



Wisconsin's Health Care Workforce 2013 Report



A report by the Wisconsin Hospital Association

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Executive Overview

Since the release of the Wisconsin Hospital Association's first health care workforce report in 2004, ensuring that Wisconsin has an adequate supply of health care professionals has been one of WHA's top priorities.

Ten years ago, Wisconsin was beginning to gain recognition as a high-quality high-value state even as hospitals struggled to fill vacancies in key clinical positions. Nurse vacancies, for example, hovered around an average of eight percent. Some organizations were offering signing bonuses, and WHA was actively encouraging health education programs to admit and graduate more students to avert shortages.

Now, a decade later, some things remain the same. Wisconsin's overall performance in patient quality and safety has continued to gain in stature. The educational system in Wisconsin still provides strong educational programming for health care occupations. Wisconsin hospitals continue to offer family-sustaining jobs with good benefits in an industry that has, so far, not experienced serious workforce reductions.

In other ways, however, the health care workforce environment has changed over the past decade. A variety of factors came into play. Perhaps some of the most dramatic were that the country experienced a serious recession, the average age of Wisconsin residents and workers continued to climb, and the Affordable Care Act (ACA) brought health reform to America's door. The uncertainty that has shrouded the health care environment over the past 24 months has further complicated the already dynamic process that it takes to staff a hospital 24 hours a day, 7 days a week, 365 days a year.

While vacancy rates have dropped to the single digits for many health care occupations, the challenges of workforce planning have only increased. The recession caused many hospital employees who were nearing retirement age to rethink their exit strategy. The economic challenges of recent years also affected utilization of medical services as people delayed elective procedures, which brought a slowdown in utilization. Increasingly, surgeries and procedures have shifted to outpatient settings, so while the number of professionals employed in hospitals may be decreasing, employment opportunities in outpatient settings have remained steady.

While it is only logical that an aging population will demand more care and easier access, it is also feasible that changes in payment, reimbursement and direct costs to the patient could temper demand.

The ACA is designed to expand coverage, but at this point, it is unclear if that goal will be met. Models for practicing team-based care and the development of health care homes offer the promise of new ways to deliver high-quality care at reasonable prices. Team-based care and models for health care homes and other new ways to deliver care with good outcomes at a reasonable price are likely to be considered.

Wisconsin Hospital Association Recommendations

The Wisconsin Hospital Association makes the following recommendations:

1. Employers should thoughtfully plan for retirements in the workforce.
2. Health care employers should plan for those that will stay longer than anticipated, needing different resources than younger workers.
3. Educational facilities and health care institutions should closely monitor the supply of registered nurses to prevent both over and undersupply of this large segment of the health care workforce.
4. Hospitals should support the educational preparation of advanced practice professionals to meet existing and future workforce needs.
5. Education facilities should watch and be ready to prepare workers for new and emerging roles as the rate of change in health care accelerates.

Wisconsin: Population, Workforce and Future

Wisconsin's population continues to grow. According to projections in *Wisconsin's Future Population: 2010 to 2040*, the number of individuals living in Wisconsin will increase 14 percent between 2010 and 2040. It is estimated that Wisconsin will approach 6.5 million residents by 2040.

Year	Projected Population
2010	5,686,986
2015	5,781,800
2020	6,004,230
2025	6,203,710
2030	6,377,040
2035	6,478,350
2040	6,495,900

Cataract surgery, which is generally associated with advancing age, was the more frequently reported principal ambulatory procedure in 2012, with more than 60,000 cases.

The fastest growing segment of Wisconsin's population will be those over age 65. This group will gain more than ten percentage points (from 13.7 percent to 23.8 percent of Wisconsin's population) and, numerically increase from 770,000 to over 1.5 million. At the same time, the number of individuals between 15 and 64—those most likely to be in the workforce—is projected to remain fairly stable. At some point during the latter half of the 2020s, the number of elderly Wisconsin residents is predicted to exceed the number of children. New industries and those industries that are growing will likely find it difficult to recruit and hire from a workforce that is no longer expanding. Recruitment and retention of the older worker and longer careers are likely to result.

The graph below shows the consistent size of the workforce population over the next three decades and the growth of the number of individuals over age 65 who are likely to leave the workforce in retirement.

