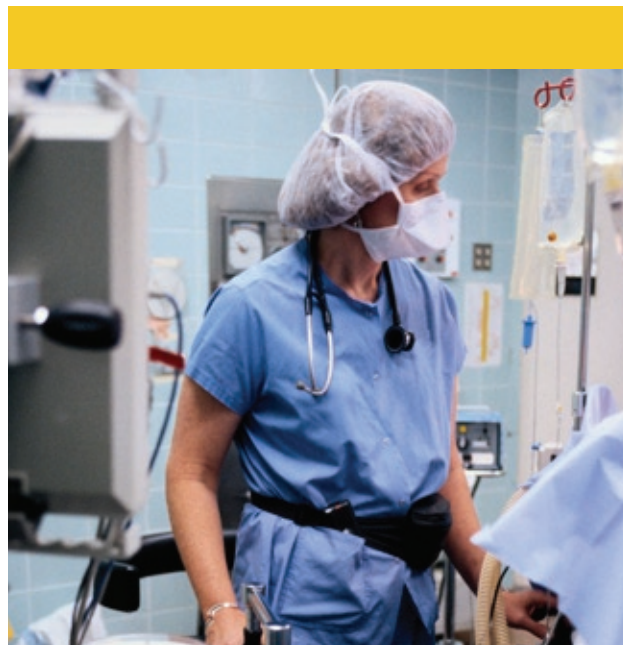
Redefining entry into the work or profession
Creating career paths that are sustainable
Focusing on those underrepresented in the current workforce
Making these careers attractive to 18- to 25-year-olds
Providing better recruitment and career information to prospective candidates
Upgrading the image of their work or profession
Creating integrated workforce recruitment and retention strategies
Creating public understanding of the worker shortage and the will for action

**Health care** and nursing could benefit from similar strategies and perspectives.

# National Reports and Recommendations

For nearly a century, a recurring under- and oversupply of nurses has existed within the United States. The history of concern with the nursing supply reveals distinct time periods with similar problems, each constrained by its own social, economic and health care realities. During each period, the policies enacted to increase the supply of nurses set precedents and limits, but failed to consider the bigger issues, such as the definition of the profession and the changing health care needs of the nation (Friss, 1994). In 1915, Isabel Stewart, leader of the National League for Nursing Education, recommended only publicity and image enhancement to bolster recruitment for the profession (Stewart, 1915). By neglecting to address issues of salary and working conditions, the shortage worsened. Eight years later, the first widely recognized national report on nursing was published by the Committee for the Study of Nursing Education, later to be known as the Goldmark report. Coming on the heels of the Flexner report on medical education (Flexner, 1910), a landmark publication that helped define the future of the medical profession, it made similar recommendations calling for standardizing education, training and licensure to assure the care and safety of patients (Goldmark, 1923).

**In 2000** and 2001, a number of formal reports, white papers and issue briefs highlighting the nursing shortage were produced by a spectrum of national organizations, associations, panels, coalitions, consortiums and government entities. While nursing issues are the main focus of most of these reports, their content ranges from articulating the immediate issues facing health care institutions today and analyzing their causes to a call for a restructuring of the American health care



“ The ‘nursing shortage’ is defined as an overarching imbalance of supply and demand attributed to demographics, qualifications, availability and willingness to do the work.”

system. The current nursing shortage, it seems, has provided an opportunity for an important and comprehensive discussion that extends beyond debates about supply and demand and begins to address how the profession relates to the health care system and how the model of nursing practice needs to evolve to meet the public's changing needs.

**What follows** is a brief summary of the content, themes and recommendations of the recent publications listed in **Exhibit 4**.

## A Different Kind of Shortage

Among these papers, there is general agreement that the current nursing situation is quantitatively and qualitatively different from past nursing shortages. Many reports, echoing the factors noted in the “A Shifting Environment” section of this study, cite the multifactorial, noncyclical nature of the challenge and acknowledge that many of the driving factors are beyond the control of the nursing profession. Some reports define the current situation as a “staffing shortage,” thus differentiating it from the impending “nursing workforce shortage” being predicted by economists (Buerhaus et

## National Reports and Recommendations

### Exhibit 4

Selected National Reports, White Papers and Issue Briefs, 2000 to 2001

***Perspectives on the Nursing Shortage: A Blueprint for Action***

American Organization of Nurse Executives, October 2000

***Facts on the Nursing Shortage***

Sigma Theta Tau International, October 2000

***Vision 2020 for Nursing***

Nursing Practice and Education Consortium (10 national nursing organizations), December 2000

***Workforce Supply for Hospitals and Health Systems: Issues and Recommendations***

American Hospital Association, Strategic Policy Planning Committee, January 23, 2001

***Strategies to Reverse the New Nursing Shortage***

Tri-Council for Nursing (American Association of Colleges of Nursing, American Nurses Association, American Organization of Nurse Executives, National League for Nursing), January 31, 2001

***When Care Becomes a Burden: Diminishing Access to Adequate Nursing***

Fagin, C., Milbank Memorial Fund, February 2001

***Crossing the Quality Chasm: A New Health System for the 21st Century***

Institute of Medicine, March 1, 2001

***The Nurse Staffing Crisis in Nursing Homes: A Consensus Statement***

The Campaign for Quality Care (31 national long-term care organizations), March 14, 2001

***Assuring Quality Healthcare for the United States: Supporting Nurse Education and Training***

Americans for Nursing Shortage Relief (29 national nursing organizations), April 25, 2001

***The Shortage of Care***

Service Employees International Union Nurse Alliance, May 9, 2001

***Who Will Care for Each of Us? America's Coming Health Care Labor Crisis***

University of Illinois Nursing Institute, May 9, 2001

***A Shortage of Registered Nurses: Is It on the Horizon or Already Here?***

Levine, L., Congressional Research Service Report for the U.S. Congress, May 18, 2001

***Nurse Workforce: Condition Critical***

Scott, W., George Washington University National Health Policy Forum, June 1, 2001

***Redesigned Workplaces and Innovative Education are Answers to Health Care Shortages***

National Congress of Health Professions Educators, June 14, 2001

***Health Care Staffing Shortage***

Joseph and Melick, Fitch IBCA, Duff & Phelps, an international financial ratings company, June 27, 2001

***Nursing Workforce: Emerging Nurse Shortages Due to Multiple Factors***

U.S. General Accounting Office, July 2001

al., 2000, JAMA). The “staffing shortage” is defined as either a maldistribution of nurses or insufficient numbers of nurses with inadequate skills and experience as a result of recent changes in the work environment. These changes include re-engineering, restructuring, reimbursement and professional dissatisfaction. The “nursing shortage” is defined as an overarching imbalance

of supply and demand attributed to demographics, qualifications, availability and willingness to do the work. The overlap of these two definitions is significant and the subtle distinctions distract from the need to move forward.

## National Reports and Recommendations

### Past Solutions Will Fall Short

Cyclical, market-driven solutions that alleviated previous nursing shortages included wage and benefit adjustments, sign-on bonuses, agency use, foreign recruitment and additional funding for scholarships and nursing schools, these reports note. In general, health care organizations are currently operating on very tight profit margins, in part due to the Balanced Budget Act of 1997 (Joseph and Melick, 2001), and will be challenged to sustain financial incentives amid continued economic pressures. The nursing shortage is not a unique American phenomenon but an international problem, and the strategy of recruiting foreign graduates from a limited global pool of nurses raises legal and ethical questions (American Organization of Nurse Executives, 2000; Levine, 2001; Joseph and Melick, 2001; Scott, 2001; Sigma Theta Tau International, 2000). The reports agree that the majority of solutions used to address past shortages are primarily short-term in nature, and point out that continuing to focus on such strategies risks diverting scarce resources that could be used to address more sustainable solutions to what has emerged as a much more complex problem than experienced in the past.



### Public Mission Is Threatened

The primary reason that patients are admitted to hospitals is because they require 24-hour nursing assessment and care. Many reports underscore the fact that the provision of health care is fundamentally to maximize health or to care for people with diseases, illness or injuries. The fulfillment of this core mission depends on the presence of appropriate numbers of adequately trained and motivated personnel. A fragmented, inefficient system of care, which results in medical errors, unnecessary treatment, undertreatment and wasted resources, may jeopardize the health of Americans (American Hospital Association, Strategic Policy Planning Committee, 2001; Fagin, 2001; Nursing Practice and Education Consortium, 2000; Institute of Medicine, 2001). There are indications that public

trust in the health care system is eroding (Campaign for Quality Care, 2001; Fagin, 2001; University of Illinois, Nursing Institute, 2001). Inadequate levels of nurses to care for patients risks standards of quality of care, and patient morbidity and mortality, and can also negatively affect productivity and cost containment (Scott, 2001). In the long run, these reports indicate, the current and future workforce shortage not only raises issues about the future of the nursing profession, but has the potential to completely undermine the current American health care system and emerge as a dominant public health issue.

### Impending Workforce Crisis

Several publications indicate that the burden of care has demonstrably increased since 1990 (Fagin, 2001) and has been quantified by surveys and studies of nurses, patients and general medical care by various organizations (Aiken et al., 2001; Federation of Nursing and Health Professionals, 2001; Institute of Medicine, 2001; Service Employees International Union, 2001). Included within this broad definition are the essential issues of adequate training and supervision, workload (staffing, acuity—a measure of severity of patient conditions which determines nursing resources required, length of stay, skills mix, overtime), safety, compensation, empowerment, advancement, respect and professional recognition within the American health care system for clinical decision-making and evidence-based practice. While the burden of care has increased, work-saving technologies that could ease the multitude of routine tasks for nurses have not been implemented, adding to nurses' dissatisfaction. At the same time, health care organizations face increased regulation and documentation, taking nurses away from patient care. This formidable combination of work environment factors fuels both recruitment and retention challenges, and many of these publications expect these to continue for several decades, particularly in acute and long-term care institutions, unless they are adequately addressed.

## National Reports and Recommendations

### Recommendations

While each report, paper or brief analyzes the current situation through its own lens, there is significant congruence regarding the actions that need to be taken. The broad recommendations fall within eight general categories:

1. **Increase the supply of nurses through more effective recruitment into the profession.** *Recommendations include:* increasing compensation; offering benefits that offset less desirable schedules; utilizing media to promote the profession as knowledge-based, versatile, autonomous and service-oriented; targeting minority and male students to better represent the overall population; reaching out to young people, from kindergartners to high school seniors; hiring dedicated recruiters.
2. **Increase the supply of nurses through expanded educational capacity and opportunity.** *Recommendations include:* increasing nursing school and faculty capacity, scholarships and loans; creating community partnerships; providing additional clinical training in geriatrics; increasing access to specialty education, distance learning and degree advancement incentives; holding nursing educators and nurse professionals mutually accountable for preparing students for the work environment and improving the quality of that environment.
3. **Increase the supply and retention of nurses by regarding them as strategic assets and making positive changes in the work environment.** *Recommendations include:* addressing staffing levels; offering flexible scheduling, mentor roles and ergonomic and safety improvements; promoting participation and professional autonomy in clinical decision-making; building needed competencies and expertise in specialty nursing care and leadership; creating additional standards for professional practice environments; developing and testing new care delivery models; creating work options for aging nurses; making use of technology that saves time and money and speeds clinical decision-making.
4. **Increase the visibility of nurses' contributions to the quality of health care.** *Recommendations include:* implementing interdisciplinary practice models; identifying professional clinical caregivers to patients and families so that they understand who is providing such care; collecting and publishing outcomes data correlated with evidence-based best practices, delivery models and staffing patterns; incorporating a population-based practice framework

that embraces and addresses the unique health and medical needs of each community being served; educating the public and policymakers to increase understanding of health workforce issues.

5. **Expand career options and improve compensation for nurses.** *Recommendations include:* providing career ladders and advancement incentives; broadening nurses' scope of practice, educational preparation, credentialing and mobility.
6. **Utilize public-sector regulatory power.** *Recommendations include:* establishing national standards for safe patient care, use of overtime and competencies; addressing reimbursement levels and systems; evaluating state practice acts and practice sites; establishing and funding state nursing centers/commissions to address issues of regulation and adequacy of supply; providing incentives for practice in underserved communities; requiring geriatric training as basic preparation.
7. **Systematically compile workforce data for planning.** *Recommendations include:* uniformly defining and consistently collecting and reporting data at national, state and local levels.
8. **Strengthen nursing leadership.** *Recommendations include:* offering nursing management leadership training; providing adequate supervision and coaching for nursing staff; creating appropriate nurse management structures; placing chief nursing officers (CNOs) on the executive team and encouraging their attendance at board meetings; increasing the number of nurse representatives on boards.

**Many of** these perspectives are not new. Since 1915, a multitude of reports, studies, surveys and commissions have analyzed, explained and made recommendations to address American nursing shortages. According to Friss (1994), these studies and commissions over the last century have done “nothing more than recycle data and in the process obscure fundamental problems.” Their recommendations have mainly focused on changing the image of nursing and not “deal[ing] with the real issues of nursing work or [the need for] more support from physicians and employers to bring about systematic reform.” Real solutions, therefore, will require a partnership of all stakeholders and cannot be achieved by the nursing profession alone (Williams, 2001).

## National Reports and Recommendations

**The reports,** white papers and issue briefs produced in 2000 and 2001, while broad and comprehensive in their recommendations, echo many of these earlier studies. In doing so, many fail to address the systemic issues that must be examined if lasting solutions to the nursing shortage are to be found.



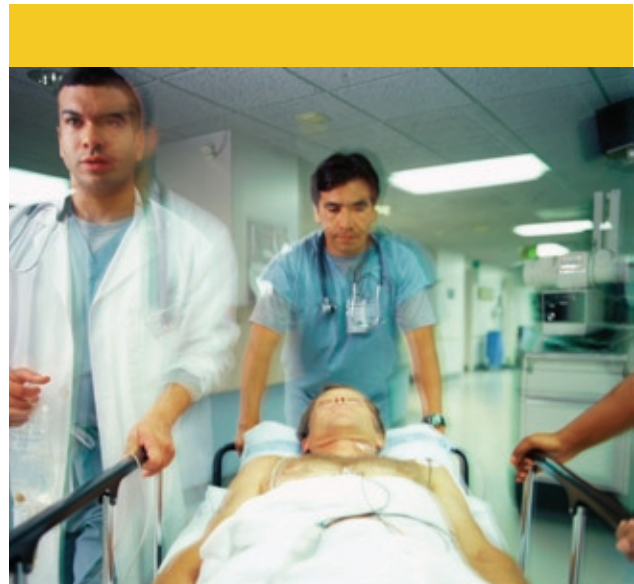
# A Range of Stakeholder Strategies

The nursing shortage in the United States has aroused the intense interest of not just the nursing profession, but all sectors of the health care industry, including educators, labor organizations and the government, and an abundance of activity to address the issue is currently taking place at the national, state and local organization levels. Meanwhile, the topic continues to capture the attention of the media, resulting in considerable national and local press coverage.

