

# **Wisdom at Work:**

## The Importance of the Older and Experienced Nurse in the Workplace

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## WISDOM WORKS TEAM

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## I. EXECUTIVE SUMMARY

With projections of a severe and looming nursing shortage, the Robert Wood Johnson Foundation® (RWJF) commissioned the development of this *Wisdom Works* white paper to identify promising strategies and opportunities for retaining experienced nurses. One projection from a 2003 online survey conducted by the American Nurses Association revealed that, in the age cohort of 40 or older, more than 82 percent of nurses planned to retire in the next 20 years.<sup>1</sup>

This paper is a response to the current and increasingly daunting crisis resulting from the shortage of nurses. Generally, workforce experts agree on three major approaches to augment the nursing workforce:

1. Increase the number of enrolled nursing students and retain them through graduation.
2. Retain new graduates and nurses at all stages of their professional careers, including older nurses.
3. Attract nurses back to the bedside who have left the national nursing workforce, such as nurses otherwise employed or those who have retired, or attract nurses from other countries (even though this latter strategy has some politically charged ramifications).

We focus on *one* approach—the retention of the older nurse to the usual retirement age and even beyond. While we acknowledge that all three approaches must converge to substantially reverse the consequences of the nursing shortage, the importance of retaining older nurses—and the knowledge and wisdom they contribute—has only recently begun to receive attention. Among the baby boomers aged 55 and over are healthy and vibrant retirees or soon-to-be retirees, with a robust 10 to 30 years of additional life expectancy. These individuals are fast becoming the largest untapped source of potential labor in the U.S. economy.<sup>2</sup>

Throughout this paper, facts and myths about aging and the older nurse, information on how workplaces support or detract from the quality of older nurses' work lives, best strategies for recruitment and retention to take full advantage of this pool of valuable human resources, and work role adaptations that are realistic and attainable will be presented. The underlying question “Is there value in retaining the older nurse in an increasingly chaotic health care system?” leads to a resounding yes!

This paper is organized to:

1. Present an introduction and a current review of the literature regarding what has been researched and written about the older nurse. Areas reviewed include data trends, anecdotal references, ergonomic and work design, and work environment, including the physical plant and operational culture considerations.
2. Present a business case for the immediate implementation of strategies to increase the retention and/or recruitment of the older nurse.

3. Share the results from interviews with sages—experts who possess targeted expertise as well as a broad view of the role and functions of the older nurse.
4. Document the results from a pilot survey of nurses addressing heretofore-unasked questions, such as the psychological impact of role changes, and peer support or toleration of workload sharing with younger nurses.
5. Reveal a set of best practices, in both health care and non–health care settings, where older employees are respected, honored, and valued for their active contributions, and explore how these might be relevant for replication in a variety of health settings.
6. Synthesize common themes from each of the above data sources, highlighting key findings and critically examining whether areas of overlap represent consensus or merely a lack of creativity and a signal that more creative work needs to be done. This, then, leads to a set of recommendations and concluding remarks.

## II. INTRODUCTION: TRENDS AND THE IMPACT OF AN AGING WORKFORCE

In examining the extent to which retaining older nurses up to or past the usual retirement age represents a reasonable strategy for meeting patient care needs, an instructive starting point is to consider the issue of an overall aging workforce, beyond just the health care setting. Nurses share with other baby boomers certain expectations about retirement and consider various factors in deciding whether to remain in the workforce.

The world is in the midst of a global “age-quake”: The workforce is turning gray and is shrinking!<sup>3</sup> Worldwide, more than a million people turn 60 years old each month. The aging of the world’s population is the result of two factors—increasing longevity and decreasing fertility.

The U.S. population is also aging, and three factors are responsible for this trend: increased fertility rates after World War II, increasing longevity, and decreased fertility rates since 1957. *The Boom*: According to published data, the 78 million babies born in the United States during the baby boom years of 1946–1964 represent about 26 million more babies than were born during the prior 18-year period, and about 10 million more than were born in the 18 years following the boom.<sup>4</sup> In the United States, a baby boomer turns 50 every 7.6 seconds. The oldest boomers will turn 65 in 2011, while the youngest boomers will not reach that age until 2029. So boomers are not only large in numbers but represent a very wide age span. *Longevity*: The 78 million boomers are more likely to survive into old age. Since 1900, average life expectancy in the United States has increased from 47 years to 77 years.<sup>5</sup> The boomers who reach 65 in 2011 can expect to live, on average, at least another 18 years.<sup>6</sup> *Decreased Fertility*: Boomers, and those in their childbearing years born after the boom, are having fewer and fewer children. In 2002, the U.S. birthrate was at its lowest point ever since the government began keeping these statistics.<sup>7</sup>

Since 1980, the number of U.S. workers over the age of 40 has increased significantly. By 2010, more than 51 percent of the workforce is expected to be 40 or older—a 33 percent increase since 1980—while the portion of the workforce aged 25 to 39 will decline 5.7 percent.<sup>8</sup> At the same time, the median age of U.S. workers has continued to rise and is expected to increase by six years, from 34.6 to 40.6, by 2010. By 2020 the number of workers aged 55 and over will increase by 80 percent, to more than 33 million.<sup>9</sup> The proportion of workers aged 55 and older will grow from 13 percent of the labor force in 2000 to 20 percent in 2020.<sup>10</sup> Meanwhile, fewer younger workers are entering the workforce. According to the Employment Policy Foundation, the workforce will experience a shortfall of 7.4 million baccalaureate degree holders by 2012.<sup>11</sup>

“While America may never grow as old as Europe and Japan,” a 2002 study notes, “its age wave will arrive with a bang. In just the two decades between 2010 and 2030—roughly the years Boomers turn sixty-five—the number of elderly Americans will nearly double.”<sup>12</sup> The baby boomers—the 78 million Americans born between 1946 and 1964—have created significant demographic shifts since the mid-1940s. As the boomers have moved through their life cycle, the United States has seen major changes in the construction of schools, the birth of new communities, the expansion of colleges, and the creation of new jobs and industries. The aging of the U.S. population

will affect every facet of our society and present challenges to policy-makers, families, businesses, and health service providers. Boomers' departure from the workforce will significantly impact business productivity and growth and redefine aging in general and the relationship of aging to work.

The normal retirement age for the oldest of the boomers is 66 years. Most pension systems, though, encourage early retirement. In 2001, for instance, more than two-thirds of all Social Security benefits were awarded to retirees who opted to take early retirement at age 62.<sup>13</sup> Although workers are retiring in greater numbers, there is some indication that the baby boomers are re-evaluating their retirement plans and their future lifestyles. Their changing views are the result of several converging factors. One important factor is the change in the stereotypical image of a retiree, from a feeble and reticent old person to a more youthful and active senior.<sup>14</sup> The baby boomers are more adventurous, healthier, more optimistic, and better educated than their forebears. The boomers *expect* to live longer. Other factors affecting the boomers' views are evolving macro-level policies (e.g., the creeping upward shift in the retirement age under Social Security; liberalization of the Social Security retirement earnings test, with the ultimate elimination of the test; and increases in, and elimination of, a mandatory retirement age) and current economic trends (e.g., new models of retirement funding).<sup>15</sup>

Improved health and technological advances make it possible to extend work life beyond age 65. Boomers are reframing the discussions of technology needs from a focus on injury, disease and disability to a focus on extending independence, productivity and quality of life.<sup>16</sup> Current aging-related study, research and product development is focused on major innovations. These aging-related technologies fall into four categories:<sup>17</sup>

1. Enabling technologies (which assist people to “age in place”)
2. Operational technologies (which assist aging people to function in society)
3. Connective technologies (which assist aging people to communicate with caregivers, families and medical resources and vice versa)
4. Telemedicine (which allows a medical source or caregiver to monitor, diagnose and/or treat patients from a distance).

There is a need not only for changes in public policies, but in attitudes and institutions as well. “In addition to attending to the more traditional policy priorities (e.g., access, equity, privacy, security, etc.), policy-makers must address how to best stimulate [aging-related technology] research, innovation, investment, awareness, acceptance, and adoption.”<sup>18</sup>

“Because the number of persons age 55 and over will grow remarkably as the Baby Boomers age, healthy retirees or soon-to-be retired persons, with 10–30 years of life expectancy, are fast becoming the largest untapped source of potential labor in the economy.”<sup>19</sup> Older workers are needed for their skills and experience and because there are not enough younger workers to replace them.<sup>20</sup> Thus experts advise us that government and industry must look for ways to persuade baby boomers to remain on the job. Boomers’ “added years of life give them the chance, their experiences in life give them the capability, and their need to come to terms with the world in a way that brings integrity to their life gives them the psychological incentive.”<sup>21</sup>

However, in spite of what is already known about the aging of the U.S. population and the growing impact this will have on the nation as the first baby boomers reach retirement age in about five years, there is scant evidence that key leaders, institutional representatives, and policy-makers—much less society at large—are preparing for, or even fully grasp the implications of, these seismic demographic changes.<sup>22</sup>

In summary, leaders in all sectors of society must be prepared to invest more in the productivity of workers—old and young alike—while expanding access to new career options such as “phased retirement” and “un-retirement.” Findings and recommendations disseminated by the 2005 White House Conference on Aging support the need for action and reform. These findings and recommendations focus on the future workplace and call for removing barriers to the retention and hiring of older workers, including eliminating age discrimination, removing impediments to phased and flexible retirement options, encouraging multiple work options for older workers and businesses, and providing greater access to education and training for older workers.

### The Nurse Shortage and the Nurse Baby Boomers

The global shortage of registered nurses is well documented. The nurse shortage is due to changes in both supply and demand: fewer people are entering and staying in nursing, while the need for health services is increasing as the population ages. (This demographic shift also affects the supply side of the equation.) By 2010 approximately 40 percent of the U.S. nurse workforce will be over 50 years of age.<sup>23,24</sup>

There are three major recognized approaches to increase the size of the nursing workforce:

1. Increase the number of enrolled nursing students and retain them through graduation.
2. Retain new graduates and nurses at all stages of their professional careers, including older nurses.
3. Attract nurses back to the bedside who have left the national nursing workforce, such as nurses otherwise employed or those who have retired, or attract nurses imported from other countries.

We acknowledge that all three approaches must be pursued simultaneously to deal with the nursing shortage. However, many challenges exist in the implementation of these approaches. Increasing the number of nursing students is a long-term solution and there has been inconsistent interest in nursing as a career, making recruitment into the profession somewhat difficult to achieve. In fact, the preliminary findings of the 2004 National Sample Survey of Registered Nurses (NSSRN) indicate that the number of licensed RNs increased only 7.9 percent<sup>25</sup> since the previous survey, conducted in 2000. The health care industry must aggressively implement workforce strategies to retain nurses as critical knowledge resources and to reduce the cost of turnover.<sup>26</sup>

In this paper we respond to one strategy in reaction to the looming crisis in the supply of nurses—the recruitment and retention of older nurses.

Before presenting detailed findings, operational definitions and an overview of the methods used to develop this paper are useful to frame the issue and the work that was accomplished.

**Definitions:** First, there is little consensus about when retirement begins, or when a nurse is considered “older.”

The term *retirement* is defined and used in several ways. Most generally, retirement refers to a withdrawal from workforce participation—typically at a later stage of life and with the collection of accrued benefits such as Social Security or a pension. But obviously an individual may retire at any age (though not necessarily with accrued benefits) or may retire from one job or career and take up another (even after filing for retirement benefits). While retirement was traditionally regarded as a time of rest and leisure, Americans increasingly regard some employment as a necessary or even desirable part of their retirement years. We believe the best description of current views on retirement is found in an AARP document:

While leisurely pursuits, fun, and time with family and friends still dominate peoples’ images of retirement; pre-retirees envision a retirement that includes at least some form of work. Fewer than half (48%) define retirement as a chance to stop working for pay completely, slightly more than half (53%) state that their definition of retirement includes working for enjoyment, not money and having to do some kind of work to help pay bills (42%).<sup>27</sup>

No effort has been made to define retirement for the purpose of this paper.

The terms *old* and *older worker* continue to be redefined as well. For statistical purposes, older workers are often considered those between the ages of 55 and 64, but the law defines an older worker as anyone 40 or over. The legal definition tallies with a pervasive attitude among many corporate recruiters who consider 40 and up unacceptably old.<sup>28</sup> Some sources further stratify the group: younger aging worker (ages 45–54); middle aging worker (ages 55–65) and older aging worker (over 65). For the purpose of this paper, the older nurse is considered to be 45 years and up, unless otherwise specified.

**Review of Literature:** The CINAHL, Medline, Academic Search Premier, and PubMed databases were searched for peer-reviewed research on factors contributing to the recruitment and retention of the older nurse. The Wisdom Works team also relied on several published annotated and non-annotated bibliographies.<sup>29, 30, 31, 32</sup> The topical search included literature on nursing workforce and human resource development, safety/ergonomics, facility design, and technology (see Appendix Methods for a description of inclusion and exclusion criteria).

**Interviews With Experts:** To complement the reviewed literature, the team identified sages—experts in hospital nurse retention, in the retention of older workers in other occupations, or in the use of technological advances for providing patient-centered

care and improved quality of care. Thirteen sages participated in telephone interviews, discussing barriers to and opportunities for extending the career of older nurses, the use of technological advances to improve patient-centered care, the role and function of ergonomics in health systems design, the adaptation of organizational and national policies to reflect workforce changes, and organizational readiness as the baby boomer workforce advances toward retirement.

**Survey of Health System Nurses:** The Wisdom Works team developed, conducted, and tested a pilot Web-based survey. The survey instrument was created based on the objectives of the white paper, with items based on the preliminary literature review, including those describing best practices. Once items were developed, Presbyterian Health System's in-house Web team developed the actual survey instrument. A convenience sample of more than 2,000 nurses employed by Presbyterian Health System in six cities in New Mexico had access to the survey. Of that number, 377 nurses (19%) responded, which was sufficient for piloting the instrument. The survey used both fixed-response and open-ended questions.

**Discovery of Best Practices:** Using information obtained from the expert interviews, literature review, Magnet Hospitals project, Advisory Board Company, Centers for Disease Control and Prevention (CDC) and Center for Substance Abuse Prevention (CSAP), criteria were identified for designation of best practices. In this paper a best practice is considered one that expands employment opportunities for older nurses; addresses their particular concerns, needs and interests; and generally makes work more rewarding. Twelve best practices are identified.

In summary, the literature review, the sage interviews, the nurse survey, and the best practices provide a foundation for the information and recommendations that follow. There are areas of overlap among the data sources, which adds credence to the results. Where discrepancies exist or where gaps appear obvious, these will be noted in the findings and conclusion section of this paper.

### III. THE HIGH COSTS OF LOSING OLDER NURSES: THE BUSINESS CASE

The accumulated costs of nursing turnover at the state and national level are staggering. Several researchers have attempted to measure replacement and turnover costs, with contradictory findings (primarily because of differences in methodology and a dependence on data from other industries). In most industries the cost of job turnover, including hiring costs, training costs, and productivity losses, is conservatively estimated at 25 percent of the employee's salary,<sup>33</sup> but the actual cost is much higher for nursing jobs.

#### The Monetary Costs of Nurse Turnover

A survey of turnover in acute care facilities found that replacement costs for nurse positions are equal to or greater than two times a regular nurse's salary.<sup>34</sup> Given a rate of nurse turnover in 2000 of 21.3 percent and a national average salary for a medical-surgical nurse of \$46,832, the cost of replacing just one nurse was \$92,442.<sup>35</sup> Replacing a specialty-area nurse increased this cost to \$145,000.

Replacement costs include human resources expenses for advertising and interviewing, increased use of traveling nurses, overtime, temporary replacement costs for per diem nurses, lost productivity, training, and terminal payouts.<sup>36</sup> If a hospital with 100 nurses experienced turnover at the national average of 21.3 percent in 2000, annual expenditures associated with the turnover of medical-surgical nurses alone amounted to as much as \$1,969,015.<sup>37</sup>

In 2002 the New York State Education Department reported that 165,640 RNs were employed in the state, and 54 percent of them worked in hospital settings. Given an average salary of approximately \$60,000 for a staff nurse, and using conservative annual turnover rates of 10 percent to 15 percent, the Education Department estimated the state's 2002 turnover costs at between \$698 million and more than \$1 billion.<sup>38</sup> Another researcher attempted to calculate the nationwide costs of nurse turnover for 2002. Assuming a nurse turnover rate of approximately 20 percent and a total RN population of 1,300,323 working in U.S. hospitals at an average annual salary of \$47,579, this researcher estimated the total cost of turnover to the industry at a staggering \$12.3 billion.<sup>39</sup>

Jones<sup>40, 41</sup> published a new methodology for estimating turnover costs that provides a more accurate picture of the hidden costs of staff nurse turnover not included in previous calculation methods. Because it has been tested in only one hospital and with three service lines, the Nursing Turnover Cost Calculation Methodology (NTCCM) has limited generalizability at this point. However, the information is worthy of consideration in this paper because it provides an improved method for analyzing turnover costs and is likely the model hospitals will use in the future.

The NTCCM yields replacement costs for a staff nurse of 1.2 to 1.3 times that nurse's average salary. This is about four times higher than replacement cost estimates calculated in 1990 by the same researcher, though it falls between the estimate cited previously (two times salary) and the rule of thumb reported in the literature (one times salary).

Jones' method includes traditional recruitment costs, such as advertising and job fairs, as well as expenses involved in hiring temporary nurses, employment processing, and training of new staff. The NTCCM also takes into account both pre-hire and post-hire costs, including loss of productivity on the unit while the RN position is vacant, patient deferrals, cost of background checks, and time spent by supervisors and co-workers helping new hires reach the productivity levels of the departed RN. Significantly, in the NTCCM the category of vacancy costs accounts for 75 percent of the current total turnover cost (compared to 35% in the researcher's 1990 estimates). This category includes efforts to fill RN vacancies in the short run through hiring of temporary staff, paying overtime to existing staff, closing beds, patient deferrals, and implementing new staffing plans.

