The vacancy rate for Registered Nurses (RNs) in all responding hospitals was 6.4 percent. Acute care hospitals also reported a 6.4 percent vacancy rate, and specialty hospitals reported a 5.2 percent rate.

The acute care hospital RN vacancy rate increased over the 2014 rate of 5.4 percent, and now stands 2.3 percentage points above the median rate of 4.1 percent for the 28 years of data collection. Vacant positions are covered by per diem nurses, staffing pools, on-call staff, overtime, and agency or traveler nurses.

Among the 40 hospitals that responded to both the 2014 and 2015 surveys, the number of filled RN positions increased by 3.4 percent, the product of a 25.2 percent increase in vacant positions and a 4.4 percent increase in budgeted positions. The RN vacancy rate for the cohort grew from 4.8 percent in 2014 to 5.7 percent in 2015. Vacancy rates increased in 30 cohort hospitals and declined in 10.
Observations on RN Supply and Demand Trends

- National studies (Buerhaus, *JAMA*, November 26, 2008) suggest that the drop in vacancy rates observed since 2002 was caused by the reentry to the workforce of older, married nurses responding to increasing RN earnings and the toll of relatively high unemployment rates on their families following the 2001 recession. The recession that began in December 2007 and drove the state unemployment rate to 9.3 percent in December 2009 appears to reinforce the trend. Improvements in the hospital workplace and widespread private-sector initiatives aimed at increasing the supply of new nurses have also been cited as affecting the trend, as has expansion of nursing education programs that led to unprecedented levels of entry into nursing over the past decade.

![Growth in the U.S. Nursing Workforce 2000 - 2010](image)

- The most authoritative studies (Auerbach, Buerhaus, and Staiger, *Health Affairs*, December 2011, and same authors *NEJM*, March 22, 2012) of projected supply and demand for registered nurses suggest that the recent reprieve in the nursing shortage may be short lived, although that forecast is highly dependent itself on uncertain forecasts about growth in the economy and reduced unemployment:

  “...it seems likely that growth in demand for RNs over the next few years will outstrip the projected growth in the workforce, leading to renewed shortages of RNs in the near term.

  Employers and workforce policymakers should not be lulled into complacency by the current absence of a nursing shortage. Instead, they should anticipate that the current positive effect of a weak economy on the RN labor supply is likely to evaporate as the economy improves and that shortage will reemerge.”

- Research from Auerbach, Buerhaus, and Staiger (*Health Affairs* August 2014) found that about one-fourth of surge in the RN workforce to 2.7 million RNs in 2012, 500,000 above the 2.2 million forecasted in 2000, can be explained by changes in the retirement age decisions of RNs:

  “We found that in the period 1969-90, for a given number of RN working at age fifty, 47 percent were still working at age sixty-two and 9 percent were working at age 69. In contrast, in the period 1991-2012 the proportions were 74 percent at age 62 and 24 percent at age 69. This trend, which largely predates the recent recession, extended nursing careers by 2.5 years after age fifty and increased the 2012 RN workforce by 136,000 people.”
December 2014, the National Center for Health Workforce Analysis issued its report, The Future of the Nursing Workforce: National and State-Level Projections, 2012 -2025. The report projects that, at the national level, “…the change in RN supply between 2012 and 2025 is projected to outpace demand (by 340,000)” and estimates that RN supply in Massachusetts will grow from 78,800 to 85,900, outpacing demand by 400 RNs.

According to a study in the October 2015 issue of Medical Care, Will the RN Workforce Weather the Retirement of the Baby Boomers? The report projects that, at the national level, “…if nurses continue to enter the workforce at the current rate, the U.S would have about 4% fewer registered nurses than needed by 2025”, according to a study in the October 2015 issue of Medical Care. …”That’s a remarkable turnaround compared to with the nearly 30% shortage predicted a decade ago” the authors said. “We still project the nation will have a shortage of around 130,000 nurses by 2025, which is by no means a small number but not the overwhelming shortage that we has once anticipated,” said co-author Peter Buerhaus , director of the Center for Interdisciplinary Health Workforce Studies at Montana State University. December 2015, the Health Resources and Services Administration projected a surplus of 340,000 nurses by 2025. “The key difference between our projects and HRSA’s lies in how each model projects net entry into the workforce, “the authors said.

Other Survey Findings

- Hospital nursing is a 24-hour, 7-day a week service. As reported in past years, the RN vacancies typically are concentrated in evening and night shifts. In the 2015 survey, 72% of hospitals reported shortages on the 11pm-7am shift and 62% on the 7pm-7am shift. Day shift shortages increased from 10 percent in 2014 to 25% in 2015. The 3pm-11pm shift significantly increased from 35 percent in 2014 to a shortage of 63 percent in 2015. The share reporting off-shift shortages increased markedly from 2014 to 2015, particularly for the 7pm-7am shift (from 49% to 62%) and the 11pm-7am shift (from 67% in 2014 to 72 percent in 2015).

- RN vacancy rates were highest in home health services, maternal child health (if combined), emergency departments, operating rooms, and adult ICUs. The lowest rates were in pediatrics, post anesthesia care units and critical care-neonatal units (NICU).
Hospitals reported that operating rooms, critical care – adult (ICU, CCU, Burn), emergency department, critical care – neonatal (NICU) and home health were the services that took longest to fill open RN positions, measured by the share reporting 60- or- more days to fill open positions. Sixty-five (65) percent of hospitals with operating rooms and 53 percent for critical care-adult (ICU, CCU, burn), and emergency department at 51 percent. Both critical care-neonatal (NICU) and home health were at 50 percent reported that it took 60 or more days to fill open RN positions.

Hospitals reported the highest percentages for filling positions in fewer than 30 days in the following service areas: ambulatory care, pediatrics, oncology inpatient, critical care-pediatric (PICU), post anesthesia care, medical/surgical, rehabilitation services, and home health. The percentage reporting fewer than 30 days to fill positions in these service areas ran from 27 to 35 percent.

RN overtime use was reported to have increased compared to the prior year by 44 percent of respondents, remained the same for 31 percent, and decreased for 25 percent. Use of agency and traveler RNs was reported to have increased from the previous year by 44 percent of respondents, remained the same for 29 percent, and decreased for 27 percent.

The survey results are based on the responses of 68 of 91 (75%) hospitals that received the survey in December 2015. The respondents included 59 acute care hospitals and 9 specialty (non-acute care) hospitals. The acute care hospital respondents account for 91 percent of the state’s acute care hospital inpatient discharges. Response rates for specific survey questions may be fewer than 68 due to not all hospitals answered all of the questions in the survey.