

# The Health Services Workers

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## Chapter 8



# Objectives

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- Provided an overview of the health services workforce in the United States.



# Introduction

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- From its beginning as a cottage industry at the turn of the century to its current position as the nation's largest industry, the U.S. health services system today employs more than 11.9 million workers (USDHHS 2002).
- Traditionally organized with the physician as leader, today's health services workforce is undergoing major changes in its roles and functions.



# Medical Education and Training

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- Flexner did not succeed in reducing the number of medical schools to 31.
- By 1915 the number had been reduced to 95, and by 1965, the number was 88; however, by 1980 the number had increased to 126 (Starr 1982).
- Additionally, 19 schools of osteopathy produce about 5 percent of the physician workforce, and several additional schools of osteopathy are currently health facility licensure staff.



# Physicians

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## The Role of the Physician in the U.S. Health Services System

- The *physician* is the *first point of contact* with the traditional health services system for most users, whether the contact is in the physician's office or clinic, or a hospital emergency department.



# The Development of the Medical Profession in the United States

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- Medicine as a profession began to emerge by the middle of the 19<sup>th</sup> century.
  - The American Medical Association (AMA) was established in 1846, states began to assume responsibility for licensing physicians, and the reform of medical education began.



# Graduate Medical Education (GME)

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- Graduate medical education (GME), the specialty training beyond medical school that ranges from three to seven or more years, is also costly.
- GME is provided in residencies of various lengths, depending on the degree of sub-specialization being sought.



# Physician Supply and Distribution

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- In 2000, 813,770 physicians were licensed in the United States, 690,000 of whom were active in the profession.
- Of the active physician pool, 71 percent were involved in providing patient care; 20 percent were hospital-based; 6 percent were involved in other professional activities such as medical teaching, administration, and research; and 3 percent were federal physicians (USDHHS 2002).



# Physician Supply and Distribution

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- About one-third of physicians were generalists or primary care physicians, including general practitioners, family practitioners, general internal medicine physicians, and general pediatricians without advanced subspecialty training.
- Two-thirds of U.S. physicians were specialists and subspecialists.



# Efforts to Affect the Physician Supply

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- The difficulty in measuring physician demand has in no way inhibited numerous efforts by the government and the medical profession to affect physician supply.
- Nearly four decades of tinkering with physician supply demonstrate the difficulty of succeeding in defining and achieving a satisfactory supply.
- Significant changes in the available supply of physicians take a very long time to occur, even when drastic changes are made in the supply pipeline (Wennberg et al. 1993).



# IMG Participation in GME

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- The participation of IMGs in GME has had a significant effect on physician supply and the generalist to specialist ratio.
- Between 1988 and 1993, the number of IMGs nearly doubled and the number of IMG residents increased by more than 80 percent.
- IMGs constitute a substantial share of the total physician workforce, up from 10 percent in 1963 to 25 percent in 1995.
- IMGs specialize disproportionately when compared to USMGs and through the mid-1990s filled more than half of all nephrology slots and about 30 percent of all cardiology slots.



# Specialists versus Generalists

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- Even those who are not persuaded of an oversupply of physicians generally agree that an imbalance exists between the number of *specialists and generalists*, or in physician distribution (Schwartz and Mendelson 1990; Cooper 1995).



# Physician Reimbursement

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- ***Outpatient care*** provided by ***specialists*** has typically been reimbursed at higher rates than care provided by ***primary care physicians***.
- ***Primary care physicians*** are likely to continue to push for greater fee equity for their ***Medicare patients*** who are not in ***capitated managed care systems***.



# Effects of Managed Care on the Physician Workforce

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- Managed care, which in 2000 covered as much as 91 percent of the U.S. population that has employer-sponsored health insurance, 60 percent of Medicaid enrollees, and 17 percent of Medicare beneficiaries.
- The *hospitalist* provides *inpatient care* in place of primary care physicians or academic attendings.



# Other Types of Health Services Providers

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- *Midlevel practitioners* such as *physician assistants and nurse practitioners, nurses, pharmacists, and dentists* are among other major health services providers.
  - Categorized as *nonphysician providers (NPPs)* or *nonphysician clinicians (NPCs)* by some (Weiner 1994; Cooper 1995), each profession has a different relationship with organized medicine.



# Other Types of Health Services Providers

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Although a full review of additional health services providers is not possible, many important health services providers fit under the umbrella term of “**allied health**” (USDHHS 1990):

- Clinical laboratory personnel
- Physical and occupational therapists
- Radiologic technicians
- Workers in dietetics



# Other Types of Health Services Providers;Cont

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- Medical records administrators
- Speech and language pathologists and audiologists
- Respiratory therapists
- Clinical psychologists
- Medical social workers



# Other Types of Health Services Providers

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- Many people in the United States also obtain care from *complementary and alternative medicine (CAM) providers*, including 50,000 chiropractors, 7,200 oriental medicine practitioners, and 1,800 naturopaths (Cooper 1995).
- Analyses of the 1999 National Health Interview Survey (NHIS) showed substantial usage of CAM providers in the prior 12 months by U.S. adults.