As part of instrument development, the NTCCM was used in one medium-sized hospital to determine nurse turnover costs. In this facility, costs of RN turnover in one year for three service lines reached \$6.4 million. To put this in perspective, Jones noted that "some of this money could have been used to hire more nurses, increase nurses' salaries, and improve working conditions" and "if that money had been paid exclusively as bonuses to the RNs employed in those units, they each would have received \$13,000."<sup>42</sup>

As methods for the more precise estimation of turnover and replacement costs are developed, hospital and nursing administrators will be able to measure and compare the costs of turnover and to consider these costs in making decisions about investments in programs to retain nurses.

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### The Impact of Staffing on Patient Outcomes

Although only a few studies have quantified the impact of staffing on patient outcomes, another cost of the nurse shortage is negative patient outcomes. Needleman and colleagues reported that more RN hours were associated with shorter lengths of stay and lower rates of urinary tract infections, pneumonia, upper gastrointestinal bleeding, shock or cardiac arrest, and failure to rescue (when a negative outcome, such as death, would have been avoided if a nurse had been available to accurately assess the patient's condition and intervene).<sup>43</sup>

Another study determined that each additional patient in excess of a patient/nurse ratio of 4:1 was associated with a 7 percent increase in the chance of failure to rescue, as well as a 7 percent increase in the likelihood of the patient dying within 30 days of admission.<sup>44</sup> The study found that a 6:1 ratio increased the chance of death by 2.3 per 1,000, and an 8:1 ratio increased the chance of death by an additional 8.7 per 1,000. The staffing ratio was also found to have a strong relationship with nurse burnout and job dissatisfaction. The study reported that for each patient over a 4:1 ratio, the odds of nurse burnout increased by 23 percent, and job dissatisfaction increased by 15 percent.<sup>45</sup> The implications are clear: High patient/nurse ratios, which are produced largely by the nursing workforce shortage, will worsen the nursing shortage by leading to increased nurse burnout and job dissatisfaction. The loss of older, expert nurses could indeed have a disproportionate impact on patient safety and quality of care, resulting in an increase in poor patient outcomes and adverse events.

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## Loss of Knowledge

Only some of the experiential knowledge of nurses is shared and documented. “What you really lose through people leaving,” researcher David DeLong notes, “is efficiency-knowledge of how to get a job done faster and better.”<sup>46</sup> Losing the knowledge of expert older nurses can negatively affect organizational performance and productivity. The costs of lost knowledge are difficult to quantify, and most organizations do not know where they are vulnerable in terms of the loss of knowledge. Research for this paper found few descriptions of health care organizations seriously considering the high cost of losing intellectual capital in the coming years. Yet over the next two decades, health systems are at risk of losing significant knowledge as the baby boomers retire.

The book *Lost Knowledge*<sup>47</sup> chronicles the impact that losing expert employees and their accumulated knowledge has had on a number of industries. One startling example provided concerns the National Aeronautics and Space Administration (NASA). According to the author, NASA has forgotten how to get to the moon because the engineers who designed Saturn 5 were encouraged to take early retirement from the space program, and with them went all the experience, expertise and even critical blueprints. Now, to return to the moon, NASA has to start essentially from scratch. While the lost knowledge in hospitals may not be as severe as this example, it is conceivable that as expert nurses retire and patient care is provided by less experienced nurses, novice nurses, and foreign-trained nurses unfamiliar with organizational procedures, hospital safety and effectiveness could be severely compromised.

“[R]etaining organizational knowledge,” DeLong states, “is not just a short-term management problem. Like the quality movement, it represents a philosophical approach to business that will become a prerequisite for remaining competitive in the years ahead.”<sup>48</sup>

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## Summary

The case for the immediate implementation of strategies to increase the retention of the older nurse applies to employers as well as to national policy-makers. The replacement of experienced nurses is costly to the individual organization and to the health care industry as a whole. Turnover costs, as previously indicated, consume considerable resources. Further, staffing studies suggest that the loss of older nurse-experts might well have a negative impact on quality of care, patient satisfaction and safety, productivity, and organizational performance.

## IV. THE WISDOM YIELDED FROM AN ANALYTIC REVIEW OF THE LITERATURE

In recent years concerns have mounted over nursing workforce issues and their impact on public health. Of particular note are the flood of nurses leaving or intending to leave the chaotic health care work environment and the rapid shift in demand demographics—especially among baby boomers, who are predicted to use more services with higher expectations for care. Many articles across a variety of professional and lay publications address these topics. Several of these articles provide in-depth synthesis of these broad concerns.<sup>49, 50, 51</sup>

The search for effective new strategies to recruit and retain nurses has taken hold, but the idea that older nurses might be key to stabilizing the shifting health care workforce is a fairly recent one. The purpose of this literature review was to seek information about the older nurse, to ferret out human resource practices that facilitate retention, and to uncover adaptations to work environments that might sustain these nurses. As noted previously, the older nurse was identified as over the age of 45.

The literature review found no consistent or cumulative literature serving as a foundation for knowledge specifically regarding the older nurse (or, for that matter, for health care workers generally). This review of the literature was performed by accessing CINAHL, Medline, Academic Search Premier, and PubMed databases; searching a variety of general-to-specific search terms; seeking references from others interested in this subject; and, in the face of scant literature, using experience and intuition to gain insight into various issues. The following categories were used to prioritize and code those publications selected for use within the report:

1. Characteristics of older nurses who intend to stay in the workforce
2. Characteristics of older nurses who intend to leave the workforce
3. Work designs and modification and job role innovations as these relate to the general and nursing-specific aging workforce
4. Environmental design and modification as related to the general and nursing-specific aging workforce.

How big is the problem of aging, and why is now the time to engage in proactive workforce practices? At a global summit on the aging workforce, it was reported that by 2050 there will be three times as many people aged 60 years and over—from 600 million now to nearly 2 billion. “The age quake aftershocks will shape the future economy, political world, health care system, social and cultural scene, and family life.”<sup>52</sup> Every institution throughout society will be affected, and it appears that adequate preparation for this massive transformation is lacking. The need for this synthesis of the literature is critical as pressures mount to protect and advocate for the public’s health.

Whether in the United States, Canada, or Great Britain, one statistic stands out regarding the older nurse: These nurses comprise nearly one third or more of today's health care workforce.<sup>53, 54, 55</sup> Minnick,<sup>56</sup> in her significant work, documented from the National Sample Survey of Registered Nurses that 49 percent of working RNs in the United States can claim birth between 1947 and 1962. In 2002, these nurses began to reach 55 years of age, which, Minnick reported, is when RNs historically begin the journey toward reduced hours and retirement. In Canada, a similar trend exists: One in three nurses is 50 or older (and one in 10 is under the age of 30).<sup>57</sup> The statistics are similar for Great Britain.<sup>58</sup>

These data, along with workforce researcher Peter Buerhaus<sup>59, 60, 61</sup> and his team's ongoing analyses and prolific writings, demonstrate the need for retaining the older nurse in the workforce for as long as possible. Minnick<sup>62</sup> underlined the potential significance of a major retirement wave of baby boomers, with respect to the impact on the labor markets. This event might dramatically impact the cost of health care if increased wages were required to adjust for the acute nursing shortage. The American Nurses Association, RWJF, state hospital associations and others now call for measures to retain nurses past the age of retirement.<sup>63, 64</sup>

**Older Nurses in Our Midst.** What is it like to be an older nurse? MacInnis captured the spirit of being a mature nurse, and suggested what the loss of these resources might mean to the current workforce and patient care, when she wrote:<sup>65</sup>

We tilt our heads back to use our bifocals. Our knees are bad, our feet flat, backs out, and shoulders pulled. Sometimes, when we run to the desk to get something, we can't remember what it was we were running for by the time we get there.

We are old nurses. But we still have something not found in the new nurse, something worth more than being swift; we have experience. Some patients can only be cared for by a veteran nurse, like those patients on ventilators, those with difficult families, or those with a variety of illnesses. Then there are those who receive care from different departments. A more experienced nurse can better juggle the needs of such patients and we can better assess orders based on the patient's condition.

Reflecting on the role of the older nurse in academic/service partnerships, Dr. Martha N. Hill, professor and dean of the Johns Hopkins School of Nursing, is quoted as saying:<sup>66</sup>

For many of us, the 'golden years' of the traditional retirement stage of life can become the 'golden opportunities' of our careers. Instead of retiring at what we believe to be the peak of our careers, we should look for ways to redefine our roles and, as senior educators with a wealth of experience, become the innovators of nursing education and the mentors and shapers of a new generation of outstanding nurses. The nursing profession now is in the enviable position of attracting some of the brightest and best. They deserve the benefit of our years of experience, scholarship and excellence.

Leah Golden, an educational coordinator at Vanderbilt University Hospital in Nashville, Tenn., was quoted in *NurseWeek*,<sup>67</sup> “It is so important to have longtime nurses. They’re the ones who know the system as well as the best way to care for the patients that the hospital commonly sees. In addition, it’s a well-known fact that it costs a lot more to train a new nurse than to retain one.” Anecdotes like these make the point that there is a defined value in having the older nurse in the nursing mix.

From a societal perspective, five policy recommendations emanated from the aforementioned global summit on the aging workforce.<sup>68</sup> The panelists recommended to: (1) invest in the health of workers and strengthen health promotion and prevention policies so people can contribute their full potential; (2) reinvent the last third of life as a time to contribute, and discourage policies that would promote early exit from the workforce; (3) support retraining and skill development for all persons, giving action to the term *lifelong learning*; (4) act against age discrimination and negative attitudes about the capabilities of older people; and (5) promote a research agenda that identifies actions, lifestyles, and treatments that encourage healthy aging and prevent disability. Collectively, these actions would promote a more age-neutral society and build a mental model supporting the notion that aging does not necessarily represent physical or mental decline, or disability. If policies like these are forthcoming, then older nurses will find a continuing role in the health care workforce.

**Age and Performance.** Regretfully, there are many myths about the older worker. Hill reported that “older people are inclined to be more conscientious, emotionally stable and agreeable. If sometimes they learn more slowly they also make fewer mistakes.”<sup>69</sup> In an article that encouraged self-reflection on the myths of aging, the *Pfizer Journal*<sup>70</sup> listed several assumptions that perpetuate discrimination against and negative self-images among older people in general. Several publications have addressed myths of aging<sup>71, 72</sup> that perpetuate stereotypes of and negative self-images among older workers specifically.

**1. Myth:** Older workers are unwilling to try new things.

**Reality:** Among workers aged 45 to 77, a total of 88 percent said “the opportunity to learn something new” would be essential to their ideal job.<sup>73</sup>

**2. Myth:** Older workers are not agile or quick, so they’re of little value.

**Reality:** Some mature workers do experience physical limitations, but their accumulated knowledge and experience and strong interpersonal skills often far outweigh physical limitations.<sup>74</sup>

**Myth:** Older workers are unwilling to learn new technology.

**Reality:** A study by Louisiana State University found that older workers in a state agency were more willing than their younger counterparts to learn new technology.<sup>75</sup>

**3. Myth:** Older workers are less driven because of burnout or proximity to retirement.

**Reality:** Towers Perrin, a global professional services firm, found that employee motivation increases—rather than declines—with age in many situations.<sup>76</sup>

**4. Myth:** Older workers are less creative than younger workers.

**Reality:** Creativity can occur at any age. In science and medicine age can be an advantage, since cumulative wisdom is often necessary to spot a breakthrough.<sup>77</sup>

- 5. Myth:** Older workers are less productive.  
**Reality:** Productivity depends more on the organization of work and management decisions than on the age of workers. Age is a poor predictor of productivity except in jobs that are physically demanding.<sup>78</sup>
- 6. Myth:** Employment is not as important as leisure to older people.  
**Reality:** The quest for adventure, identity, intellectual stimulation and social experience does not end at a prescribed age. Most mature workers are not financially prepared for retirement in their 50s or even 60s.<sup>79</sup>
- 7. Myth:** Older workers are more expensive to employ.  
**Reality:** The costs of more vacation time and pensions are often outweighed by the low turnover among older workers. Higher turnover among younger workers translates into additional recruiting, hiring, and training expenses.<sup>80</sup>
- 8. Myth:** Older workers will either be disabled or out sick more often.  
**Reality:** Attendance studies reveal that older workers consume less sick time for short-term illnesses than younger workers.<sup>81</sup>
- 9. Myth:** Older workers as a group are considerably less cognitively sharp than younger people.  
**Reality:** Selected cognitive decline actually begins at age 25. Less than 5 percent of people aged 65 to 69 have moderate to severe memory impairment.<sup>82</sup>
- 10. Myth:** It is expensive to accommodate the older worker's needs.  
**Reality:** Accessible technology may open the workplace to many older workers.<sup>83</sup>
- 11. Myth:** Training the mature worker does not pay off.  
**Reality:** Older workers actually stay on the job longer after training than younger workers.<sup>84</sup>

Letvak<sup>85, 86, 87</sup> studied the health and safety of 308 older nurses in part to examine the relationship between age and physical and mental health and job-related injuries and health disorders. Among the 72 respondents who reflected on their health status over a retrospective five-year time frame, the majority of injuries reported were needlesticks and back injuries. Other reports included musculoskeletal injuries to the neck, arm, and knee; exposure to body fluids; physical assault; and contracting hepatitis C. Using multiple linear regression, this study reported that years as an RN predicted better mental health in the older RN categories. This might suggest that those with poorer mental health had already left the workforce due to the demands of nursing. Job satisfaction, control over practice, and job demands were areas that positively influenced the older RN's health. Older nurses in the hospital setting were most likely to report job-related injuries.

MacDonald<sup>88</sup> reported similar findings in the Canadian province of New Brunswick, but noted that the most significant accident trends were in the middle group, not the older-aged group. Some deterioration due to repetitive strain may be inevitable for nurses, but those who do not keep up their level of physical fitness are more prone to injury. Along with age, fitness levels dictate the time needed to recover from injuries. The issue of maintaining workplace health is not just an issue for older nurses. Research indicates that health care workers are the least healthy of all Canadian workers.<sup>89</sup>

The literature revealed a growing number of examples of nurses who have returned or plan to return to nursing careers. Leslie Wiggins faced the toll that nursing 40 hours a week took on her body, but also believed that she could still offer being “cool under pressure” and apply calmness to her job in an outpatient surgery setting. Marie Cronk related that “experience is invaluable...and I have a lot of knowledge and I’m able to use it...and pass it along to younger people,” as reported in the same article that quoted Wiggins.<sup>90</sup> Cronk differs from Wiggins in that her 12-hour shifts are matched by a healthy diet and treadmill workouts.

In *Johns Hopkins Nursing*, nurse Penny Dvorak reported that she found herself at a career crossroads, but that she recalled her mother’s adage:<sup>91</sup> “My mother always said that she’d rather wear out than rust out...and I’ve always worried that if I just quit one day and sit myself down, I might not ever be able to get back up.”

The references cited in this section reflect the mainstream issues and thinking around the impending retirement of the older nursing workforce, as well as the likely impact this event will have on the health care delivery system. While there is a dearth of data regarding this sector of the workforce’s intent to stay in or leave the health care field, four general themes emerged across the literature that appear to be directly related to a person’s decision of whether or not to retire:<sup>92, 93, 94</sup> health status, financial status, attitude toward retirement, and current job satisfaction.

All of these issues need to be considered as the health care system creates strategies to attract and keep older nurses in the workforce.

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#### Human Resource Benefits: Entice the Older Worker

There are many reasons why health care organizations are awakening to the recruitment and retention of the older nurse as part of the demographic mix in their agencies. Hilton<sup>95</sup> advised that organizations should “understand and know their internal demographics” with data such as the ages of the nursing workforce, intent to retire, the types of positions that will be vacated, and—in the case of management positions—whether a succession plan is in place. In the same article, she posits that human resource professionals, with other hospital leaders, should engage in workforce planning with a strategic eye toward confronting future workforce needs.

As might be expected, the AARP<sup>96</sup> has weighed in on the issue of employee benefits, recommending that companies should:

1. Analyze their workforce demographics.
2. Identify potential solutions.
3. Assess the fit of best practices to the company.
4. Design the details of the specific benefit programs to each environment.
5. Pay close attention to implementation practices.
6. Monitor the results and utilization of programs implemented.
7. Evaluate the benefits and costs.
8. Adjust or fine-tune programs as necessary.

On a cautionary note, the AARP<sup>97</sup> advised employers that mature workers differ in terms of their tenure and whether they have a career relationship with an employer. Therefore, different benefits and programs might be necessary to satisfy the long-service career employee, the mid-career hire, the late-career hire, and the temporary workforce in areas such as earnings, career progression, retirement security, health benefits, flexible work options and training.

Spetz and Adams<sup>98</sup> described the significance of employment-based benefits during a labor shortage. These authors noted that benefits such as health insurance, paid vacation, retirement programs, and tuition reimbursement aided in recruitment and retention. Given that employment benefits play an important role in recruitment and retention, what, then, constitutes a benefits program tailored to the older worker? The most comprehensive description was noted in the AARP publication cited above.<sup>99</sup> The various types of benefits were classified into four categories: fundamentals; core programs; programs of significant value; and extras. Examples of each of these benefits were drawn from a range of companies with interests in the older worker, including health care organizations. The fundamental benefits cited included disability and health benefits for full-time employees, and non-discriminatory hiring in general, as required by law; flexible work options for part-time workers; a basic pension benefit consistent with industry practice; a health plan that pays for reasonable diagnostic tests for full-time employees; and some coverage of rehabilitation.