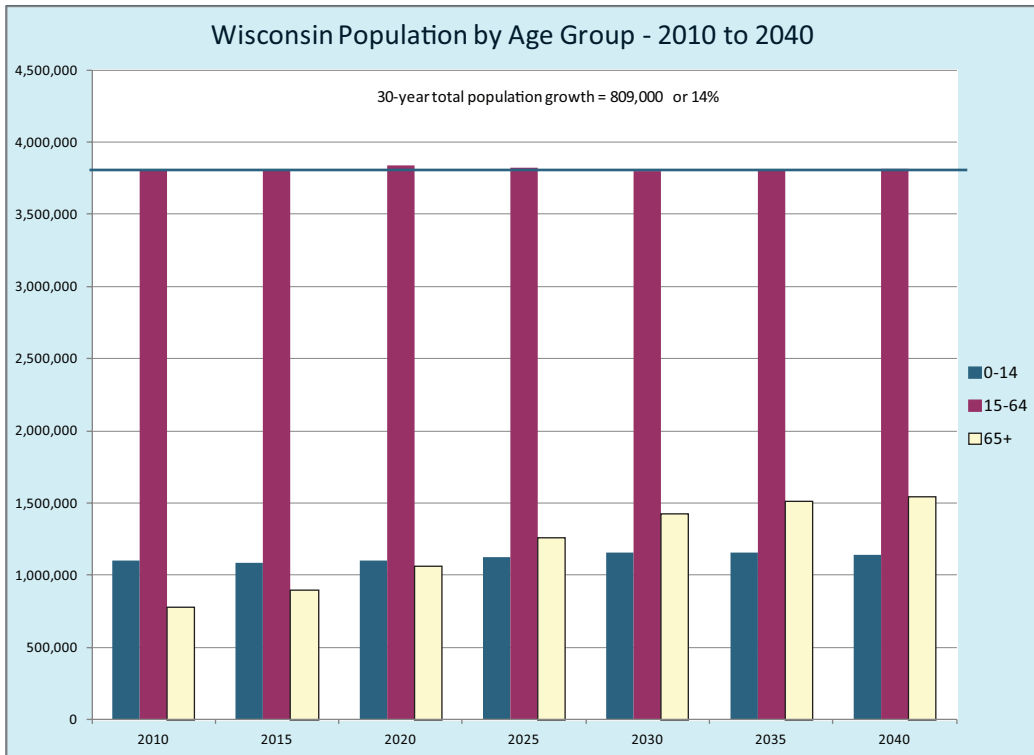
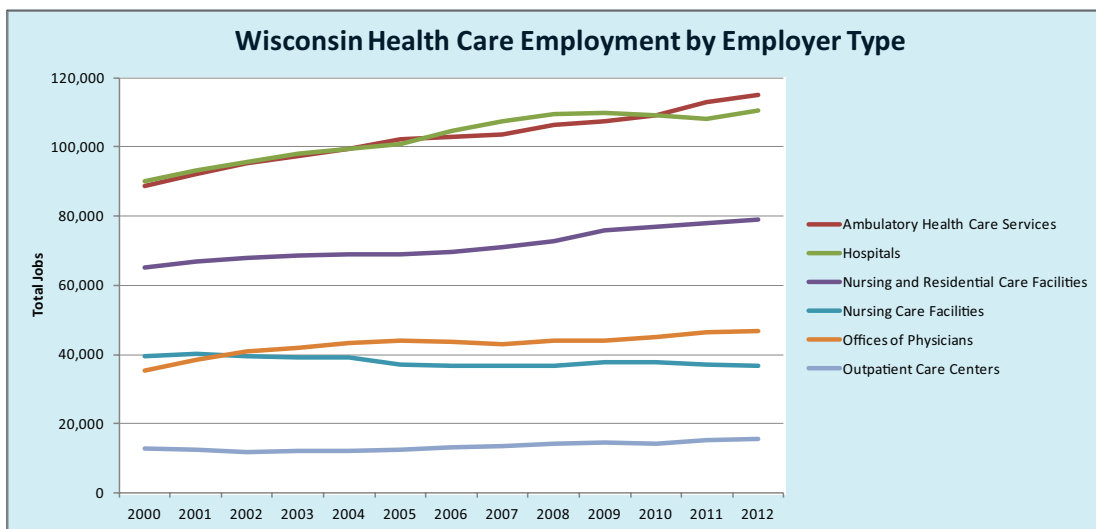
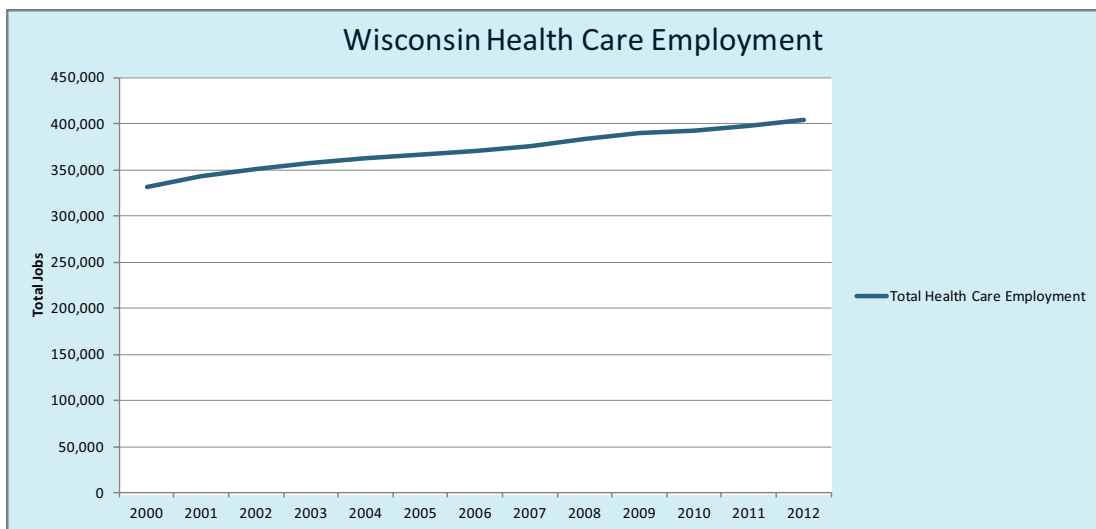


Chart courtesy of Dennis Winters. Data from DOA, Analysis by DWD, OEA.

The growth in the number of older residents is in sharp contrast to the lack of increase in the number of people who are available to work. The age of the health care workforce is a reflection of Wisconsin's demographics. It is also expected that older residents will consume more health care. One example is that cataract surgery, which is generally associated with advancing age, was the most frequently reported principal ambulatory procedure in 2012, with more than 60,000 cases.

