

Are Hospitals Reducing Nursing Staff Levels?

California leads the nation in encouraging the growth of Health Maintenance Organizations and Preferred Provider Organizations. Over 12 million Californians—one-third of the population—have their health care financed through an HMO or PPO.

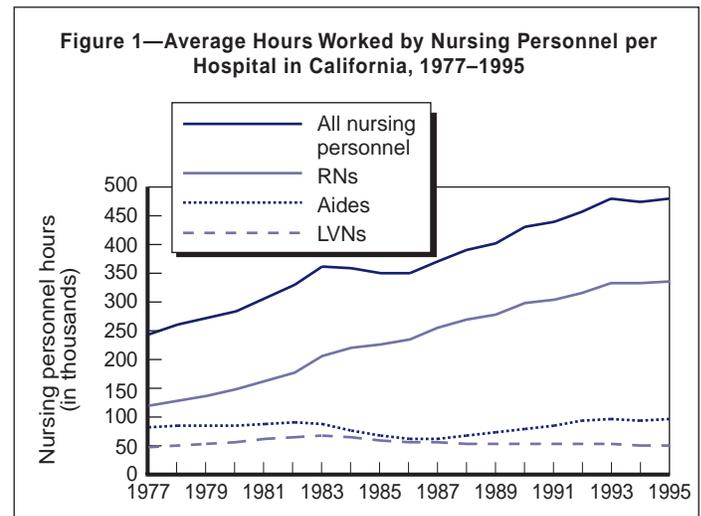
Some of the effects of managed care organizations have been well documented: They reduce the number of hospitalizations, use outpatient care more intensely, and shorten the length of hospital stays. These cost-containment efforts have led to growing concern among policymakers and the public about the availability and quality of medical services under managed care. Most recently, this attention has focused on hospital nursing staff, with several unions and newspaper articles alleging that hospitals are reducing their use of registered nurses (RNs) and other nursing personnel.

To test this allegation, Joanne Spetz analyzed data from California's Office of Statewide Health Planning and Development, documenting her results in *Nursing Staff Trends in California Hospitals: 1977 through 1995*. She found that the average number of hours worked by nursing personnel per hospital rose from 1977 to 1993 and then stabilized between 1993 and 1995. As shown in Figure 1, the hours worked by RNs increased significantly over this period, although growth in RN hours has slowed in recent years. In contrast, the hours worked by licensed vocational nurses (LVNs) and nursing aides declined after 1983. The use of aides has recovered in the past eight years, but LVN use is still below its 1983 peak.

Further analysis showed that the hours worked by nursing personnel per hospital discharge and per patient day have risen, indicating that more nursing resources are serving patients admitted to California hospitals. This may reflect the increase in severity of illness among patients admitted through managed care.

Why Has the Nursing Staff Mix Changed?

As reflected in Figure 1, the ratio between RNs and other nursing personnel in California hospitals has changed



The average number of hours worked by RNs in California hospitals has increased nearly threefold over the past 20 years.

dramatically over the past 20 years, with RNs assuming a greater role in patient care. There are a number of reasons why the nursing staff mix may have changed.

First, as hospitals have reduced the average length of patients' stays, they have eliminated some of the recuperative services provided to patients; there are fewer meals to serve, fewer bedpans to change, and fewer patients to move. Aides and other unlicensed nursing staff are most likely to perform these tasks. Thus, one would not expect to find much growth in their staff levels. In addition, the shorter average length of stay has led to an increase in the average severity of illness among patients, which suggests an increased need for RNs.

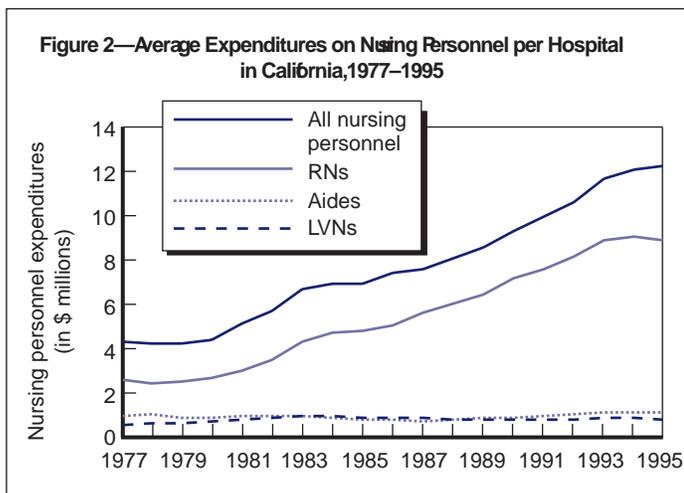
The continuing improvement of medical technology may also have contributed to the growth in RN staffing. RNs are trained in advanced technologies, and they may be able to learn new techniques on the job more quickly than other nursing personnel.