Beyond these fundamental benefits, and classified as core programs, are the following:<sup>100</sup>

1. Alternative roles for older workers, such as through special projects or redesigned jobs
2. Health benefits for active part-time employees
3. Special focus on hiring older workers for a variety of jobs
4. Programs where experienced and newer employees work together so that knowledge is preserved, the newer employee has expanded capabilities, and the experienced worker is offered an important role
5. Phased retirement or rehiring post-retirement
6. Injury prevention programs that inform job changes or environmental modifications, along with conditioning of workers to reduce worker injury
7. Tailored rehabilitation programs to support position requirements and return-to-work criteria
8. On-site physical therapy
9. Training that leads to other career options.

Benefits classified as having significant value include:<sup>101</sup>

1. Counseling and support for career placement
2. Paid additional time off for the purpose of caregiving beyond what is legally required by the Family Medical Leave Act
3. Special features for older workers in the Employee Assistance Program
4. Elder-care options with company financial support; in lieu of other time-off programs, employee leave banks
5. Retiree health benefits
6. Special hiring programs for “semi-volunteers,” who may be compensated with meals or educational opportunities but who are not paid employees
7. Long-term care insurance with employer subsidy or group purchase option
8. Organized programs to mentor and offer knowledge about the workplace to integrate workers from all organizational sectors
9. Informal programs targeted to the mature part-time worker, or those with limited special-purpose flexibility
10. Employer-provided pension benefits that exceed market norms, and other added benefits, such as a catch-up contribution program in 401(k) plans
11. On-site fitness facility or access to wellness and prevention programs (health screenings, immunization clinics, etc.)
12. Rehiring programs on an ad hoc basis or through an outside agency for retirees
13. Personalized retirement preparation programs
14. Service awards that include something of monetary value.

Finally, scaled-down extras might include the following:<sup>102</sup>

1. Unpaid leave for caregiving
2. Elder-care referrals or other options without financial support
3. Support for volunteer placement in the community
4. Long-term care insurance available for voluntary purchase without group discount or employer subsidy
5. Prevention and wellness education and information without a fitness facility
6. Education about rehabilitation programs for disabled employees
7. Retiree clubs, newsletters, and periodic social events
8. Service awards with no significant monetary value.

While health care agencies were included in the AARP report, Spetz and Adams<sup>103</sup> reported specifically on employment-based benefits as a strategy to help ease the nursing shortage. Their research was a mixed-method study using quantitative data

from the Current Population Survey (CPS) to analyze trends in the provision of benefits to nurses for recruitment and retention, qualitative interviews of health care leaders with professional knowledge about nurses' employment benefits, and focus groups of RNs from both the East and West Coast (including nurses who received benefits and nurses who did not).

Although this research was not targeted for the older nurse per se, the findings showed that different age groups place different values on the choice of benefit offerings. The researchers noted that many health care employers are trying to enhance the benefits they offer to support recruitment and retention efforts. Informants noted a focus on retention of employees, by offering benefits such as tuition reimbursement, flexible shift scheduling, and retention bonuses. Several informants observed that nurses' preferences for benefits vary with age; younger nurses are typically interested in wages and career opportunities, while older RNs care more about benefits and retirement plans.<sup>104</sup> The researchers classified non-wage benefits such as health insurance, paid vacation, retirement programs, child-care support, and tuition reimbursement. These benefits accounted for 29 percent of the compensation provided to employees.

Compared with other U.S. workers, RNs are more likely to be enrolled in a retirement plan and health insurance through their employers: according to the research of Spetz and Adams, 78 percent of RNs were offered an employer-sponsored retirement package and 81 percent enrolled. Age was a determinant of enrollment: 69 percent of RNs aged 18–29 were enrolled, compared with 88 percent of RNs aged 50–64. Unionized RNs tended to have more opportunities for an employer-sponsored retirement program and a higher percentage (90 percent) of RNs took advantage of this benefit. Hospitals were more likely than other types of health care agencies to offer retirement packages.<sup>105</sup>

Similar patterns exist related to health insurance: 81 percent of male RNs enrolled in an employer-sponsored health insurance plan, compared with 69 percent of their female counterparts (many of whom enroll as a dependent in another's plan). Among hospital-based nurses, 74 percent were enrolled in health insurance, compared with 61 percent of RNs in non-hospital settings.<sup>106, 107</sup>

An important finding in this research<sup>108</sup> was that benefits were more important as retention rather than recruitment strategies, with older nurses showing preference for benefits and retirement plans. As will be discussed later, the quality of the work environment is also more highly valued by older nurses. Given that many nurses change jobs frequently (averaging 28 months in their first position and 40 months in their fourth), and with the health care industry facing large retirement numbers in the next two decades, some employers were restructuring retirement plans to facilitate employment beyond 65 years of age. Allowing nurse retirees to work part time without affecting their pension was a strategy these authors reported to retain senior nurses. They also advised that health care organizations appeal to different demographics; if, for example, child care is offered as a benefit for younger nurses, an elder-care subsidy would be an appropriate benefit for older nurses. Gradual retirement was recommended, as was offering staff the maximum flexibility with regard to scheduling.<sup>109, 110</sup>

With regard to retirement, Shultz, Morton and Weckerle<sup>111</sup> studied the usual *push and pull factors*. Generally, “push factors” were perceived as negative (i.e., the potential retiree was induced to retire due to poor health or the dislike of a position) while “pull factors” were viewed as positive (the potential retiree was lured toward retirement by the desire to pursue areas such as leisure or volunteer interests). In this research, various retirement processes were examined that differentiated retirees motivated by push and pull factors. From a large-scale national sample, these authors concluded that whether or not the retirement decision was viewed as voluntary or nonvoluntary indeed influenced post-retirement satisfaction, with negative or push factors being the most relevant. These findings supported the notion that both pre- and post-retirement functioning and adjustment were variable, and programs could be better tailored to help those who were pushed into retirement. Retirees who were being pulled might benefit from transitional retirement programs and flexible opportunities, enabling them to remain in the workforce in some capacity.

**Career Fulfillment: Non-Economic Factors Influencing Retention of the Older Nurse.** While the importance of wages and benefits to recruitment and retention cannot be underestimated, there are other policies and practices that affect retention of the older nurse. This discussion will lead into a broader discussion of the work environment and ergonomic factors in the next section.

Most cited studies of job satisfaction and retention strategies did not isolate the older nurse as a subcategory, so little is known about this specific cohort of nurses related to previous studies. At this juncture, we know that the leadership behaviors of nurse managers influence job satisfaction and, consequently, retention.<sup>112, 113, 114, 115, 116</sup>

Tang<sup>117</sup> developed an evidence-based administrative guideline as a strategy for first-line managers to enhance job satisfaction among staff nurses in hopes of decreasing turnover. She grouped four factors as influencing job satisfaction in multiple settings: work environment, nurse characteristics or mobility factors, organizational characteristics, and nurse manager characteristics. She recommended that select demographic data, turnover rates, job satisfaction, and intent-to-leave data be collected and analyzed for its relevance to the agency. Due to many interacting factors, interventions to improve satisfaction were supported by a mix of correlational descriptive studies, expert opinions, and informal observations. High on the list of approaches to boosting job satisfaction were policies that create esprit de corps; nonfinancial strategies that enhance nurses’ autonomy; shared governance; expressions of recognition and respect for nurses, ranging from verbal acknowledgment and feedback to written acknowledgment; and the provision of professional growth and development opportunities.

Attending to staffing and staff/patient ratios was another frequently identified retention strategy that appeared more important to the older workers. Nurse/patient ratios, high levels of overtime, and lack of management support in this area of concern influence nurse perceptions about the quality of their work and their capacity to remain highly productive over time.<sup>118, 119, 120</sup> A study of Texas nurses by Reineck and Furino<sup>121</sup> found that workload concerns ranked behind only economic concerns as the issue most affecting nurse retention. Their findings were categorized into eight themes:

1. Workload (the extent of it)
2. Results of workload (influencing intent to leave)
3. Shifting staffing (floating and re-assignment)
4. Inconsistent perceptions of staffing by staff nurses and administrators
5. Staff shortages among support personnel
6. Need for state intervention (mandated staffing levels)
7. Staff shortages on night shifts
8. The impact of patient severity and illness (making predictions about patient acuity and staffing needs untenable).

Neuhauser claimed that:

In the long run, people will like working for a health care organization and choose to stay because they are respected and feel pride in their work. Organizations have all types of cultures, ranging from sinister to truly inspiring. In health care, you rarely find the sinister end of the continuum because hospitals and clinics are caring institutions in their basic mission. However, there are cultures with caustic or neutral cultures. This can be triggered by how people treat each other on a routine basis, but at a deeper level it is determined by the basic attitudes toward the value of the work itself.<sup>122</sup>

This notion of trust and respect in the workplace as a definitive strategy is echoed by Laschinger and Finegan<sup>123</sup>; Veninga<sup>124</sup>; and McGuire et al.<sup>125</sup> Collectively, these authors recommend strategies that do not apply exclusively to the older nurse, but that can enhance the older nurse's work experience:

1. Offer time off to provide renewal (not only vacation time but also on-the-job breaks to create the opportunity for reflection).
2. Offer services that enhance time off (e.g., elder care, laundry services).
3. Move to more principle-centered policies and procedures rather than rigid policies and practices.
4. Break down caste systems—for example, by giving nurses the opportunity to work in new service areas or in newly structured positions.
5. Promote managerial respect for all workers, which includes openness to inclusive decision-making and sharing credit where due.
6. Ensure that managers are passionate and compassionate, competent, honest, and ethical; doctors should model these same behaviors.
7. Promote various methods of getting and giving feedback, and have managers and peers respect the people and mechanisms used.
8. Emphasize a cause, not a business, to resonate with the personal values of health care workers; honor the spiritual aspects of health care work and workers.
9. Promote staff development in all of its varying dimensions.
10. Promote new technologies that ease the work burden rather than simply adding to it.

Many will recognize that these strategies are embraced in the concept of the Magnet Hospital Recognition Program, which acknowledges facilities that attract workers and retain nurses in an exemplary work environment.<sup>126, 127, 128, 129, 130</sup> In an article by Upenieks,<sup>131</sup> the author references Buchan's classification<sup>132</sup> of the key characteristics of Magnet Hospitals. The first category refers to administration, which should:

1. Reflect a participatory and supportive management style.
2. Employ a well-prepared and qualified nursing executive.
3. Promote a decentralized organizational structure.
4. Secure adequate nurse staffing.
5. Develop clinical specialists.
6. Model flexible work schedules.
7. Promote clinical career opportunities.

The professional practice of nursing should:

1. Embrace a professional practice model for the delivery of care.
2. Promote professional autonomy and responsibility.
3. Ensure that advice from specialists is available.
4. Emphasize teaching responsibilities of the staff.

Finally, professional development should:

1. Encompass a planned orientation of staff.
2. Emphasize service and continuing education.
3. Promote clinical recognition through the use of competency-based clinical ladders.
4. Secure management and leadership development.

The principles that guide Magnet Hospitals complement the six guiding principles that were developed by the American Association of Critical Care Nurses. In developing the guiding principles, it was recognized that quality critical care nursing was contingent upon effective communication, collaboration and organizational systems. Labeled as essential standards, these prominent evidence-based guidelines supported establishing and sustaining a healthy work environment:<sup>133</sup>

1. **Skilled communication:** Nurses must be proficient in communication skills as they are in clinical skills.
2. **True collaboration:** Nurses must be relentless in pursuing and fostering true collaboration.
3. **Effective decision-making:** Nurses must be valued and committed partners in making policy, directing and evaluating clinical care and leading organizational operations.

4. Appropriate staffing: Staffing decisions must ensure the effective match between patient needs and nurse competencies.
5. Meaningful recognition: Nurses must be recognized and must recognize others for the value each individual brings to the work of the organization.
6. Authentic leadership: Nurse leaders must fully embrace the imperative of a healthy work environment, authentically live it and engage others in its achievement.

Leaders in the health care delivery system have begun to contemplate how employee benefits and incentives—both financial and nonfinancial factors—can and do affect the older worker’s decision to stay or leave the workplace. The principles noted above likely influence older as well as younger nurses, and if adhered to would affect the retention of nurses across all age ranges. A recent article by Thrall notes that “[t]he most effective solution to recruitment and retention is to become a good place to work.”<sup>134</sup>

### Work Design and the Creation of Functional Workplaces

Nursing is complex and taxing physical, emotional, and intellectual work. Over time, this takes a toll on the nurse. Efforts should be undertaken to reduce or eliminate strain caused by work design, and a more functional workplace should be implemented. If these improvements benefit the older nurse, then certainly they benefit other nurses and might increase career longevity.

**The Link With Ergonomics.** In a report by Herman Miller, a leading manufacturer of equipment and furniture used in health care, the science of ergonomics was defined as “fitting the physical environment and the job to the worker’s capabilities or limitation as well as to the tasks performed.”<sup>135</sup> In the same report, ergonomics was described as having four components: (1) anthropometrics (noting the size, shape, and weight of people); (2) biomechanics (the physical demands associated with work tasks); (3) situational analysis (the social support and physical task environment); and (4) prevention (conditioning or modifying risk factors). The report noted that there is no such thing as an *average worker* in any setting; design elements must accommodate a wide range of workers, from the short to the tall, the thin to the overweight, and the younger to the older, as well as, of course, males and females.

As mentioned earlier in this paper, Buerhaus et al.<sup>136</sup> have reported that older nurses will take a more prominent role in the workplace through 2020. What, then, are the ergonomic issues that must be addressed? Thompson<sup>137</sup> reported that older nurses are more vulnerable to the occupational hazards found in health care. Specifically, after age 40, muscle mass and strength begin to decrease and result in marked decreases in the strength of knee and hip joints. These changes often mean that 50 percent of older nurses are unable to lift *any* weight from certain postural vantage points.<sup>138</sup> Long-term exposure to chemical agents, such as latex, makes the older nurse more susceptible to allergic sensitivities. Leg and feet pain are not uncommon. Visual acuity is diminished, particularly under harsh fluorescent lighting.<sup>139</sup> Lastly, musculoskeletal disorders beyond those previously mentioned are prevalent. Back pain related to disc

problems, tension neck syndrome, ligament strains, and other maladies such as carpal tunnel syndrome are common problems, collectively referenced as cumulative trauma disorder.<sup>140</sup> Risk factors for musculoskeletal disorders, which are common in nursing work, include repetitive motion, holding one position, awkward posturing, local pressure, and use of force. Some of the predisposing factors for musculoskeletal or trauma disorder are smoking, diabetes, obesity, pregnancy, vitamin B<sub>6</sub> deficiency, rheumatoid arthritis, and poor vision.<sup>141</sup>

The ergonomic solutions for these physical problems have been identified. Parker<sup>142</sup>, a specialist in medical center design, suggested these broad principles and considerations:

1. Nurses walk too much, often up to 12 miles per shift, and this is frequently related to finding supplies and equipment. Physical design has to reduce this burden.
2. Decentralized nursing stations to bring the nurse closer to the patient must be part of the design.
3. Patients are increasingly overweight or obese and physically compromised. Overbed lifts must be installed.
4. Slippery floors, wires and cords, and equipment make safety an issue. The physical environment should be designed to increase safety.
5. Shift and procedural considerations make lighting very important. Have adjustable lighting options part of the unit design.
6. The pace of nursing requires that simple accommodations be offered for personal needs, such as locating restrooms close to the unit.
7. Nursing units tend to be cluttered. Ensure adequate storage and make certain that workspaces accommodate the completion of documentation and other essential tasks.
8. Equipment is necessary in delivering patient care. Ensure space for equipment.
9. Efficiency is lost when spaces such as patient rooms are inconsistent in their design. Standardize rooms whenever possible.
10. The color, texture, lighting, artwork, and other aesthetic features influence patients, families, and staff. Consider the context of these features in creating a pleasant work environment.
11. Noise decreases productivity and increases errors. Attend to the acoustics of a unit through wall coverings, use of pagers, and the like.

With regard to aging eyes, Croasmun<sup>143</sup> described ways to reduce eyestrain and increase comfort for computer-dependent older nurses, including: lowering the monitor, attending to glare, addressing the need for lighting, adjusting brightness, and using white letters on a dark background.

Herman Miller<sup>144</sup> suggested that jobs can be redesigned to remove or reduce risk factors. High-stressor tasks can be alternated with non-stressor activities. Taking breaks from work, including stretch breaks, reduces stress; minimizes shoulder, neck, and low back pain; and reduces eyestrain. Lifting carefully, avoiding awkward positions, and adjusting chairs to promote comfort are additional ways to avoid injuries.

Melles, Freudenthal, and Bouwman<sup>145</sup> described the design of ICU equipment, its adaptability to needs, and the cognitive limits of ICU staff in interacting with equipment. Acknowledging the equipment-intensive nature of this clinical setting, these researchers considered the user interface with equipment from a design and safety perspective. They noted that equipment should be adaptable to users' varying experience levels, personal preferences, and physical conditions, as well as to the environment, including the level of illumination, noise and the presence of others. They reported that applied interface ergonomics has not kept abreast of these user demands and, therefore, falls short of being optimal. The holistic perspective—the idea that the environment influences the users of a technical system—creates the opportunity for an ecological interface design.

The design of equipment involves a complex set of activities. The characteristics of the nurse deserve consideration, as does the level of complexity of the task. Coupled with the degree of chaos and complexity on the unit, the designer must consider the kind of information and feedback that is necessary to effectively use equipment. Ultimately, Melles et al. discovered five sources of work domain constraints:<sup>146</sup> the presence or absence of teamwork; the magnitude of chaos on the unit; the number of types of medical personnel available, which adds to complexity; and the patient, both as a biological system to be controlled and as a passive user of equipment.