Health Care Industry Remains Stable Source of Employment in Wisconsin

Unlike other industry sectors in Wisconsin, health care, which is a combination of six employer types including hospitals, remained a stable employment force during the recent recession and recovery. Slow and steady has characterized the growth in the health care employment sector. The Department of Workforce Development data shows that health care-related jobs have shown steady and consistent growth over the last decade and grew slowly even through the recent economic downturn.

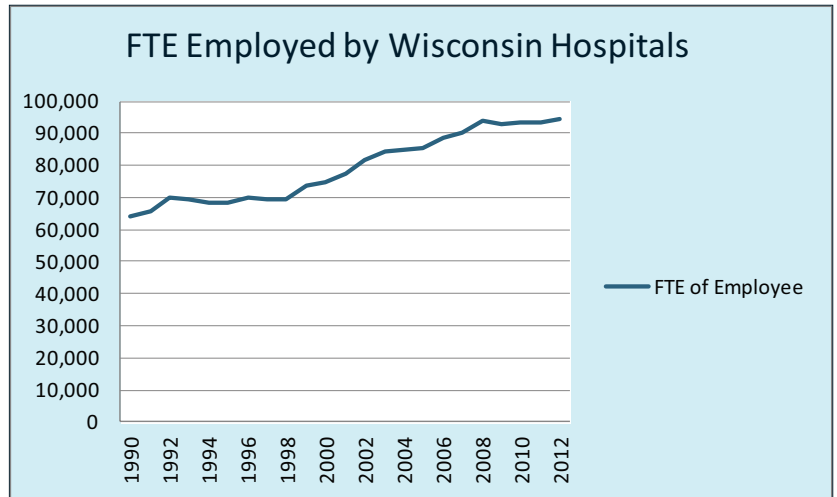


WHA Survey Illustrates that Hospital Workforce Reflects Economic Times

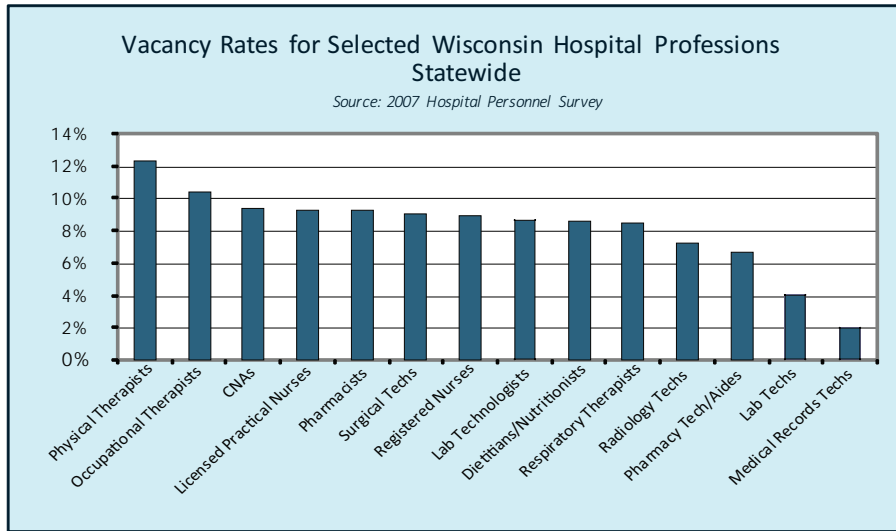
The Wisconsin Hospital Association conducts an annual hospital personnel survey. The survey focuses on clinical occupations, typically those that require the greatest recruitment and retention efforts by hospitals. Each year, the data represents the employment picture for a single week in late September. All hospitals in the state participate so the survey

is an accurate census of hospital employment. When the survey data is analyzed in conjunction with data from the WHA Information Center's *Guide to Wisconsin Hospitals*, which is an annual fiscal survey of hospitals, a fair picture of employment in Wisconsin hospitals emerges.

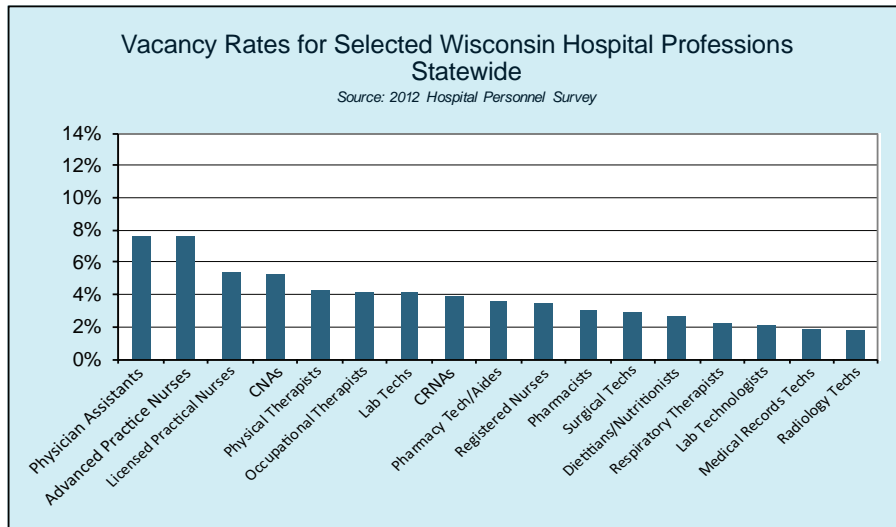
Shown here is a graph of full-time equivalents (FTE) employed by hospitals. This is not a report of the number of individuals employed, or the jobs, but a calculation based on hours worked by all employees. The number has increased over time and stabilized at about 94,000 FTEs since 2008.