**Because of** the magnitude of the nursing shortage, its complexity, its relationship to issues both within and outside health care, and its long-term nature, the many stakeholders interested in seeing the problem addressed share both common and divergent perspectives on the approaches that should be taken. To gain a broad understanding of these approaches and the activities now being undertaken across all sectors, extensive interviews with representatives from each stakeholder group were conducted (also see **Appendix B**) and supporting material was reviewed for this study. A summary of findings is presented here. In the section that begins on page 48, “A Continuum of Responses, An Evolving Profession,” stakeholder activities are discussed within the context of how they contribute to the evolution of the nursing profession.

## National Professional Nursing Organizations

The national organizations have taken the lead in crafting a national legislative agenda and developing broad recommendations that provide a template for future



“ A wide range of organizations and government entities are genuinely concerned about the nursing shortage and have a stake in finding a solution. ”

action. Legislative efforts have largely focused on supply (increasing funding for loans, scholarships, nursing school capacity, faculty and research). As evidenced by the reports, white papers and issue briefs produced by such groups, referenced in the previous section, a number of consortiums and coalitions of professional organizations have come together under the pressure of a universal challenge. Each recognizes that it alone cannot craft the perfect solution and must put aside professional territorialism and seek common ground. A major challenge for these groups, however, is to establish accountability for implementing their multiple recommendations. Nurses for a Healthier Tomorrow, a coalition representing 27 nursing organizations with a straightforward, noncontroversial objective, has commenced a national multimedia image campaign. Based on extensive work by JWT Specialized Communications, which found that most children find nursing to be an unattractive career choice, the coalition aims to cast a dynamic image of nursing that will encourage youth to pursue it as a profession (Bronson Gray, 2000). Viewed by some as “treating the symptoms, not the disease,” this valuable effort must be integrated with those that diagnose and treat the root causes of the problems plaguing the profession.

## A Range of Stakeholder Strategies

**Other nursing** consortium efforts remain primarily on paper at this time. The American Nurses Association (ANA) and the American Organization of Nurse Executives (AONE) have developed conceptual models that define the breadth, depth and complexity of the issues and organize the scope of work into “domains” (e.g., education, finance, work environment, technology, legislation/regulation/policy, delivery systems, diversity, etc.) In a “Call to the Profession,” ANA convened a summit of 100 national nursing organizations in September 2001 to build consensus and lay the groundwork for creating a master tactical plan for the profession. In 2002, the same summit plans to issue a “Call to the Nation” and will actively involve other health care partners and corporations.

**The concept** of “unity” for the profession is a very necessary and ambitious goal whose time finally may have arrived. The nursing shortage, however, may represent as much opportunity as danger. If the leadership of the nursing profession allows nurses to remain fragmented in a host of professional “silos” with competing agendas, the result will be at the very least a missed opportunity and possibly a far more serious problem for the nation as a whole. In the words of Linda Stierle, executive director of ANA, “We must seize this opportunity to unify as a profession, to embrace the call or pay the price. There will be no second chance” (ANA, 1999). The risk involved in the ANA professional collaborative is significant: success or failure could presage a promising new future or the passive erosion of the profession.

### Major focus of the national professional nursing organizations:

- Work together, respect expertise, create unity.
- Establish common goals and objectives in all domains.
- Educate lawmakers, shape legislation, influence policy.
- Improve the professional image of nursing.

## Health Care Industry and Non-Nursing Professional Organizations

Other key health care groups, such as the American Hospital Association, the American Medical Association, the American Association of Medical Colleges, the Association of Academic Health Centers, the Catholic Health Association, the Federation of American Hospitals, Premier and VHA, Inc., have recognized the critical nature of the nursing shortage and its impact on their mission and future. As a result, they have issued supportive position statements, published policy papers and reports and formed task forces or study groups to understand and address the issue (American Hospital Association, Strategic Policy Planning Committee, 2001, American Medical Association, 2001). The political influence and value of the support of these organizations cannot be underestimated. The nursing “story” is the human face of a much larger health care workforce issue that will affect all Americans. It should be leveraged for all it is worth.

### Major focus of the health care industry and non-nursing professional organizations:

- Unite efforts across sectors to address workforce challenges.
- Enlarge supply.
- Educate policymakers, support legislation.
- Improve work conditions and collaboration among disciplines.
- Collect outcomes data.

## Labor Organizations

The labor unions that provide resources and collective bargaining on behalf of their membership have significantly increased their levels of activity and focus over the last year. Like the professional organizations, the unions have also created a strong legislative agenda. However, their legislative focus is not on increasing supply, but rather on improving the work environment and safety. The major national labor organizations that represent nurses have worked together to design



## A Range of Stakeholder Strategies

a coordinated approach and develop model language for legislation that addresses mandatory overtime, whistleblower protection and involvement in staffing decisions. Many bills have been introduced in state legislatures, and there is considerable energy being focused at the federal level. The same language used in these bills is being inserted into contract language at bargaining tables across the nation. The approach is direct and consistent.

**Labor organizations** or their parent organizations have surveyed nurses across the country and published their results (American Nurses Association, 2001; Federation of Nursing and Health Professionals, 2001; Service Employees International Union, 2001). A recent survey commissioned by the Federation of Nursing and Health Professionals of the American Federation of Teachers (2001) reported that “the nursing shortage will be worse than expected because one in five nurses currently employed plans to leave the profession within the next five years” citing work environment as the primary reason. In response, unions are beginning to work with employers of health care delivery organizations to create new partnership arrangements that focus on education, training, scheduling, staffing, work redesign and political action.

**In June** 2001, the United American Nurses of the ANA voted unanimously to affiliate with the AFL-CIO. In the near future, John J. Sweeney, president of the AFL-CIO, will host a meeting of top nursing union leaders to collaborate on a strategy of mutual support and organizing. While only 18 percent of nurses are represented by labor organizations nationwide, the concentration is significantly higher in several states. California leads the nation with 41 percent of nurses currently represented by collective bargaining agreements.

### Major focus of labor organizations:

- Strengthen collaborative labor efforts.
- Educate lawmakers and support legislation.
- Influence compensation and work environment via contract language.
- Work toward more “partnership” agreements with employers.

## Legislatures

The abundance of legislative activity at both the state and federal levels is reflective of the growing awareness of the nursing shortage. Bills that have been introduced can be categorized in five broad areas:

- **Increasing supply via education:** scholarships; forgivable loans in return for service to underserved areas; funding for increased school capacity and faculty; incentives such as scholarships, tutoring, transportation and child care to attract minority students.
- **Increasing supply via immigration:** expand the H1-C category for visas, which aims to bring foreign-trained and licensed nurses to the United States to provide service to underserved areas.
- **Data and planning:** establish commissions, studies, task forces and committees to analyze or monitor the nursing workforce; expand duties of nursing licensure boards to collect, monitor and utilize nursing workforce data.
- **Work environment:** limit overtime; impose mandatory overtime; post staffing ratios in hospitals to inform the public; define associated disciplinary actions.
- **Licensure compacts:** interstate recognition of nursing licenses; promote mobility.
- **Other:** acknowledge the nursing shortage; urge attention to address the shortage.

**As of** August 2001, a total of 110 “nursing shortage” bills had been introduced in 34 states during the year’s legislative session. They are summarized in **Exhibit 5**.

**As of** August 2001, a total of five “nursing shortage” bills had been introduced in either the U.S. Senate or U.S. House of Representatives during the year’s legislative session. They are summarized in **Exhibit 6**.

**Various congressional** committees and agencies have also held multiple hearings on the subject of the nursing workforce shortage throughout the 2001 federal legislative session.

**While the** legislative activity in 2001 began to address some of the symptoms of the nursing shortage, few substantive efforts were made to tackle the underlying issues. Unfortunately, some legislation was

## A Range of Stakeholder Strategies

### Exhibit 5

State Legislative Activity, January to August 2001

Category	Introduced	Passed One Chamber	Signed into Law
Increasing Supply via Education	52	20	0
Data and Planning	17	11	0
Work Environment	28	17	0
Licensure Compacts	10	4	2
Other	3	0	0
<b>Total</b>	<b>110</b>	<b>52</b>	<b>2</b>

Source: National Conference of State Legislatures, *Health Policy Tracking Service Issue Brief*, July 2001.

### Exhibit 6

Federal Legislative Activity, January to August 2001

Category	Name	Number	Sponsor
Increasing Supply via Education	Nurse Reinvestment Act	S. 706	John Kerry (D-MA)
Increasing Supply via Education	Nurse Reinvestment Act	H.R. 1436	Lois Capps (D-CA)
Increasing Supply via Education	Nurse Employment and Education Development (NEED) Act	S. 721	Tim Hutchinson (R-AR)
Work Environment	R.N. and Patient Protection Act	H.R. 5179	Tom Lantos (D-CA)
Increasing Supply via Immigration	Rural and Urban Health Care Act	S. 1259	Sam Brownback (R-KS)

Source: National Conference of State Legislatures, *Health Policy Tracking Service Issue Brief*, July 2001.

characterized by politics (acknowledging the issue but taking no action), and other bills mandated data-gathering activities that will consume time and resources that could be better spent on solutions. Perhaps a better understanding of the impending challenges posed by the nursing shortage will lead to a more productive 2002 legislative session.

#### Major focus of legislative activity:

- Increase supply.
- Protect workforce, ensure safety.
- Obtain data for planning.

## Government Entities

A number of federal and state agencies remain actively involved in nursing shortage issues as a component of their daily operations. Entities such as the Health Resources and Services Administration's Division of Nursing of the Department of Health and Human Services (federal), the National Advisory Council of Nursing Education and Practice (federal), the National Institute of Nursing Research (federal), the National Council of State Boards of Nursing (state), and the National Conference of State Legislatures (state) are involved in the administration of legislation and funds, regulation, or the collection and tracking of information related to the nursing profession. The Health Resources and Services Administration's Division of Nursing recently commissioned the largest

## A Range of Stakeholder Strategies

study to date correlating nurse staffing variables to patient outcomes in acute care hospitals (Needleman and Buerhaus, 2001). This type of study has broad implications for policymaking, improving data collection and further outcomes-based research.

**As a** result of previous state legislation signed into law, there are two state-sponsored entities that are actively addressing nursing shortage issues. The Maryland Commission on Nursing was created in 2000; it has 46 members and seven vice chairs. The North Carolina Center for Nursing was funded through legislation in 1991. Now well established, it continues to serve as a model for other states with respect to data collection, structure, leveraged funding and sophisticated initiatives that primarily address nursing recruitment and retention. The North Carolina center is one of the *Colleagues in Caring* (CIC) sites funded by The Robert Wood Johnson Foundation. A national program, CIC brings together a region's stakeholders in health care and nursing practice to create and sustain a workforce development system within that region.

**One of** the lessons learned from the work of many state-based CIC sites is the recognition of the importance of adequate data regarding supply and demand for planning. This involves assigning clear responsibility for data collection and analysis, and creating mechanisms to ensure that recommended actions are taken and that stakeholders have access to the data and responsibility for reporting results of actions taken. Some states have used CIC resources effectively to create strong replicable models. However, to utilize this valuable information at a national level in a way that would truly benefit the nursing profession, a standard minimum dataset must be defined and agreed on.

### Major focus of government entities:

- Administer, monitor and regulate as required.
- Collect and track information for planning.
- Support workforce research.
- Analyze and share information with key stakeholders.

## Nursing Education Organizations

Universities, colleges and community colleges across the country are seeking creative ways to increase nursing school enrollment and capacity. Many are offering accelerated degree programs, distance learning and new teaching methodologies via teleconferencing or the Internet. Some are even creating differentiated practice models that clearly define the roles and responsibilities of nurses based on educational preparation and new professional degrees for applicants who already have a bachelor's degree. Schools have increased minority recruitment, developed public relations campaigns and forged partnerships with health care delivery organizations such as hospitals, medical centers and health care systems. Many nursing education organizations participate in multidisciplinary regional or state nursing collaboratives to align goals and expectations between education and practice. However, the fact that the average age of nursing faculty is considerably higher than that of the average practicing nurse has emerged as a significant resource issue for the profession.

**The core** mission of all of these organizations is to produce adequate numbers of appropriately trained nurses to provide care that meets the health needs of the American public. Many states have made considerable progress, either on their own, or with the support of projects such as CIC by eliminating barriers (i.e., establishing consistent course requirements, prerequisites and number of credits) among the separate paths of entry (L.P.N.s and diploma R.N.s, who are licensed by state exam and required to complete some coursework and clinical experience but not educational degrees; associate-degree R.N.s, who complete an associate of arts program; and baccalaureate-degree R.N.s, who complete a four-year bachelor of science in nursing degree). The CIC projects have embraced the practice of lifelong learning as a retention strategy and recommend that all stakeholders, whether they be schools, unions or employers, provide assistance to health care workers who want to further their careers.

## A Range of Stakeholder Strategies

### Major focus of nursing education organizations:

- Increase capacity, recruit minorities.
- Improve educational and training opportunities for nurses.
- Expand the range of teaching technologies.
- Enhance collaboration between education and practice.
- Provide qualified faculty.