Finally, RN education includes training in management, human behavior, and other skills that qualify them for case

management, patient teaching, and other professional responsibilities. As hospitals have developed ambulatory surgery units and other specialized patient services, they have favored employing RNs in these services.

How Has the Nursing Staff Mix Affected Hospital Expenditures?

Changes in nursing staff mix have contributed strongly to rising costs for nursing labor in California hospitals. As shown in Figure 2, average expenditures per hospital on nursing labor have risen continuously since the late 1970s, surpassing \$12 million in 1995 (in 1995 inflation-adjusted dollars). This cost growth results almost entirely from increases in spending on RN labor.



The rising cost of nursing labor in California hospitals has been fueled almost entirely by increases in spending on RN labor.

Although expenditures on nurses are rising, nursing's share of total hospital expenses declined from 48 percent in 1977 to 16 percent in 1995. Nonetheless, even with the decline in nursing personnel's share of hospital expenditures, nursing services constitute the single largest item in most hospital budgets.

In addition to the increasing proportion of RNs among hospital nursing staff, average wages of skilled nurses have risen more quickly than those of less-skilled nurses, further contributing to hospital expenditures. RN wages grew from \$17.54 per hour in 1977 to \$25.08 per hour in 1995 (in

1995 dollars), LVN wages rose from \$12.49 to \$15.47 per hour, and aide wages remained relatively stable, dropping from \$10.52 to \$10.50 per hour. Between 1994 and 1995 the wages of nursing personnel declined—the first decrease in inflation-adjusted RN wages in almost 20 years.

Why Is There a Perception of Reduced Nurse Staffing?

Concerns about possible declines in nurse staffing have risen despite the continued increase in hours worked by nursing personnel. These concerns may be fueled by several factors. First, nursing personnel employment grew slowly between 1993 and 1995. In addition, the average number of hours worked by nursing personnel does not follow the same pattern in all units within hospitals. For example, the use of nursing personnel in acute-care inpatient units grew very little between 1983 and 1993 and declined between 1993 and 1995.

Although growth in the number of hours worked by nursing personnel has slowed over the past several years, the average length of hospital stays has dropped from 5.8 to 4.5 days. The shorter length of stay is likely to have increased the intensity of care provided to patients while they are in the hospital, and the lack of a significant increase in hospital use of nursing personnel as intensity of care has risen may have led to the perception that employment is dropping.

Some hospitals have engaged in highly publicized "restructuring" of their nursing services, possibly contributing to insecurity among hospital employees. The recent decline in RN, LVN, and aide wages is likely to add to the perception that the use of nursing personnel is dropping.

Finally, there was an 18.6 percent increase in the number of graduates from basic RN training programs between 1988–1989 and 1993–1994. These new graduates may find it harder to obtain employment in hospitals than they expected.

It is difficult to predict how nursing staff levels might change over the next several years. However, it would not be surprising if nursing personnel hours per hospital declined somewhat because fewer people entered hospitals in the early 1990s. In addition, the absolute cost of RN labor and the widening gap in wages between RNs and other nursing personnel might lead to some substitution of lower-paid nurs-

This research brief summarizes a report by Joanne Spetz, Nursing Staff Trends in California Hospitals: 1977 through 1995. The report may be ordered by calling (800) 232-5343 [mainland U.S.] or (415) 291-4415 [Canada, Hawaii, overseas]. A copy of the full text is also available on the Internet (www.ppic.org). The Public Policy Institute of California is a private, nonprofit organization dedicated to independent, nonpartisan research on economic, social, and political issues that affect the lives of Californians.