While employment remained somewhat fixed during and after the recent recession, vacancy rates in the surveyed clinical occupations have steadily declined. A graph of position vacancies from as recent as 2007 (before the beginning of the recession) shows vacancy rates in some occupations were in the double digits.



The picture of 2012 data is much different.



While 2007 had only two occupations with vacancy rates below five percent, the current data shows nearly all occupational groups with vacancy rates below that rate. In 2012, only four occupations are above the five percent mark. The highest vacancy rates this year are for two groups that were not included in the 2007 survey: physician assistants and advanced practice nurses.

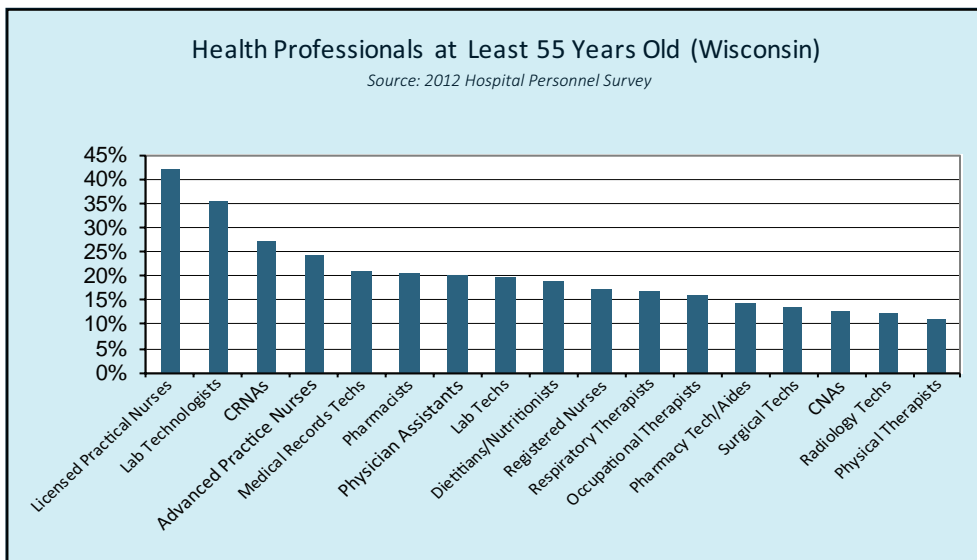
The highest vacancy rates in hospitals in 2012 were for physician assistants and advanced practice nurses. – WHA Hospital Workforce Survey, 2012.

What has changed?

The aging of Wisconsin has long predicted an impressive retirement rate for current workforce members. Although the workforce has continued to age, retirements have not occurred at the pace anticipated by age alone. The serious economic downturn that occurred beginning in 2008 created a new financial reality for many workers, who elected to stay at work longer than experts had predicted or workers had expected.

Gallup reports that the average retirement age in the United States has “crept up by four years over the past two decades, from 57 in 1991 to the current 61.” They also report that the average non-retired person expects to retire at age 66, up from 60 in 1995.

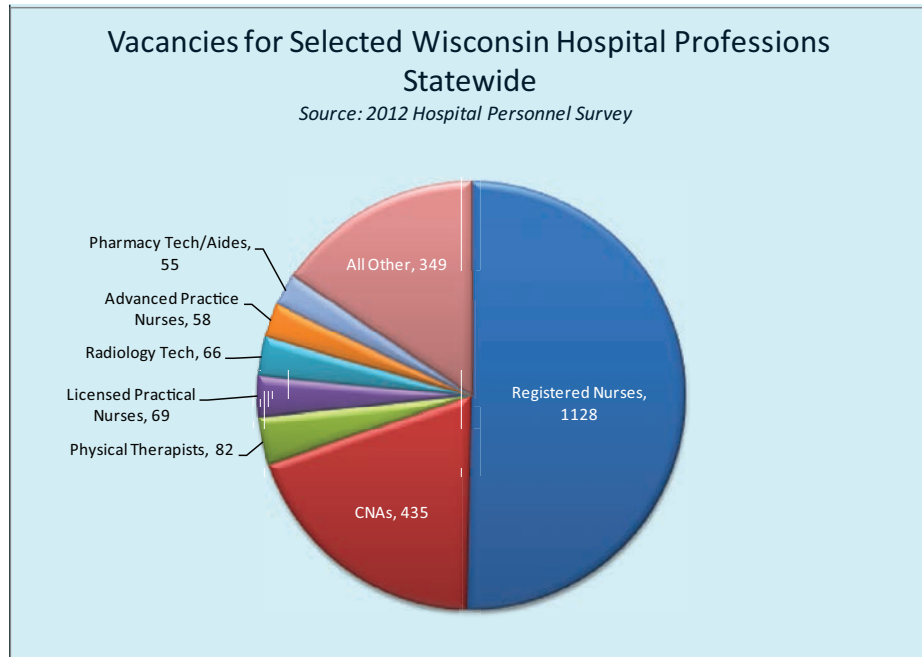
At one time, health care workers expected to retire at age 55. Now many of the occupational groups have at least 20 percent of their members beyond this marker. The result has been a workforce that is aging in place. Older workers have not been the norm in health care and employers are seeing new expectations, requirements and challenges created by these mature workers.



A second influence has been the increased number of newly-prepared health care workers entering the workforce. Wisconsin’s educational institutions responded to health care’s request for increased numbers of graduates while students gravitated toward health care as a stable source of strong jobs. The result was a greatly increased number of individuals available for work in health care. One example of this growth is the registered nurse workforce. The number of graduates of Wisconsin registered nurse entry programs taking the licensure exam was 2,877 in 2007, rising to 3,335 in 2012. Nationally, the Health Resources and Services Administration (HRSA) reports that the RN nursing workforce has more than doubled in the last decade.