Well-designed equipment developed within these parameters would be reliably used to provide the critical feedback (cybernetics) needed to alter the course of treatment, create efficiency in use, and promote stable clinical outcomes. Older nurses were cited as having more problems in operating medical equipment, especially if devices react inconsistently or do not provide clear guidance to the user.<sup>147</sup>

**Creating Functional Workspaces.** To provide a comprehensive review of all architectural considerations is beyond the scope of this paper. However, articles reflecting the synthesis of key principles are germane, particularly as they relate specifically to the older nurse. Gordon Friesen,<sup>148</sup> a Canadian health care administrator and hospital designer, argued for nearly 50 years that hospital design should address these questions:

1. “Why is the patient the last one to be consulted in any place to improve hospital services?”
2. “Why is the nurse the low man on the totem pole of providers of health care?”
3. “Why does [the nurse] spend as much as half of her eight or twelve hour shift away from the bedside, finding the supplies she needs to give care?”

When in operation during the mid-1960s to late 1970s, the Friesen hospitals initiated private rooms on 20-bed units, an administrative control center to permit the nurse to move from patient room to patient room without returning to home base, and the nursery, a cabinet in the corridor for each room that relieved nurses of the burden of fetching supplies and medication from a remote storage room, thus ensuring that nurses could devote the optimal time to care for the patient.<sup>149, 150, 151, 152</sup> These innovations and the following 1980 quote show the unique insight that Friesen had into the future and the set of principles that have resurfaced today as nurses gain a voice in the design of their work environments.

Nurses must be kept at the highest professional level making sure they are recognized as an important part of the medical team. The role of the nurse is to nurse, to treat the patient as a whole respecting his or her dignity as a human being. With such qualifications and a functional health center will come improved quality of care and efficient organization. This is the objective for the year 2000.<sup>153</sup>

Hamilton<sup>154</sup> referenced Friesen in an article that compared and contrasted contemporary design practices over time. New units have, as a primary focus, the challenge of reducing walking associated with nurses' tasks. He described T-, Y- and L-shaped designs; triangular and racetrack designs; the use of pods and clusters; and centralized and decentralized approaches that have been attempted. There is consensus, he concluded, that unit size should range from 30 to 42 beds, with trends toward the private room to accommodate high patient acuity. Rooms should be larger and more flexible to support physiological monitoring, integrated information systems and other advances in diagnostic treatment modalities that often take place at the bedside. Also to be considered are the relevant placement of support functions, communications and technology, and designs for future flexibility to accommodate patients with both a therapeutic and satisfying hospital experience.

Many workplace improvements that benefit patients and their families also create a positive environment for staff. Simply, ambience has an effect on people.<sup>155</sup> Schweitzer et al. commented that elements of environmental design can and do help or hinder healing and influence the behaviors and actions of patients, their families, and the clinical staff. One such important finding in their report was how the work environment affects patient safety. Specifically, Schweitzer et al.<sup>156</sup> stated that private rooms in intensive care units have been found to reduce infection rates; widened doors to patient bathrooms reduce fall rates; flexibility in the use of a patient room can minimize patient transfer, thereby decreasing medication error rates; and designs that promote ambulation can alter patient mood states, such as those associated with depression.

In spite of the significance of social support, the separation of patients from their families continues to be an issue. Hospital design—especially the absence or presence of sufficient space to accommodate patients' loved ones—has a profound effect on the patient and family experience of care. But Schweitzer et al.<sup>157</sup> clarified that unit design features also affect the relationships between patients and the nurses and other caregivers who interact with them. Private rooms, consultation space, and the reduction of physical barriers such as glass partitions enhance relationship development.

Relationship development and sustenance among hospital workers can be influenced by lounges, gardens, day care, and other spaces that promote full collaboration, which in turn reduces turnover.

According to the report by the Center for Health Design for the RWJF-funded *Designing the 21st Century Hospital Project*, we have an “once-in-a-lifetime”<sup>158</sup> opportunity to address the ergonomics of nurse-related work. If these issues are not attended to now, retention challenges will continue with the aging of each successive generation of nurses.

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## Summary of Literature Review Findings

The literature provided a description of the looming mass departure of almost one-third of the nursing workforce and the potential impact on the health care delivery system. The literature debunked many myths regarding the older worker; cited the willingness of older nurses to stay in the workforce and continue to make a strong contribution to the health and welfare of society; reviewed the need for a new vision about the important role of older nurses in the provider sector; described the need for creative and innovative human resource strategies; identified many economic and non-economic factors affecting the older nurse’s decision whether or not to retire from the workforce; and identified new workplace designs that would enhance the physical aspects of work for nurses across all age brackets.

Although much has been written describing what could and should be done to retain the older nurse, to date little is known about the relative importance of various factors in decisions about continuing employment in nursing. Minimal, if any, research has been done to describe the interaction of economic, non-economic, and workplace design and culture factors in nursing workforce retention.

## V. THE WISDOM OF EXPERTS: A SURVEY OF SAGES

Another source of wisdom extending beyond the literature was derived from persons with extensive experience in various workplace settings. The Wisdom Works team nominated 25 individuals based upon their reputations in health care systems design, executive leadership and management, patient-centered care and safety, and labor relations.

Of these 25 experts, 13 were actually interviewed by telephone. They shared their insights and opinions about barriers and opportunities for extending the careers of experienced, seasoned nurses; the use of technological advances to improve patient-centered care; how health care could be designed and delivered with improved ergonomics; the organizational and national policies that need adaptation to reflect the changing workforce; and organizational readiness as the baby boomer workforce rapidly advances toward retirement. (See Appendix Methods for a list of sages interviewed and a description of interview probes.)

Sages reflected on the current and future role of older nurses in the workforce. They described what they saw as the attributes of the older, seasoned nurse. Then they shared ideas about the changes needed to enhance nurse retention.

### How Sages View Older Nurses

The frame of reference for the interviews was that an older nurse was a professional career nurse between 45 and 64 years of age. Using Benner's "novice to expert framework,"<sup>159, 160</sup> the older expert nurse possessed excellent analytical problem-solving skills, had mastered the ability to navigate the health care system to create change, understood patient flow, provided extraordinary patient-centered care, had significant professional authority, and had developed intuitive skills as a result of experience and education. The sages believed it important to differentiate between the older, expert nurse with decades of experience in patient-centered care and the novice, second-career nurse who was within the stated age range but who lacked the experience and expertise that would define adaptive work roles. Consistent with the debunking of the myths of the aging worker described in the literature review, the sages held a positive view of the contributions of senior nurses, whom they described as:

1. Calm during emergency situations and able to promote an atmosphere of calmness
2. Accomplished, dedicated and experienced
3. Committed to the profession over profit
4. Hard-working, knowledgeable and committed
5. Able to display a "been there, done that" attitude
6. Intuitive and accomplished in their decision-making skills
7. "Salt of the earth" team players.

The term *mentor-ready* was also used to describe the older nurse who possessed the skills and knowledge to develop the novice nurse in the practical, technical, and analytical aspects of the nursing profession, and give the novice guidance in developing a long-term career plan.

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### Extending the Bedside Practice of Older Nurses

The sages were well aware of the physical and mental demands of nursing in an acute care setting and the critical changes needed to improve the environments in which nurses work. When asked whether older nurses could maintain a bedside practice, the sages overwhelmingly agreed that it was possible, though increasingly rare because of the physical and mental demands of the role. The lack or inconsistent use of patient lifting devices and other technologies, and the presence of centralized workstations, long hallways, high patient census, and challenging work schedules, were examples the sages cited as contributing to the physical demands that adversely affect nurse retention and extension of the careers of older nursing professionals.

Because of the extreme physical demands associated with bedside nursing, some of the most skilled practitioners transition to less strenuous positions in nursing or health care (e.g., administration, research, education). One sage described this transitional process as “very unfortunate and draining the bedside of the brainpower practitioners.”

Under a managed care model and with a shift to outpatient procedures, the hospital bedside nurse is left with a high concentration of acutely ill patients. The sages stressed that, regardless of whether an institution has a nurse shortage or surplus, it is imperative that nurses seamlessly provide excellent patient-centered care. They spoke of how seasoned nurses integrate knowledge of critical organizational processes that develop over a nurse’s career as they move from novice to expert. Knowledge of how these clinical systems and processes integrate equips the seasoned nurse to mentor the novice nurse and other health care personnel. Through mentoring, the wisdom and knowledge of the older nurse are passed to the next generation. Consequently, the nursing profession as well as the patients receiving care would be severely hurt if the cadre of senior, knowledgeable and experienced nurses were to suddenly leave the system.

Reinforcing the recommendations published in the literature, the sages believed that the ability of the older nurse to remain in the acute care setting could be greatly enhanced through adaptations in the work environment. They suggested adaptations in the areas of human resources, ergonomics and health care design, technology, organizational culture, training and continuing education, and third-party reimbursement policies.

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### Change Human Resource Policies

The sages advocated for changes in hospital policies. Broadly, the policies in need of change included increasing scheduling flexibility, expanding roles, advancing employee-employer relationships and developing new career paths. Interestingly, the sages mentioned pay and benefits infrequently.

**Flexible Work Schedules.** Our sages expressed concern that the current nursing staffing requirements are “out of sync” with the rest of the world. Organizations must develop policies around scheduling that are creative, adaptable, and flexible, yet make sense to advance patient care. In this career stage, the older nurse was described as engaged, both professionally and personally (teaching, consulting, serving on commissions and boards, etc.) with interests and obligations outside of the immediate work environment. Additionally, due to the physical and emotional demands, the 40-hour workweek may not be as practical for the older nurse. Flexible work schedules should be considered—not a new concept, but one that many health care institutions have not implemented. Flexible scheduling includes both adaptable work hours as well as scheduling requirements within a 40-hour workweek. For example, a Milwaukee hospital experienced very low nurse turnover and very high staff retention with a staffing model that requires seven days on, followed by seven days off. While this approach may not hold universal appeal, it does reflect “knowing” the local market and offering an interesting alternative. The objective of this scheduling pattern is to allow nurses to engage in activities outside of the hospital, promote continuity of care, and build in patterns that allow the nursing staff to regularly project their weekend, holiday or evenings off from work.

Another innovative staffing model focuses on those shifts that are most difficult to fill. Shifts and positions are posted, and, using an eBay-type model, the nursing staff places bids, indicating a willingness to work a particular shift for a specified amount of compensation. This gives the nursing staff an element of control, particularly when someone needs to change a work schedule temporarily.

**Creative and Innovative Positions.** Several sages pointed out that within health care institutions, non-nursing professionals are unwilling to accept various roles or capacities for which experienced nurses are prepared to function (refer to Figure 1: Suggested Creative and Innovative Roles for the Aging Nurse). Many physicians and other health care professionals tend to view nurses serving in nontraditional roles as infringing on their authority or jeopardizing their position. An example given by a sage related to the management of a patient suffering from a chronic condition, such as diabetes, that does not require physician re-diagnosis and treatment plan development at every patient visit. In an environment where care management could flourish, a senior nurse would possess the skills and knowledge to manage the day-to-day care of this patient. However, this would require that physicians be willing to allow nurses to serve in this capacity. Additionally, third-party reimbursement policies would need to allow the institution to be paid for services rendered by nurses.

By allowing nurses to expand into these different roles and components of nursing, the institution would: (1) maintain the skills and experiences of nursing staff and benefit from the control or reduction of training costs; (2) be required to redefine expectations of the nursing practices; (3) need to address diversity-related issues; (4) be positioned to develop stronger and more functional multidisciplinary teams; and (5) have the capacity to improve relationships with patients and their families. Additionally, these positions represent creative and innovative opportunities for effectively recognizing senior nurses and their valuable contributions to the organization.

Several foundations, including RWJF, provide grant opportunities to support creative nursing positions. Unfortunately, these positions are rarely institutionalized, and when an organization undergoes a reduction in force, they are usually the first positions eliminated.

Although most senior nurses have the needed skills, the sages believed that it would be a mistake to burden these nurses with all the roles listed in Figure 1. The sages acknowledged that these roles offer a wonderful opportunity for seasoned nurses to take their bedside experiences and apply them in new roles. However, the sages thought it was more important to have the nurses develop expertise *in* these domains, but not *across all* of the domains.

Figure 1: **Suggested Creative and Innovative Roles for the Aging Nurse**

| Nursing Roles                              | Brief Description  |
|--|--|
| Chief On-Boarding Officer                  | <ul style="list-style-type: none"> <li>Assists newer nurses when they join the hospital staff</li> <li>Helps younger nurses sharpen their problem-solving skills and assists with the integration and transition into the culture</li> <li>Assists in shaping the organizational culture of junior-senior nurse mentoring</li> </ul>   |
| Best-Practice Coach                        | <ul style="list-style-type: none"> <li>Examines the qualitative data</li> <li>Determines how best to utilize the information</li> <li>Coaches younger nurses or clinicians to achieve a higher level of clinical performance</li> </ul>  |
| Technology Facilitator                     | <ul style="list-style-type: none"> <li>Assists in the development of methods for effectively incorporating the technology into practice</li> </ul>   |
| Team Builder                               | <ul style="list-style-type: none"> <li>Coaches younger nurses and physicians, and sets up corrective processes and approaches</li> <li>Teaches nurses to master the skills needed to serve as team coaches or facilitators</li> </ul>  |
| Senior Consultant/<br>Cost-Benefit Analyst | <ul style="list-style-type: none"> <li>Acquires the skills necessary to use new technologies and provides an assessment of the technology from a systems perspective</li> <li>Determines the return on investment or performs cost-benefit analysis</li> <li>Determines how to incorporate patient satisfaction data or medical utilization data into practice</li> </ul>                |
| Preceptor/Mentor                           | <ul style="list-style-type: none"> <li>Integrates new nurses into the organization and into the practice setting within the organization</li> <li>Assists in the transition from theory to practice and from novice to expert nurse</li> </ul>   |
| Community Liaison                          | <ul style="list-style-type: none"> <li>Serves in a quasi-public-relations or community-action role</li> </ul>  |
| Research Assistant                         | <ul style="list-style-type: none"> <li>Participates regularly in “think tank” discussions with multidisciplinary team members for health care delivery issues</li> <li>Conducts research to assess the needs of older nurses</li> </ul>  |
| Relief Nurse                               | <ul style="list-style-type: none"> <li>Performs “limited assignment” of patient care duties for nursing staff during their absence (e.g., during lunch and breaks), which would accommodate the scheduling needs of the older nurse</li> </ul>   |
| Safety Officer                             | <ul style="list-style-type: none"> <li>Conducts patient safety assessments and recommends preventive patient care delivery practices</li> </ul>  |
| Staff Development                          | <ul style="list-style-type: none"> <li>Addresses the professional development issues of the nursing staff</li> </ul>   |
| Communicator                               | <ul style="list-style-type: none"> <li>Serves as the communicator and integrator of cultures for patients/families and staff. There is less ethnic and cultural diversity among the nursing profession than among physicians (i.e., African-American and Latino groups are underrepresented in nursing, and Asian-Pacific Islander and Caucasian groups are overrepresented).</li> </ul> |
| Patient Educator and<br>Family Advocate    | <ul style="list-style-type: none"> <li>Educates patients/families/caregivers</li> <li>Facilitates more in-depth education, freeing other nurses for other patient-care responsibilities</li> <li>Helps patients/families to negotiate the health care delivery system along a continuum of care</li> </ul>   |
| Quality Coach                              | <ul style="list-style-type: none"> <li>Uses data for evidence-based patient-care practices to improve patient care</li> </ul>  |

Source: Sage Interviews

Although these positions were viewed as excellent opportunities to extend the career of the older nurse, concerns were identified. The sages noted the tendency to promote the most experienced, best skilled, sharpest clinical nurses into administrative and other non-clinical roles. Of course, nurses with the desire and skills should move to these roles. But excellent clinicians should not feel as though providing bedside care is a second-class role. A transition into administration, education, research and other roles should not be the only way to increase salary. Currently, clinical nurses are paid less and viewed hierarchically as being at a lower level. Either overtly or indirectly this sends the message that if nurses want to better themselves, they must leave bedside practice. In the words of one of the sages, “This is a terrible message and equally terrible way of socializing nurses. This practice needs to change.”

Additionally, the new positions or roles listed in Figure 1 may be considered as “soft” and not an integral part of quality patient care. There may be resistance from other health care professionals to accept these new roles (viewed as an infringement on their roles). Potentially the financing system may be unwilling to reimburse for services performed by these nurses.

**Professional Nurse Practice.** One idea coming from the sages was the establishment of a professional nurse practice, thereby eliminating the need to create new positions, job categories, or job descriptions. This type of model promotes the development of a senior nurse practice, similar to practices used in arranging for radiology and anesthesiology services. The hospital would contract with the senior nurse practice group to provide the services incorporated in the defined roles, such as technology facilitator, quality coach, or chief on-boarding officer. Additionally, because the nurses in this practice group would no longer be hospital employees, they would gain new status and have a different relationship with the medical staff. Under this system, both the nurses and physicians would be independent contractors—both professional, both highly experienced, both contributing to the hospital.

Currently, the dominant practice model for primary care nursing is very restrictive and prevents innovation. On one level, this creates nursing autonomy and independence. On another, it prevents the health care industry from experimenting with new ways for nurses to be responsible for a broader array of patients and patient care.

**Development of Career Paths.** Sages indicated that to a great extent, the comprehensiveness of their education and training allows nurses to operate fairly proficiently upon graduation from nursing school. However, over the course of their career, much time is spent differentiating them to develop a bedside practice. This type of orientation makes it very difficult for the senior, experienced clinician to transition into an undifferentiated role—for example, to serve in an administrative and managerial role that requires different skill sets and an understanding of technology. In general, health care institutions fail to create career paths and to offer the continuing education and training needed for this type of career shift. Because current and future practices will increasingly require nurses to both participate in and lead multidisciplinary teams composed of individuals with varying technical skills, levels of preparation, and roles, the establishment and implementation of a career ladder is critical.

