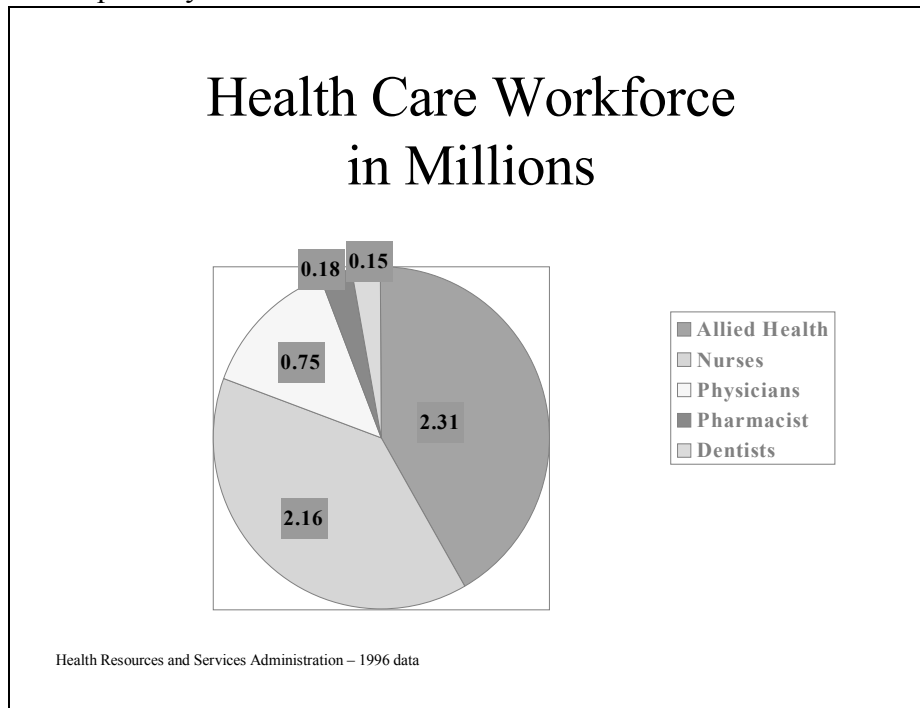


The Health Care Workforce Shortage

The nursing shortage has made prime time! During the televising of the Olympics, several excellent commercials (sponsored by Johnson and Johnson) highlighted the critical shortages of nurses in the nation's health care workforce. Members of AACC and of the Management Science Division are well aware of the increasing shortages in the laboratory field, especially of clinical laboratory scientists/medical technologists. A coalition of national professional medical associations, including AACC, ASCP and NCCLS, has also captured the attention of Congress and several bills, urging increasing funding for education and scholarships for laboratory science professionals, have been drafted. But as managers it is important to know that several other professionals are also facing critical shortages.

The delivery of health care is clearly a team effort. Physicians must have available a variety of other health professionals if they are to be able to properly diagnose, monitor and treat patients. Other health care providers, such as dentists, pharmacists, physical and occupational therapists, clinical chemists can also be independent providers of health care. The absence of any one health professions discipline can adversely affect the care of the patient and the efficiency of the health care system.

But first a bit of background. The figure below shows the health care workforce in millions as compiled by the Health Resources and Services Administration in 1996.¹



While the allied health workforce is the largest group of health care professionals, this group is fractured into over 200 different professions and rarely, if ever, speaks with one voice. The next largest group, the nurses, has a strong professional organization whose voice is heard in Congress and in the media. That is part of the reason the nursing

shortage has been so well publicized. However there are several other health professions with a larger vacancy rate.

This article will discuss the critical shortages of many professionals in the health care workforce. A partial critical list is shown below.