Physician assistants (PA) and advanced practice nurses (APN) were not included in the survey until 2009. Changing employment patterns, availability of practitioners and difficulty in recruiting physicians for certain types of positions has resulted in hospitals being much more interested in and likely to hire these professional workers. New jobs for PAs and APNs have created opportunities that did not exist even five years ago, creating new demand for vacancies in these professions.

The 2012 Personnel Survey contained 2,242 vacancies in 17 selected occupations. The largest number of vacant positions, (1,128) for registered nurses reflects the size and importance of the RN workforce in Wisconsin hospitals. This number reflects only a 3.4 percent vacancy rate for this very large group. Despite the low rate, there are many RN jobs vacant in Wisconsin hospitals. Vacant jobs for certified nursing assistants are the next largest component with 435 positions accounting for 19 percent of the reported vacancies.



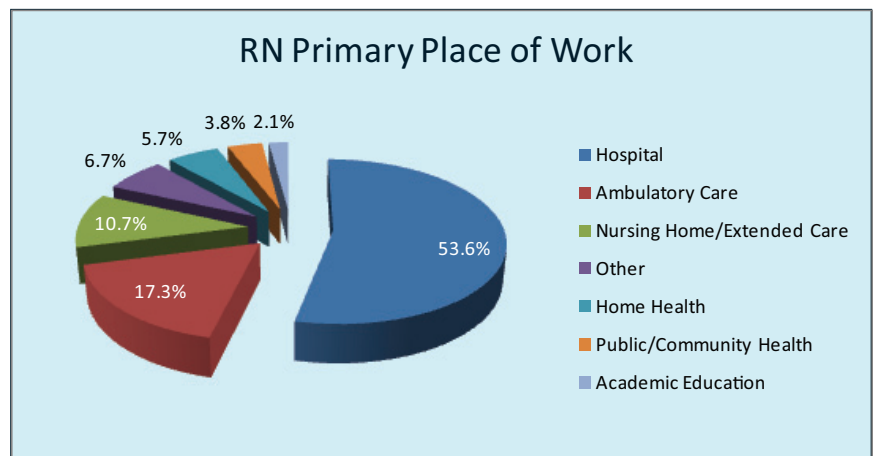
Reports on Nursing Workforce

Much of the interest in health care workforce is focused on registered nurses. While there are many other occupational groups and types of workers in health care, “registered nurse” is by far the largest group with over 90,000 RNs currently in Wisconsin and more than 2.8 million RNs nationwide.

Licensure Survey

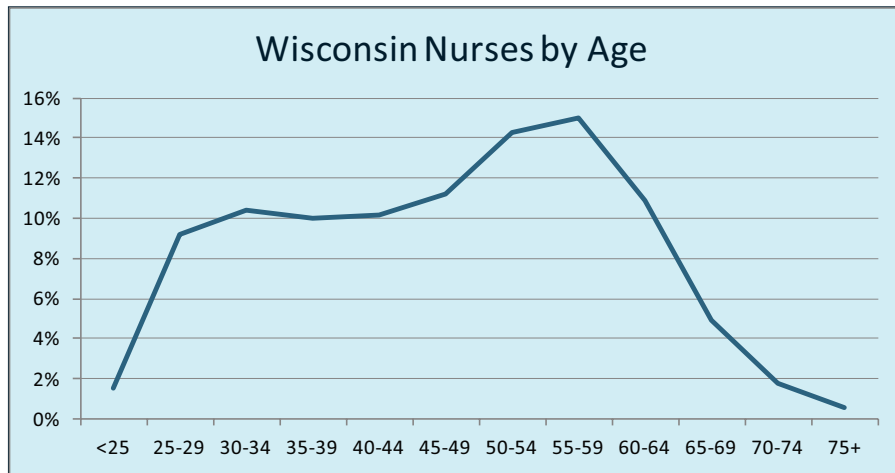
To renew their professional license in 2012, registered nurses were again required to complete a workforce survey. This complete census of registered nurses licensed in Wisconsin has allowed the state to be well informed about this segment of the workforce. A total of 81,187 registered nurses renewed their licenses for 2012. Only the online renewals were available for analysis, so the number reported by the survey is slightly smaller (78,159).

Eighty-three percent of nurses are actively working as a nurse with another 4.9 percent working in other positions, 2.6 percent of nurses reported that they were unemployed and looking for work and 64.9 percent of all employed nurses reported working in a staff nurse positions. Five and one half percent of those renewing their license reported being retired.



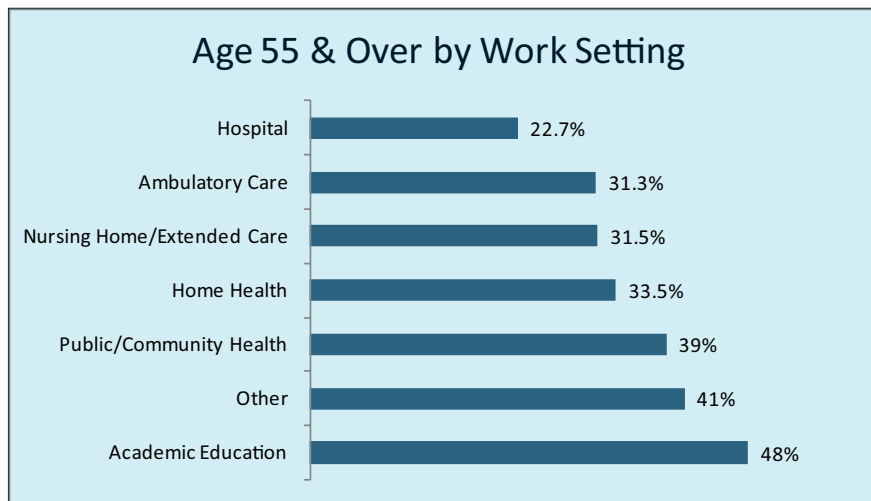
Hospitals employ the majority of working nurses.