## Health Care Delivery Organizations

Providers of health care such as hospitals, medical centers and health care systems are appropriately focusing their attention on issues of recruitment and retention at the local and regional levels. Strategies involve partnerships with nursing schools, public schools/communities and labor unions. Recruitment efforts range from public relations campaigns, financial incentives and internal training programs to new graduate and international recruitment activities. Retention efforts range from loyalty-enhancing improvements in compensation and benefits (including educational opportunities) to significant work environment (better nurse-to-patient ratios and schedules; administrative and other support services, such as delivery of supplies, food and drugs, transport of patients and lifting of heavy patients; technology that reduces redundancy, automates routine tasks, collects information and improves and speeds communication; and programs to recognize and reward outstanding performance). For more senior staff, new nursing roles—such as Admit and STAT nurses, roles aimed at relieving unit nurses of time-consuming and complex tasks (STAT nurses are free to assist staff and patients on an as-needed basis)—are being created; and manager training and mentoring has re-emerged as an important retention strategy. Many organizations are implementing decision-making and governance structures for their nurses to give them a voice in creating a professional work environment that enhances patient care. And there is a reported proliferation in the number of hospital applications to the American Nurses Credentialing Center (ANCC) to become “Magnet Hospitals,” a designation that requires a hospital to

meet 14 key standards for a professional nursing work environment. A key point: Where there is a successful Chief nursing officer (CNO) and an upgraded and truly professional nursing work environment, there is also a supportive CEO who visibly values the work of nurses by demonstrable action, not rhetoric. It is an essential partnership.

**Some health** care delivery organizations are utilizing consultants who specialize in the areas of recruitment and retention or work environment to assist with planning or developing tactical plans. Many nursing leaders within these organizations are involved with community or regional planning initiatives focused on the nursing shortage. In some states, regional float pools have been created. Many organizations, however, are still reliant on temporary help from local agencies or traveling nurses to meet their day-to-day staffing needs.

### Major focus of health care delivery organizations:

- Improve recruitment and retention.
- Set up partnerships with schools, communities and regions.
- Improve the work environment.
- Develop leadership opportunities.

## Staffing Organizations

Probably one of the fastest growing segments of the nursing industry, at the local and national levels, is temporary staffing (Gorman, 2001). Local agencies offer nurses benefits that compete with those of health care delivery employers. Nurses who are attracted to these arrangements value their time and flexibility. At the national level, the demand for traveling nurses (13-week assignments) is enormous. There are currently an estimated 12,000 vacancies nationwide for traveling nurses requested by hospitals. National staffing organizations provide rich benefits for their nurses, including educational advancement opportunities and the ability to take 30 days off after each 13-week assignment.

## A Range of Stakeholder Strategies

**In addition** to traditional per diem and traveler services, the organizations now offer staffing management services to hospitals and medical centers. These services include 24 hours, 7 days a week staffing, contracting with local agencies, screening and placing travelers, hiring and managing the internal float pool, and meeting associated orientation and performance evaluation requirements for accreditation. Two top national organizations, which combined have control of 80 percent of the market, recently filed for initial public offerings of stock. Business is booming.

### Major focus of staffing organizations:

- Grow business.
- Improve benefits to staff.
- Increase services to clients.

## Philanthropic Organizations

Many foundations and trusts actively fund nursing demonstration projects and studies that will lead to a broader understanding of the underlying challenges of the nursing shortage and identify a range of potential solutions. The Robert Wood Johnson Foundation, The John A. Hartford Foundation, the Milbank Memorial Fund and the Helene Fuld Health Trust, to name a few, all have demonstrated their concern for the nursing profession, the health care industry and the American public through their generous efforts. Many of the reports produced as a result of these investments have added to the growing body of documentation that is building up a compelling case for change and providing direction and a map for the future (Abrams, 2001; Bellack et al., 2001; Donaho and Kohles, 1996; Fagin, 2001; The Robert Wood Johnson Foundation, 1999).

### Major focus of philanthropic organizations:

- Understand the underlying challenges.
- Identify potential solutions.
- Add value with focused resources.

**As this** section illustrates, a wide range of organizations and government entities are genuinely concerned about the nursing shortage and have a stake in finding a solution. The most effective and sustainable strategies will draw these diverse stakeholders together, build on their commonalities, support their current activities and encourage the development of new efforts that address the real issues underlying this national and international problem.



# A Comparison of Markets

In order to assess the extent and character of the nursing shortage across the nation, an examination of 15 markets was completed as a component of this study. The information collected and analyzed highlights the major similarities and differences among the markets with respect to population, economics, health providers, insurance status, nursing workforce and nursing education resources. Chief nursing officer (CNO) interviews were conducted in each of the markets to better understand the impact of the shortage and the types of actions being undertaken at the local level. Focus groups with registered nurses were conducted on site in three representative markets to add their perspective on the issues.

**Market definition.** The 15 markets selected were defined by the standard metropolitan statistical areas (SMSAs) as defined by the U.S. Census Bureau, based on county boundaries, with the exception of Montana, where the entire state was considered a single market. (For a complete list of the SMSA markets and their corresponding counties, see **Appendix C.**) The markets were:

1. Boston, Massachusetts
2. Cleveland, Ohio
3. Greenville, South Carolina
4. Indianapolis, Indiana
5. Kansas City, Kansas and Missouri
6. Lansing, Michigan
7. Little Rock, Arkansas
8. Miami, Florida
9. Montana (rural)
10. Newark, New Jersey
11. Orange County, California



“ It seems clear that the nursing shortage is indeed a reality across the diverse markets examined, with the notable exception of Montana. ”

12. Pensacola, Florida
13. Phoenix, Arizona
14. Seattle, Washington
15. Syracuse, New York

## Population characteristics.

**Exhibit 7** compares the size of the population, race/ethnicity and specific age information for the 15 markets. Of note are the population differences among the markets selected; Boston, at the high end of the spectrum, has more than 10 times as many people as Pensacola, at the low end. Also of interest is the significant percentage of non-white populations within Miami, Orange County and Newark. In the state of Montana, 90 percent of the population is white, the highest percentage of all the markets. Miami and Cleveland represent the highest percentage of seniors, at 15 percent. The percentage of children younger than 18 varies between 23 and 27 percent across all 15 markets.

**Economic characteristics.** **Exhibit 8** provides a comparison of key economic data for the 15 markets, including median income, poverty rate and unemployment data. Median income is significantly lower in Miami compared to the other markets. A high percentage of the population lives at or below the Federal Poverty Level in Miami (25 percent), Pensacola and

## A Comparison of Markets

### Exhibit 7

Population Characteristics of the 15 Markets, 1999

Market	Population*	Race/Ethnicity				Age	
		White	Black	Hispanic	Other	65+	<18
Boston, MA	4,409,572	86%	6%	6%	3%	14%	23%
Cleveland, OH	2,221,181	77%	18%	3%	2%	15%	25%
Greenville, SC	929,565	78%	18%	1%	3%	13%	24%
Indianapolis, IN	1,536,665	83%	14%	1%	2%	12%	26%
Kansas City, KS and MO*	1,755,899	78%	13%	5%	4%	11%	27%
Lansing, MI	450,789	85%	7%	5%	3%	10%	26%
Little Rock, AR	579,795	75%	21%	2%	2%	12%	27%
Miami, FL	2,175,634	22%	19%	56%	3%	15%	24%
Montana (MT)*	882,779	90%	0.3%	2%	8%	13%	26%
Newark, NJ	1,954,671	65%	18%	12%	5%	14%	23%
Orange County, CA	2,760,948	57%	1%	30%	12%	10%	25%
Pensacola, FL*	403,384	76%	17%	3%	5%	13%	24%
Phoenix, AZ	3,013,696	73%	4%	20%	4%	14%	27%
Seattle, WA	2,334,934	82%	4%	4%	9%	12%	25%
Syracuse, NY	732,920	89%	6%	2%	4%	14%	26%

Source: Unless otherwise noted, all data are derived from the *Community Tracking Study Household Survey, 1998–1999*, by the Center for Studying Health System Change.

\* U.S. Census Bureau, 1999 Community Population Estimates.

### Exhibit 8

Economic Characteristics of the 15 Markets

Market	Median Income	Percentage at or below the Federal Poverty Level	Percentage of Unemployment <sup>a</sup>
Boston, MA	\$31,868	10%	2.9%
Cleveland, OH	\$26,840	13%	3.7%
Greenville, SC	\$24,967	14%	3.8%
Indianapolis, IN	\$27,996	11%	2.2%
Kansas City, KS and MO	\$37,739 <sup>b</sup>	9% <sup>b</sup>	3.5%
Lansing, MI	\$30,830	11%	2.9%
Little Rock, AR	\$28,550	12%	3.5%
Miami, FL	\$19,672	25%	5.8%
Montana (MT)	\$29,672 <sup>b</sup>	16% <sup>b</sup>	4.8%
Newark, NJ	\$32,890	10%	4.0%
Orange County, CA	\$30,365	11%	2.5%
Pensacola, FL	\$25,736 <sup>b</sup>	16% <sup>b</sup>	4.2%
Phoenix, AZ	\$29,135	14%	3.3%
Seattle, WA	\$34,566	10%	4.2%
Syracuse, NY	\$24,619	14%	3.9%

Source: Unless otherwise noted, all data are derived from the *Community Tracking Study Household Survey, 1998–1999*, by the Center for Studying Health System Change.

<sup>a</sup> U.S. Bureau of Labor Statistics, May 2001.

<sup>b</sup> U.S. Census Bureau, 1999.

## A Comparison of Markets

Montana (both at 16 percent). Of note is the fact that Pensacola and Montana are considerably more rural than the other markets. Not surprisingly, the highest unemployment rates are also found in these three markets, in addition to Seattle.

**Health provider and insurance characteristics.** Exhibit 9 provides a comparison of health insurance status and health provider statistics. The percentage of people without health insurance is highest in Miami (20 percent), Montana (19 percent) and Orange County (16 percent). In Boston, Cleveland, Kansas City and Lansing, the percentage of people without health insurance ranks lowest at 7 percent, reflecting, in part, proactive state policy.

**The HMO** penetration rate, defined as the percentage of the population enrolled in public or private health maintenance organizations (HMOs) or point of service (POS) plans, ranges from a low of 7 percent in Montana to a high of 52 percent in Miami, with Boston, Orange County and Kansas City close behind (45 to 48 percent).

**The more** traditional forms of health insurance—preferred provider organization (PPO) plans, traditional fee-for-service (FFS) plans or traditional Medicare—are prevalent in several areas, including Greenville, Montana, Seattle and Syracuse. In these markets these traditional forms of coverage represent 70 to 76 percent of the covered lives. In contrast, Miami, Orange County and Kansas City have seen a

### Exhibit 9

Health Insurance and Provider Characteristics of the 15 Markets

Market	No Health Insurance <sup>1</sup>	HMOs or POS Plans <sup>2</sup>	PPO, FFS, Medicare and Other	Staffed Hospital Beds per 1,000 people <sup>3</sup>	Practicing Physicians per 1,000 people <sup>4</sup>
Boston, MA	7%	48%	45%	2.7	3.3
Cleveland, OH	7%	29%	64%	3.6	2.7
Greenville, SC	11%	13%	76%	2.8	1.7
Indianapolis, IN	12%	23%	65%	3.3	2.5
Kansas City, KS and MO	7% <sup>a</sup>	45% <sup>e</sup>	41%	3.4 <sup>f</sup>	2.2 <sup>h</sup>
Lansing, MI	7%	41%	52%	2.2	2.1
Little Rock, AR	13%	28%	59%	5.0	3.1
Miami, FL	20%	52%	28%	3.6	2.7
Montana (MT)	19% <sup>b</sup>	7% <sup>d</sup>	74%	2.6 <sup>f</sup>	1.7 <sup>h</sup>
Newark, NJ	10%	25%	65%	3.8	2.6
Orange County, CA	16%	46%	38%	2.1	2.2
Pensacola, FL	13% <sup>c</sup>	20% <sup>e</sup>	67%	4.0 <sup>g</sup>	1.9 <sup>h</sup>
Phoenix, AZ	15%	34%	51%	2.2	1.7
Seattle, WA	8%	20%	72%	1.6	2.5
Syracuse, NY	9%	21%	70%	2.9	2.4

Source: Center for Studying Health System Change:

<sup>1</sup> Community Tracking Study Household Survey, 1998–1999.

<sup>2</sup> Community Report Series 2000–2001, InterStudy, *Competitive Edge 10.1*.

<sup>3</sup> Community Report Series 2000–2001, American Hospital Association.

<sup>4</sup> Community Report Series 2000–2001, Area Resource File, 1998.

<sup>a</sup> HCIA-Sachs (Solucient), a publicly traded health care intelligence company, 1999.

<sup>b</sup> U.S. Census Bureau, 1999.

<sup>c</sup> 1999 Florida Health Insurance Study, Phase II Small Area Analysis, University of Florida for the Florida Agency for Health Care Administration, 1999.

<sup>d</sup> InterStudy, *Competitive Edge 10.2, Part II*, 2000.

<sup>e</sup> InterStudy, *Competitive Edge 10.2, Part III*, 2000.

<sup>f</sup> American Hospital Association, *Annual Hospital Survey, 1999*.

<sup>g</sup> Florida Hospital Association, 1999.

<sup>h</sup> American Medical Association, *Physician Characteristics and Distribution in the United States, 2000–2001 Edition*.



## A Comparison of Markets

greater erosion of this more traditional payer base, with only 28 to 41 percent of covered lives in these plans.

**The ratio** of staffed hospital beds per 1,000 people is highest in Little Rock (5.0) and Pensacola (4.1), and lowest in Seattle (1.6), Orange County (2.1) and Lansing (2.2). The ratio of practicing physicians per 1,000 people is highest in Boston (3.3) and Little Rock (3.1), with Cleveland and Miami close behind (2.7). The lowest physician ratios among the markets are in Greenville, Montana and Phoenix (each at 1.7).

**Nursing characteristics.** Securing comparable nursing data relevant to the 15 markets proved to be a significant challenge. There is no single national data source for either licensure or educational program information. The National Council of State Boards of Nursing was unable to produce market-level data on licensed nurses. The Division of Nursing, Health Resources and Services Administration (HRSA) of the Department of Health and Human Services publishes an extensive sample survey of registered nurses every four years, but because of the sampling process used, the data are only significant at the state level.

**The National** League for Nursing (NLN) publishes directories of accredited nursing schools, but these do not include hundreds of schools that exist that are not accredited by the NLN. The American Association of Colleges of Nursing and the American Association of Community Colleges each produce national lists of schools within their own domains (bachelor of science in nursing/B.S.N. or associate degree in nursing/A.D.N. programs) but these are not completely comprehensive. In fact, none of these sources produced lists of nursing schools that matched those provided by the individual state boards of nursing.

