Nurses comprises the largest sector of the healthcare workforce and the majority of nurses work in hospitals. Because of the prominence and importance of this employee group, the availability of nurses, particularly Registered Nurses (RNs), is of particular strategic importance to hospitals and health systems. An RN shortage appears to be emerging in certain specialty and geographic areas. This shortage may become more serious and widespread over time, due to changes in social, demographic and economic factors. Hospitals are implementing a variety of approaches to manage present and future shortages. However, broader public policy issues may also need to be addressed.

**Today, a nurse shortage is emerging in specialty areas...**

*Chart 1: Percentage of hospitals reporting increased difficulty in hiring and recruiting specialty RNs compared to six months earlier*

- Critical Care
- Emergency Services
- Med-Surg Care
- OR/Peri-Operative

**The shortage appears more severe in the West...**

*Chart 2: Median number of days to fill vacancies by region*

**And in rural areas.**

*Chart 3: Median number of days to fill vacant RN positions in urban and rural areas*
RN Dissatisfaction May Be Driving the Current Shortage in Hospitals

Job related stress for RNs is perceived to have increased in hospitals while salaries lag behind inflation. Hospitals have undergone fundamental change driven, in part, by changes in patient demand for care. Hospital patients are now older, sicker, and require a greater intensity of care from RNs and other personnel. At the same time, hospitals have restructured the provision of care through interdisciplinary teams. Now, there are fewer nurse managers in hospitals providing professional support to the nursing staff. Many nurses report dissatisfaction with the changes in hospitals and their jobs. Meanwhile, as the hospital environment has become more volatile, RNs have more employment choices outside the hospital. Demand for RNs in alternative work settings, such as home health, has increased.

When adjusted for inflation, RN wages have been flat in the last few years...

![Chart 4: Actual and inflation-adjusted RN wages](image)

At the same time, nurses have been under more pressure...

![Stresses Affecting RNs](image)

And have more employment opportunities outside hospitals.

![Chart 5: The percentage of RNs working in hospitals and other health care settings](image)
But Hospitals’ Ability to Respond is Limited by Competing Pressures

Most hospitals feel constrained in their ability to address RN issues. Increased competition and the need to cut costs conflict with efforts to improve working conditions for RNs in hospitals. Reduced reimbursement, utilization review and managed care have prevented hospitals from increasing the number of RNs they employ. At the same time, proposed staff ratio legislation in some states would mandate minimum requirements for nurse staffing and decrease management flexibility.

**Hospitals are facing many competing pressures…**

 Forces Increasing Costs
- Rising labor costs
- System-development requirements
- Increased acuity of patients
- Technology and drug costs

 Forces Decreasing Revenue
- Managed care
- Switch to other care settings
- Competition
- Medicare/Medicaid reimbursement cuts

**Resulting in hospitals adding fewer RNs, particularly in markets with high managed care penetration…**

*Chart 6: Annual percentage change in RN FTEs employed by hospitals based on MSA managed care penetration*

**And proposed staff ratio legislation would limit flexibility in staffing.**

*Map 1: States that have proposed staff ratio legislation impacting health care facilities*
The RN Shortage is Expected to Worsen Over Time

Currently, the shortage remains isolated in certain specialty and geographic areas. However, it is expected to become more widespread over time. Fewer people are now entering nursing education programs, and some programs have grown smaller or closed. In addition, the average age of nurses has been increasing. The number of nurses retiring each year will grow over the next few years, with insufficient numbers of nurses in the education pipeline to replace them. This will dramatically decrease nurse supply. At the same time, a number of demographic changes will increase demand for nurses. These include rising patient acuity and a growing number of baby boomer seniors with chronic care needs.

**The average age of RNs is increasing with the baby boomer generation…**

*Chart 7: Number of RNs by age category, 1980, 1996 and projected 2000*

**While the retiring RNs will be hard to replace as the supply pool shrinks…**

*Chart 8: National enrollment in RN education programs*

**So a shortfall between supply and demand will develop over time.**

*Chart 9: Projections of RN supply and demand to 2020*
Requiring New Hospital Strategies

A study of RN shortages commissioned by The American Organization of Nurse Executives and interviews we conducted with 46 hospital CEOs and nurse administrators found that hospitals are having difficulty recruiting and retaining nurses. Both studies identified common incentives and strategies that administrators use to recruit and retain nurses. Over the next decade, however, a more fundamental gap between supply and demand may require creative public policy solutions.

Administrators report using a range of incentives and other strategies to minimize their current shortages...

Table 1: Incentives hospitals use for recruitment and retention of nurses

<table>
<thead>
<tr>
<th>Incentives</th>
<th>% using</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flexible Hours</td>
<td>65</td>
</tr>
<tr>
<td>Bonus</td>
<td>27</td>
</tr>
<tr>
<td>Child Care</td>
<td>17</td>
</tr>
<tr>
<td>Relocation bonus or assistance</td>
<td>10</td>
</tr>
<tr>
<td>Differentials/incentive pay/holiday bonus</td>
<td>7</td>
</tr>
<tr>
<td>Benefits package</td>
<td>7</td>
</tr>
<tr>
<td>Transportation</td>
<td>5</td>
</tr>
<tr>
<td>Competitive salary/market parity</td>
<td>3</td>
</tr>
</tbody>
</table>

- “(We) have used agency nurses to cope with short term shortages, but they are bankrupting the hospital.”
- “To address the shortage, (we) now pay a signing bonus for new nurses and a bonus to staff members that help recruit new nurses.”
- “(Our) hospital has responded to the shortage by having managers working a lot of clinical hours.”

