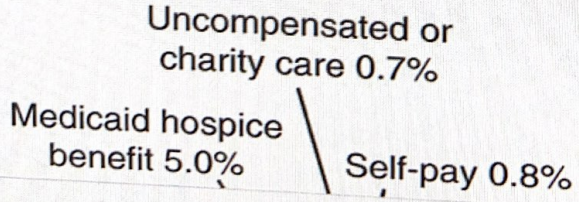
The two primary areas of emphasis in hospice care are: (1) pain and symptom management, which is referred to as **palliation**, and (2) psychosocial and spiritual support according to the holistic model of care (see the *Beliefs, Values, and Health* chapter). Counseling and spiritual help are made available to relieve anguish and help the patient deal with his or her death. Social services include help with arranging final affairs. Apart from medical, nursing, and social services staff, hospice organizations rely heavily on volunteers.

The idea of providing comprehensive care to terminally ill patients was first promoted by Dame Cicely Saunders in the 1960s in England. In the United States, the first hospice was established in 1974 by Sylvia Lack in New Haven, Connecticut (**Beresford, 1989**). Hospice organizations expanded after Medicare extended hospice benefits in 1983. Hospice is a cost-effective option for both private and public payers. It is estimated that for every $1 spent on hospice, Medicare saves $1.52 in Part A and Part B expenditures (**National Hospice Organization, 1995**). Hospice enrollment has been found to save money for Medicare to improve care quality for patients across a number of different lengths of service (Kelly et al., 2013). The difference in costs mainly reflects services that are not medically intensive. Many states now provide hospice benefits under Medicaid. **FIGURE 7-9** shows the sources of coverage for hospice services.



- Provide physician certification that the patient's prognosis is for a life expectancy of 6 months or less
- Make nursing services, physician services, and drugs and biologics available on a 24-hour basis
- Provide nursing services under the supervision of a registered nurse
- Make arrangements for inpatient care when necessary
- Provide social services by a qualified social worker under the direction of a physician
- Make counseling services available to both the patient and the family, including bereavement support after the patient's death
- Provide needed medications, medical supplies, and equipment for pain management and palliation
- Provide physical, occupational, and speech therapy services when necessary
- Provide home health aide and homemaker services when needed

In 2014, 1.66 million patients in the United States received hospice services; the average length of service was 71.3 days (**National Hospice and Palliative Care Organization, 2015**). The majority of hospice patients were 65 years or older (83.9%), female (53.7%), and white (76%). The top diagnoses were cancer (36.6%), dementia (14.8%), heart disease (14.7%), and lung disease (9.3%).

There are approximately 6,100 hospice programs in the United States (**National Hospice and Palliative Care Organization, 2015**). The majority of these programs are independent (59.1%), followed by hospital based (19.6%), home health agency based (16.3%), and nursing home based (5.0%).

Medicare is the largest source of financing for hospice. In terms of levels of hospice care, the Medicare Hospice Benefit affords patients four levels of care to meet their needs: routine home care,

The U.S. hospice movement was founded by volunteers, and there is a continued commitment to volunteer service in this movement. In fact, hospice is unique in that it is the only provider whose Medicare conditions of participation requires volunteers to provide at least 5% of total patient-care hours. In 2014, approximately 430,000 hospice volunteers provided 19 million hours of service (**National Hospice and Palliative Care Organization, 2015**).

Ambulatory Long-Term Care Services

Long-term care has typically been associated with inpatient care provided in nursing homes, but providers in two main types of settings—case management and adult day care—deliver outpatient services. **Case management** provides coordination and referral among a variety of health care services. The objective is to find the most appropriate setting to meet a patient's health care needs. **Adult day care** complements informal care provided at home by family members with professional services available in adult day care centers during the normal workday. The *Long-Term Care* chapter discusses both services in more detail.