**Given these** circumstances, this study gathered information on nursing from individual state boards of nursing. Even so, the amount and type of information that many of these state boards were able to provide was, at best, limited. The only consistent measure was the total number of registered nurses (R.N.s) or

licensed practical nurses (L.P.N.s) by county. In Massachusetts, where licensure data are available only by ZIP code, a special data report was run to match the 277 ZIP codes within the six counties that make up the Boston Standard Metropolitan Statistical Areas (SMSA). Even then, the nursing board had to total it manually. Many boards cannot distinguish between nurses who are active (employed) and inactive (unemployed, retired or left the profession). As a result, the lowest common denominator for the purpose of comparability was “licensed nurses.” Each state board also produced a list of approved nursing schools for the entire state. Market-specific information regarding schools was derived from ZIP code matching.

**This scarcity** and lack of consistent data point to the difficulty of understanding the changes that are occurring in nursing, and perhaps the difficulty of making a strong case for policy changes to address the issue. A recent report from the U.S. General Accounting Office reaches the same conclusion: “National data are not adequate to describe the nature and extent of workforce shortages, nor are data sufficiently sensitive or current to compare nurse workforce availability across states, specialties, or provider types” (U.S. General Accounting Office, 2001). Compared with the American Medical Association and the American Hospital Association, which routinely survey and produce consistent data at regional and local levels, professional nursing organizations are both unprepared and disorganized. This shortage makes the monitoring of changes in nursing workforce and practice difficult to monitor and makes identification of emerging issues difficult to project. This problem represents a major opportunity for improvement.

**Licensed nurses.** In **Exhibit 10**, the number of licensed nurses (R.N.s and L.P.N.s) is compared to the market population. Licensed nurses represent approximately 1 to 2 percent of the total population in each market. Using the industry benchmark of nurses per 1,000 people, there is wide variation in the numbers of licensed nurses, ranging from 7.7 to 21.9 per

## A Comparison of Markets

### Exhibit 10

Schools of Nursing in the 15 Markets, 2000

Market	Licensed within the Market <sup>a</sup>							State <sup>b</sup>
	Population	R.N.s	L.P.N.s	All Nurses	Percentage of Population	All Nurses per 1,000 people	R.N.s per 1,000 people	Employed R.N.s per 1,000 people
Boston, MA	4,409,572	62,608	19,925	82,533	1.9%	18.7	14.2	11.9
Cleveland, OH	2,221,181	26,842	8,155	34,997	1.6%	15.8	12.1	8.8
Greenville, SC	929,565	6,936	1,794	8,730	0.9%	9.4	7.5	7.3
Indianapolis, IN	1,536,665	19,688	5,708	25,396	1.7%	16.5	12.8	7.6
Kansas City, KS and MO	1,755,899	17,374	4,612	21,986	1.3%	12.5	9.9	9.6
Lansing, MI	450,789	4,052	865	4,917	1.1%	10.9	9.0	8.0
Little Rock, AR	579,795	7,829	2,887	10,716	1.8%	18.5	13.5	7.0
Miami, FL	2,175,634	13,075	3,945	17,020	0.8%	7.8	6.0	7.9
Montana (MT)	882,799	9,605	3,218	12,823	1.5%	14.5	10.9	8.1
Newark, NJ	1,954,671	30,486	5,867	36,353	1.9%	18.6	15.6	8.0
Orange County, CA	2,760,948	21,172	3,822	24,994	0.9%	9.1	7.7	5.4
Pensacola, FL	403,384	7,135	1,696	8,831	2.2%	21.9	17.7	7.9
Phoenix, AZ	3,013,696	25,401	5,238	30,639	1.0%	10.2	8.4	6.3
Seattle, WA	2,334,934	22,332	3,654	25,986	1.1%	11.1	9.6	7.4
Syracuse, NY	732,920	9,363	4,030	13,393	1.8%	18.3	12.8	8.4

<sup>a</sup> Actual numbers provided by each individual state board of nursing.

<sup>b</sup> Health Resources and Services Administration, National Sample Survey of Registered Nurses, 2000. Numbers represent the state average, not the market average.

1,000 residents. Whatever margin of error might be applied to the data, there are markets at the low end of the scale, such as Miami, Orange County and Greenville, where the ratios may be predictive of higher local vacancy rates. Determining whether this measure can serve as a credible indicator of a worsening situation over the years to come will require additional data and analysis.

**The number** of L.P.N.s is provided to illustrate that they make up a significant percentage of the total number of nurses. Across the 15 markets, L.P.N.s represent between 14 and 30 percent of the total licensed nurse population in every market (percentages are not shown in **Exhibit 10**).

**An important** comparison lies between the number of licensed R.N.s per 1,000 by market, drawn directly from the state boards in each jurisdiction, and

the state average of employed R.N.s per 1,000, provided by HRSA's national sample survey. While one number represents the market level and the other a statewide indicator, and they are thus not directly comparable, they do point to the relative levels of employment and the available pool of R.N.s across the markets.

**In some** markets, these numbers are relatively close (e.g., Greenville, 7.5 to 7.3), while in others one is more than double the other (e.g., Pensacola, 17.7 to 7.9). In Miami, where the state average of employed R.N.s per 1,000 is actually higher than the number of licensed nurses per 1,000 within the Miami market, the tightness of the local market for R.N. service is evident. In Montana, where the market numbers represent the entire state, the difference between licensed and employed nurses in this state is 25.7 percent.

## A Comparison of Markets

### Exhibit 11

Schools of Nursing in the 15 Markets, 2000

Market	Programs within the State <sup>a</sup>						Programs within the Market <sup>a</sup>						
	B.S.N.	A.D.N.	Dpl <sup>b</sup>	Total R.N.	L.P.N.	Total All	B.S.N.	A.D.N.	Dpl <sup>b</sup>	Total R.N.	L.P.N.	Total All	Nursing Schools-to-Population Ratio <sup>c</sup>
Boston, MA	15	21	3	39	20	59	8	10	2	20	13	33	0.5
Cleveland, OH	23	30	8	61	45	106	4	4	1	9	9	18	0.4
Greenville, SC	11	13	0	24	24	48	4	4	0	8	6	14	0.9
Indianapolis, IN	20	27	1	48	25	73	4	4	0	8	4	12	0.5
Kansas City, KS and MO	23	48	1	72	59	131	10	8	0	18	6	24	1.0
Lansing, MI	15	32	0	47	24	71	1	2	0	3	1	4	0.7
Little Rock, AR	9	15	3	27	29	56	3	3	1	7	9	16	1.2
Miami, FL	15	26	0	41	44	85	3	1	0	4	5	9	0.2
Montana (MT)	2	3	0	5	5	10	2	3	0	5	5	10	0.6
Newark, NJ	17	14	14	45	23	68	5	2	2	9	4	13	0.5
Orange County, CA	21	71	0	92	94	186	0	3	0	3	1	4	0.1
Pensacola, FL	15	26	0	41	44	85	1	1	0	2	1	3	0.5
Phoenix, AZ	6	15	0	21	3	24	2	4	0	6	2	8	0.2
Seattle, WA	6	19	0	25	23	48	3	5	0	8	5	13	0.3
Syracuse, NY	47	59	1	107	73	180	2	6	0	8	5	13	1.1

<sup>a</sup> Actual numbers provided by each state board of nursing (county and ZIP code match).

<sup>b</sup> Dpl.=diploma, school of nursing.

<sup>c</sup> Nursing school-to-population ratio is the number of nursing schools per 100,000 people in each market.

**Schools of nursing.** Another important variable in examining nursing supply is the availability of nursing education resources, represented by the number of schools of nursing within the markets. In **Exhibit 11**, the actual number of types of nursing schools approved by each state board is presented at both the state and market levels. While the numbers and types of nursing schools within the markets are interesting, a ratio of schools per 100,000 people was calculated for the purpose of comparison.

**Analysis of** these data cannot be taken too far, but some general trends can be observed. The four markets with the lowest numbers of total L.P.N.s per 1,000 and licensed R.N.s per 1,000 (see **Exhibit 10**) are Miami, Orange County, Greenville and Phoenix. With the

exception of Greenville, the other three are the markets with the lowest number of nursing schools per 100,000 people.

**Miami, Orange** County and Phoenix also represent three of the five markets with the largest minority populations and the three markets with the highest percentages of Hispanics in the 15 markets. There seems to be some link to nursing supply, availability of education and ethnic origin. Additionally, these three markets fall into the lower third of all the markets in their percentage of traditional payers (PPO, FFS and Medicare), which could be due to high HMO penetration, high percentage of uninsured people or some combination of the two.

## A Comparison of Markets

### A Snapshot of Agency Demand

Temporary staffing agencies were polled within each of the 15 markets to obtain a sense of the areas of greatest demand. According to these polls, 94 percent of the requests for temporary nurses currently come from acute and long-term care facilities. Montana agencies primarily supply nurse's aides for long-term care and reported that the R.N.s who do sign on have other full-time jobs. In fact, the Montana hospitals have formed internal or regional float pools and only rarely use staffing agencies. Considering Montana as an outlier, the percentage of requests for nurses that come from acute facilities in the other 14 markets ranges from 35 to 100 percent, with a mean of 71 percent. The percentage of requests for nurses to staff long-term care facilities in the other 14 markets ranges from 0 to 55 percent, with a mean of 23 percent. Most agencies report that the demand for R.N.s is primarily in acute care and that long-term care requests are generally for L.P.N.s. The percentage of requests for temporary nurses to work in ambulatory and home care settings represents only 6 percent of the agencies' overall activity. Activity within the markets does vary based on hospital vacancy rates, seasonal variation and the presence of hospital float pools, but the greatest demand for nurses is currently at the institutional level.

### Chief Nursing Officer Survey

Chief nursing officers (CNOs) in each of the 15 markets were surveyed using a standard tool (see **Appendix C**). With the assumption that acute care health care organizations were likely to be among the first to experience a nursing shortage because they employ such a large percentage of nurses, the decision was made to focus the CNO survey in this arena.

**A total** of 45 CNOs were surveyed across the 15 markets. Within that group, tenure in their current CNO position ranged from two months to 17 years, with the mean length of time in the role at six years and the median at five. When asked if they were experiencing a nursing shortage, 84 percent answered affirmatively. Within this group, 34 percent reported that they were

experiencing vacancies across all sectors of the nursing workforce. The other 66 percent reported that only certain nursing sectors were currently affected, including critical care, operating room, postanesthesia care, cardiovascular surgery, emergency room, telemetry, medical-surgical, obstetrics, management and night shifts in general.

**With respect** to the specific workforce indicators that CNOs collect and monitor, 97 percent track vacancy rates; 91 percent look at turnover; 69 percent examine first-year turnover; and 88 percent track agency usage by percentage of total labor hours or dollars. Only 25 percent have information on worker's compensation claims. Other workforce indicators being followed include staff complaints, overtime, mandatory overtime, medical leave through the Family Medical Leave Act, and American Nurses Association "report card standards." When asked the average age of their nursing staff, 80 percent of the CNOs had these data. The average age of the nursing staff of these hospitals ranged from 38 to 48 years with a mean of 44 years and a median of 43 years.

**Regarding impact** on operations, emergency room diversion due to shortage of staffing was reported in 50 percent of the facilities with full emergency service across all markets, with the exception of Little Rock, Pensacola and Montana. Staffing shortages were also reported as being a reason for surgeries being delayed (28 percent) and admissions being denied (31 percent). A considerable 67 percent reported having difficulty transferring patients to long-term care facilities in the last year. Mandatory overtime was reported as being used at 24 percent of the hospitals in the last year, always as a last resort.

**Quality indicators** can also be considered broad indicators of workforce strain. Only 4 percent reported an increase in sentinel events, as defined by the Joint Commission on the Accreditation of Healthcare Organizations (JCAHO), over the last year, and 13 percent reported an increase in medication errors. However, 27 percent reported an increase in patient complaints.

## A Comparison of Markets

Other quality indicators being tracked by CNOs include falls, skin integrity, infection rates, pain, nursing outcomes and patient satisfaction.

**All CNOs** had information on new graduate hires, and 91 percent of them contract with schools of nursing in their areas for clinical rotations. However, there is wide variation in the number of schools and subsequent number of students who rotate on-site among the individual hospitals. Of those hospitals with nursing school contracts, the number of schools per hospital ranged from one to 26 with a mean of seven and a median of six. The number of nursing students rotating on-site annually as a result of the contracts ranged from four to 1,246.

**Hospitals with** labor union contracts represented 38 percent of the total. The number of years unions have represented nurses at these institutions ranged from eight to 39 years with a mean of 17 years and a median of 20. In these hospitals, unions represented 50 to 100 percent of nurses, with a mean of 93 percent. When asked to rank their relationship with the union on a scale of 1 to 10 (1=adversarial, 10=collaborative), the scores ranged from 2 to 10 with a mean of 7 and a median of 8. For the hospitals where the nursing staffs are not unionized, 18 percent reported recent attempts to organize.

**Manager-to-**full-time-equivalent (FTE) ratios varied widely across the markets from 18 to 150. The manager-to-bed ratio varied from 20 to 88. While all the managers have fiscal responsibility, a growing number are serving in a clinical role that occupies from 10 to 50 percent of their time. This is an area that deserves much more exploration as a staff retention strategy.

**With respect** to strategies being used to offset the shortage in the last year, 96 percent of the CNOs gave wage increases, 56 percent gave benefit increases, 62 percent used other incentives, 71 percent reported making work environment improvements and 56 percent reported changes in care delivery models. Only 20 percent of CNOs had used consultants, but 80

percent were involved in community-wide activities to address the nursing shortage. With respect to staff involvement in decision-making, 76 percent reported having some type of structure either in place or currently being implemented. The names of the structures ranged from Shared Governance to Nursing Advisory to Nursing Practice Council. The exact nature, makeup or effect of these models was not determined by the survey, but represents an interesting area for future study. Other strategies currently being employed across the markets to address the shortage are covered in the “Continuum of Responses, An Evolving Profession” section, which follows.

**There were** seven CNOs (16 percent) who reported that they were not currently experiencing a nursing workforce shortage. This was true for all three of the CNOs surveyed in the state of Montana. The others were individual hospitals or medical centers in the markets of Boston, Kansas City, Newark and Pensacola.