# Other Types of Health Services Providers

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- An estimated 29 percent of U.S. adults used at least one CAM therapy in this period.
- Nearly 27 million adults sought spiritual healing or prayer for mind/body interventions; 19 million for biologically-based herbal medicine therapies; and 15 million for chiropractic therapies (Ni et al. 2002).



# Midlevel Practitioners

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- Two categories of health services providers – *physician assistants and advanced practice nurses*, which includes *nurse practitioners and nurse midwives* – are called *midlevel practitioners*, indicating that their functions and responsibilities are higher than those of entry-level caregivers but below those of physicians.



# Physician Assistants

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- ***Physician assistants (PAs)*** emerged as a profession at the close of the Vietnam War, when medical corpsmen sought a way to use their training in the peacetime economy.
- ***Duke University*** is credited with establishing the first PA training program in the early 1960s.
- In 2002, 59 programs graduated about 4,100 PAs to work in hospitals, clinics, and physician practices.



# Physician Assistant Education and Training

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- The majority of PA training programs are ***university-affiliated*** and require ***20 to 36 months of didactic and clinical training***.
- Most PA programs are affiliated with medical schools; the medical model of care, as opposed to the nursing or the social models, is therefore emphasized.
- PAs receive a ***certificate of program completion*** and ***some may also receive baccalaureate or master's degrees*** if their programs are structured to offer them.



# Advanced Practice Nurses

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- *Two types of advanced practice nurses (APNs) – nurse midwives and nurse practitioners* – have been health services providers since the early 1970s.
- In states that permit them to practice, nurse midwives provide prenatal care, labor and delivery services, and postpartum care for the mother and infant.
- Nurse midwife training programs are usually based in nursing schools.



# Advanced Practice Nurses

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- An estimated 4,000 nurse midwives are in active practice in hospitals, clinics, and other health services settings (Schroeder 1994).
- The nurse practitioner profession developed not only to address the perceived shortages of primary care physicians but also in recognition that nurses could function clinically well above their customary levels.
- With additional training, nurses could handle an estimated 50 to 90 percent of the patient encounters in an ambulatory care setting.



# Advanced Practice Nurses

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- APNs function according to each state's Nurse Practice Act, which specifies the degree of independence of practice permitted
- Medicare does not directly reimburse APNs , and other payers vary in their recognition of APN practice independence.



# Education and Training of Nurse Practitioners

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- ***Nurse practitioners*** (NPs) are ***registered nurses*** who receive ***advanced training***, usually in schools of ***nursing affiliated with universities***.
  - Their training thus emphasizes the ***nursing model of care***.
- NPs may receive a ***baccalaureate or master's degree*** as part of their training program.
- NPs function under the ***auspices of a state's Nurse Practice Act***, but they ***work under the supervision of a physician rather than another nurse***.
- Like PAs, NPs may have a relationship with a physician that is side-by-side, over-the-shoulder, or at-a-distance.



# Supply and Distribution

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- More than 58,500 NPs were in practice in the United States in 2001 (Hooker and Berlin 2002).
- Cooper (1995) projected that the number of APNs would increase to 102,000 by the year 2010.



# Nurses

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- ***Nurses*** constitute the ***largest group of health services providers***, with more than two million active nurses in the workforce.
  - Modern nursing traces its origins to Florence Nightingale, whose emphasis on hygiene is credited with reducing the death rate in British hospitals from 40 to 2 percent during the Crimean War of 1853 to 1856.



# Nurses

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- Nurse training schools were established in New York City, New Haven, and Boston in 1873, fostered by upper-class women who were committed to improving institutions such as public hospitals and almshouses.
- ***Two-thirds of nurses are hospital employees, but the market for nurses in outpatient settings is growing rapidly.***



# Nurses

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- Between 1988 and 1992, employment of nurses in hospital outpatient settings increased 68 percent and employment in public health and community settings increased 62 percent, whereas nurse employment in hospital inpatient settings grew less than 6 percent.



# Nurse Education and Training

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- Five levels of nursing preparation exist, although hierarchical progression through them is not a customary career path.
- In addition, nurses may obtain advanced degrees, including *Ph.D.s in nursing and Doctor of Nursing (ND)*.
- The *entry level is the certified nurse assistant (CNA)*, whose training may consist of institution-specific, on-the-job training.



# Nurse Education and Training

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- No licensure is associated with this level of nursing, though a certificate of completion may be awarded.
- The licensed practical nurse (LPN) or licensed vocational nurse (LVN) is the next level of nursing and requires formalized training, often in a community college technical or vocational program, of an average of 12 months.