When representatives of the nursing profession are excluded from design, layout, and patient flow planning, health care facilities may not incorporate design elements that facilitate interaction between nurses and patients or support an environment in which patient care is paramount. Well-known examples include facilities with long hallways requiring nursing staff to walk excessively, centralized nursing stations, and small bathrooms. Poor ergonomics and physical strain contribute to the loss of acute care nurses who leave the profession in their latter years or transition into another practice setting. The sages recommended a number of ergonomic adaptations (some of which follow) that could enable the senior nurse to continue a direct care practice.

**Mechanical Patient Lifts and Devices to Aid Ambulation.** The installation of transfer tracks above all beds and in the bathrooms to assist with moving patients would go a long way toward reducing the incidence of back injuries that nurses suffer. The use of transfer technology is essential, not just for nurses, but for all bedside health care workers.

**Decentralization.** Acute care nurses should have everything they need to provide patient-centered care at the bedside. For example, decentralized nursing stations could be located outside of the patient's room (with an observation window), allowing for easy access by all providers. Similarly, the decentralization of the supplies needed to provide bedside care would reduce the need for nurses to travel to and from a centralized storage facility.

**Patient Privacy.** Although designing health care facilities with private rooms may be costly, it allows the medical and nursing staff to interact privately with the patient and family. This type of space also allows for a more concentrated delivery of patient care by eliminating the need to leave the patient area to gather supplies from a distant location.

**Lighting Schemes.** The use of more sophisticated lighting schemes over task areas would alleviate some of the stress on the aging eye. The development of lighting systems that illuminate the work area at the bedside, while still shielding the patient from the brighter light, would be extremely beneficial to the older nurse.

The sages agreed that one of the biggest areas in need of modification relates to technology. There is an assumption that patient safety can be improved through the use of technology. Too often, the lack of technological support and well-equipped, patient care environments relegate nurses to serving as hunters and gatherers, taking them away from the bedside. Because technology is such an integral part of patient-centered care, it is imperative that nurses participate in any discussions about introducing new technologies into the hospital setting. Issues regarding technology tend to be twofold—the way it is introduced in the workplace and its role in enhancing patient safety.

**The Introduction of Technology in the Workplace.** There is a need to ensure that the nurses who entered the nursing profession in the early 1970s are adequately prepared to manage and use today's technology. This may be one area where the seasoned nurse lags behind the younger nurse. Typically, health care facilities purchase new technology, provide a short in-service training, and then require the nursing staff to use the equipment proficiently. Research, however, has shown that older individuals tend to learn differently from younger people. It is important that institutions adapt training to different learning modalities and tools.

Hospitals often purchase expensive technology that is ineffective, making everyone's job more difficult. The technology requires more hours of work. There are advantages in using low-cost technology coupled with redesigned processes and improvements. It is important to get the bedside professionals (with some assistance from external sources) to be active drivers in changing the design of care processes and in instituting the use of low-cost technology.

Several sages pointed out the importance of involving older, experienced nurses in the decision-making process to ensure that the technology is nurse friendly. For example, much of the technology does not feature the use of large font types. For persons over 40 years of age, this is a major issue. If nurses are involved in the discussion and selection of new technology, it may make for easier acceptance and utilization of the equipment.

**Opportunities to Improve Patient Safety.** Technologically enhanced work environments make it easier to provide direct care. Technological support should not be limited to the use of patient lift devices. Use of electronic medical records (EMRs) would eliminate the need for centralized nursing stations and provide numerous portables to access patient information. EMRs could incorporate alert prompts for a variety of situations, including pharmaceuticals, IV pumps, or special diet restrictions. The medical alerts would be helpful for everyone. Patient safety might also be enhanced through the use of mechanisms for turning the patient, systems for preventing hospital-acquired infections, beds with fall-prevention devices, infusion pumps, technology that moves the patient from the bed to the stretcher, negative-pressure rooms, handicapped-accessible showers, and electronic bar-coding of medications and even patients.

There is also a need for an integrated management information system (MIS) that works from the nurse's perspective. Information would be entered into the MIS in real time to ensure that the most current patient data are available. It should be easy to update patient information; the nurse should not have to go through 10 screens to input information. Additionally, the MIS must be linked to all related systems of care, eliminating the need to enter the same information multiple times in different systems.

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## Change Organizational Culture

A work environment that supports nursing practice autonomy and nurse participation in operational decisions is key for nurse retention. For too long, organizational cultures have devalued the experiences and contributions of nurses to the health care delivery system. A culture of respect is needed to address the nurse staffing shortage across the entire profession. It is important to examine how an institution embraces the culture of respect, particularly concerning disruptive practitioners who are disrespectful of other staff members. The sages reiterated research findings indicating that the devaluation of experience and the lack of respect for nurses are leading factors in nurse attrition; nurses are tired of doing a difficult job under stressful conditions and of not having their contributions acknowledged.

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## Commit to Training and Continuing Education

The rapidity of change in the health care industry demands a commitment to lifelong learning. Sages cited continuing education as critical to senior nurses who are promoted into managerial and innovative positions requiring new skill sets. If the nursing staff were provided convenient learning opportunities—for example, through long-distance learning, self-tutorials, on-site training, and videoconferencing—they might be more apt to continue their education.

There has been a decade of under-investment in continuing education for the senior nurse. Key is how continuing education is viewed within the organization. For example, many contracts place a premium on continuing education. Performance evaluation and salary increases are attached to continuing education. Contracts can be manipulated to require that a certain percentage of continuing education coursework be directly related to a specific discipline. This type of approach enhances the practitioner's knowledge and in turn benefits the institution. It also encourages the practitioner to branch out and learn about other areas of health care.

There are times when continuing education and performance evaluations are not linked to salary increases. In these situations, other forms of public recognition may be important—for example, recognition for the person who has completed the most continuing education units or for the person who has conducted the most in-service training sessions. Public recognition demonstrates that the institution values continuing education.

Continuing education is directly related to how the older nurse transitions into other roles and positions. If the institution provides the educational opportunities for the nursing staff to acquire the necessary skills to move into other areas, nurses will be more inclined to stay on the job.

But it is not sufficient simply to provide senior nurses with continuing education resources to improve and enhance their general skill sets. These nurses must also be trained to assume the newly defined roles. Many of these roles will either require new skill sets or will rely on skills the nurse learned in nursing school but has not used in recent years.

## Change Third-Party Reimbursement Policies

Insurance carriers are reluctant to reimburse for preventive health care services that nursing professionals have historically provided. Nurses are in the best position to provide these preventive health services through their skill in providing the patient some level of instructional guidance. The sages suggest that an examination of the entire reimbursement system might serve as a catalyst for change in the health care industry, which currently focuses on inpatient, bedside encounters. The financing and reimbursement systems are inhibitors for assessing the nurse's value. This does not mean that every cost associated with services the nursing staff provides must be reimbursed, but that the reimbursement structure should be better adjusted to account for nursing contributions.

## Change Union Policies

There are approximately 11 unions representing nurses, including the Office and Professional Workers International, American Federation of Teachers/Healthcare, and United Steelworkers. The approach or philosophy regarding any issue may vary greatly from one union to the next. In the past, unions resisted strategies that would differentiate benefits among members. Over time, however, they have embraced the concept of seniority and accepted it as a basic core value. More recently, union leaders have begun to look beyond the benefits issues toward recognizing and respecting the differences in the learning requirements for older nurses. Strategies aimed at retention now focus specifically on the older nurse and are being built into contracts. Unions recognize the benefits of having the older, more experienced employee and union member in the workforce.

The sages noted that unions continue to modify their logic and rationale and consider the implications of a management-by-exception approach. Rather than trying to convince younger nurses of the importance of providing special accommodations for older nurses, the unions could advocate for the individualization of benefits. Unions could promote a benefits package that might be more appropriate for the older, experienced nurse while promoting another benefits package that would hold more appeal for the newer, less experienced nurse. No one would be receiving preferential treatment, but benefits would be tailored to the particular concerns of different groups.

For example, special benefits for nurses with more than 25 years' experience could be developed. Such benefits could include weekends off, additional pay for seniority by adding levels at the top of the current salary ladder, seniority benefits (e.g., an extra day of paid time off for senior nurses), better pensions and the creation of a trust fund into which employers (and employees) could contribute. The funds would be distributed to employees at retirement to be used toward future health care costs.

Another idea centered on special continuing education incentives. Many contracts place a premium on continuing education, with performance evaluations and salary increases reflecting an employee's continuing education credits. Contracts could be structured to require that a certain percentage of continuing education coursework be directly related to a specific discipline. This type of approach would enhance the practitioner's knowledge and in turn would benefit the institution.

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## Change National Policies

When queried about national-level policies regarding the older nurse, the sages made the following suggestions:

1. Consider having portable pensions—allowing the older nurse to transfer existing pensions to other institutions without having to retire.
2. Establish national policies promoting retirement from direct care as an opportunity for transition into another area of nursing without punitive results, such as reduced benefits. For example, Social Security payments would not be discontinued or reduced if a person worked more than a set number of hours after retirement.
3. Establish national policies requiring institutions to provide opportunities for nurses to obtain continuing education units. Many state boards of nursing are adopting policies that require continuing education.
4. Structure policies requiring representation from the nursing profession on all commissions, boards, committees, or decision-making bodies addressing patient care.
5. Create policies aimed at developing a culture of respect. This culture encourages staff to regularly identify solutions aimed at improving the work environment, reduces redundancy, and helps the staff deliver better bedside care.
6. Improve the dissemination and sharing of facts and figures, anonymously, through the use of information networks. For example, Rhode Island created a system that allows for connectivity between all health care providers.

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## Other Ideas for Nurse Retention

Although not common themes, other noteworthy ideas by individual sages included the following.

**Focus on Commonalities, Not Differences.** There is very little difference between the needs of the older and younger nurse. It is the overall needs of all nurses that should be the focus. The challenge is creating opportunities in the workplace that encourage older and younger nurses to work together by collectively focusing on their commonalities and not their differences.

**Reducing Injuries.** Since the Bureau of Labor Statistics (BLS) began collecting data on occupational injuries nearly two decades ago, the nursing field has accounted for three of the 10 most injury-prone jobs (registered nurse, licensed practical nurse and nursing aide). The health care industry must make the changes necessary to remove nursing from the BLS list.

**Multiple Learning Modalities.** Lifelong training is critical in the complex field of nursing. It is important to create a continually improving learning environment, in which nurses play a major role. Research has shown that older people learn differently from younger people. It is therefore important to use different learning modalities and educational tools, including continuing education, on-site training, degree programs, Web-conferencing and self-tutorials.

**Incremental Changes.** To support the older nurse, institutions should introduce incremental changes, as opposed to implementing major functional or operational changes. There is a need to create a culture that allows the older employee to gradually adopt the skills needed to advance the institution's mission and intention.

## Summary of Findings From the Sage Interviews

The 13 sages offered many suggestions for retaining the older, seasoned nurse. Although they varied in the number and types of suggestions put forward, all believed that the older nurse could contribute more to the health care profession in the future if accommodations were made across the work environment. No sage mentioned disadvantages to the retention of the older worker. Nearly all of the sages' suggestions also surfaced in the review of the literature described in another section of this paper, likely reflecting both the sages' familiarity with the issues and the consensus in the profession about strategies to enhance the retention of nurses. Two issues not researched extensively include how to establish an organizational culture that is more respectful of the contributions of nurses, and the feasibility of establishing and contracting with senior nurse practice groups to provide specialty services.

Interestingly, the sages did not mention salaries and employee benefits as important in nurse retention, differing considerably from the vast array of research findings, policy papers and anecdotes in the nursing publications and workforce studies in general. They did, however, refer to policy changes that would increase the portability of retirement benefits.

The Wisdom Works sages concur with the imperative that we must quickly change the work environment into a place where the older nurse is welcomed, accommodated, appreciated and effectively utilized. The collective wisdom of older individuals in this sector of our nursing workforce must be sought, guarded and valued.

## VI. THE WISDOM FROM A PILOT SURVEY OF HEALTH SYSTEM NURSES

Recruitment and retention issues dominate most discussions around the nursing shortage. The cost of staff turnover is immense and has become a critical factor in the budgets of most health care delivery systems, thereby introducing the opportunity for the dialogue around work environment factors. The supply side of the equation must include creative and innovative solutions for attracting and keeping the older nurse in the workforce. Replacements for nurses must be recruited and trained, and transitions are disruptive to work flow. Being able to predict the likelihood that nurses will leave their current employer and/or the profession would benefit workforce planning at the national, regional, state and institutional levels. Several studies have pointed to the usefulness of such information for hospital systems.

As described in the literature review, Hilton advised that organizations should “understand and know their internal demographics” with data such as the ages of the nursing staff, intent to retire, the types of positions that will be vacated, and—in the case of management positions—whether a succession plan is in place.<sup>161</sup> In the same article, she posited that human resource professionals, along with other hospital leaders, should engage in workforce planning with a strategic eye to confront future staffing needs. Tang<sup>162</sup> also recommended that select demographic data, turnover rates, job satisfaction, and intent-to-leave data be collected and analyzed for its relevance to the agency.

Published studies have determined that work dissatisfaction leads to absenteeism, expression of grievances and turnover. Dissatisfied workers report a higher intent to leave. While intent to leave is the best predictor of actual turnover, overall job satisfaction is among the next best predictors, along with organizational commitment.<sup>163, 164, 165, 166, 167</sup>

When the Wisdom Works team turned to the literature to search for a low-cost and easy-to-administer survey instrument that most health care systems could quickly administer, it was apparent that such a tool was not readily available. Most of the instruments reviewed were primarily oriented around the collection of demographic data or were designed for single-agency use. For the purpose of this paper, the team wanted to explore more fully how organizations might capture data addressing a broader scope of their nurses’ perceptions about the work environment.

In order to test the implementation of such a data collection instrument in one institution, a convenience sample of nurses employed at Presbyterian Healthcare Services—which employs more than 2,000 nurses in seven hospitals and 26 ambulatory clinics, home health care and hospice services in six New Mexico cities—was surveyed to explore factors related to job satisfaction, intent to leave nursing and intent to stay employed at the current workplace.

The Vice President, Patient Services, a member of the Wisdom Works team, worked with the team and Presbyterian colleagues to design and conduct a Web-based survey of nurse employees. Following an examination of surveys used in published studies of nurse retention, the research team selected, revised and devised items expected to

elicit opinions about factors (both personal and in the work environment) that affect intent to remain employed in nursing and at the institution.

The draft survey instrument was reviewed by the members of the Wisdom Works team for usability and face validity and then pretested by five Presbyterian nurse employees. Those persons involved with the review of the literature gave advice based on the review of the literature and the gaps in research data. The purpose of the pilot study was to determine the feasibility of administering a Web-based survey in a health care system as well as to test the instrument designed by the Wisdom Works team.

All nurse employees were invited to participate in the survey available on Presbyterian Healthcare Services' private, statewide Internet system. Anonymity was guaranteed and participation in the survey implied informed consent. Employees were told that the purpose of the survey was to "gather input regarding factors that would facilitate you working in a direct patient care role past age 50 or until you retire." Data were coded and reported in the aggregate, ensuring participant confidentiality. Nearly 19 percent (N = 377) of nurses employed in the system responded to the survey.

The preliminary data from the pilot study indicated differences in the practice characteristics of the two categories of respondents—younger nurses (< age 40) and older nurses (= or > age 40). The younger nurses were more concentrated in acute care facilities (76.3%) than were the older nurses (60.5%). Younger respondents were also more likely to be employed in direct patient care (87.6%) than were their older colleagues (54.7%). Three-quarters (74.7%) of younger nurses reported a 12-hour shift, the typical shift for hospital nurses in this organization; less than half (46.7%) of older nurses worked a 12-hour shift, reflecting the differences between the two groups in setting and job function. Less than half (46.3%) of the younger respondents were currently married, compared with over two-thirds (69.1%) of those age 40 and older.

While many aspects of the survey could be included in this paper, the team has extracted some of the more pertinent items from the pilot study that support the use of this type of survey in the workforce setting. Job satisfaction, intent to stay at current job, and intent to remain in nursing will be highlighted.

### Job Satisfaction and Intent to Stay at Current Job

Overall job satisfaction was higher than expected, as measured by a single question: "Regarding your work in general, how pleased are you with your job as a whole?" Fully 99 percent responded that they were very satisfied or satisfied. This score was felt to represent the satisfaction of the nursing staff with their current professional roles in nursing, and for purposes of future study related to career plans and the potential for retirement. An additional point must be emphasized in the interpretation of this positive response: The response was reported from a survey sample of the total nursing population at Presbyterian and not from the subset of nurses over the age of 45 years, where concern regarding future career direction and longevity may be less compelling. Younger nurses (33%) were more likely to want to stay at the current workplace for the duration of their careers than were their older colleagues (12%).

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## Intent to Stay in Nursing

In addition to the fixed-response items, respondents to the Web questionnaire were also asked three open-ended questions concerning their interest in remaining in nursing. The Wisdom Works team analyzed the responses. Although the proportion of the 377 survey respondents who responded to the open-ended items was not reported, a total of 641 responses were recorded.

Pay and benefits and flexible scheduling were cited most frequently in response to the first question, “In thinking of your previous responses, what are the top three factors that will influence your intent-to-stay in nursing for the duration of your career?”

Nurses were next asked, “What environmental or human resources factors did we not address that you think are important to retaining nurses like yourself?” The most frequently mentioned factor was pay and benefits, accounting for 23 percent of the comments, followed by facility and equipment, accounting for 10 percent of the comments.