While continued pressures on hospitals and RNs will require coherent medium and long-term strategic solutions.

Table 2: Long-term strategies hospitals use for recruitment and retention of RNs

<table>
<thead>
<tr>
<th>Long-Term Strategies</th>
<th>% using</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supporting training and education</td>
<td>62%</td>
</tr>
<tr>
<td>Increasing communication and recognition</td>
<td>62%</td>
</tr>
<tr>
<td>Establishing links with nursing schools and education</td>
<td>47%</td>
</tr>
<tr>
<td>Changing staff mix</td>
<td>15%</td>
</tr>
</tbody>
</table>

- “An internal training program has been developed to provide a career ladder for our existing staff and to help develop a core group of critical care nurses with high loyalty to the institution.”
- “(We are) able to better retain nurses by creating a culture where nurses have more say in their job structure and greater job satisfaction.”
Policy Questions Raised by the RN Shortage

There may be a need for public policy discussion about nurse staffing issues at the local and federal levels.

- How should nurse education be funded and supported at the state and federal level?
- How can public policies, local initiatives and hospital programs develop more community interest in the nursing profession to bring supply and demand into balance?
- How can hospitals balance consumer demands for quality with pressures for cost control and the need for management flexibility in staffing?
- What can be done at a local and federal level to retain experienced nurses, particularly in critically under-served and rural areas?
- Are public policy interventions required to prevent a major RN shortage in the future, or will the market naturally ‘fix’ itself?

Statistics for RNs Working in Hospitals

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<thead>
<tr>
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<tbody>
<tr>
<td>RN FTEs</td>
<td>864</td>
<td>895</td>
<td>901</td>
</tr>
<tr>
<td>Percent of RNs Working Part Time</td>
<td>34.1%</td>
<td>34.3%</td>
<td>35.3%</td>
</tr>
<tr>
<td>RN FTE per Adjusted Admission</td>
<td>0.019</td>
<td>0.019</td>
<td>0.018</td>
</tr>
<tr>
<td>Number of Hospitals with Nursing Schools</td>
<td>129</td>
<td>150</td>
<td>150</td>
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</table>
### Hospital Sector

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Total Margin: 86 to 97 Trend</td>
<td>5.6%</td>
<td>6.7%</td>
<td>6.7%</td>
</tr>
<tr>
<td>Percent Change in Cost per Case: 86 to 97 Trend</td>
<td>-0.2%</td>
<td>0.2%</td>
<td>0.6%</td>
</tr>
<tr>
<td>FTE per Adjusted Admission: 86 to 97 Trend</td>
<td>0.08</td>
<td>0.08</td>
<td>0.09</td>
</tr>
<tr>
<td>Average Length of Stay (in Days): 86 to 97 Trend</td>
<td>6.5</td>
<td>6.2</td>
<td>6.1</td>
</tr>
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</table>

### Healthcare Industry

<table>
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<tr>
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<tbody>
<tr>
<td>National Health Expenditure as a % of GDP: 86 to 97 Trend</td>
<td>13.6%</td>
<td>13.6%</td>
<td>13.5%</td>
</tr>
<tr>
<td>Percent Uninsured: 86 to 97 Trend</td>
<td>15.4%</td>
<td>15.6%</td>
<td>16.1%</td>
</tr>
<tr>
<td>Number Uninsured (in Millions): 86 to 97 Trend</td>
<td>40.6</td>
<td>41.7</td>
<td>43.7</td>
</tr>
<tr>
<td>Percent Unemployed: 86 to 98 Trend</td>
<td>5.4%</td>
<td>4.7%</td>
<td>4.5%</td>
</tr>
</tbody>
</table>
Sources:


Chart 4: Findings from the National Sample Survey of Registered Nurses, 1980-1996, Bureau of Health Professionals, Division of Nursing, DHHS

Chart 5: Findings from the National Sample Survey of Registered Nurses, 1980-1996, Bureau of Health Professionals, Division of Nursing, DHHS


Chart 7: Findings from the National Sample Survey of Registered Nurses, 1980-1996, Bureau of Health Professionals, Division of Nursing, DHHS

Chart 8: Nursing DataSource 1997, Volume 1: Trends in Contemporary RN Nursing Education, Table 19, Center for Research in Nursing Education and Community Health, National League of Nursing

Chart 9: Report to the Secretary of the Department of Health and Human Services on the Basic Registered Nurse Workforce, 1996, National Advisory Council on Nurse Education and Practice, Bureau of Health and Human Services, Division of Nursing, DHHS

Map 1: American Hospital Association Analysis

Table 1: Research on Nurse Staffing, The American Organization of Nurse Executives, November 1998. Prepared by The HSM Group Ltd.

Table 2: American Hospital Association Interviews


Sources for “Stats to Know”:


Percent Change in Cost per Case: American Hospital Association Annual Survey, 1986-1997


National Health Expenditure as a Percent of GDP: Compiled by HCFA on www.hcfa.gov/stats/nhe-oact/tables/t09.html


Number Uninsured: Compiled by Bureau of the Census on http://www.census.gov:80/hhes/www/hlthlhs.html


TrendWatch is a quarterly report produced by the American Hospital Association and The Lewin Group highlighting important and emerging trends in the hospital and health care field.