# Nurse Education and Training

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- ***States licensure*** is required for the LPN/LVN.
- The third level of nursing preparation, and what is generally considered the ***first level of professional training***, is that of the registered nurse (RN).
- ***The RN must be licensed by the state to practice.***



# Nurse Education and Training

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- The fourth level of practice is the *advanced practice nurse, a nurse midwife or a nurse practitioner, described earlier.*
- The fifth level of nursing is the *clinical specialist, whose preparation requires a master's degree.*



# Nursing Supply and Distribution

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- The total active workforce of nurses numbered more than 2.2 million, or 82 percent of the licensed profession, in 2000 (Sochalski 2002).
- About 50,000 nurses were trained in each year between 1980 and 1990 (Aiken and Gwyther 1995) in 1,484 programs.
- Despite the high number of nurses and the nurse-to-population ratio of 670 to 100,000, ***periodic shortages of nurses have existed.***



# Issues Facing the Nursing Profession

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- As the ***largest group of health services*** providers, nurses have many issue facing their profession.
- Maintaining the appropriate supply of nurses which continue to be a challenge and nursing salaries may fluctuate with the supply.
- The ***downsizing of hospitals as well as the spread of managed will affect nursing supply, although the full range of effects is not yet known.***



# Pharmacists

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- In its developmental stages, pharmacy was closely allied with medicine.
- Early pharmacies, especially in small frontier towns, were frequently owned and operated by the town's physician; conversely, non-physician druggists often acquired medical practice as a part of their role.



# Pharmacist Education and Training

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- Seventy-five schools of pharmacy, all affiliated with an institution of higher learning, provide two entry-level pharmacy degree, either of which satisfies the prerequisite of ***an entry-level degree for eligibility to take the licensure examination*** (USDHHS 1990): ***the five-year baccalaureate degree or the six-year Doctor of Pharmacy (PharmD) degree.***



# Pharmacist Education and Training

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- Individuals with baccalaureate degrees in pharmacy may earn a PharmD as a graduate-level degree
- Accrediting bodies appear to be emphasizing the PharmD over the baccalaureate degree.



# Supply and Distribution of Pharmacists

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- In 2000, 208,000 pharmacists were in active practice in the United States (USDHHS 2002), 46 percent of whom are women (Cooksey et al. 2002).
- Peak enrollments in pharmacy schools occurred in 1974 to 1975, sharply declined in the early 1980s, and currently remain below the mid-1970s high.



# Issues Facing the Pharmacy Profession

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- New communication, information, and other technologies have the potential for decreasing the demand for pharmacists.
- Another force that may affect the demand for pharmacists is the growing market share of mail order pharmacies.
- Maintenance drugs for conditions such as ulcers or high cholesterol are particularly well suited to mail ordering, which generally specifies a 14-days turnaround time, although the turnaround may be much shorter.



# Dentists

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- **Dentistry** emerged as a profession as technological advances permitted the retention of diseased teeth, the prevention of dental decay, and the ability to correct dental malformations.



# Dental Education and Training

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- About 170,000 active dentists are in the U.S. health services workforce today (USDHHS 2002).
- About 8 percent of all dentists are female and 3 percent are African American.



# Health Services Administrators

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- Maintaining the operation of an increasingly complex health services delivery system requires an administrative complement to the provision of care.
- Once administration was the domain of a provider, whose principal training was as a clinician; ***today's administrators must be highly trained business people and managers.***



# Education and Training

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- Executives in the U.S. health services system generally have graduate-level training that they earn in one of three ways: ***by earning a master's degree in a field such as hospital administration; by entering administration from a clinical profession such as medicine or nursing; or by assuming administrative responsibilities after completing education programs in general business, law, accounting, or a related field.***



# Education and Training

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**Administrators are responsible for a range of functions, including:**

- Strategic planning and marketing
- Accounting and financial management
- Clinical and management information
- Human resources (recruiting)
- training benefits, and compensation)
- Maintaining the physical plant



# Supply and Distribution

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- Determining the supply of administrators depends on the organizational levels included in the count.
- One source (Griffith 1995) estimates the total executive pool to be about 60,000.
- The leading professional organization, the American College of Healthcare Executives, has a current membership of about 30,300 (ACHE 2003).
- Growth areas in the field include mergers and acquisitions, contracting, rate setting, and marketing.



# Issues Facing Health Services Administrators

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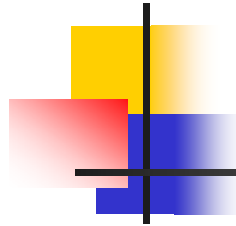
- The volatility of the U.S. health services delivery system requires and executive workforce that demonstrates leadership and flexibility.
- Administrators must be prepared to address the prospect of new owners or employers as a result of mergers and acquisitions.
  - *Reengineering and downsizing of facilities, the reconfiguration of facilities into new systems, and new links with other providers require the commitment of significant administrative resources.*



# Reference

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- Barton, P.L. (2007). *Understanding the U. S. Health Service Systems*,
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# Questions

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