**Montana is** a unique market for a number of reasons. Recalling the data presented above, the state has the lowest percentage of non-whites, 10 percent. It also has the lowest HMO penetration rate, 7 percent. There are many factors that affect the latter. Montana was late in entering the HMO business. Because of a strict network adequacy law, HMOs have not been able to meet requirements in various parts of the state, thus limiting this type of health insurance coverage. The insurers continue to pay 90 to 100 percent of usual, customary and reasonable charges to hospitals. Montana is a small-business state where many employers do not offer health care as a benefit. Nurses are not only important wage earners, but also have the ability to provide benefit coverage for their spouses and families. In two of the three hospitals surveyed, the Montana Nurses Association represents the nurses. There is only one hospital per community, with the exception of two towns in the state where there are two hospitals to choose from. There are not as many competing employment options, in either nursing or other fields, for nurses who want to stay in Montana. The Montana CNOs are focused on work environment and attracting



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new graduates into the hospital environment. Nursing is still considered a very stable and respected career option for people in Montana.

**The other** individual hospitals whose CNOs reported “not having a nursing shortage” are worthy of consideration: those in Pensacola, Kansas City, Newark and Boston. Each of these four hospitals reported no increase in adverse quality indicators and no use of mandatory overtime.

**The Pensacola** facility is a naval hospital. It has union representation for civilian staff and relatively low ratios of FTEs (30) and beds (20) per nursing manager. Nurse managers spend 10 percent of their time in a clinical role. Nurses from the hospital are actively involved in organizing visits to schools with professional military recruiters, hosting site visits at the naval hospital and conducting interviews with applicants.

**The Kansas** City hospital's nurses are not unionized, and the ratio of managers' to FTEs (52) and beds (30) is paired with a 20 percent clinical time commitment. This facility has increased nursing hours on most units to accommodate acuity, patient needs and an aging workforce. They have also developed an extensive internal float pool.

**The Newark** facility was the second hospital in the country to achieve Magnet status under the current standards. The CNO believes that having to achieve and maintain the Magnet standards has created a professional environment that supports a positive work environment and advocates for nurses. The hospital's nurses are not unionized and they report no temporary agency use.

**The Boston** facility is one of the largest and busiest in the nation. The nurses are not unionized and have a collaborative governance structure. The CNO has created a proactive Center for Clinical and Professional Development that not only offers professional advancement and recognition opportunities for nurses, but also encompasses work environment improvements

through the use of technology and systems that save nurses time in performing routine tasks.

**While other** hospitals within these three markets report shortages, these individual institutions stand out and have lessons to share. Their focus on the needs and professional recognition of their nursing staff is the common thread.

## Findings from Nurse Focus Groups

During June and July 2001, a total of seven focus groups were held with staff nurses in three of the markets studied (see **Exhibit 12**). The purpose of these focus groups was to solicit the perceptions of actively practicing nurses regarding the current conditions in the market. While it is important to consider quantitative measures in each market, the voice of nurses working in direct care roles must be considered to appreciate the full picture.

### Exhibit 12

2001 Focus Groups

Phoenix, AZ	2 groups (21 nurses total)
Kansas City, KS and MO	3 groups (26 nurses total)
Pensacola, FL	2 groups (26 nurses total)

**A total** of 73 registered nurses, representative of these three markets, participated in the seven focus groups. Respondents were screened to assure that they worked in a hospital setting and functioned in roles that were primarily direct patient care with minimal management responsibilities. Despite the screening, there were several nurses in the Phoenix and Pensacola groups with current positions in ambulatory or home care, and one from the occupational health field, but all had recent hospital experience. Professional nurses with a background in education, research or service moderated the groups. A standardized discussion guide was used (see **Appendix C**).



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**Respondents were** asked to report which year they were born, and 70 responded: eight were born from 1909 to 1945; 45 were born from 1946 to 1964; and 17 were born in 1965 or later.

### Summary of the Focus Group Feedback

- 1. Most of the nurses plan to stay in nursing; however, they have concerns that as they age they will be unable to continue given the heavy workloads and chaotic work environment.**

**Even though** nurses were satisfied with their career choice, most of them could not imagine continuing in an inpatient setting for any length of time unless work conditions dramatically improved. Most would not recommend nursing to others unless they believed the individual had a realistic understanding of the demanding and physical work required of them. The overall belief was that an individual must possess the intrinsic desire to work “in service to others” to be successful for the long term.

**The rewards** of nursing most often mentioned were: caring for patients and their families, providing both physical care and psychosocial support, patient education and serving as patient advocates. They reported that frequently they are only able to provide for patients' most critical physical needs, such as giving medications and performing assessments. There were a number who cited the people they worked with as something that kept them going in their current jobs. Positive feedback from patients and their families, they said, also provides great satisfaction.

- 2. The number one concern of nurses in all of the groups was their increased daily workload.**

**Respondents have** seen their patient assignments increase over the last several years with either the same or higher acuity. Many are assigned eight to 10 patients with little or no ancillary support. Because of shortened lengths of stay, they may have as many as 12 patients during a 12-hour period. This increase in

work intensity is physically and emotionally exhausting and raises concerns in their minds about the safety of the care they provide.

**Nurses' concerns** about workload also included their perception that managers/administrators view all nurses as equally capable of performing the same level of work. Nurses reported that little consideration seems to be given to how inexperienced or agency nurses, who require more supervision and may have more questions, increase the burden on more senior or competent staff. Managers seem to ignore these differences in their single-minded goal of maintaining staffing at a defined number per shift based on patient census, nurses said, and generally fail to take patient acuity into account as a contributing variable. Many nurses believed that hours per patient day (HPPD) was the only metric used in determining staffing.

**The lack** of ancillary support was also a frequent topic. It was believed that administrative decisions to cut nurse technicians and professional allied health staff were made to decrease overall costs while maintaining registered nurse numbers. As a result, the nurses reported, they have had to take on the responsibilities of support staff, such as answering phones, obtaining equipment, supplies and medications and transporting patients off the unit, in addition to their regular duties.

**Focus group** respondents in one market talked about their hospital management's emphasis on providing outstanding customer service with a focus on improving patient satisfaction scores. In this market, outside consultants were brought in to do mandatory training on customer service. This demonstrated to the nurses that administrators had little or no appreciation for the connection between workload and its impact on patient satisfaction.

- 3. Nurses are confused about the financial issues surrounding health care.**

## A Comparison of Markets

**Nurses in** the focus groups said that they understood the financial imperatives hospitals face as a result of the Balanced Budget Act and decreased reimbursement by third-party payers. However, decisions at the organizational level puzzled them. Nurses asserted that capital and operating budgets are more interchangeable than management leads them to believe. It is difficult to see new construction, they said, when they have been told to cut end-of-shift overtime and when patient care supply levels are decreased. They see an increased reliance on costly temporary nurses and bonus pay as incongruent with hospitals' claims that they cannot afford to increase nurses' salaries or benefits.

**Salary compression** was a great concern among these nurses. They said they find the practice of paying higher rates to entry-level nurses and offering sign-on bonuses to be demoralizing. Many feel that, given the nature of the work, the responsibility nurses have and the many career choices available, salaries for all nursing positions, not just entry-level jobs, will have to increase significantly to attract people to nursing.

**Nurses also** said they feel viewed as a commodity. In the Pensacola market, nurses perceived that there is not a consistent shortage: nurses are begged to work one day and asked to stay home the next. They viewed this as a resource allocation problem.

### 4. Nurses feel relatively powerless to change things they dislike in their work environment.

**Nurses who** felt most positive about their jobs believed that there were ways to make their concerns known. They were in the minority. The majority had two very different perspectives. One group said they work in an environment where structures exist that allow for input, and administrators are generally empathic to their issues. For the most part, however, nurses' input and administrators' empathy do not translate into action or changes. The other group said hospital administration has no interest in their opinions, and that they are expected to do as they are told. These nurses feel labeled as "troublemakers" for bring-

ing up issues. Even those who do not philosophically support unions said organizing might be the only way to make substantial improvements in working conditions.

### 5. Nurse managers can make a significant difference in how nurses perceive their jobs.

**Several respondents** reported that they had supportive first-line managers. These managers are committed to patient care, are clinically competent to provide care and frequently do so. These nurses see them as advocates to the administration; they work to assure that there are enough qualified staff to care for patients and adequate equipment and supplies.

**Most nurses** said their nurse managers were no longer able to support them because they had two to four units to oversee and/or because they had little influence or input at an administrative level. Interestingly, one focus group suggested that completely eliminating this role would be a way to free up dollars to increase staff salaries. Nurses also said that managers are feeling as exhausted as front-line nurses, and that this makes it difficult to do a good job.

### 6. Nurses are confused about the financial issues surrounding health care.

**Some nurses** said they felt that the image of nursing suffers because they themselves do not actively and enthusiastically promote the profession. Some groups talked about the portrayal of nurses in television shows like "ER," in which nurses are clearly subservient to physicians. Nurses also expressed that physicians do not treat nurses with respect, which underscores the image that nurses have little to contribute that is unique and important to patient care. Many said a campaign to improve the image of nursing that emphasized critical thinking skills, the variety of clinical opportunities and flexibility of hours could be useful. This would need to coincide with improvements in the work environment, they emphasized. Otherwise, people would enter nursing with unrealistic expectations. Nurses also acknowledged that they themselves do not

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always promote a positive image of their work environment, which reinforces the lack of professionalism perceived by many less experienced nurses.

**7. Respondents see little commitment from nursing schools and employers to adequately educate, train and orient new nurses. There is also limited support for continuing education.**

**Nurses in** the focus groups said they believe that nursing education is doing a disservice to students by not preparing them adequately for the realities of the work world. They also said that in the current environment they find it difficult to provide orientation to new graduates. They see this as a vicious circle where the preceptor (a more experienced nurse who helps orient new graduates or hires) is working hard and the graduate nurse quickly becomes overwhelmed. One nurse took offense at the saying that “nurses eat their young.” She said that it is not possible to care for eight sick patients and be positive and nurturing to a new person. In one market, all the nurses reported that new nurses receive only two weeks of orientation regardless of their experience or clinical area.

**Very few** of the nurses reported being paid to attend continuing education classes and seminars, even when their employers required it. Most seemed unaware that this is clearly a violation of the Fair Labor Standards Act. For the nurses, this lack of interest in their ongoing professional development further reinforces the perception that a nurse is not valued as a professional. Some mentioned that programs are offered during their working shifts and they are invited to attend. However, they acknowledged it would be difficult to focus on learning when they know what awaits them when they return to their patients.

**8. Suggestions to address the nursing shortage**

**The nurses'** suggestions for addressing the shortage can be grouped into the following four broad categories:

### Workload and Work Environment

- Decrease individual workloads.
- Provide support staff: clerical staff, nurse technicians, transport technicians, etc.
- Empower nurse managers to be able to fully support their units.
- Listen and take action regarding concerns in the work environment.

### Financial

- Increase salaries.

### Respect and Support

- Encourage physicians to treat nurses as colleagues.

### Education and Professional Development

- Improve the orientation process.
- Provide paid continuing education.

**Generally, nurses** from all the markets expressed similar concerns regarding work environment, a sense of powerlessness to effect change, and physical and emotional exhaustion. The only major difference was that nurses in the Pensacola market believed that, because of the limited number of hospitals, there was not as much a nursing shortage as a resource allocation problem. Despite this, they too voiced concerns about their work environment.

## In Conclusion

The objective of this investigation was to discern how widespread the nursing shortage is and if it varies across these 15 markets. From the CNO interviews and the reports of the nurse staffing agencies, it seems clear that the nursing shortage is indeed a reality across the diverse markets examined, with the notable exception of Montana. The few bright spots elsewhere have more to do with the distinctive characteristics of specific institutions or the efforts of individual hospitals to address the needs of nursing professionals. This study

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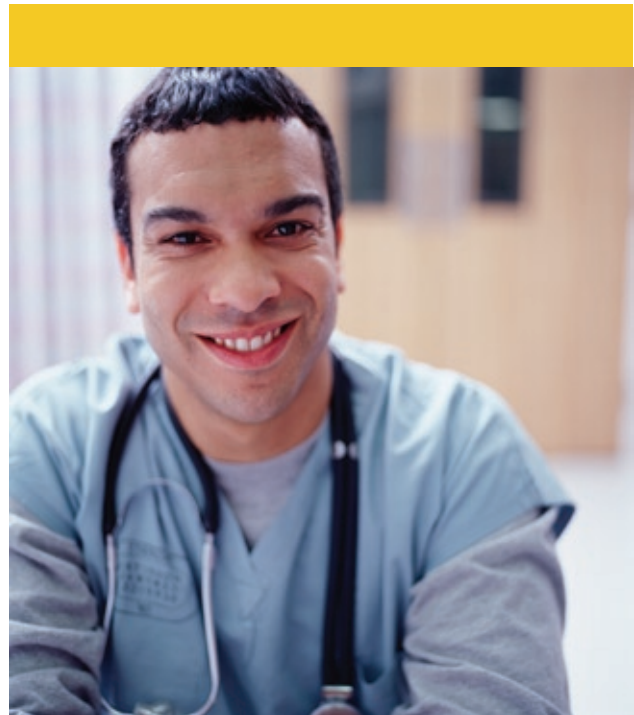
made no effort to measure the intensity of the nursing shortage in each market, but a cursory examination of the insurance, demographic, educational and professional characteristics of each market reveals some important variables. The relative diversity of the population, penetration of managed care, number of uninsured people, and presence of educational resources seem to combine to make the availability of R.N.s a greater issue in some markets than others. For the nurses who participated in the focus groups, their messages regarding the underlying issues they face were consistent.

# A Continuum of Responses, An Evolving Profession

The range of activities that have emerged in response to the nursing workforce shortage, summarized in the “Stakeholder Strategies” section of this report, runs the gamut from short-term fixes to long-term, future-directed interventions. These responses reflect the nursing profession’s evolution from a workforce commodity to a vital, strategic asset that is essential to the success of any health care organization or system.

