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Not-for-profit and public healthcare - US

Nursing shortage will pressure hospital margins over the next three to four years

Hospitals across the US are experiencing a nursing shortage because of strong demand for nurses coupled with a lack of supply. Nurse training programs and student enrollment are increasing, but it will take several years to fill the need. As a result, we expect the nursing shortage will continue for at least the next three to four years. In the interim, labor costs associated with recruiting, retaining and developing nurses will strain margins, a credit negative.

» **The nursing shortage will continue to weigh on hospital margins for the next three to four years.** Labor is the largest expense category for hospitals at about 51% of operating expense. Strategies to address the lack of nurses will compound existing expense pressures and negatively affect hospital margins.

» **Nursing shortages are often market specific; the South and West will be more negatively affected than the North and East.** An aging population and chronic disease management will drive increasing demand for nurses nationwide, with higher demand in the South and West because of strong population growth.

» **Rural hospitals will be more adversely affected.** Most rural communities cannot match the compensation offered by urban hospitals and will be disproportionately affected.

Why is there a nursing shortage?

While the US has experienced nursing shortages in the past, several factors exacerbate the current shortfall. An aging population, increased volumes from expanded healthcare coverage and the rising incidence of chronic disease drive today's demand. In addition, an aging nursing workforce, competition from staffing and traveler agencies, and a scarcity of training programs and nursing instructors place constraints on supply.

Efforts to increase nurse supply will take time as nursing schools seek to increase the number of nurse educators in order to expand school enrollment. The Health Resources and Services Administration shows that enrollment for undergraduate nursing degrees increased 34% between 2012 and 2016 and is projected to increase by another 9% by 2019. The projected supply of nurses will be about 3.9 million by 2025 compared to the projected demand for nurses of 3.5 million over the same period, resulting in an excess supply of 340,000 (see Exhibit 1).

Exhibit 1

Federal government predicts nursing supply will exceed demand by 2025

RN supply		RN demand	
Estimated supply, 2012	2,897,000	Estimated demand, 2012	2,897,000
Estimated supply growth, 2012-25	952,000	Estimated demand growth, 2012-25	612,000
New entrants	1,950,000	Changing demographics	584,000
Attrition	(998,800)	ACA-related increase in the number of insured	28,000
Change in average work hours	800		
Projected supply, 2025	**3,849,000**	**Projected demand, 2025**	**3,509,000**
Supply in excess of demand, 2025			**340,000**

Source: Federal Health Resources and Services Administration

The number of doctoral nursing graduates also significantly increased to 2,065 in 2011 from 512 in 2006, an annual growth rate of 22%. Expansion of the number of doctoral nursing graduates will be critical to the future workforce because nurses with advanced degrees constitute the largest source of nurse educators. The increase in training capacity will add 1.95 million new entrants into the nursing profession by 2025.

Alternatively, relief from the nurse shortage may be expedited if there is a broad economic downturn, akin to the financial crisis of 2007-08. During that time, many nurses remained employed and delayed retirement, entered or re-entered the workforce to support household financial obligations, and avoided agency or traveler work in favor of full-time employment and benefits. This also resulted in downward pressure on wages.

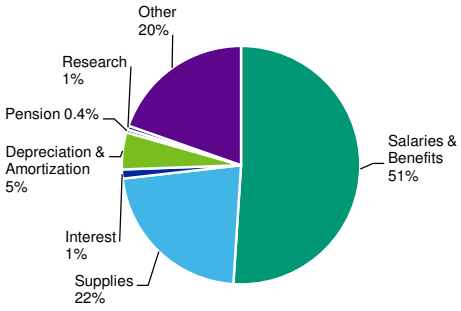
Until the increase in nurse supply materializes, hospitals will continue to face margin pressure because of rising wages, expensive recruitment and retention efforts that exceed revenue growth. Per our annual medians, average annual revenue growth of 5.7% between 2012 and 2016 exceeded salaries and benefits expense growth of 5.5%. However, salaries and benefits expense typically does not include recruitment expense, which tends to be higher during a favorable economic climate as nurses more frequently change employers because of confidence in the business cycle.

The nursing shortage will continue to weigh on hospital margins for several years

Labor is the largest hospital expense at about 51% and is increasing at a faster rate than total expense growth which is outpacing revenue growth, a credit negative (see Exhibits 2 and 3). The lack of nurses will compound these expense pressures and negatively affect hospital margins for the next three to four years. Although hospitals are using incentives to attract nurses and fill the need, those incentives carry additional expense. While we expect expense pressure to continue in the near to mid-term, most hospitals will successfully manage through the increased expense and return to historical margin levels.