The third open-ended question, which asked respondents if they had anything else to say, resulted in 151 additional comments, addressing primarily the same themes covered in the two preceding questions. The top issues that respondents shared concerned staffing and job issues, review of policies and procedures, and improving pay and benefits.

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## Summary of Findings From the Survey of Nurses

It is important to note that there was no survey instrument in the mainstream that met the needs of this study. The Wisdom Works team found that while the questionnaire had limitations and was not fully tested for validity, reliability and item bias, it does show great promise in terms of moving into the area of organizational relationships and implementation of strategies, reaching far beyond basic demographics. The team will continue to refine and test the instrument as it promises to aid in assessing an organization’s readiness for change. Findings might give administrators much deeper insight into whether or not changes in the work environment would be well received by both the younger and older nursing workforce.

The pilot study, while having many limitations, did yield some useful findings. Limitations included the use of a convenience sample, used only in one health care system; a low rate of participation (19%), which affects statistical analysis; and limited testing for validity and reliability. Therefore, the results could not be generalized to the broader population. However, the study indicated that a Web-based staff survey could be implemented very quickly and with little direct cost, and might provide an organization with a quick snapshot of the nursing workforce and the implications therein.

The results of this survey raise an important point in need of further research: how organizations can accommodate older nurses and at the same time maintain fairness and equity within an environment that also supports the recruitment and retention of younger nurses.

## VII. APPLIED WISDOM: CRITICAL BEST PRACTICES FOR IMPLEMENTATION

Best practices have been described as “the processes that lead to the implementation of the most appropriate intervention for a given location and population.”<sup>168</sup> A best practice, for purposes of this paper, is one that expands employment opportunities for older nurses; addresses their particular concerns, needs, and interests; and generally makes their work more rewarding. A best practice from the perspective of the older nurse may also be a retention strategy that helps decrease the training and recruitment costs and discontinuities in patient care for a health care organization. Many of the successful retention strategies reported in the literature address new graduates rather than the older, experienced nurse.<sup>169</sup> While practices such as easing stress, providing appropriate training, and supporting nurses emotionally and professionally can benefit nurses regardless of age, more targeted approaches are needed for the retention of the older nurse.

### Identification and Selection of Best Practices

Using information obtained from the review of the literature and sages’ interviews, the Advisory Board Company, and the CDC<sup>170</sup> and CSAP (both of which have established criteria and processes for designating programs as having demonstrated effectiveness), criteria were identified to guide the selection of best practices. The criteria that would best address older nurses were those used in the AARP Best Employers for Workers Over 50 selection process.<sup>171</sup>

The criteria used in the Wisdom Works review, in descending order of importance, are<sup>172</sup>:

1. Employee development opportunities
2. Health benefits for employees and retirees
3. Age of employer’s workforce
4. Alternative work arrangements and time off
5. Retirement benefits and pensions.

Other data used to inform the best-practice review related to specific initiatives that had themselves stimulated best practices with salience to the issue of the older nurse—the AARP Best Employers for Workers Over 50, the Magnet Recognition Program<sup>®</sup> and the Center for Health Design’s Pebble Project. Each is a movement that has galvanized a critical mass of organizations to address a specific goal on a national level.

Now in its sixth year, the AARP Best Employers for Workers Over 50 “is an annual recognition program that acknowledges companies and organizations whose best practices and policies for addressing aging workforce issues are roadmaps for the workplaces of tomorrow.”<sup>173</sup> The Best Employers for Workers Over 50 is the most significant program for identifying best practices for the older worker.<sup>174</sup> Exemplary employers are designated annually after an intensive review process. Significantly, health care systems have been named to the AARP’s Best Employers list since its inception,

and some have been recognized for multiple years. According to the AARP, the top employers in health care appear to have more numerous and better-developed mature worker programs, compared with employers across other sectors. The 2005 honorees included 22 health care organizations, with four ranked in the top 10. In addition, Carondelet Health Network was awarded AARP's new Bernard E. Nash Award for Innovation for its exemplary practices in recruitment. That said, the AARP best health care employers seem to be a critical starting point for looking at best practices for the retention of older nurses.

The 2005 designated health care organizations and their rankings are shown below.

Figure 2: **AARP Best Employers for Workers Over 50 (2005)**

| AARP Ranking | Designated Health Care Organization                        |
|--------------|--|
| 2            | Scripps Health, San Diego                                  |
| 3            | Bon Secours Richmond Health System, Richmond, Va.          |
| 9            | Yale-New Haven Hospital, New Haven, Conn.                  |
| 10           | Lee Memorial Health System, Ft. Myers, Fla.                |
| 11           | Mercy Health System, Janesville, Wis.                      |
| 13           | SSM Health Care, St. Louis                                 |
| 15           | Beaumont Hospitals, Southfield, Mich.                      |
| 16           | Loudoun Healthcare Inc., Leesburg, Va.                     |
| 19           | Saint Barnabas Health Care System, West Orange, N.J.       |
| 22           | Oakwood Healthcare System Inc., Dearborn, Mich.            |
| 24           | Centegra Health System, Woodstock, Ill.                    |
| 26           | Scottsdale Healthcare, Scottsdale, Ariz.                   |
| 28           | University of Colorado Hospital Authority, Denver          |
| 29           | Cabell Huntington Hospital, Huntington, W.Va.              |
| 31           | Carondelet Health Network, Tucson, Ariz.                   |
| 35           | Inova Health System, Falls Church, Va.                     |
| 37           | St. Mary's Medical Center, Huntington, W.Va.               |
| 43           | West Virginia University Hospital, Morgantown, W.Va.       |
| 45           | Ochsner Clinic Foundation, New Orleans                     |
| 47           | University Physicians Healthcare, Tucson, Ariz.            |
| 48           | The University of Texas MD Anderson Cancer Center, Houston |
| 49           | Henry Ford Health System, Detroit                          |

Source: [www.aarp.org](http://www.aarp.org), "AARP Best Employers for Workers Over 50 Honorees for 2005"

The AARP best practices<sup>175</sup> categories were described in greater detail in the review of literature section of this paper (see page 63). They are: fundamentals (policies, programs and management practices that are regarded as basic requirements); core programs (programs that relate to job and career design, workplace design, hiring and recruiting, methods of leaving the workforce and formal workplace flexibility programs); programs of significant value (programs that create economic value but

not career opportunity, including care-giving support, retirement security, health care and informal workplace flexibility); and extras (programs of nominal economic value for employees, such as retiree relations programs, elder-care referral services and volunteer service opportunities). In total, they capture the changes identified through the literature review to be important in increasing the retention of older nurses—role creation/expansion/modification, human resource practices, environmental changes, and policy changes.

The Magnet Recognition Program, now in its 20th year, “is a designation or seal of approval for quality nursing and also provides a vehicle for disseminating successful practices and strategies among nursing systems.”<sup>176, 177</sup> Despite its age, the Magnet Recognition Program’s concept is as fresh and effective as ever, helping to meet new-hire and veteran nurses’ needs by increasing clinical nurses’ job satisfaction and providing the structure to deliver quality patient care—even during staffing shortages.<sup>178</sup> Currently, the Commission on Magnet Recognition Program recognizes more than 180 health care organizations for their excellence in nursing service.<sup>179</sup> Studies have reaffirmed Magnet hospital advantages: decreased turnover rates and increased job satisfaction when compared with non-Magnet hospitals.<sup>180</sup>

The Center for Health Design’s Pebble Project “creates a ripple effect in the health care community by providing researched and documented examples of health care facilities whose design has made a difference in the quality of care and financial performance of the institution.”<sup>181</sup> This research collaborative seeks to improve the quality of care for patients; attract more patients; aid in the recruitment and retention of staff; increase philanthropic, community, and corporate support; and enhance operational efficiency and productivity.<sup>182</sup>

According to the personal communication with Derek Parker and Debra Levin, the project was originally intended to address the link between hospital design and patient safety; later, findings indicated a direct link with staff satisfaction and efficiency as well.<sup>183</sup> Parker believes that many of its best practices have salience for all nurses, particularly older nurses.<sup>184</sup> Both Parker and Levin make a strong case for evidence-based design, which they see as having equal value with evidence-based medicine. Evidence-based design is based on research that links hospital design to patient and staff outcomes.

The Pebble Project focused on the built environment and included hospital replacements, critical care units, nursing stations, and ambulatory care centers. Reports indicate that nurses employed by project sites have increased job satisfaction relative to comparison groups, as well as reduced turnover rates. Further, rigorous studies have linked the physical environment to reduced staff stress and fatigue and increased effectiveness in delivering care.<sup>185</sup> Pebble Project sites have instituted the types of ergonomic and workplace design modifications described in the review of literature for this paper as affecting the nursing work environment.

Twelve best practices that would contribute the most to the retention of the older nurse were identified. They are briefly described, and examples of their implementation are given, in this section of the paper. Where possible, examples of successful models in health care systems are described. If a successful model from health care could not be identified, an example from another industry was used. Many of the examples are summarized from the AARP Best Employers Program for Workers Over 50, but other examples represent the Magnet Recognition Program, the Pebble Project and RWJF's *Transforming Care at the Bedside* initiative. The order of listing does not indicate order of importance. The available evidence does not allow for conclusions about the relative importance of each practice.

**Boosting 401(k) Participation and Redefining Pensions.** This practice includes financial education programs in the workplace to better inform and prepare workers to handle financial challenges and to capitalize on the benefits of employer-provided 401(k) plans. The practice may also include automatic enrollment of employees; instead of offering employees the choice of “opting in” to a 401(k) plan, eligible employees are automatically enrolled into the plan and must take specific action to “opt out” if they do not want to participate.

Children's Health System, Birmingham, Ala., offers catch-up contributions. Workers age 50 and older may make additional contributions to a retirement plan up to the specified legal limit.

Scripps Health, La Jolla, Calif., offers structured pension plans as defined contributions with employee after-tax contributions, allowing employees to straddle retirement and employment. In response to the needs of the 50-plus workers, Scripps recently added retiree health insurance to its benefits and created a tax-free health account for retirees to save toward additional medical expenses.

**Care-giving and Grief Resources.** AARP's 2002 *Staying Ahead of the Curve* study found that workers age 45 and over have home-front concerns that are numerous and pressing. Caring for a spouse, parent, grandchild, or other person is a major concern. This option helps older workers balance their care-giving responsibilities and personal challenges while remaining employed.

Bon Secours Richmond Health System, Richmond, Va., provides a 50 percent subsidy for elder care and sick-child care, and employees can receive home-health-care assistance for their dependents up to 10 days per year. Bon Secours also offers subsidized child care for grandchildren.

Scripps Health established a life-cycle employment program to assist workers in planning for their personal needs at every stage of life, from increasing family time and putting children through college, to caring for parents and protecting assets.

**Corporate Cultures That Value the Mature Worker.** This best practice views mature employees as a “resource to be cherished rather than a liability to be minimized.”

Bon Secours Richmond Health System included the Director of Senior Services on its diversity team specifically to address senior employee issues.

Scripps Health trains managers as to the motivators, demotivators, and communication preferences and strategies for various age groups, including mature workers as well as new entrants into the workforce. This training is called “Crossing the Generation Chasm.”

Baptist Health South Florida, Coral Gables, Fla., made a commitment to mature workers through its Employee Advisory Groups. Besides diversity classes, this program deals with age-related issues and gives mature workers an opportunity to offer feedback.

**Flexible Work Options.** Flexible work options include alternatives for scheduling, worksite location, assignments and job structure. Other options include job sharing, part-time work and compressed work schedules.

Scripps Health offers two complementary programs: job sharing and flexible work options. Job sharing at Scripps Health is an option for all employees, especially those who want to work part-time or fewer hours. Two employees can share the same job position.

Yale-New Haven Hospital, New Haven, Conn., recently implemented a “Have It Your Way” shift option for the nursing staff to allow for greater flexibility.

Lee Memorial Health System, Fort Myers, Fla., offers full- and part-time employees the Seasonal Months Off program, which allows them to take time off for up to six months per year while maintaining their health and life insurance at the same rate.

Carondelet Health Network, Phoenix, has a seasonal worker program that allows nurses to sign short-term contracts and work on a seasonal basis.

**Knowledge Transfer Paired With Phased Retirement.** In this practice, the soon-to- retire employee trains a replacement within a flexible schedule that has sufficient time built in to guarantee completion, allowing the accumulated knowledge and skills of the experienced employee to be transferred to the replacement.

Pinnacle West Capital Corporation, Phoenix, has a knowledge-transfer program whereby a soon-to- retire employee trains a replacement within a certain time frame and has considerable flexibility during this period to arrange a work schedule. Employees do not have formal rules or guidelines about what to share and how, but they are strongly encouraged to let others know when they are departing and what knowledge they wish to transfer beforehand. Pinnacle West Capital attributes its very high customer satisfaction scores in part to its programs of knowledge sharing and employee transition. Through these programs, both the company and the employee reap benefits during the retirement process.

**Magnet Status.** While not specifically designed to address the older nurse, Magnet status may be important to retention. In physics, magnetism is one of the phenomena by which materials exert an attractive or repulsive force on other materials. Similarly, there are eight essential forces of Magnetism that work together positively to create an environment of excellence. The eight essential forces of Magnetism are: nurse autonomy and accountability (clinical autonomy); control over nursing practice and practice environment (organizational autonomy); good nurse-physician relationships and communication; the opportunity to work with other nurses who are clinically competent; supportive managers/supervisors; support for education; adequate nurse staffing; and concern for the patient.

Studies over the last 20 years provide evidence that registered nurses working in Magnet hospitals have higher rates of job satisfaction.<sup>186</sup>

Four of the SETON Healthcare Network's acute-care hospitals have earned the American Nurses Credentialing Center's Magnet status. This network offers many additional benefits: a shift bonus plan that provides a means of encouraging staff to schedule an increased number of shifts during periods of increased patient census; a seasonal flex plan that allows experienced critical care nurses the opportunity to work for nine months and take three months off during the summer; a seasonal 80-hour reward that encourages nurses to regularly work 80 hours per pay period during the hospital's busiest times; flexible scheduling to include full- and part-time positions, varied shift schedules and PRN work and work schedules to be tailored to fit individual and family needs; and a weekend work plan for nurses who may prefer weekend work hours. This plan pays staff an additional amount for their consistent weekend work, giving some people the ability to focus on family, school or other activities during the week. There is also a referral program for hard-to-fill positions that offers a \$2,000 referral bonus for recruitment of a new staff member.

Baptist Health South Florida, whose South Miami Hospital was designated as a Magnet hospital in June 2005, also offers an array of benefits attractive to the older nurse. They include: flexible hours to meet the employee's personal needs; education offerings and in-service programs provided free of charge; on-site shoe repair, dry cleaning and a hair salon; an employee assistance program; elder-care resources; pastoral care; a retirement plan and matching contributions; and paid time off (PTO) and cash-outs on an elective or emergency basis. PTO cash-outs can be used for medical expenses resulting from accident or illness; imminent loss of home; the impact of catastrophes, such as fires, floods, or hurricanes; vehicle purchase or repair (over \$500); and legal fees for domestic/child custody issues. Employees can also cash out PTO for the purchase of a principal residence or yearly college tuition expenses for themselves, spouses or dependent children. Also offered are: a "sunshine fund" through which employees having financial difficulties can obtain interest-free loans; tuition assistance; scholarships worth up to \$12,000 per year; an adoption benefit of up to \$4,000 per adoption per year; and a credit union.

**Mentoring Programs.** Mentoring programs increase opportunities to transfer corporate knowledge and advice that is not always conveyed through formal training activities. They create and expand career opportunities and help companies solve

problems that could otherwise block productivity. More important, these programs provide ways to leverage the institutional knowledge of older workers to the benefit of themselves, junior employees, and the company as a whole. These practices may be formal or informal.

In its preceptor program, Baptist Health South Florida does more than just publicly recognize the efforts of seasoned nurses who agree to serve as preceptors to younger, less experienced colleagues. Baptist Health offers financial incentives for experienced nurses to take on this role.<sup>187</sup>

Scripps Health<sup>188</sup> has implemented a clinical mentorship program. This program was funded through a \$5-million business plan. Tangible benefits have begun to be realized, including retention of the nursing workforce, thus saving salary and recruitment dollars. Included in the program was the development of 65 nursing positions for clinical mentors. Clinical mentors—not to be confused with preceptors—are selected based on demonstrated maturity within nursing and clinical expertise. They are able to schedule shorter, more flexible shifts to function as resources for both experienced and inexperienced staff on units. There are very stringent competence and personality requirements. Improvements in two national nursing quality measures—rates of failure to rescue and hospital-acquired pressure ulcers—have been documented. The shorter shifts and less demanding physical work have been seen as a benefit to older nurses with excellent clinical skills.

**Phased Retirement.** Several health care organizations have incorporated phased retirement, a practice that allows older workers to leave the workforce gradually, for example, by reducing the number of hours worked before full retirement while continuing to accrue benefits. Some organizations also rehire retirees without affecting their retirement benefits.

SSM Healthcare, St. Louis, and Bon Secours Richmond Health System allow long-tenured employees to collect full retirement benefits while continuing to work on a part-time basis or at reduced hours.

St. Mary's Medical Center, Huntington, W.Va., adjusts pension calculations to allow workers in their final years of employment to reduce hours without decreasing their pension benefits. St. Mary's also rehires retirees.<sup>189</sup>

Scripps Health has modified its benefits package to allow an employee who is aged 55 or older and has worked in the system at least 10 years to reduce the hours worked while maintaining full-time benefits. Employees can work as few as 16 hours per pay period and still receive health care coverage. The cost of these benefits has been offset by decreased turnover in all hospital departments. Pension changes have also been implemented, including allowing employees to draw on their fund while still working.