Aging of the RN workforce continues to be a concern. Twenty-eight percent of all Wisconsin working nurses are over the age of 55.



Newly-graduated nurses tend to find their first employment in hospitals, resulting in hospitals having the lowest percentage of nurse employees over age 55 of all work settings. Still, more than one in five hospital nurses is over age 55. An almost alarming 48 percent of nurses in academic education are over age 55.

One in five nurses are over age 55.



On the survey, 77 percent of employed nurses reported they provide direct patient care, and of that group, more than 30 percent plan to leave direct patient care in the next nine years citing retirement as the major reason. Nurses across all regions of the state have an average of 15 years experience.

The survey included advanced practice nurses (APNs) which found that over 8,000 nurses hold the academic credential to work as an advanced practice nurse. Half of those nurses—about 4,000—are currently working in Wisconsin in an advanced practice nurse role (5.7 percent of the total nurses). This is lower than the reported national average of 8.7 percent. On average, APNs are about 50 years of age.

Nurses with graduate education are also needed in faculty roles and as nurse leaders in administrative positions. Given the current growing vacancy rate for APNs in hospitals, a focus in increasing the total number of nurses academically prepared for all of these roles, as well as a better understanding of what attracts master's prepared nurses to each of these roles, is important.

This survey reported all data in a regional format. This allows a better understanding of the distribution of registered nurses in Wisconsin and the distinctive demographics and descriptions of nurses based on where they live and work.

Wisconsin Center for Nursing Report

The Wisconsin Center for Nursing (WCN) published a nursing workforce report, *The Wisconsin Nursing Workforce: Status and Recommendations*, in 2013. The WCN report was based on data from the above mentioned licensure survey and guided by the IOM Report: *The Future of Nursing*. WCN's report identified eight nursing workforce issues in Wisconsin and made recommendations to address the issues.

Wisconsin Center for Nursing Workforce: Recommendations from 2013 Report

1. There is a shortage of Advanced Practice Registered Nurses (APRNs) to meet current and future access and health needs in Wisconsin.
2. Barriers exist in Wisconsin that prevent Advanced Practice Registered Nurses from practicing to the full extent of their education and certification.
3. There is a need to expand educational capacity to meet the projected demand for nurses which is 500 new graduates needed annually by 2020, as based upon forecasting models from the Wisconsin department of Workforce Development, Office of Economic Advisors.
4. Currently 53.5% of nurses working in Wisconsin have a BSN, or higher degree. Wisconsin will need to increase the educational capacity of BSN completion programs to support seamless academic progression options to meet the goal of 80% BSN by 2020.
5. Currently, 0.6% of Wisconsin nurses hold a doctoral degree in nursing. To assure an adequate faculty supply, along with increasing diversity, Wisconsin will need to double the number of nurses with doctoral degrees by 2020.
6. Turnover among new graduates is higher than turnover of experienced RNs. Retention of new graduates is essential to assure an adequate workforce, improve patient safety, and decrease healthcare costs.
7. There is a need to redesign the healthcare delivery system, and assure interprofessional coordination of care.
8. There is a significant need to enhance nursing and other healthcare workforce data collection and workforce planning.

National Council of State Boards of Nursing Survey

The National Council of State Boards of Nursing (NCSBN) conducted a national nursing survey in 2013 to replace the national nurse survey historically done by HRSA. Wisconsin had a 53 percent response rate to this survey and was well represented in the results. This report shows that trends seen in Wisconsin are reflective of national trends in the nursing workforce.

The report confirmed that 72 percent of full-time faculty is age 50 or older and verified the aging and near-critical shortage of nurse faculty. Wisconsin does not currently license advanced practice nurses, so it is of interest that nationally, 54 percent of APNs report being nurse practitioners, 30 percent report being clinical nurse specialists, 12 percent report being certified registered nurse anesthetists (CRNAs) and four percent report being certified nurse midwives.

The average number of hours that nurses report working per week, nationally, was 36.89 while the number for nurses in Wisconsin was 37 hours per week.

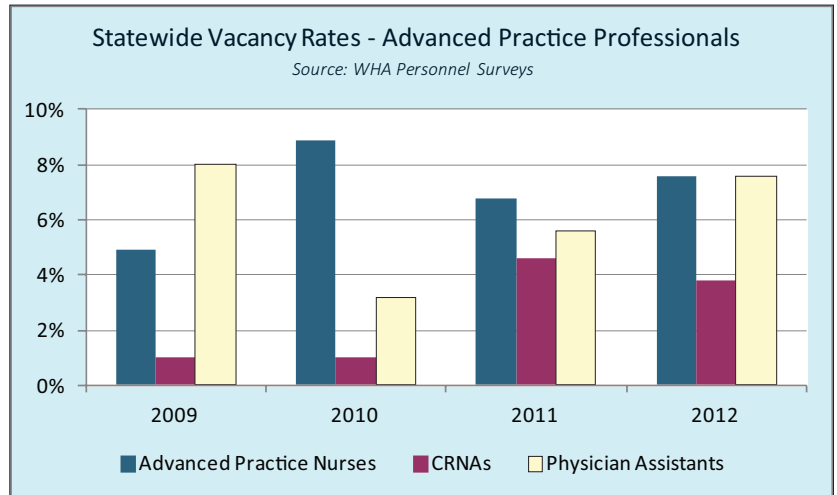
Responding to a question not asked in the Wisconsin survey, nine percent of nurses in the national survey reported using telehealth in their current nursing role.