Exhibit 2

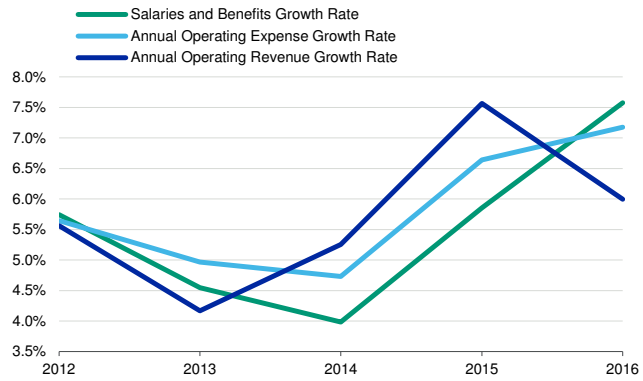
Salaries and benefits expense comprise the largest expense category by a wide margin



Average expense by expense category. Data for all hospitals from fiscal 2016 audits.
Source: Moody's Investors Service

Exhibit 3

Salaries and benefits expense growth outpaces total expense and operating revenue growth



Source: Moody's Investors Service

An aging population, increased incidence of chronic disease and alternative employment options, such as nurse staffing and traveler agencies, drive increased demand. Although the supply of nurses is likely to improve with expanded nurse training programs and increase in the number of eligible nurse educators, it will still take three to four years for the supply to meet expected demand. In the interim, hospitals are employing various strategies to attract and retain nursing talent — including increased compensation, sign on bonuses and attractive fringe benefits — all leading to increased costs and margin pressure.

Adding to the expense of retaining and recruiting nurses, hospitals are implementing strategies to address the shortage including partnering with local colleges to provide hands-on training to nursing students and creating internal pools to fill temporary vacancies without using contract labor.

Partnerships with local colleges strengthen the pipeline of nurses because the hospital provides a setting for the clinical training. While in training, nursing students develop attachments to the hospital and its personnel, which increases the likelihood that the student will choose to work at the hospital after graduation. Also, because students tend to stay local for their training, they may be more likely to stay local for employment.

Second, while the creation of internal nursing pools may reduce the need for contract labor, it requires that the hospital must manage those resources and, as a result, labor costs increase. Nursing pools consist of nurses who are scheduled as needed to supplement existing staff in times of high patient volumes. While this strategy reduces expensive contract labor, it may lead to higher attrition and lower productivity if nurses are not effectively trained across service lines.

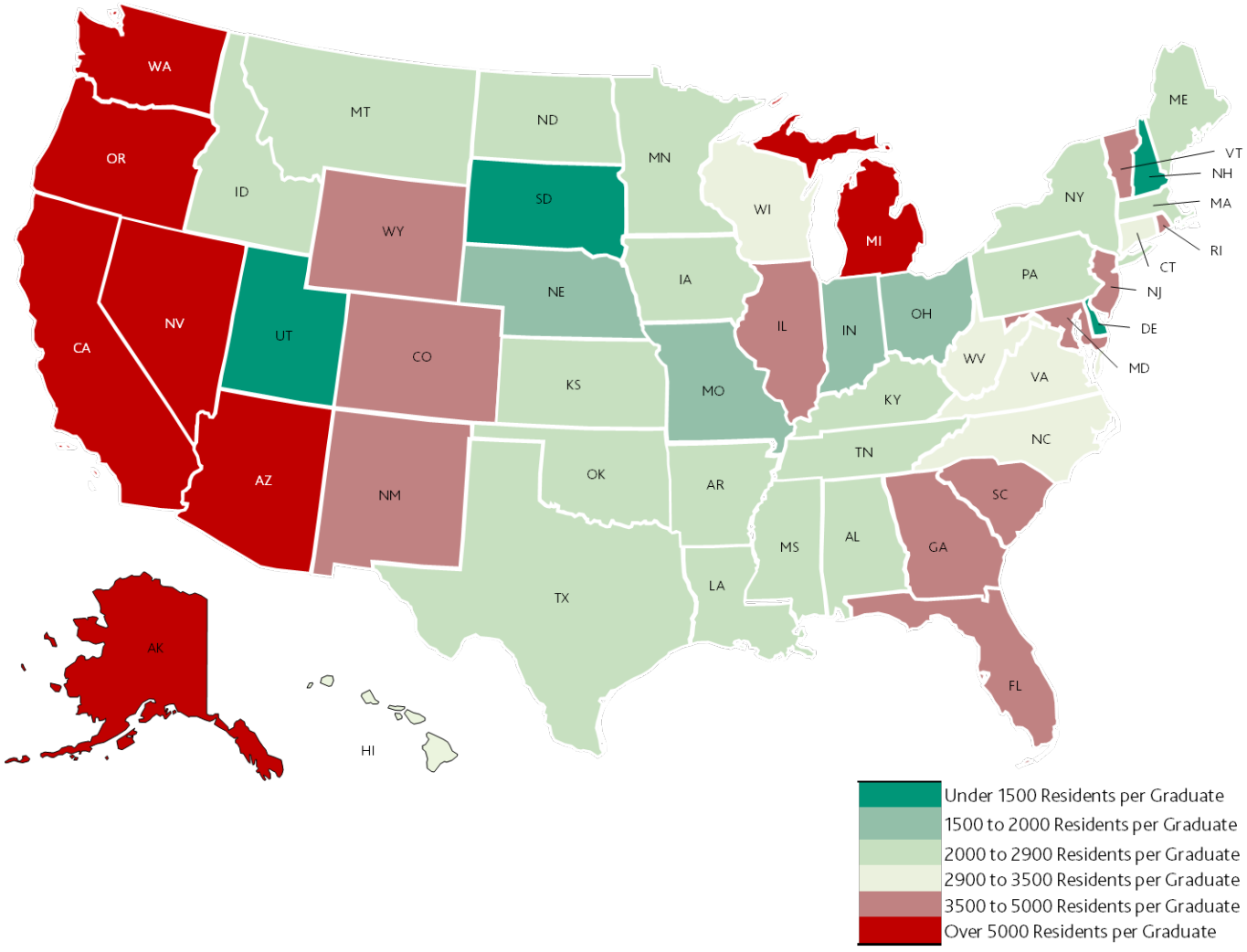
The resurgence of nurse staffing and traveler agencies is another source of rising nurse-related expenses. As the national economy improves and wages rise, nurses are more likely to frequently change jobs and opt for more lucrative contract-based or short-term work. Typically, traveler nurses are contracted for about 13 weeks at a time before moving to the next assignment. This creates another source of competition for the same supply of available nurses.