**It can** be helpful to view this evolution and the current responses that are shaping it as a continuum represented by four stages: Scramble, Improve, Reinvent and Start Over (see **Exhibit 13**). (An earlier iteration of this model, developed by Kimball and O’Neil, was published in *Policy, Politics & Nursing Practice*, August 2001.) While this process generally moves in a forward direction over time, it does not necessarily take a direct, linear path. As illustrated in the “Stakeholder Strategies” section of this report, the current actions by many organizations to address the nursing shortage fall into all four of these stages, while responses or model programs undertaken by individual stakeholders can have elements that fall into various stages simultaneously. Still, these four stages do reflect movement along an evolutionary path.

**As the** nursing profession evolves, it also becomes of greater value to consumers. At earlier stages, systems of care are geared more to meet the needs of health care professionals or institutions. However as nurses progressively embrace more autonomy in their nursing



“ Perhaps the American nursing shortage, with its very human face, will serve as the catalyst that is needed to move forward. ”

practice, integrate the intelligent use of technology and come to better represent the diversity of the American public, their service becomes more responsive to consumers at a time when care is increasingly defined by the needs of consumers and their families.

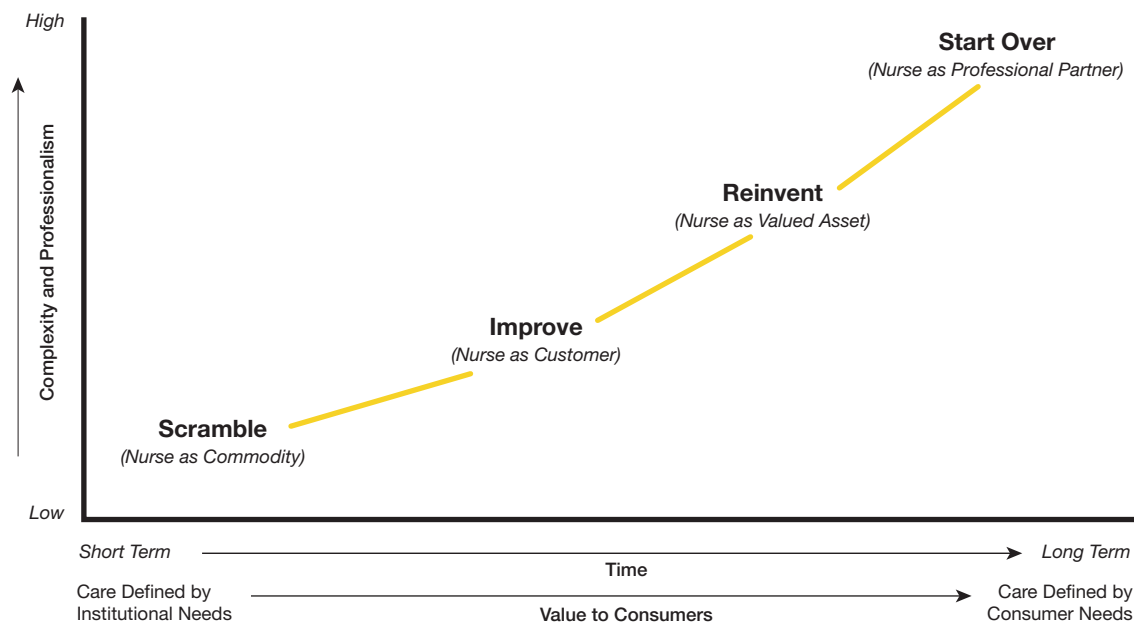
**No intention** is made to judge those actions that fall into earlier stages of the profession’s evolution; all of these steps are crucial to the overall progression. Recalling Abraham Maslow’s historic work on satisfaction and self-actualization, progression is a key element in the need hierarchy (physiological, safety, social, esteem, and self-actualization). As each lower-level need is satisfied, a higher-order need arises as a motivating factor (Maslow, 1968). Using this analogy with respect to the nursing profession, the actions taken in earlier stages (i.e., wage adjustments, safety issues or scholarships) represent steps that inevitably must be taken to forward its evolution.



## A Continuum of Responses, An Evolving Profession

### Exhibit 13

Continuum of Responses to the Nursing Shortage



## Scramble: The Nurse as Commodity

A flurry of activity and information characterizes the early stage of a workforce shortage. Stakeholders collect data, debate the issues and prepare their case for change. Short-term actions prevail as leaders buy time, carefully assess the situation and begin to chart a course of action. This stage is marked by a proliferation of studies, surveys, white papers, reports and task forces to analyze the problem and recommend how best to move forward. The overall focus is on recruitment of nurses, as evidenced in the “National Reports and Recommendations” section of this report. While highlighting only a sampling of national reports, this section illustrates the considerable activity of this type that is going on throughout the sectors.

## Actions: A Focus on Recruitment

The first actions taken are often those that have been successful in the past. Examples include updating old four-color recruitment brochures, contracting for temporary staff and recruiting internationally. As the

workforce challenge continues, wage adjustments, sign-on bonuses and other types of financial incentives emerge. There are myriads of these actions currently taking place across the country, yet they are highly competitive and generally not sustainable. Activities found in the Scramble stage tend to focus on monetary incentives and employ the principles of a classic market-driven demand/supply cycle. The nurse is considered a commodity, an expandable workforce element responding to traditional market incentives.

**Other early-stage** actions include generous recruitment expense budgets, job fairs and the launch of new marketing or image campaigns in the community served. In some instances, this latter strategy, when employed with other initiatives, has produced measurable results. The University of Maryland reported a 40 percent increase in nursing program enrollment as a result of a focused public awareness campaign launched in conjunction with new community and business partnerships and the removal of identified barriers to entry.



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**Most activities** in the Scramble stage, however, tend to be unilateral and are often initiated by stakeholders operating from within their independent domains. Georgetown University Hospital in Washington, D.C., for instance, created a “Blue Ribbon Campaign” to engage its nurses in an aggressive recruiting effort. All staff wore blue ribbons and carried the message “We Are a Nurses’ Hospital.” The campaign was so successful that the hospital hired 100 highly qualified nurses in 70 days, opened 250 new beds and now has waiting lists on several units.

**While some** organizations are experimenting with Web-based advertising, most financial and recruitment strategies defined in the Scramble stage are not technology-dependent. Diversity may appear in the images embedded in brochures and advertisements, but it is not yet an integral or celebrated feature of the professional practice. Nursing leadership plays a very minor role in implementing actions within the Scramble stage, mostly deferring to managers who undertake tactical initiatives to bring more nurses into the organization.

**No one** could effectively argue that early-stage actions are designed to add value to care and meet or exceed the needs of sophisticated consumers of health care. Additionally, this stage produces little change in the status quo of nursing. There is scant attention paid to altering nursing education, the nature of work or the underlying structure of the profession. Activities in the Scramble stage are focused on numbers, not people; by themselves they rarely have a lasting impact on strengthening the professional role of nursing.

### Improve: The Nurse as Customer

In the Improve stage, the reality of the depth and breadth of the workforce shortage begins to dawn on stakeholders and a gradual awakening occurs. Consensus develops that past solutions and traditional demand/supply-cycle responses will not adequately address the fundamental issues driving the shortage. Front-line health care delivery and nursing education

organizations initiate action in response to workforce “symptoms” of vacancies, turnover, declining enrollment and strikes. At this stage, employers and educators acknowledge that nurses have intrinsic needs/wants and begin to recognize them as customers.

**Surveys, focus** groups and forums are utilized to better understand nurses’ needs, wants and motivators. Leadership listens seriously to nurses and grasps the complexity of its diverse and dynamic workforce. The following types of actions characterize the Improve stage: increasing flexibility and improving the work environment; expanding educational opportunities and increasing diversity; and recognizing achievements and mentoring. They are a strong indication that nurses are beginning to be heard.

### Actions: Increasing Flexibility, Improving the Work Environment

Many organizations across the country now offer flexible schedules to accommodate the needs of both practicing nurses and students. Some hospitals have decreased their reliance on temporary agencies by creating attractive incentives for nurses to work in internal float pools, such as competitive rates, specialty training, education benefits, unit-based assignments and dedicated managers. Massachusetts General Hospital in Boston and Northwestern Memorial Hospital in Chicago have created on-site child care centers, recognizing the personal needs of their diverse workforce. As an outgrowth of a collaborative partnership with its labor unions, Kaiser Permanente in Oakland, California, became the first health care delivery organization to publicly announce new guidelines for nurse staffing to be implemented across its system. The Medical University of South Carolina, in Charleston, incorporated a “lift team” to assist with patient care. It introduced two futuristic robots (named Leuk Hallwalker and Carrie O’Cytte) to deliver blood products from the laboratory to the nursing units 24 hours, 7 days a week, with a 94 percent success rate. Battery-operated and completely self-guided, the robots have a 20-phrase vocabulary and politely alert others to their presence with flashing lights and verbal requests.

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Reported to be a grand success, the technology is being considered for other uses.

### Actions: Expanding Educational Opportunities, Increasing Diversity

Scholarships, forgivable loans in return for service, and tuition reimbursement are being offered by schools, hospitals, regional collaboratives and as the result of targeted state legislation. Case Western Reserve in Cleveland, Ohio, offers full tuition to students who work as a nurse's aide one day a week while in school and then commit to employment as an R.N. for one year after graduation. Capacity expansion at nursing schools is a critical issue for many states. Nurses Now is a business partnership between San Diego State University and several local hospital systems to double the number of nursing graduates by pooling resources. Improving the time it takes to obtain a degree is another job that many are taking on. An L.V.N. bridge course at Charter Oak State College in New Britain, Connecticut, which gives one year of credit toward an associate's degree, increased enrollment three-fold. Duke University in Durham, North Carolina, and the University of Iowa, in Iowa City, are offering four-semester accelerated degrees for B.S.N. and master's in care management degrees, respectively.

**Educational services** are also being offered in new and creative ways by both schools and providers of care. Many provider organizations now offer "specialty" training residencies in critical care, operating room and emergency room services either on-site or in partnership with local educational organizations. To encourage nurses' career advancement, Sentara Healthcare System in Norfolk, Virginia, pays for nurses' specialty certification exam fees, and when certified, recognizes them with increased compensation. The

Inova Learning Network at Inova Health System in Falls Church, Virginia, the Center for Clinical and Professional Development at Massachusetts General Hospital in Boston, and Kaiser Permanente's Nursing Academy are these shining examples of health care delivery organizations that have created career-advancing learning organizations to benefit their nurses.

**While Excelsior** College in Albany, New York, and the University of Phoenix remain the largest

accredited providers of distance-based learning for nurses, Charter Oak State College offers online programs to a clientele that has become 30 percent out-of-state. The University of Kansas, in Kansas City, Kansas reported that, as a result of offering all B.S.N. courses through interactive, Web-based technology, enrollment increased 53 percent.



### Outreach efforts

to increase and diversify the workforce of the future begin to emerge in the Improve stage. Coalitions across practice, education and professional associations join forces to formulate goals and strategies. Organizations now offer summer camps for high school students and create "Future Nurses Clubs" for potential recruits. The future recruitment of minorities is recognized as a necessity. The Nursing Shortage Consortium of South Florida, a 501(c)4 representing five counties and 35 diverse organizational members, sponsors an annual "Day in the Life of a Nurse." In 2001, the cross-cultural nursing initiative paired 500 students each with a nurse for a day of personal learning about the nursing experience. Nurses will remain in contact with students to promote a positive image of nursing.

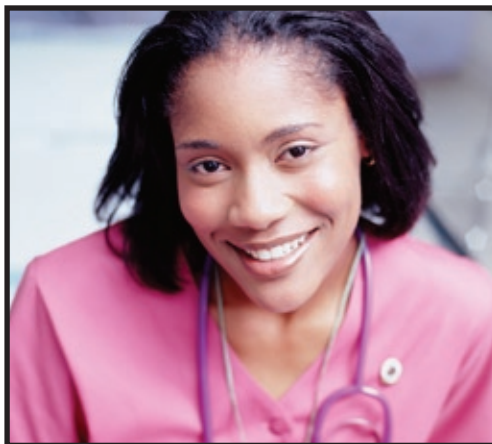
**Recognizing that** mirroring the diversity of the community is a reflection of the underlying value of that diversity (Chyna, 2001), nursing schools have

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developed aggressive efforts to recruit minorities. Nursing education organizations have developed long-term partnerships with provider institutions and community leaders to design new paths that advance entry into the profession and support minority recruitment reflective of the population served. The Maryvale High School Student Nurse Academy in Phoenix, Arizona, identifies Hispanic youths who might be at risk and matriculates them from volunteers to certified nurse's aides to L.P.N.s by grade 12 and then into an R.N. program of their choice. The program is sponsored by a partnership of corporate, provider and education partners. Emory University in Atlanta, Georgia, reported a 2001 incoming class that included 30 percent ethnic minorities and 10 percent males for the fall of 2001. The University of Kansas hired a dedicated minority recruiter to focus exclusively on the Hispanic, Vietnamese and Korean communities.

### Actions: Recognizing Achievements and Mentoring

In the Improve stage, an increased sensitivity to the need for recognition and mentoring within the profession emerges. Many hospitals recognize staff for their contributions and leadership as preceptors (more experienced nurses who help orient new graduates or new hires), mentors and clinical educators with clinical excellence awards and other tangible forms of recognition. A major lesson from the Colleagues in Caring (CIC) project is the importance of collaboration across the spectrum of education to practice. Hospitals and schools across the country are focusing on easing the transition for new graduates into the hospital work environment with supportive preceptor, internship, externship and mentorship programs. This has proved to be a very popular and positive activity. The New Hanover Healthcare System in Wilmington, North Carolina, implemented an R.N.



mentorship program for 70 new graduates and reduced its first-year turnover from 34 percent to 8 percent.

**In the** Improve stage, solutions become more involved with the cultivation of loyalty and point to longer-term investments in people. Although the approaches represent significant improvement, there is minimal structural change to the professional aspects of nursing, and thus little added value for consumers.

### Reinvent: The Nurse as Valued Asset

At the Reinvent stage of the continuum, leadership begins to recognize that a new paradigm will be required to adequately address the core issues underlying the nursing shortage. While the Improve stage responses are generally needed and warranted, they are often more cosmetic than structural. As the ongoing challenge of providing high-quality and respectful care with fewer professional nurses continues to escalate, a new level of inquiry starts to evolve, underscoring the need to re-envision the nursing profession and its relationship to the health care system. Actions in the Reinvent stage focus on creating new nursing roles, career ladders and more professional environments.