Advanced Practice Professionals

Advanced practice professionals (APPs) are not new to health care, but the current economy, supportive research on patient outcomes and continuing difficulty in recruiting physicians has created increased interest in utilizing APPs in hospitals. Advanced practice nurses and physician assistants are professional groups that have existed for decades. Studies have shown that APPs form positive relationships with patients and have outcomes that approximate those of physicians.

Hospital positions for advanced practice nurses and physician assistant positions had the highest vacancy rate of the surveyed occupations. Both groups had 7.6 percent vacancy and the rates for both increased over last year. Hospital members of WHA report anecdotally that the vacancy rate is the result of the number of new positions being created, rather than serious difficulty in recruitment.

There is mounting evidence that suggests that the predicted shortage of primary care physicians that will be needed to care for those newly eligible for insurance under the Affordable Care Act (ACA) can be partially addressed with increased use of advanced practice professionals. These articles suggest that there is great employment potential for these clinicians in primary care. Long present in physician offices and ambulatory environments, APPs are also increasingly being employed by or entering into other employment agreements with hospitals to provide care in the acute care setting. APPs work in hospital emergency departments, function as hospitalists, work with specific patient populations and special units and support procedural suites.



In addition to the increasing demand for APPs in hospitals, the expected growth in patient demand for basic medical services created by new access to health care via the ACA has resulted in new interest in APPs as primary care providers. The additive effect of both acute care and ambulatory growth for APPs suggests that these professionals have many career opportunities, they will be increasingly difficult to recruit, and that educational capacity will need to grow to meet these workforce needs.

Physician Assistants

The American Academy of Physician Assistants released a report on physician assistant practice in the hospital environment. It reported the following national data:

There are nearly 75,000 clinically-practicing PAs. Forty percent (30,000 PAs) practice primarily in hospitals. Another 20 percent (15,000) practice at least part of the time in hospitals. While PAs work almost anywhere in a hospital, they most often practice in emergency departments, inpatient services, operating rooms, outpatient units and critical care/intensive care units. (2010, p1)

The Wisconsin Department of Safety and Professional Services reports that there are 2,337 physician assistants licensed in Wisconsin, and that 1,997 reside in Wisconsin.

Wisconsin has five educational programs that prepare physician assistants. The newest at Concordia University began admitting students in fall of 2013.

Advanced Practice Nurses

In the 2012 Wisconsin RN licensure survey, 3,398 nurses reported that their primary nursing employment position was as an advanced practice nurse.

There are four categories of advanced practice nurses: clinical nurse specialists (CNS), certified registered nurse anesthetists (CRNA), nurse practitioners (NP) and certified nurse midwives (CNM). The last group holds a specific license to practice and currently 214 CNMs are licensed in Wisconsin.

Nurse anesthetists do not hold a specific license beyond their RN license, but they must be certified by their professional association to practice. The Wisconsin Association of Nurse Anesthetists reports that there are more than 650 CRNAs practicing in Wisconsin.

Nurse practitioners are also certified, but by many specialty organizations. In the 2012 RN relicensure survey, 3,835 nurses reported that they are currently certified as an NP, with the largest number being certified as family nurse practitioners. In that same survey, 2,233 nurses indicated that they are certified as a clinical nurse specialist with the single largest group being certified in areas of women’s health.

All of the above advanced practice nurses may be credentialed with prescriptive authority in Wisconsin. In addition to initial academic education, to become an advanced practice nurse prescriber (APNP) a certified advanced practice nurse must do additional course work in clinical pharmacy/therapeutics and pass an exam. From all the categories above, there are 4,597 APNPs in Wisconsin.

More than a dozen academic nursing programs in Wisconsin prepare nurses for advanced practice. There is significant student interest in advanced practice occupations, but schools report that finding the extended clinical learning experiences needed to prepare these practitioners is increasingly difficult making expansion of student capacity difficult. This difficulty is also reported by physician assistant programs; in fact, these programs compete for available clinical preceptors and learning experiences.

A recent study published in the *Journal of the American College of Surgeons* projected the demand for physicians, advanced practice nurses and physicians assistants. The study used the goals of health care reform, estimates of future spending and the historic relationship between spending and the health care workforce to reach its conclusions. If there are no significant changes to educational capacity, the study predicted that workforce will fall 20 percent short of patient demand for care by 2025. By this date, the number of Wisconsin residents over age 65 will increase significantly, and the shortfall would have serious effects on their ability to access care (Sargen et al).

A National Perspective on Health Care Workforce

Interest in and concern about the future health care workforce is not limited to Wisconsin. The Affordable Care Act (ACA) established a National Health Care Workforce Commission, a multi-stakeholder workforce advisory committee charged with developing a national health care workforce strategy beginning in 2010. To date, Congress has not provided the necessary funding for the Commission to be convened. Despite the lack of funding, the commission has been named, and attention has been given at the national level to a large range of issues related to the health care workforce.

The National Council of State Boards of Nursing has released a national study of nursing (noted above) and the Health Resources and Services Administration (HRSA) has also analyzed and reported on the national nursing workforce.