The South and the West will be more negatively impacted than the East and the North

The number of people over the age of 65 will increase to 21% in 2035 from 15% in 2015, according to US Census Bureau projections. The increase in this demographic is significant because people over the age of 65 generally require more healthcare services. While this demographic shift will be national, other factors will more adversely affect communities in the southern and western United States (see Exhibit 4).

Exhibit 4

The pipeline for nursing graduates is weakest in the southern and western states



Nursing school graduates per capita in calendar year 2016
Source: US Department of Education

The incidence of obesity and diabetes is growing disproportionately in the South, per a recent report by the US Centers for Disease Control and Prevention. Louisiana (Aa3 negative), Mississippi (Aa2 negative), Alabama (Aa1 stable) and West Virginia (Aa2 stable) have at least a 35% obesity rate (meaning, Body Mass Index greater than 30) in 2015, compared to the average of at least 20% in all states. Similarly, the opioid crisis is disproportionately affecting economically distressed communities in the same parts of the country.

In particular, the need for nurses in Florida (Aa1 stable), Texas (Aaa stable) and California (Aa3 stable) will be greatest. These states will not only see some of the highest population growth and an increasing average age in the US but also show the lowest number of nurses entering the work force by 2030, per a report from American Journal of Medical Quality.

In addition to variation by region, the unfavorable effect of the nursing shortage will differ by hospital within these communities. Hospital systems that either own a nursing school or are affiliated with a nursing program will better navigate the shortage than those local competing hospitals that are not affiliated with a nursing school.

Rural hospitals are more adversely impacted by the shortage

The shortage of nurse supply will most adversely affect rural hospitals. Large urban hospitals benefit from advantages such as their proximity to nursing schools, the ability to pay competitive wages, jobs for spouses and provide lifestyle perks in a city setting. Additionally, nurses tend to work near where they attended school and trained. As a result, rural hospitals may need to increase their financial incentives, typically in the form of sign-on bonuses and higher wages, to attract nurses.

A common strategy we observe by more rural hospitals is an active engagement plan with nearby nursing schools. Engagement often includes providing a clinical setting for nursing students to train, financial scholarships, chair endowments and mentorship programs. Affiliations that enable hospitals to have input in curriculum design and instruction to ensure strong nursing candidates are common. Phoebe Putney Memorial Hospital (A1 stable) in rural Georgia is closely aligned with several colleges and universities (for example Albany Technical College, Albany State University, Georgia Southwestern University, Abraham Baldwin Agriculture College, etc.) to provide a clinical training setting and assist in curriculum development, thereby building a pipeline of local nursing talent to Phoebe.

In addition, rural hospitals use telemedicine, electronic consultations (eConsults) and other technologies to bring needed clinical services and consultations to remote areas. Services such as eConsults enable local clinicians to consult with other clinicians remotely with the use of video conferencing. Stormont-Vail HealthCare (A2 negative), which serves the northeast portion of Kansas (Aa2 stable), has an eConsult program with the Mayo Clinic (Aa2 stable), which provides consultations for high acuity cases otherwise unavailable to those communities. Though technologies such as eConsults and other delivery models are promising, it is still unclear if they will lead to a net reduction in the number of nurses needed at a hospital.

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