### Actions: Creating New Nursing Roles

In the Reinvent stage, new roles emerge for experienced nurses and clinical staff that capitalize on knowledge and bridge the divide between clinicians, educators, preceptors and mentors. Qualified nursing clinicians now collaborate with educational organizations to provide clinical oversight for students in clinical settings. Many hospitals have implemented the role of an experienced Admit R.N. or a STAT R.N., who ushers patients from the emergency room to patient rooms, completes a nursing assessment, orients

## A Continuum of Responses, An Evolving Profession

patients, enters and implements initial physician orders, and reports to the unit staff. This new role operates during peak admit times, often for four- or six-hour shifts, and is well received by all parties.

**In the** Reinvent stage, hierarchical roles fade as nursing leaders serve as coaches and facilitators who encourage professional nursing staff involvement and development, while front-line nurses assume leadership roles in organizational decision-making, strategic planning, outcomes and patient satisfaction analysis. Shared governance and other types of participative decision-making models gain recognition and prevalence as nurses call for more “say” in patient care and professional practice issues.

### Actions: Creating New Career Ladders

Career ladders based on competency and/or education are set up and mentorship roles move beyond new graduates to benefit experienced nurses who wish to advance their careers. At the Medical University of South Carolina in Charleston, a three-tiered differentiated practice model was designed and implemented to encourage and create a majority of nursing “leaders” (top tier). A mentor program is a critical component of the model that facilitates the advancement of R.N.s.

**The path** to professional advancement becomes more clearly defined as consistent educational standards are established, and differentiated practice and commensurate payment models evolve. The dean at the University of Iowa and the CNO at University Medical Center in Iowa City partnered to create a differentiated practice model that offers the B.S.N. graduate a new nurse clinician role to guide and direct care using evidence and improving outcomes while clinically managing a patient population. Preparation for this role is completed with personalized professional portfolio development and intensive interview training.

**In the** Reinvent stage, nontraditional stakeholders introduce new solutions. Ladders in Nursing Careers (L.I.N.C.) was a career advancement program funded

by The Robert Wood Johnson Foundation in partnership with hospital associations and employers that developed a career model to help low-income and minority entry- and midlevel employees to advance into L.P.N. and R.N. positions. The program’s success is credited to the partnership model, an external educational counselor for each student worker, and home unit coaching and encouragement (Abrams, 2001, The Robert Wood Johnson Foundation, 1999).

**Lehigh Valley** Hospital in Allentown, Pennsylvania, offers the S.M.I.L.E. program (Scholarship Money Invested in Lehigh Employees). The program pays full tuition for housekeeping, technical and clerical staff who are accepted in a local associate’s degree nursing program. Participants must meet performance standards, work 16 hours per week while in school and agree to work two years after graduation as an R.N.

**In Philadelphia,** Pennsylvania, the Thomas Breslin Learning Center is a joint venture between 60 employers and the District 1199C labor organization. Through employer contributions (55 percent) and available federal funds (45 percent), the Learning Center sponsors scholarships, tuition reimbursement and extensive in-house training programs for entry-level employees who want to become nurse’s aides, L.P.N.s or R.N.s. Certified to provide the G.E.D., nurse’s aide exams and English as a second language courses, the venture has expanded its outreach to its community of underprivileged, unemployed, immigrant minorities and people on welfare. The concept of developing and promoting from within takes on new depth with this effort, which is a worthy model for future development.

### Actions: Creating More Professional Environments

Hospitals and medical centers that have achieved and maintain Magnet Hospital status from the American Nurses Credentialing Center have been reviewed extensively in the literature on the professional nursing environment and achieving quality outcomes (Sullivan-



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Havens and Aiken, 1999, Parker-Pope, 2001). When this study was completed, 37 health care organizations had been given Magnet status across the United States. (When this report went to press, 45 organizations had achieved Magnet status, demonstrating considerable movement toward meeting the standards for a professional work environment.) Two of the Magnet facilities interviewed during the course of this study were the University of California, Davis (UCD) and Hackensack University Medical Center in Hackensack, New Jersey. Both reported no problems with vacancies or turnover, no difficulties with quality indicators, no use of agency temporary help, a high percentage of B.S.N.-prepared nurses who seek employment, a work environment that values the registered nurse, active research on nursing outcomes and a sense of pride among the staff for being designated as and constantly working to maintain Magnet status. UCD enjoys an all-R.N. staff made possible by the savings associated with no temporary staff use and low turnover. Nurses at UCD are 100 percent unionized but have not held a strike in a decade. Several organizations interviewed were in the process of applying for or meeting the requirements of Magnet standards. The Magnet standards have become a litmus test for organizations that wish to achieve a professional nursing environment and create the infrastructure that is required to support it. A critical point: The entire organization, from the front-line nurses to the CEO, must endorse the goal in order to be successful.

**In the** Reinvent stage, the use of technology that reduces and streamlines work while improving access or response to patient care needs both enhances the role of the nursing profession and benefits patients. Clarian Health Partners in Indianapolis, Indiana, which has 156 licensed critical care beds, created a flexible and more sophisticated bed monitoring capability on its medical-surgical units with a conversion to “patient-focused, ergonomic, comprehensive acuity-adjusted rooms” that accommodate critical care demand and significantly reduce patient transfers to intensive care. Nurses participated as full partners in the design, which recently won a Vista Award for multidisciplinary design

process. The savings of not transferring the patient multiple times based on acuity balances the cost of scheduling more qualified staff to meet patient needs. Patients stay put, nurses save time, everyone wins.

**Strengthening Hospital** Nursing was a Robert Wood Johnson Foundation demonstration project that focused on improving care delivery in a constantly changing environment. The highest levels of satisfaction came from nurses involved at the unit level, who were actively engaged in identifying best practices as the basis for patient care. Salt Lake City based Intermountain Healthcare, a leader in outcomes research, is implementing an interdisciplinary electronic medical record system that spans the continuum of care, from the physician’s office to the hospital to the home health care setting. It automates care coordination via a single problem list/summary for all disciplines. Proficiency with the system demands a more cognitive worker who is comfortable with making data-based decisions.

**In the** Reinvent stage, labor unions representing nurses begin to play a role in promoting quality, service and professional growth. Kaiser Permanente’s partnership with the Coalition of Kaiser Permanente Unions (representing 27 local unions, 64,000 health care workers, and 9,000 R.N.s and L.P.N.s) is designed to help make Kaiser the employer of choice for nurses by improving the work environment and addressing issues of quality, systems, education, staffing and budget. This is a model that many are watching and also trying to emulate. It represents new ground and holds much promise and risk.

**In the** Reinvent stage, the role of the professional nurse is leveraged as a valued strategic asset in the delivery of high-quality, patient-centered health care. Patient advocacy and professional empowerment are structurally integrated as nurses rediscover their “professional voice” within the health care system and participate fully in interdisciplinary approaches to care (Buresh and Gordon, 2000). As a result, approaches that meet consumer needs progress, and clinical outcomes and satisfaction improve.



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### Start Over: The Nurse as Professional Partner

At the far end of the response continuum are innovations that represent fresh new concepts, some of which are also the most radical in nature. These approaches extend beyond re-engineering and seek to create entirely new models of care and professional practice. Some raise the question of whether the basic medical or biomedical paradigm for the delivery of health care services and the organization and training of nursing professionals is sustainable or even desirable in the future.

**Actions being** advanced in this stage represent a collaborative, interdependent and long-term view. They are often complex, yet elastic, continually evolving to embrace the changing needs of the increasingly educated consumer of health care. Integral to their success are core values that honor diversity and foster independence for the people they serve. Respected by consumers as knowledgeable caregivers, patient advocates, information resources and teachers of self-care, nurses practice at the upper limits of their professional licenses and certifications. Start Over efforts are often the result of collaborative partnerships between multiple sectors that find their roots in the community and are defined by consumer needs. In this stage, enlightened and effective leadership and risk-taking facilitate efforts to change.



### Actions: Creating New Models of Care

Start Over actions include new systems of care delivery that move services out of traditional health care settings. On Lok, Inc., in San Francisco is a community-based capitation model that provides a seamless system of health care services for the frail elderly with goals of optimizing health and dignity, maintaining clients at home and avoiding/significantly reducing acute and

long-term care admissions. Its services are based on a multidisciplinary model, which offers its participants a complete package of care including senior centers with recreation and physical and occupational therapy; primary, dental, eye and foot care; alternative care; laundry service; transportation; meals; personal care assistance at home or in an On Lok residence; hospice care; and contracted acute and long-term care with oversight by On Lok medical staff. Now licensed as a health plan in California, On Lok has provided this holistic spec-

trum of services under a capitation arrangement with Medicare and MediCal since 1983 with sound financial results. Nurses play a pivotal care management role in its six primary care clinics and are considered full professional partners by the physicians and nurse practitioners they work with. A sophisticated multidisciplinary medical record system is used for documentation throughout the system. On Lok participants represent

all cultures, and the staff reflects this diversity. In this care model, all members of the interdisciplinary team (including geriatric aides, transport drivers, receptionists and meal delivery staff) are trained and empowered to observe and communicate minor changes in status or other relevant information that might affect the participant's goals. With an eye on the future, On Lok's current executive director and CEO, a visionary nurse, has played an instrumental role in building and growing the organization and continues to do so.

**In the** Start Over stage, technology makes possible individualized, customized monitoring that provides better control and reduces demand on acute care facilities. LifeMasters Supported Self-Care, Inc., in Irvine, California, is an interactive health management services company that has proved that it can improve outcomes for patients, provide decision support tools for physicians and lower costs for payers. With contracts covering 45 states, LifeMasters is now providing disease management services in four languages for 55,000

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individuals living with chronic illnesses, such as congestive heart failure, coronary artery disease, diabetes and asthma. LifeMasters utilizes in-home biometric monitoring combined with Internet technology that transmits weight, vital signs, lab values and other essential assessment information to a central case management office where professional nursing staff review, intervene, teach and coach patients by phone. The nursing experts provide personal support to patients between physician office visits and teach them how to manage their chronic illness effectively. Physicians direct all care and have secure real-time Internet access to complete care records on individual patients or their entire patient population, which allows them to make longitudinal decisions. LifeMasters received the 2000 Full Service Disease Management Vendor Leadership Award from the Disease Management Association of America.

**Improved care** management in the acute care setting is advanced by the use of technology that leverages professional expertise. Sentara Healthcare in Norfolk, Virginia, is a multihospital health system that utilizes centralized critical care monitoring to support a remote electronic intensive care unit (E-ICU) that expertly monitors critical care patients in four hospital ICU units. The remote E-ICU is staffed 24 hours, 7 days a week with an expert team that includes an experienced, certified critical care nurse and a physician intensivist who provide immediate response and personalized clinical support to the on-site critical care nursing staff in outlying hospitals via television monitors, video teleconferencing, electronic medical records and decision support tools through a dedicated network. Virtual rounds are conducted on each patient based on acuity. Visual smart alarms signal electronic alerts based on set parameters, and ICU staff nurses have a direct “hot phone” to E-ICU. Decisions based on change in status can be made instantly.

**In the** area of nursing practice, new professional practice models gain ground in the Start Over stage. Across the country, academic medical centers' schools of nursing have established community-based primary care clinics staffed by nurse practitioners that focus on

education and prevention. Practicing at the upper limits of their licensure, the nurses establish contracts with physicians to provide the required legal oversight. As new models develop, it is conceivable that nursing professional practice organizations could contract directly with acute care hospitals for the provision of different types of specialized nursing services.

**In the** Start Over stage, nurses are not only recognized as key strategic assets, but as professional partners in the long-term viability of providing health care. In this almost-present future, national and state labor organizations representing nurses proactively collaborate with health systems and government to promote and advance the profession of nursing. Boards of health care organizations have appropriate nursing representation. The role of the CNO is positioned and leveraged to reflect the fact that the provision of hands-on patient care is still the core of quality health care and organizational mission. Nursing professional organizations come together in unity to benefit their diverse constituents by articulating a clear vision of the value nursing brings to society. In the Start Over stage, nursing service is not owned by the profession, but facilitated by it to become manifest through communities, families, other professions and individuals providing self-care. This is the most radical reforming of nursing.

**While a** few tangible examples of Start Over activities have surfaced, this stage of the continuum remains in its infancy. The impetus for many new Start Over activities may come from outside traditional institutions of learning and practice. These new approaches have the potential to create fresh opportunities and alignments for the profession of nursing while designing creative and effective services to ease the coming demand on the health care system. To break from tradition and pave the way to a new future for health care will require multilateral support from all sectors and stakeholders: nursing professional and educational organizations, the health care industry, government, labor and providers of care. Perhaps the American nursing shortage, with its very human face, will serve as the catalyst that is needed to move forward.

# Strategies and Recommendations for Action

This report describes the complex and enduring nature of the nursing shortage in the United States. It provides compelling evidence that this shortage is unlike any of those in the past and thus requires bold new solutions. It calls for a re-envisioning of the nursing profession itself, so that it can emerge from this crisis stronger and in equal partnership with the profession of medicine. Anything less consigns nursing, and the public that depends upon its care, to perpetual cycles of shortage and oversupply.

**The authors** therefore recommend that a National Forum to Advance Nursing be created. An independent body, the Forum would draw together a wide range of stakeholders to address the nursing shortage and broader, related health and social issues. To build upon the vast number of activities that are already under way, and to acknowledge their critical value, the Forum would concentrate on helping nursing achieve later evolutionary stages of the profession, as outlined in the previous “Continuum of Responses” section. While the philanthropic sector is uniquely situated to provide crucial leadership and resources to help create and fund this Forum, it cannot act alone. To achieve success the Forum will require active, collaborative participation from every group that shares concern about the nursing shortage, including nurses and nursing profession leaders, educators, health care industry leaders, labor unions, government, the array of collective national organizations and consumers, among others.

The National Forum to Advance Nursing would focus efforts in the following strategic areas:



“If lessons from the nursing shortage are any guide, addressing a systemic problem requires the input of all those who have a stake in that system.”

1. Creating new nursing models; developing and piloting new ideas that address both the nursing shortage and broader health and social issues; advancing the study of nursing's contribution to health care outcomes and consumer satisfaction; and creating entirely new models of health care provision.
2. Reinventing nursing education and work environments to address the needs and values of, and appeal to, a new generation of nurses.
3. Establishing a national nursing workforce measurement and data collection system.
4. Creating a clearinghouse of effective strategies to advance cultural change within the nursing profession.

