Chapter 5: Workforce
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Physician Workforce

The number of active physicians per thousand population declined slightly after a lengthy period of growth throughout the 1980s and 1990s. The number of physicians per thousand varies by region and is particularly high in the Northeast and Mid-Atlantic and relatively low in parts of the South and West. The decline may be due in part to the leveling of the number of residents in training, physician retirements, and population growth (Charts 5.1 - 5.3).

Hospital Workforce

After declining in the early to mid-1980s, the number of full time equivalent employees (FTEs) working in hospitals has increased, although the rate of increase has moderated since 1993. However, FTEs per adjusted admission\(^{(1)}\) has been declining since 1992. The rate of decline was the same in 2000 as in 1999. The number of registered nurse (RN) FTEs has been increasing slowly; however, the number of RN FTEs per adjusted admission is decreasing. RN FTEs as a percent of total hospital FTEs has remained steady between 24 and 25 percent from 1986 through 2000 (Charts 5.4 - 5.7).

Current and Long-term Workforce Shortage

The combined pressures of an aging population, competition from other health care employers, financial constraints, and declining enrollment in health education programs have created critical shortages of health care professionals. Job types particularly affected include nurses, imaging and laboratory technicians, and pharmacists.

\(^{(1)}\) An aggregate measure of workload reflecting the number of inpatient admissions, plus an estimate of the volume of outpatient services, expressed in units equivalent to level of effort for an inpatient admission.
Results from a workforce survey sponsored by the AHA and other hospital organizations in Fall 2001 indicate that a large share of positions remain vacant in hospitals throughout the country. Hospitals reported vacancy rates ranging from 12 to 15 percent among imaging technicians, RNs, LPNs, and pharmacists - and further reported more difficulty in recruiting these same professionals than two years prior. According to survey results, hospitals see the workforce shortage as contributing to ED overcrowding and ED diversion, reduced number of staffed beds, and increased patient wait times (Charts 5.9, 5.10, and 5.12).

Today’s shortage is expected to worsen over the next 20 years. Based on current projections of increasing demand for health care, a shortage of more than 800,000 registered nurses is expected by 2020 (Charts 5.13 - 5.15).
Chart 5.1:
Total Number of Active Physicians per 1,000 Persons
1980 - 1999

(1) 1980 does not include doctors of osteopathy

Chart 5.2:
Total Number of Active Physicians(1) per 1,000 Persons by State
1999

Source: Health United States, 2001
(1) Includes active non-federal doctors of medicine and active doctors of osteopathy
Chart 5.3:
Medical and Dental Residents in Training in Community Hospitals
1980 - 2000


Chart 5.4:
Total Full Time Equivalent Employees Working in Hospitals
1980 - 2000

Chart 5.5:
Full Time Equivalent Employees per Adjusted Admission
1980 - 2000


Chart 5.6:
Number of RN Full Time Equivalent Employees and RN FTEs per Adjusted Admission
1986 - 2000

Chart 5.7:
RN Full Time Equivalents as a Percentage of Total Hospital Full Time Equivalents 1986 - 2000


Chart 5.8:
RN Employment by Type of Provider 1980 - 2000

Source: Findings from the National Sample Survey of Registered Nurses, 1980-2000, Bureau of Health Professions, Division of Nursing
Chart 5.9:
Mean Vacancy Rates\(^{(1)}\) for Selected Hospital Personnel
Urban, Rural, and Total
Fall 2001

Source: “The Healthcare Workforce Shortage and Its Implications for America’s Hospitals” Fall 2001, First Consulting Group
\(^{(1)}\) Percent of budgeted positions that are unfilled
Chart 5.10:
Hospitals Reporting More Difficulty Recruiting
Relative to 1999 for Selected Types of Hospital
Workers
Fall 2001

Source: "The Healthcare Workforce Shortage and Its Implications for America's Hospitals" Fall 2001, First Consulting Group

Chart 5.11:
Percent Change in Employment Cost Index(1), All Private
Service Industries, All Health Services, and Hospitals,
12 Months Ending June 2002

(1) Total compensation
Chart 5.12: Percentage of Hospitals Reporting Various Types of Workforce Shortage Impacts
Fall 2001

- ED Overcrowding: 38%
- Diverted ED Patients: 25%
- Reduced Number of Staffed Beds: 23%
- Increased Wait Times to Surgery: 19%
- Discontinued Programs / Reduced Services Hours: 17%
- Delayed Discharge / Increased Length of Stay: 12%
- Cancelled Surgeries: 10%
- Curtailed Acquisition of New Technology: 8%
- Curtailed Plans for Facility Expansion: 7%

Source: "The Healthcare Workforce Shortage and Its Implications for America's Hospitals" Fall 2001, First Consulting Group

Chart 5.13: Distribution of RN Workforce by Age Group
1980 - 2020 (Projected)

Chart 5.14:
Annual Enrollment in US RN Education Programs
1987 - 2000

Source: National League for Nursing; 1997 - 2000 data are unpublished and unofficial

Chart 5.15:
National Supply and Demand Projections for FTE RNs
2000 - 2020

Source: National Center For Health Workforce Analysis, Bureau of Health Professions, Health Resources and Services Administration, 2002