**Planning for Retirement.** Nurses are often unprepared for retirement. This practice focuses on retirement planning education.

Thomson West, Cambridge, Mass., hosts quarterly one-hour group information sessions for employees. After the sessions, employees may meet one-on-one with a financial planner. This benefit is available to all employees, presumably on an elective basis.

The Charles Stark Draper Laboratory, Eagan, Minn., allows employees to attend ongoing seminars on retirement planning, college savings, transitioning to retirement, healthy lifestyles, and estate planning. The financial planning covers a range of topics instead of just mature-worker issues such as retirement.

**Talent Management.** This best practice is an employer's assessment of the impact of projected demographic and labor market changes in its workforces. This strategic planning tool leads to an in-depth understanding of the current talent base by key factors such as age, career level and skill area. Talent management is important because it focuses on the need to perform a workforce analysis.

Inova Health System, Fairfax, Va., has a Web-based talent management system. This system helps Inova attract and retain top talent. The system includes applicant tracking, employee referral, career development, succession planning, performance appraisal and learning management.

**Training, Lifelong Learning, and Professional Development.** This practice directs education programs to the older worker.

Ohio State University Medical Center has two career enhancement programs—Program 60+ allows anyone over 60 to audit classes free of charge, and the Bridge Program helps older workers transition into college.

Loudoun Healthcare Inc., Leesburg, Va., has partnered with George Mason University to hold graduate classes for a master of science in nursing at its facilities.<sup>190</sup> Bon Secours Richmond Health System employees can enroll in 50 different classes and development programs, held at varying times and locations to accommodate individual schedules.

**Workplace Redesign and Ergonomic Improvements.**<sup>191, 192, 193, 194</sup> Physical working conditions contribute to turnover and burnout, particularly in older nurses. Ergonomics uses information about people to make the workplace safer, more comfortable and more productive. While not initially or solely focused on the older workforce, technology, design, and ergonomics are providing new options and solutions for fostering longer work lives. According to researchers, “[in] the healing environments of health care, it is particularly important to take care of those who care for the ill and injured.”<sup>195</sup>

Baptist Health South Florida installed new beds throughout the hospital system to reduce the constant stresses nurses experience by lifting and moving their patients.<sup>196</sup>

Parrish Medical Center, Titusville, Fla., opened a new hospital in 2002. In a survey of 734 staff members in 2004, a majority stated that the design features—access to natural

light, improved airflow, separation of public/patient transport areas, and homelike patient room design—positively affect the quality of their work life and help them provide care more effectively. Annual staff turnover has decreased from 20 percent in the old facility to 13 percent.

Peace Health, Eugene, Ore., while waiting to begin construction on its new 440-bed regional medical facility, installed ceiling lifts and booms in patient rooms in the ICU and neurology units of its existing facility. After the installation of the equipment, the average annual number of patient-handling injuries decreased from five to one, and annual costs of patient-handling injuries decreased from \$365,145 to \$993.

St. Alphonsus Regional Medical Center, Boise, Idaho, renovated a nursing unit to reduce noise levels. Changes included increasing the size of private rooms, adding carpet to hallways, putting acoustical tiles on walls and ceilings, and relocating machinery and nurse charting away from patients. As a result, average decibel level per patient room was less than 51.7, quality of sleep improved from 4.9 to 7.3 (on a scale of 0–10), and patient satisfaction scores improved during a three-month comparison period.

Bronson Methodist Hospital, Kalamazoo, Mich., since opening its outpatient and inpatient pavilions in April and November 2000, has seen nursing turnover rates drop to 4.7 percent; the occupancy rate rise to 87 percent; and overall patient satisfaction increase to 96.7 percent. Private patient rooms have resulted in decreased patient transfers because of the elimination of conflicts among patients and an increase in patient sleep quality. Private rooms, location of sinks, and air inflow design have also resulted in an 11 percent decline in overall nosocomial infection rates. Market share has increased.

Methodist Hospital Clarian Health Partners, Indianapolis, since opening its new Comprehensive Cardiac Critical Care unit in 1999, has made a number of improvements, which have resulted in higher employee satisfaction. Patient fall rates are down 75 percent due to the unit's decentralized design, which allows for better observation. Patient room layout, equipment integration, and other design features have helped push patient transfers down 90 percent. Overall patient dissatisfaction rates have dropped from 6 percent in 1998 to 3 percent in 2001. A decrease in patient transfers, combined with nurses' more consistent knowledge of each patient's condition, has contributed to an improved medication error index. Unit design has helped reduce the caregiver workload index, resulting in improvements in nursing efficiency.

The University of Pittsburgh Medical Center-Shadyside, a two-year member of Transforming Care at the Bedside, has initiated an advanced clinical design, incorporating a number of innovations.<sup>197</sup> Each nurse has a personal non-cellular phone. Instead of using their feet to ensure communication, nurses receive the shift report by dialing Voice Care, a password-protected voice mail/message system. Patient histories and recent clinical information are stored on the system. Physicians use Voice Care to provide admission reports to nurses. The use of the personal phone saves every nurse 20 minutes per shift, returning \$420,000 to bedside care. Voice Care saves every nurse approximately eight minutes per shift, returning \$267,000 to the bedside. Patient

supplies are immediately available in the patient's room, saving six trips to the supply room or 18 minutes for every nurse, returning \$400,000 to bedside care. At Shadyside, new documentation practices have reduced paperwork by 50 percent. If a nurse deems the unit too busy because of admissions or emergent situations, a pull of a chain notifies others and delays the receipt of new admissions 30 to 60 minutes. If a patient's condition deteriorates, the nurse uses the personal phone to call a Condition C, and a rapid response team comes to the unit to provide support. When a nurse has a problem and the unit director is not immediately available, the nurse can call the ASSIST line monitored by the VP Patient Care Services. The caller receives an e-mail to acknowledge the concern and notify leadership.

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## Summary of Best-Practice Findings

These 12 best practices are ones that hold the most promise for addressing issues related to the older nurse. As can be noted, these programs have been designed based on the specific context and culture of each organization. What is important is the commitment demonstrated to workers in general and to older workers specifically.

Two practices seem particularly important—talent management and knowledge transfer. The former would help health care institutions to understand their workforce needs, while the latter would help address the “brain drain.” Health system leaders must understand their workforce needs. It is only when organizations understand the talent they need and begin to identify gaps and potential gaps in their talent base that appropriate plans can be put in place. With 2010 less than four years away, each hospital should know nurses' intent to leave their organization and the potential gaps created by retiring older nurses.

David DeLong<sup>198</sup> cautions businesses about the high cost of losing intellectual capital and its heightened importance when the baby boomers retire. The loss of older nurses' knowledge can have a deleterious impact on hospitals in terms of patient outcomes and safety.

Although there is a growing consensus that the older nurse can continue to have a pivotal bedside role, particularly when best-practice strategies have been implemented, few employers offer the flexibility and the incentives needed to retain older nurses.<sup>199</sup> Of equal concern is the general lack of preparedness for responding to the aging workforce.

While many employers fail to see the aging workforce as a compelling business interest, a bottom-line, business case can be made for making workplaces attractive to older nurses. Research on the benefits of programs for retaining the older nurse is sparse. Obviously, implementation of many of the best practices described in this section would have an attached cost; however, it is not unreasonable to expect that improved retention of nurses would also result in certain cost savings and/or increased revenue for the employer, in addition to benefiting the entire health sector.

## VIII. RECOMMENDATIONS AND CONCLUSIONS: USING OUR COLLECTIVE WISDOM TO CREATE A TIPPING POINT

For at least the past two decades, there have been numerous efforts to address the shortage of bedside nurses. The recommendations take into consideration information from various sources and fields of study (e.g., employment and retention of the older worker, retirement planning, and organization and business management). Most of the changes that would make continuing in the profession more attractive to the older nurse may also be expected to enhance recruitment and retention for younger nurses as well, thus laying the groundwork for a long-term solution to the current crisis in nursing.

### Recommendations

The Wisdom Works team recommends to RWJF:

- Create a system to develop and apply evidence-based criteria for best practices for the retention of older nurses, such as those described in this paper and others yet to be identified. Support research to establish best practices, including the identification of their costs and benefits. Apply diffusion theory to translate best-practices research into widespread practice. Eventually, develop a Web-based toolkit to assist hospitals in assessing their organizational capacity and readiness to implement best practices for nurse retention.
- Invest the resources needed to identify, describe and evaluate best practices for recruitment and retention of the older nurse, including the long-term impact of the employment of older nurses. Foster research on the effects of the employment of older nurses on patient care and nursing practice. Support research on how programs to increase retention of older nurses affect younger nurse recruitment and retention.
- Partner with national nursing organizations and groups to identify and bring together the connectors, mavens and salespersons who will make the retention of the older nurse an “epidemic.” Utilize the concept of the tipping point: “Much has been made of the profound effect of the tipping point, the point at which a trend catches fire—spreading exponentially through the population.”<sup>200</sup>, <sup>201</sup> This phenomenon is dependent on a few extraordinary people, using word of mouth as the most important form of communication. Toward that end, create a National Nursing Visionary Leadership Forum that brings together novice and expert nurses, an intergenerational approach to support more localized knowledge management strategies. And use the Robert Wood Johnson Executive Nurse Fellows to shepherd this cause.
- Work with the AARP, think tanks, and policy-makers to determine the feasibility of options such as portable pensions, phased retirement and other benefits that are applicable to the older workforce in general. Advocate for the enactment of options determined to have a favorable effect on the older worker.
- Facilitate hospitals’ adoption of workforce planning—selecting the right mix of personnel and gauging the impact of the aging workforce on organizational performance—through the creation of a Web-based toolkit.

- Invest in further testing and development of a low-cost, readily available, easy-to-interpret Web-based survey instrument that health care organizations could use to regularly assess work environment issues affecting staff decisions about intent to stay on the job.
- Establish a national research collaborative to specifically assess and monitor nurses' intent to retire. A biennial National Nursing Sample Survey would provide data for workforce planning at the national level. The Health Resources and Services Administration's Division of Nursing and National Center for Workforce Analysis should provide the leadership and structure for this undertaking.
- Work with industries and businesses to establish a user-driven, national learning laboratory. Product developers could interact with older nurses more directly so that medical innovations are better adapted not only to the nursing process and bedside environment but also to the needs of the older nurse. This attention to product design would likely benefit all nurses regardless of age.

Although much needs to be undertaken at the national level to initiate systemic change, many incremental steps can and are being taken to accommodate older nurses at the individual facility and organizational level. The Wisdom Works team recommends that these efforts continue. Examples are to:

- Encourage health systems to make immediate and incremental ergonomic and design changes, such as improved lighting and the installation of lifts.
- Invest in the creation of expanded roles for older nurses with appropriate continuing education to prepare them for these roles. Design career paths to provide expanded and enriched opportunities for older nurses that support and improve patient care.
- Encourage nursing administrators to customize education and training for the seasoned nurse, including on-boarding programs and technology-related programs.
- Work with employers and unions to advance the concept of individualized benefits packages, along with flexibility in scheduling options.
- Encourage every health care setting to be a good place to work as evidenced by policies that demonstrate respect for and appreciation of staff, promote a balance between work and life, and offer an array of benefit options across the span of the work life.
- Equip supervisors and managers to understand and support an older workforce.
- Create talent management to foster the right mix and skill level.
- Create succession-planning programs to promote personal and professional growth and development opportunities on the job.
- Encourage every health care organization to strive for a culture that brings together the eight forces of Magnetism.
- Invest in the design and evaluation of knowledge management programs in health care organizations.
- Formally assess the perceptions of hospital and nursing administrators about recruiting and retaining older nurses, and develop and evaluate any awareness/ educational programs aimed at this group.

The problems associated with attrition in the nursing workforce are not new, but to date solutions have been applied inconsistently and piecemeal, organization by organization. A great deal is known about steps that can be taken to retain and accommodate the older nurse. What appears to be lacking is the political will to act.

Unless hospitals begin to address the conditions that would help older nurses extend their work life past usual retirement age, many of these nurses will retire at the very time hospitals are faced with the growing demands of an aging population. Various surveys and reports document that older nurses are more likely to extend their work life under the following conditions:<sup>202</sup>

- Supportive workplaces
- Social interaction with peers and patients
- More control over work setting
- Participation in decision-making
- Work recognition, encouragement, and positive feedback from supervisors
- Favorable work schedules
- Economic incentives
- Less strenuous jobs that use their experience
- Ergonomically friendly, safe and effective workplaces
- Retirement programs that make working longer attractive
- Innovative new nursing roles.

While strategies for recruiting and retaining older nurses are feasible, the challenges ahead are indeed great. Nothing short of transformational change is required to avert a potential public health catastrophe within the next 15 years. We need to be clear that there is no time to waste.

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#### **Review of Literature**

The CINAHL, Medline, Academic Search Premier, and PubMed databases were searched for peer-reviewed research on factors contributing to the recruitment and retention of the older nurse. The Wisdom Works team also relied on several published annotated and non-annotated bibliographies. The search for articles included the nursing, human resource development, safety/ergonomic and technology literature. The reviewers identified more than 100 articles that cited findings in the following areas: characteristics of older nurses who intend to stay employed in nursing; work design, work modification and job role innovations that contribute to retention; environmental design, environmental modification, concepts and principles; and characteristics of the older nursing and non-nursing workforce. Reviewers developed and applied a coding scheme based on the above areas. Fifty-five relevant articles were identified and then reviewed in depth.

#### **Expert Interviews**

Based on a review of the literature, the research team identified 22 experts or Sages. For the purpose of this project, the term Sage referred to an expert in hospital nurse retention, in the retention of older workers in other occupations, and in the use of technological advances for providing patient-centered care and improved quality of care. The Sages were either trained professional nurses or had extensive experience working with nurses. The potential interviewees represented expertise in the areas of systems for geriatric populations; architecture; human resources; workforce development; policy; technology; patient safety; and healthcare facility design. To assess their willingness to participate in the telephone interview process, the experts were contacted through telephone calls and email messages. Follow-up telephone calls and repeat email messages were directed to non-responders to the initial request. Of the 22 experts originally identified: eight agreed to a telephone interview; two declined participation due to professional commitments; and one declined due to lack of knowledge regarding the subject matter, but identified a suitable replacement. Ten did not respond to telephone and email messages. Later, seven top-level nursing executives were identified and asked to participate in the interview process. Five of the seven agreed, bringing the total number of interviewees to 13

**Demographic Characteristics of the Interviewees.** A diverse group of Sages were selected. Twelve of the 13 interviewees were women. Nine of the experts self-identified themselves as Caucasian; three as African American, and one as Chinese American. As shown in Figure 3, they represented large public and private healthcare institutions, private industries, a labor union, and universities across the county.

Figure 3: **Wisdom Works Sage Interviewees**

| Sage/Expert  | Contact Information   |
|--|---|
| Joyce Benjamin                                       | Health Design Consultant, NTD Stichler  |
| Linda Burnes Bolton                                  | Vice President of Nursing, Cedars Sinai Health System   |
| Leslie A Clarke, R.N., M.S., M.B.A.                  | The Children’s Hospital of Philadelphia, Senior Vice President  |
| Marilyn Chow, Ph.D., R.N.                            | Kaiser Permanente Corporate Office  |
| Lola Fritz, R.N., BA                                 | PeaceHealth, Director of Operations Facility Planning   |
| Carole A. Gassert, Ph.D., R.N., F.A.C.M.I., F.A.A.N. | Associate Dean, Academic Affairs, University of Utah, School of Nursing   |
| Gwen Johnson, R.N., M.H.A.                           | Howard University Hospital, Nurse Coordinator Women’s Health  |
| Karen Jones, R.N., Healthcare Specialist             | HGA, Milwaukee, Wisconsin   |
| Mary Lehman MacDonald, M.S.                          | Director, AFT Healthcare  |
| Audrey Nelson, Ph.D., R.N., F.A.A.N.                 | Director, Veterans Health Administration, Patient Safety Center of Inquiry, Health Services Enhancement Program on Patient Safety, Tampa, Florida |
| Edward H. O’Neil, MPA, Ph.D., F.A.A.N.               | Professor, Family and Community Medicine, Dental Public Health Director, University of California, San Francisco                                  |
| Sara Rix, Ph.D., Senior Policy Advisor               | AARP, Public Policy Institute   |
| Sister Mary Roch Rocklage, R.S.M.                    | Sisters of Mercy Health System  |

**Telephone Interview Process.** The research team contracted with AFYA, Inc. to conduct the telephone interviews and to analyze the interview data. Dr. Hatcher and Dr. Connolly of the Wisdom Works team worked with AFYA, Inc. to select and train two experienced staff persons to conduct the interviews. Dr. Hatcher and Dr. Connolly also monitored a subset of the interviews.

A brief introductory telephone conversation was conducted with each Sage to assess his or her willingness to participate in the telephone interview process. Once confirmed, the *Interview Guide* and background information was sent electronically to each interviewee (refer to attached *Interview Guide* and *Participant Confirmation Letter*). Reminder notices, along with another copy of the *Interview Guide* were emailed to the Sages one day prior to the scheduled interview.

At the onset of the interview, the Sage was reminded that: (1) the interview would be recorded; (2) all statements would be non-attributable unless permission were sought and granted; and (3) they could skip any question they did not feel comfortable or qualified to answer. The four-part telephone interview began with the verification of limited demographic information, proceeded with general opinions about the older nurse, and concluded with questions about enhancements in the work environment to attract and retain the older nurse. On average, the interviews were completed within 90 minutes.