## Strategic Area One

The Forum would support research and pilot programs and would advance the use of breakthrough or “disruptive” strategies within institutions, as described by Christensen Vohmer and Kenagy, 2000. These strategies would both create new nursing models and study their effects on patient outcomes and satisfaction with care. Efforts would first focus on the following areas:

- a. Redesign of nursing work environments, with a particular emphasis on using new technologies to facilitate nursing practice.
- b. Nursing leadership.

## Strategies and Recommendations for Action

Once successful models have been developed, they would be applied to these areas:

- c. Creating new professional practice models.
- d. Reinventing nursing education to better prepare students for and reflect the current work environment.

The Forum would support sustained research that closely examines the health status of communities, regions, states and the nation, using economic models that review nursing resources and the health outcomes of study populations. It would also spur research to identify new models of care that are driven by the needs and wants of consumers.

### Strategic Area Two

To attract and retain a new generation of nurses, and to ensure that the new nursing workforce represents the ethnic and racial diversity of the United States, the Forum would focus efforts on reinventing nursing education and work environments to address the needs and values of these new workers. It would foster the creation of new training/educational models and new community-based roles that utilize nurses' unique skills, while fostering satisfaction and competence. It would develop replicable demonstration projects to attract and retain men, minorities and special populations, such as single mothers, workers displaced from other professions and older Americans.

### Strategic Area Three

The Forum would establish a national nursing workforce measurement and data collection system to provide current, consistent and comparable data that can be aggregated and compared at national, state and county levels longitudinally. Initial efforts would focus in the following areas:

- a. Establishing national standard definitions for nursing employment and licensure; tracking the number of students entering the array of nursing education programs and standardizing measurement for those programs' capacities; creating a schedule for routine data collection; and assigning responsibility for collecting such data at the state level.
- b. Establishing a single repository for national aggregate nursing workforce data.
- c. Developing new measures as fresh issues emerge and health care and the nursing profession evolve.
- d. Designing and implementing a longitudinal nursing workforce environment study using quantitative and qualitative methods.
- e. Designing and implementing a study demonstrating the correlation between patient diagnosis-related groups (DRGs) and the intensity of nursing care, which would provide a conceptual foundation for realigning nursing service to become an income-generating service as opposed to an institutional cost.
- f. Expanding and establishing valid indicators of quality in nursing care.

**Such information** would be invaluable to health care leaders, nursing educators and policy-makers as they plan for nursing and educational capacity in the future.

### Strategic Area Four

The Forum would establish a clearinghouse of effective strategies to advance cultural change within the nursing profession by creating a comprehensive, up-to-date Web site that is nonterritorial, easy to use, and provides useful information for health care leaders about research, programs and models that have proven successful in advancing the nursing profession.

### Engaging Consumers

The National Forum to Advance Nursing is, by any standards, an ambitious proposal, which will require the collective efforts of all stakeholders in the nursing shortage, including communities and consumers. Because consumers are directly affected by the nursing shortage, they must be kept apprised of circumstances and engaged in the development of systemic solutions. As the nursing profession evolves toward providing care that better meets the needs of consumers, their collaborative participation will become ever more essential. Partnerships with consumer and community groups must therefore characterize the Forum's work in each strategic area.

## Strategies and Recommendations for Action

### A Necessary Structure

If lessons from the nursing shortage are any guide, addressing a systemic problem requires the input of all those who have a stake in that system. The National Forum to Advance Nursing would provide the necessary structure to bring together all stakeholders in a collective effort to develop meaningful, lasting solutions to the American nursing shortage.



# Appendix A

## Members of The Robert Wood Johnson Foundation's National Advisory Committee

On September 7, 2001, The Robert Wood Johnson Foundation convened a meeting of its national advisory committee to review an earlier draft of this report and develop recommendations for action. The members of this advisory committee are listed below. Please note that the views expressed in this report are those of the authors. The participation of these individuals as advisers to the study does not imply endorsements of the findings or conclusions contained in this report.

**Shirley Chater, Ph.D., R.N., F.A.A.N. (Chair)**

Senior Consultant  
Academic Search Consultation Service

**Linda Burnes Bolton, D.P.H., R.N., F.A.A.N.**

Vice President and Chief Nursing Officer  
Cedars-Sinai Health System

**The Honorable Lois Capps**

Congresswoman from California  
U.S. House of Representatives

**Marilyn Chow, D.N.Sc., R.N., F.A.A.N.**

Vice President, Patient Care Services  
Kaiser Permanente

**Karen Cox, M.S.N., R.N., C.S., P.N.P.**

Vice President, Patient Care Services  
Children's Mercy Hospital and Clinics

**Michael Desjardins (nursing student)**

President  
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## Appendix A

### Questions Posed to The Robert Wood Johnson Foundation's National Advisory Committee

1. What are the leverage points that seem to offer the most opportunity for change?
2. What steps can be taken to activate change at all four stages?
3. Are there missing elements of infrastructure that could facilitate change?
4. Is a single articulation of the change needed?

# Appendix B

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# Appendix C

## Market Definition

Standard Metropolitan Statistical Areas (SMSAs), as Defined by the U.S. Census Bureau

Market	State	Counties	FIPS Codes*
Boston	MA	Bristol, Essex, Middlesex, Norfolk, Plymouth, Suffolk	25005, 25009, 25017, 25021, 25023, 25025
Cleveland	OH	Ashtabula, Cuyahoga, Geauga, Lake, Lorain, Medina	39007, 39035, 39055, 39085, 39093, 39103
Greenville	SC	Anderson, Cherokee, Greenville, Pickens, Spartanburg	45007, 45021, 45045, 45077, 45083
Indianapolis	IN	Boone, Hamilton, Hancock, Hendricks, Johnson, Madison, Marion, Morgan, Shelby	18011, 18057, 18059, 18063, 18081, 18095, 18097, 18109, 18145
Kansas City	KS MO	Cass, Clay, Clinton, Jackson, Johnson, Lafayette, Leavenworth, Miami, Platte, Ray, Wyandotte	29037, 29047, 29049, 29095, 20091, 29107, 20103, 20121, 29165, 29177, 20209
Lansing	MI	Clinton, Eaton, Ingham	26037, 26045, 26056
Little Rock	AR	Faulkner, Lonoke, Pulaski, Saline	05045, 05085, 05119, 05125
Miami	FL	Dade	12025
Montana	MT	All counties	All codes = 30XXX
Pensacola	FL	Escambia, Santa Rosa	12033, 12113
Newark	NJ	Essex, Morris, Sussex, Union, Warren	34013, 34027, 34037, 34039, 34041
Orange County	CA	Orange	06059
Phoenix	AZ	Maricopa, Pinal	04013, 04021
Seattle	WA	Island, King, Snohomish	53029, 53033, 53061
Syracuse	NY	Cayuga, Madison, Onondaga, Oswego	36011, 36053, 36067, 36075

\* FIPS Codes—federal information processing standards codes—are issued by the National Institute of Standards.



**Appendix C**

# Chief Nursing Officer Interview Tool

## The Robert Wood Johnson Foundation Nursing Shortage Study

### Health Care Market Profile/Nursing-Specific Data

CNO Name: \_\_\_\_\_

Title: \_\_\_\_\_

Organization: \_\_\_\_\_

City, State: \_\_\_\_\_

Telephone: (       ) \_\_\_\_\_

E-mail: \_\_\_\_\_

 Please send me a copy of the summary data from the CNO interviews.

(The contact information is **confidential** and will only be used to contact you if follow-up information is needed or if you request a summary of the data collected.)

Thank you for participating and providing the information requested on the following pages. Your comments are most welcome.

Number of years you have been in the Chief Nursing Officer role: \_\_\_\_\_

## Appendix C

### Shortage Data

Is your organization experiencing a nursing workforce shortage?  Yes  No

If yes, is it across all areas of practice or only in certain sectors?  All  Some Sectors

Specify sectors: \_\_\_\_\_

Do you have information on your current nurse vacancy rate?  Yes  No

Do you have information on your current nurse turnover rate?  Yes  No

Do you have information on your turnover for first-year hires?  Yes  No

Do you know how many new graduates were hired in the last year?  Yes  No

What is the average age of your nursing staff? \_\_\_\_\_

### Skills Mix and Student Data

What is your organization's overall nursing skills mix for direct patient care?  
(% total FTEs by license or job category)

R.N. \_\_\_\_\_% L.P.N. \_\_\_\_\_% Aides \_\_\_\_\_% Other \_\_\_\_\_%

How many schools do you contract with for student clinical rotations? \_\_\_\_\_

Approximately how many nursing students rotate on-site during 1 year? \_\_\_\_\_

### Labor Data

Are your nurses unionized?  Yes  No

If **YES**,

How many years have they been unionized? \_\_\_\_\_

How many separate unions represent your nursing staff? \_\_\_\_\_

Which unions? \_\_\_\_\_

What % of the nursing staff do unions represent? \_\_\_\_\_

Describe union relationship on 1-10 scale (1=adversarial, 10=collaborative) \_\_\_\_\_

If **NO**,

Have there been recent attempts to organize?  Yes  No

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**Signs and Symptoms**

Do you utilize mandatory overtime?  Yes  No

If yes, how long has it been in place? \_\_\_\_\_

Do you know your registry/agency usage in the last year?  Yes  No

Can you estimate either % total labor hours or total \$  Yes  No

Have you experienced ER diversion due to staffing in the last year?  Yes  No

Have you had to reschedule any surgeries in the last year due to staffing?  Yes  No

Have you had to deny any admissions in the last year due to staffing?  Yes  No

Have you had difficulty transferring to Long-Term Care in the last year?  Yes  No

**Quality and Work Environment**

How many nurse manager positions do you have in acute, ER & surgical services? \_\_\_\_\_

Define the average acute inpatient nurse manager role:

#FTEs \_\_\_\_\_ #beds \_\_\_\_\_ Fiscal duties:  Yes  No

% time in clinical role \_\_\_\_\_%

How many nurse manager vacancies have you had in the last year? \_\_\_\_\_

Over the last year, given your current staffing, have you seen an increase in:

Sentinel Events?  Yes  No  data not available

Medication Errors?  Yes  No  data not available

Patient Complaints?  Yes  No  data not available

Worker's Compensation Claims?  Yes  No  data not available

Anything else you are tracking?  No  Yes \_\_\_\_\_

Do you have a formal structure in place for nurses to participate in decision-making, such as shared governance, nursing councils, etc.?  
 Yes  No

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If yes, how many years has it been in place? \_\_\_\_\_

What is the structure formally called in your organization? \_\_\_\_\_

**Shortage Strategies**

Have you employed any of the following strategies in the last year? Check all that apply.

- Increases in pay
- Increases in benefits
- Use of incentives
- Use of consultants
- Work environment improvements
- New care delivery models

Are you involved in community-wide activities to address shortage issues?

- Yes    No

What other specific actions have you taken or are you currently taking to address the shortage?

What strategies have you executed so far, or in the past, that you consider particularly successful?

**Thank you for your participation and support!**

**Please return the completed survey by \_\_\_\_\_ to:**

**Name:**

**Fax:**

## Appendix C

### R.N. Focus Group Discussion Guide

Thank you for agreeing to participate in our discussion today. My name is \_\_\_\_\_, and I am facilitating this discussion as part of a national study The Robert Wood Johnson Foundation is sponsoring entitled “Health Care’s Human Crisis: The American Nursing Shortage.” We will be talking about what you do every day as a nurse, and what ideas you have to make your workplace a better one. I would like to hear from everyone, so please speak up if you are on the shy side, and maybe hold back a little if you find yourself being the first person to answer every question.

1. Is there anything about you or where you work that you would like to share with others around the table?  
*You may pass when we come to you if you would rather not share anything.*
2. What kind of nursing are you currently doing?
3. Is that the area of nursing that you want to be in?
4. If you are not working full-time, what would most likely make you work more hours?
5. What are some of the things you like best about your job? What are some of the rewards of the job?
6. What are some of the things you don’t like about your job? What are some of the drawbacks of the job?
  - What causes these issues to occur?
  - What could be done to address these issues?
  - How much authority do you feel you personally have to address these issues?
7. Have the things you like and dislike about your job changed in the last couple of years?
  - In what ways have they changed?
  - What has caused the changes?
  - Are these changes for better or worse? Why do you say that?
8. How responsive is your employer to efforts of nurses like yourself to raise concerns or identify problems?
  - What things have you raised concerns about in the recent past?
  - What happens when a nurse raises a concern?
  - Are you involved in making positive changes in your hospital? Share some examples.
  - Is there a response, but not the response you were looking for?
  - (If not responsive) What makes you say that they are not responsive? What do you think the reasons are that they are not more responsive?
  - What would make you feel more connected to your employer?



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9. Does your employer provide benefits to you?
  - What kind of benefits are they?
  - How satisfied are you with these benefits?
10. Does your employer have programs or services available to you that help you succeed in your job or that help to make your job less stressful?
  - What kinds of programs are they?
  - How satisfied are you with these programs and how they are made available to you?
11. Are there training and educational opportunities available to you through your job?
  - What kinds of opportunities are they?
  - How useful are they?
  - (If not very useful) What makes you say that they are not very useful?
  - What would make them more useful?
12. Did your nursing education adequately prepare you for the realities of a nursing career?
  - To what extent has your nursing career met your initial expectations?
  - Are there things about nursing and your current nursing job that have been more positive than you originally thought they would be?
    - What aspects?
    - In what ways are they more positive?
  - Are there things about your current nursing job that have been more negative than you originally thought they would be?
    - What aspects?
    - In what ways are they more negative?

*As I'm sure you are aware, we are now facing a shortage of nurses in many parts of the country, and projections are that it will get worse before it gets better.*

13. In addition to the things we've already talked about, what other kinds of changes do you think are needed to attract more qualified people to the field, and to retain a higher percentage of those already in nursing?

*Be creative – we're looking for new ideas to make nursing a more attractive career.*

14. What can be done to support you and make it easier for you to do your job?

*Thank you very much for participating. If you have any other ideas you would like to share individually, feel free to stay a few minutes and share them.*

This discussion guide was adapted from a tool developed for use with nurses by the Center for the Health Professions, University of California, San Francisco.

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