Deloitte Center for Health Solutions in cooperation with the Bipartisan Policy Center in Feb 2013 released *The Complexities of National Health Care Workforce Planning: A review of current data and methodologies and recommendations for future studies*. The report "examines the demand-side of the workforce equation, and suggests that methods and analytical tools to project health care workforce demand should be integrated into a comprehensive national health professional workforce planning model."

In fall 2013, the American Hospital Association (AHA) released a white paper titled "*Development of an Effective Health Care Workforce Planning Model*" and a related toolkit. According to the AHA:

The U.S. health care system faces growing challenges—the U.S. population is aging at a rapid rate; health care reform is expected to bring millions more patients into the system; and there are anticipated shortages in numbers of trained health care professionals to care for these patients. Therefore, the need to start now to develop more effective and efficient workforce planning models (WPMs) for health care organizations is critical.

There is no current national model or framework for oversight, regulation or even review of the size, nature, or preparation required to build and maintain an adequate health care workforce. It seems unlikely that any national action will occur in the near future. This oversight is a state responsibility. Having the right number of health professionals at the right time, in the right location is important to ensure that Wisconsin residents have access to health care. But it is also important that state and student resources are not used to prepare too many or the wrong type of practitioners in the wrong locations, which would be a poor use of very scarce resources. The nurse workforce is a good example. It is unclear if Wisconsin will have an inadequate, adequate or oversupply of registered nurses. It is also unclear what the future holds for nurse demand.

A Changing Environment for Health Care Workforce

While it seems only logical that an aging population would demand more care and easier access, it is also feasible that changes in payment, reimbursement and patient costs will temper that demand. It would be good news if all future generations of Wisconsin residents maintained healthier lifestyles resulting in better health and fewer health care needs.

While the purpose of national legislation is to provide health insurance coverage to most if not all citizens, it is unclear at this point if that goal will be realized.

The health care industry is changing rapidly to meet current, proposed and possible environmental challenges for payment, access and workforce. Team-based care, health care homes and other new ways to deliver care with good outcomes at a reasonable price are likely in this uncertain environment. New provider and support roles, new delivery methods, new payment methods, and the always present scientific advancements seem to make it less clear today than ever how the future of health care will look.

In Wisconsin, hospital and health system administrative teams are known for innovation and leadership. As health care delivery systems evolve, new models of care will emerge. It is imperative that Wisconsin policymakers look to the future as they set policy that will determine how quickly Wisconsin health care organizations can adapt to the challenges of building a solid health care workforce.

Wisconsin Hospital Association Recommendations

The Wisconsin hospital Association makes the following recommendations:

Employers should thoughtfully plan for retirements in the workforce. It is clear that a significant number of individuals will leave the health care workforce in the near future. Hospitals should be prepared by knowing when and in what departments this will likely happen. AHA has a Workforce Planning Model and Assessment Tool designed to support this process.

But employers should also plan for those that will stay longer than anticipated, needing different resources than younger workers. Because there are fewer workers to replace those who leave health care, retention of older workers will become a necessity for hospitals. Health care professionals are all aware of the small but significant physical, mental and emotional changes that are part of routine aging. Careful consideration of these factors in employment settings will support the need of both employers and employees for older workers to remain at work.

Educational facilities and health care institutions should monitor closely the supply of registered nurses to prevent both over and undersupply of this large segment of the health care workforce.

Support the educational preparation of advanced practice professionals to meet existing and future hospital needs. APNs and PAs are currently the most difficult positions to fill, according to the WHA personnel survey. Supporting clinical learning for students in these occupations is only one of many ways that hospitals can work to address the growing need for these professional workers.

Watch and be prepared for new and emerging roles as the rate of change in health care accelerates. Team-based care, health care homes and other new ways to deliver care with good outcomes at a reasonable price are likely to create new employment roles. It is important that employers watch and prepare for these new workers.

Information Sources and Suggested Reading

Wisconsin's Future Population, 2010-2040: A First Look at the Next 30 Years. Preliminary Age-Sex Projections for the State of Wisconsin, Based on the 2010 Census. Prepared for the Wisconsin Department of Administration Demographic Services Center, July 2012. Accessed at: <http://www.doa.state.wi.us/docview.asp?locid=9&docid=9707>

Wisconsin Registered Nurse Survey- 2012 Report. Accessed at: http://www.wisconsincenterfornursing.org/2012_Wisconsin_RN_Survey_Reports.html. The data from this report is also held by the Wisconsin Hospital Association Information Center. The Center can provide data analysis for specific RN workforce questions.

The Wisconsin Nursing Workforce: Status and Recommendations. Wisconsin Center for Nursing, 2013. Accessed at: http://www.wisconsincenterfornursing.org/documents/2013WIStateWorkforce_v10%20091613%20FINAL.pdf

Wisconsin Health Care Employment Data retrieved via WORKNet query from this site: <http://worknet.wisconsin.gov/worknet/homeda.aspx?menuselection=da>

The National Council of State Boards of Nursing and the Forum of State Nursing Workforce Centers 2013 National Workforce Survey of Registered Nurses. *Journal of Nursing Regulation*. Volume 4, Issue 2. July 2013 Supplement.

The U.S. Nursing Workforce: Trends in Supply and Education. HRSA, Bureau of Health Professions, National Center for Health Workforce Analysis, April 2013.

Results of Gallup's annual Economy and Personal Finance survey. Conducted April 4-14 and reported at: <http://www.gallup.com/poll/162560/average-retirement-age.aspx?version=printExpected-Retirement-Age.aspx>

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