Critical List of Shortages in Health Care Professions

Allied Health Professionals

Medical Technologists

Cytotechnologists

Radiographers

Ultrasonographers

Nuclear Medicine Technologists

Radiation Therapists

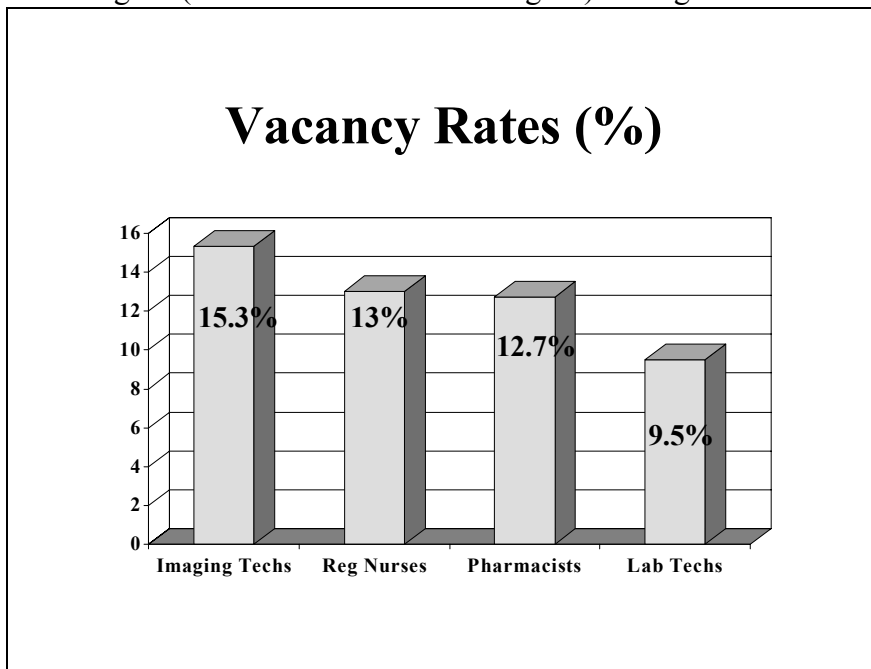
Dental Hygienists

Nurses

Pharmacists

Dentists

While each article or report published has slightly different vacancy rates, the conclusion is the same. There are serious shortages. Concern about workforce shortages led to the American Hospital Association (AHA), the Association of American Medical Colleges (AAMC), the Federation of American Hospitals and the National Association of Public Hospitals and Health Systems commissioning the First Consulting Group (FCG) to determine the workforce shortages in the nation's hospitals. The report² issued in the fall of 2001 found the shortages in hospitals of registered nurses, pharmacists and imaging technologists (radiation science technologists) to be greater than 10% as shown below.



The report also stated that the situation is getting worse with 60% of the hospitals responding to the FCG survey reporting that recruitment for these professionals has become more difficult since 1999. Over 1/3 of the hospitals surveyed in this report told of decreased patient satisfaction and over 1/2 of the nurses felt it was more difficult to provide quality care due to the workforce shortages.

At least seven allied health professions are facing shortages ranging from 10 to 20%. The American Society of Clinical Pathologists (ASCP) estimates that the shortage of medical technologists will be 5000 positions a year for the next 5 to 10 years³. Between 1998 and 1999, there was a 65% increase in job openings while 17% fewer students graduated from accredited programs. There has been a steady decline in the number of medical technology programs, 638 in 1983, 393 in 1993 and 273 in 1999⁴. Efforts to save money by hospitals and predications that medical technologists would not be necessary in future automated laboratories caused many accredited programs to close, especially hospital based programs.

The radiation science technologist shortage can also be partially explained by efforts to save money by eliminating education programs. In 1995, 10,330 new graduates took the national radiography exams. By 1999, that number had dropped to slightly over 7000 graduates⁵. In 1995, 941 new graduates in radiation therapy took the therapist exam while that number shrank to 389 four years later⁵. The future increase of an elderly population as the baby boomer generation ages will only add to the demand for the services by these imaging and therapy technologists.

The last two years when I have gone to my dentist, he complains that he is unable to hire dental hygienists. The dental hygiene program at the University of Nebraska stated there are over 200 vacancies in Nebraska, and this program (one of two in the state) graduates only 20 students per year.

The Pharmacist Workforce, published by the Health Resources and Services Administration, stated there were 6000 unfilled positions in the nation in 2000⁶. The results from the First Consulting Group published in the fall of 2001, showed that the vacancy rate for pharmacists in the nation's hospitals was the second highest (12.7%) of those reported². Factors identified⁶ as contributing to the shortage of pharmacists include: the expanded number of complex and diverse medications, as well as the expanded roles of pharmacists into process improvement to decrease medication errors and reduce the costs of medication while improving health outcomes. In addition, retail prescriptions increased 44% from 1992 (1.9 billion) to 1999 (2.8 billion). Increased competition between large pharmacies with expanded store hours and new store openings have also caused shortages in the nation's hospitals.

While the % vacancy rate for nurses is not as high as that of pharmacists or several allied health professions, the large number of nurses in the workforce mean the 10 to 12% shortage of registered nurses is 216,000 to 260,000 vacant positions. As stated earlier,

the majority of today's nurses believe health care quality has decreased because of the nursing shortages.

According to the American Dental Association⁷, 6000 dentists leave practice yearly, while only 4000 dental students graduate a year. By 2010, about 50% of America's dentists are expected to retire. Another critical shortage is brewing at the same time national attention has been focused on the needs to improve oral health⁸.

This short article is not meant to cover information on shortages in all health care professions. But as leaders and managers in health care organizations, it is important that we are aware the shortages include many professions and affect multiple parts of the system.

Clearly the shortages of health professionals is real and likely to become worse. The AHA has begun efforts to focus on recognizing that people are the greatest asset of the hospital, suggesting ways to demonstrate that health professionals are valued and essential to the hospitals' success. It will take the efforts of government policy makers, schools, hospitals, health care professions organizations, and other health care provider organizations to reverse this trend.

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