After completion of each interview, one interviewer typed the hand-written notes from the interview, capturing key concepts. The second interviewer reviewed the audio recording of the interview and expanded/clarified the first draft of interview notes. Although interview notes were not transcribed verbatim, the notes were quite detailed. The interview notes were analyzed and common themes were identified across all interviews for inclusion in the final report. No specific software or analytical methodology was utilized. Singular responses were captured in table formats. Where applicable, outlier opinions/responses were also cited in the report.

## Survey of Nurses at Presbyterian Healthcare Services

A convenience sample of nurses employed at Presbyterian Healthcare Services, which employs more than 2000 nurses in six New Mexico cities, was surveyed to explore factors related to job satisfaction and intent to remain in nursing as they age. Presbyterian Healthcare Services consists of seven hospitals and 26 ambulatory clinics, home health care and hospice services. The Vice President of Patient Care Services and Chief Nursing Officer, a member of the Wisdom Works team, worked with the team and Presbyterian colleagues to design and conduct a Web-based survey of nurse employees. Following an examination of surveys used in published studies of nurse retention, the research team selected, revised and devised items expected to elicit opinions about factors, both personal and in the work environment, intrinsic and extrinsic, that affect intent to remain employed in nursing.

The draft survey instrument was reviewed by other members of the Wisdom Works team for face validity and then pre-tested by five Presbyterian nurse employees. Results of the pre-test indicated that the survey could be completed on-line in 10 to 15 minutes, a reasonable time for participants.

All nurse employees were invited to participate in the survey, which was available on Presbyterian Healthcare Services' private, statewide Internet system. Employees were told that the purpose of the survey was to "gather input regarding factors that would facilitate you working in a direct patient care/patient role past age 50 or until you retire" All nursing employees, both RNs and LPNs, regardless of their job function and position, or whether they worked on acute care or in another setting, were invited to participate and were assured their responses were anonymous. They were allowed to complete the survey during their regular work shift. Two reminder email letters were sent during the month (September 2005) when the survey Web-site was open.

The response rate was 19% (N = 377). No attempt was made to determine the extent to which respondents were representative of all employees.

A statistician employed at Presbyterian analyzed the data. In order to conduct bivariate analyses, the age response categories were dichotomized into 40 and older and under age 40. The Pearson chi-square was used to test for significance of differences between older and younger nurses on several characteristics. Spearman rank correlation coefficient was used to measure association between specific nursing practices and characteristics of the work environment and overall job satisfaction as measured by the question: "Regarding your work in general. How pleased are you with your job

as a whole?” with Four Likert response categories. Spearman rank correlation coefficient was also used to measure association between overall job satisfaction and intent to remain with the current employer as measured by the question “Would you like to stay at your current workplace for the rest of your current working life?”

A firm external to the hospital system—Morehead Associates—was retained to analyze the responses to the open-ended questions.

## Sages: Participant Confirmation Letter

The Robert Wood Johnson Foundation (RWJF) has funded a project entitled: Wisdom Works! The focus of this project is to learn how older nurses can extend their working lives by sharing their wisdom, as caregivers and clinical consultants, with other nurses and hospital workers, giving them valuable support. The expected deliverable is a white paper on this topic that includes a review of the literature, a report of a survey of currently practicing nurses, telephone interviews from the “Sages,” and a business case.

The Sages are experts in hospital nurse retention, the retention of older workers in other occupations, and the use of technological advances in patient care and the quality of care that will improve retention. You have been identified as a “Sage” whose expertise is invaluable in strengthening our knowledge of nurses and their career needs. We seek your commitment in helping us create a document that has the potential for impact and action.

As a Sage, you will be involved in an interview not to exceed 1.5 hours. This interview will begin with the verification of some demographic information such as place of work and professional title, and proceed with your interview conducted by AFYA, Inc. Within 1-2 days of receiving this e-mail, Stephanie McDaniel of AFYA, Inc., will contact you to confirm you’re willingness to participate in this project as well as to determine the most convenient date and time for your interview. Please know that it is our sincere desire to conduct the interviews throughout November 2005. Additionally, the interviews will be monitored by one of the RWJF Executive Nurse Fellows—Charlene Connolly, Ed.D., R.N., or Barbara J. Hatcher Ph.D., M.P.H., R.N..

We appreciate your willingness to participate and to help us better understand how best to retain older nurses in the workplace.

Sincerely,

Charlene Connolly  
*Wisdom Works, Investigator*  
*Provost, Medical Education Campus*  
*Northern Virginia Community College*

Barbara J. Hatcher  
*Wisdom Works, Principal Investigator*  
*Director, Center for Learning, Public & Global Health*  
*American Public Health Association & Interim Secretary General,*  
*the World Federation of Public Health Associations*

You have been selected as a thought leader in nursing and healthcare, so your opinions are very important to the development of a White Paper that a group of us have been selected to write, under the auspices of the Robert Wood Johnson Foundation. This White Paper is to address the Role and Function of the Older Nurse in the Workforce at a time when severe nursing shortages are projected. This paper should guide setting in motion strategies that will improve the present working environment, but more importantly, get leaders to ‘prime’ their organizations for future older nurses. Will you participate in this taped interview?

There will be four parts to this interview. I already have some critical information about you as a leader, but would like to verify and amplify a bit about your background. Second, I’d like your general opinions about the older nurse. Finally, I’d like to ask you some questions about enhancements to the work environment that might be attractive to older nurses.

### **Part A. Selected Demographics**

Title:

Region:

Classification: Researcher, Academic, Practitioner, other

### **Part B. (Images and characteristics of the older nurse through the eyes of sages)**

1. When you think of ‘older nurses’ in the workforce, what words come to mind that characterize their attributes?
2. As you think about the older nurse, is it possible to stay in nursing at an older age? Explain your rationale.
3. If you put yourself in the shoes of an older nurse, talk to me about what the opportunities and barriers would be to continue in bedside practice.
4. What is your opinion about intergenerational and/or multicultural workers and the impact that these workers have on the older nurse.
5. If you were consulting with hospital administrators, such as a CEO, CNO, or Human Resource executive, what advice would you offer these leaders in regard to the older nurse?

### **Part C. (Job role and work environment adaptations)**

Assuming that an organization had decided to actively retain and invest in job role and work environment modifications for the older nurse, please give us your best ideas about these questions.

1. Thinking about job roles, what changes do you think could be made to the bedside staff nurse role that would enhance the older nurse’s ability to function in this position?
2. What new or modified positions exist that you believe could be ideally suited for the older nurse?

3. If you were to implement the changes you suggested in question one and two, what advice do you have about how to ‘sell’ these changes to younger nurses? To other professional colleagues? To human resource leaders?
4. Thinking about the work environment and all of the dimensions that nurses are engaged with in their practice, what changes would you advocate for regarding modifications to actual care delivery practices?
5. To change the physical space—with the older nurse in mind?
6. To use technology differently—with the older nurse in mind?
7. To provide continuing education—with the older nurse in mind?
8. To foster patient safety—with the older nurse in mind?
9. To promote patient centered care—with the older nurse in mind?

**Part D. (Organizational/Macro-systems Readiness)**

1. When thinking about designing a work environment and human resource benefits aimed at the older nurse, generally speaking, what do you perceive as organizations’ readiness to accept these changes (i.e., younger nurses, supervisors, executive management, unions)?
2. When thinking about the older nurse what current policies, if any, constrain workplace enhancements (i.e., institutional, Macro-Systems)?
3. When thinking about the older nurse, what policy options does the nation need to consider?
4. How would unions perceive strategies aimed at the older nurse?
5. In closing, what additional thoughts do you have about retaining the older nurse? Is there anything that has not been discussed that you would like to add? What three points would you most like to make—in terms of the statements that you made—that best summarize your thinking.

## Health System Nurse Survey

To begin this survey, it will be helpful to have some general information about you. All information will be maintained as confidential and the results will only be reported in aggregate. Please answer the following questions.

### DEMOGRAPHICS

What is your age?

- Under 40
- 40–49
- 50–59
- 60–65
- 66–or older

What is your gender?

- Female
- Male

Which setting *best* depicts where you practice?

- Acute care medical/surgical
- Acute care intensive care or specialty units
- Acute care without ‘hands on’ nursing
- Home care
- Ambulatory/outpatient
- Skilled/Long term care
- Other: (describe) \_\_\_\_\_

Which role *best* depicts your practice?

- Direct patient care
- Case manager or care coordinator
- Staff development or patient educator
- Quality improvement or utilization review
- Other: \_\_\_\_\_

Which best describes your seniority/total years spent as a *practicing Registered Nurse*?

- Less than two years
- 2–5 years
- 6–10 years
- 11–15 years
- 16–or greater

Which best describes your seniority in the institutional setting of your current employer?

- Less than two years
- 2–5 years
- 6–10 years
- 11–15 years
- 16–or greater

Which best describes your domestic arrangements (check more than one, if necessary)?

- Live alone in own residence
- Live with spouse/significant other in own residence
- Live with children in own residence
- Live with parents or other extended family in own residence
- Care for significant other/parents/child or extended family in a non-institutional setting outside of primary residence and in a non-institutional setting
- Care for significant other/parents/child or extended family in an institutional setting (i.e., long term care) outside of your primary residence
- Other: (describe)

Which best describes your current *primary* working hours?

- 8 hour days, full-time
- 8 hour days, part-time
- 8 hour evenings, full-time
- 8 hour evenings, part-time
- 8 hour nights, full-time
- 8 hour nights, part-time
- 12 hour days, full-time
- 12 hour days, part-time
- 12 hour evenings, full-time
- 12 hours evenings, part-time
- Other: (describe)

How many weekends do you usually work in a month?

- None
- One
- Two
- Three
- Four

### SECTION ONE: Perceptions of 'fitness' for work

As you reflectively think about your nursing practice in relationship to other younger nurses, please rate your practice in these areas. "Generally speaking, my abilities are: 1 = Better Than, 2 = the Same As, or 3 = Less than, younger nurses in these categories:"

|  |   |   |   |
|--|---|---|---|
| A. Keeping pace with assigned workload                   | 1 | 2 | 3 |
| B. Managing difficult families                           | 1 | 2 | 3 |
| C. Keeping abreast of and using new technology           | 1 | 2 | 3 |
| D. Handling ethical dilemmas                             | 1 | 2 | 3 |
| C. Influencing physicians                                | 1 | 2 | 3 |
| D. Guiding other disciplines, including follow through   | 1 | 2 | 3 |
| E. Enduring unit-based pressures                         | 1 | 2 | 3 |
| F. Interpreting labs, monitors, and other clinical data  | 1 | 2 | 3 |
| G. Working consecutive days                              | 1 | 2 | 3 |
| H. Mentoring staff and students                          | 1 | 2 | 3 |
| I. Managing highly complex patients                      | 1 | 2 | 3 |
| J. Pioneering changes in practice parameters             | 1 | 2 | 3 |
| K. Providing culturally sensitive care                   | 1 | 2 | 3 |
| L. Tailoring patient education                           | 1 | 2 | 3 |
| M. Lifting, bending, and physically performing           | 1 | 2 | 3 |
| N. Functioning in Codes and Disasters situations         | 1 | 2 | 3 |
| O. Tailoring discharge planning                          | 1 | 2 | 3 |
| P. Working with multi-generational workers               | 1 | 2 | 3 |
| Q. Embracing non-patient care organizational change      | 1 | 2 | 3 |
| R. Documenting outcomes of care                          | 1 | 2 | 3 |
| S. Preventing patients from high risk situations         | 1 | 2 | 3 |
| T. Assessing patients                                    | 1 | 2 | 3 |
| U. Assisting with JCAHO (or other accreditors) readiness | 1 | 2 | 3 |
| V. Maintaining infection control standards               | 1 | 2 | 3 |

|  |   |   |   |
|--|---|---|---|
| W. Using and troubleshooting high tech equipment         | 1 | 2 | 3 |
| X. Providing feedback to administration                  | 1 | 2 | 3 |
| Y. Delegating to nursing and other professional staff    | 1 | 2 | 3 |
| Z. Showing compassion for patients, families & coworkers | 1 | 2 | 3 |

## SECTION TWO: Perceptions of the work environment

As you think about your unit's work environment, both now and for the duration of your career, rate the relevant importance of the following factors that would influence the quality of your work life. Use this scale: 1 = highly impacts me; 2 = moderately impacts me, and 3 = has very little or no impact on me.

"My work environment matters to me, so I am most likely to continue my employment on a unit that has:"

|  |   |   |   |
|--|---|---|---|
| A. Consistent staff-patient ratios   | 1 | 2 | 3 |
| B. Permanent versus temporary staff  | 1 | 2 | 3 |
| C. Specialty teams (e.g., 'lifting' teams, IV teams)                                 | 1 | 2 | 3 |
| D. Supplies at the bedside   | 1 | 2 | 3 |
| E. A discharge planner   | 1 | 2 | 3 |
| F. A staff developer   | 1 | 2 | 3 |
| G. A Clinical Nurse Specialist   | 1 | 2 | 3 |
| H. A Case Manager  | 1 | 2 | 3 |
| I. A chaplain or social worker   | 1 | 2 | 3 |
| J. Cardiac and other monitors  | 1 | 2 | 3 |
| K. Computer access to the internet   | 1 | 2 | 3 |
| L. Physical accommodations for the family  | 1 | 2 | 3 |
| M. A quiet place to do paperwork   | 1 | 2 | 3 |
| N. A quiet place to take a break   | 1 | 2 | 3 |
| O. Patient assignments are made exclusively by acuity                                | 1 | 2 | 3 |
| P. Patient assignments are made exclusively by room clusters to minimize walking     | 1 | 2 | 3 |
| Q. Patient assignments are made exclusively on care continuity                       | 1 | 2 | 3 |
| R. Bright and cheerful décor   | 1 | 2 | 3 |
| S. Subdued and peaceful décor  | 1 | 2 | 3 |
| T. Equipment that is immediately available   | 1 | 2 | 3 |
| U. Nurses who use pagers, PDAs/handheld computers and other communication technology | 1 | 2 | 3 |

|   |   |   |   |
|---|---|---|---|
| V. Multi-generational nurses  | 1 | 2 | 3 |
| W. Noise restrictions (i.e., no paging)   | 1 | 2 | 3 |
| X. Specialty equipment is available to handle large patients, confused patients, etc. | 1 | 2 | 3 |
| Y. Bright lighting  | 1 | 2 | 3 |
| Z. Subdued lighting   | 1 | 2 | 3 |
| AA. Decentralized or no nursing stations  | 1 | 2 | 3 |

### SECTION THREE: Perceptions of human resource practices

As you think about the human resource practices, both now and for the duration of your career, rate the following factors that would influence your quality of life satisfaction. Use this scale: 1 = highly impacts me; 2= moderately impacts me, and 3 = has very little or no impact on me.

“Human resource practices are important to me, so I am most likely to continue to work if I am able to:”

|   |   |   |   |
|---|---|---|---|
| A. Influence my work schedule   | 1 | 2 | 3 |
| B. Limit the length of my work day  | 1 | 2 | 3 |
| C. Limit the number of consecutive days I work  | 1 | 2 | 3 |
| D. Limit the physical dimensions of my work   | 1 | 2 | 3 |
| E. Take an assignment with a lower nurse-patient ratio than other nurses  | 1 | 2 | 3 |
| F. Seek job roles that are peripheral to, but complement bedside care   | 1 | 2 | 3 |
| G. Retain retirement benefits at the highest rate of pay if a position with a lower rate of pay comes available | 1 | 2 | 3 |
| H. Retrain for alternative positions  | 1 | 2 | 3 |
| I. Attend continuing education to keep abreast of trends  | 1 | 2 | 3 |
| J. Restrict job functions (i.e., use of computers), but compensate in other areas                               | 1 | 2 | 3 |
| K. Work through a phased-in retirement  | 1 | 2 | 3 |
| L. Formally mentor other nurses   | 1 | 2 | 3 |
| M. Have adult support services available to help reduce the burden of caregiving for family/significant others  | 1 | 2 | 3 |
| N. Take a longer rest break during the work shift   | 1 | 2 | 3 |
| O. Participate in social events that are geared to senior staff   | 1 | 2 | 3 |
| P. Participate in exercise and other wellness programs geared to senior staff                                   | 1 | 2 | 3 |
| Q. Have ‘floating’ reduced or eliminated  | 1 | 2 | 3 |

#### SECTION FOUR: Likelihood of collegial support

When thinking about younger staff and the potential to design a work environment and human resource benefits aimed at the older nurse, generally speaking, what do you perceive as their readiness to accept these changes? Use this scale: 1 = eager and supportive; 2 = supportive as long as their needs are also met; and 3 = unready and most likely, non-supportive.

“My younger colleagues support—to varying degrees—the contributions of older nurses; I believe their response to these changes would be:”

|   |   |   |   |
|---|---|---|---|
| A. Modified job roles for older nurses  | 1 | 2 | 3 |
| B. Job duty restrictions for older nurses   | 1 | 2 | 3 |
| C. More flexible work hours for older nurses  | 1 | 2 | 3 |
| D. More frequent rest breaks for older nurses   | 1 | 2 | 3 |
| E. Special education opportunities for older nurses                                       | 1 | 2 | 3 |
| F. Modified work environments to accommodate older nurses                                 | 1 | 2 | 3 |
| G. Changing human resource benefits for older nurses                                      | 1 | 2 | 3 |
| H. Letting older nurses take reduced work loads   | 1 | 2 | 3 |
| I. Letting older nurses substitute job tasks more suited to their strengths and abilities | 1 | 2 | 3 |

#### SECTION FIVE: Open-ended responses

In closing, please comment on the following questions:

1. In thinking of your previous responses and more, what are the *top three factors* that will influence your intent to stay in nursing for the duration of your career?
2. What environmental or human resource factors did we not address that you think are important to retaining nurses like yourself?
3. Is there anything else you would like to say?

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