Public Health Services

Public health services in the United States are typically provided by local health departments, and the range of services offered varies greatly by locality. Generally, public health services are limited to well-baby care, sexually transmitted disease clinics, family planning services, screening and treatment for tuberculosis, and ambulatory mental health. Inner-city, poor, and uninsured populations are the main beneficiaries of these services. Health programs delivered in public schools fall under the public health

The public school setting is a growing area of practice for physical therapists, occupational therapists, and speech–language pathologists. These professionals help children with special physical and emotional dysfunctions. The Individuals with Disabilities Education Act (IDEA) of 1975 (which is subject to reauthorization every 3 years) has been instrumental in enabling children with special needs to receive services in public schools so that they can obtain optimal access to education.

Community Health Centers

Creation of community health centers (CHCs)—formerly called neighborhood health centers (NHCs)—was authorized during the 1960s as part of the Johnson administration's War on Poverty campaign, mainly to address health care needs in medically underserved regions of the United States. The federal government's application of the **medically underserved** designation signals that a community has a dearth of primary care providers and delivery settings, as well as poor health indicators for the populace. Such areas are often characterized by economic, geographic, or cultural barriers that limit access to primary health care for a large segment of the population. CHCs are required by law to locate in MUAs and provide services to anyone seeking care, regardless of insurance status or ability to pay. Hence, CHCs are a primary care safety net for the nation's poor and uninsured in both inner-city and rural areas.

CHCs are private, nonprofit organizations, but they operate under the auspices of the federal government. Section 330 of the Public Health Service Act provides federal grant funding for CHCs. These centers also heavily depend on funding through the Medicaid

CHCs are private, nonprofit organizations, but they operate under the auspices of the federal government. Section 330 of the Public Health Service Act provides federal grant funding for CHCs. These centers also heavily depend on funding through the Medicaid program. Private-pay patients are charged on sliding-fee scales, determined by the patient's income.

CHCs tailor their services to family- oriented primary and preventive health care and dental services (**Shi et al., 2007**). These centers have developed considerable expertise in managing the health care needs of underserved populations. Many have established systems of care that include outreach programs, case management, transportation, translation services, alcohol and drug abuse screening and treatment, mental health services, health education, and social services.

In 2015, CHCs served 24.3 million patients in the United States, who collectively made more than 96 million patient visits. Most patients who utilize CHCs are members of vulnerable populations —92% of the patients were below the 200% federal poverty level and 24% were uninsured in 2015. Among special populations, approximately 1.2 million homeless individuals, 910,172 agricultural workers, and 1,510,842 residents from public housing received services under this program (**Health Resources and Services Administration [HRSA], 2015**). From 2008 to 2015, the number of new health centers supported by HRSA increased by 27%, and the total number of patients served increased by 42%— that is, by more than 7.2 million additional patients. In 2015 alone, HRSA provided funding for almost 430 new health center sites and increased access to care for more than 1.8 million additional patients (**HRSA, 2016**).

Despite serving a population that is often sicker and at greater risk for poor health outcomes than the general population, the quality of care provided at CHCs is equivalent and often surpasses care provided by other primary care providers. More than 93% of HRSA-funded health centers met or exceeded at least one *Healthy People 2020* goal for clinical performance in 2015. More than 68% of these centers are recognized by national accrediting organizations as patient-centered medical homes. More than 92% of CHCs have electronic health records (EHRs) installed and in use at all sites and for all providers (**HRSA, 2016**).

Health centers also meet or exceed nationally accepted practice standards for treatment of chronic conditions. In fact, the Institute of Medicine and the Government Accountability Office have recognized health centers as models for screening, diagnosing, and managing chronic conditions such as diabetes, cardiovascular disease, asthma, depression, cancer, and human immunodeficiency virus (HIV) disease. Health centers have improved health outcomes for their patients and have lowered the cost of treating patients with chronic illness (**National Association of Community Health Centers [NACHC], 2016a**).

Studies have shown that CHCs provide accessible, cost-effective, and quality care (**NACHC, 2015**, **2016b**, **2016c**). Because the majority of the patients they serve are members of vulnerable groups (i.e., low income, minorities, homeless), CHCs play an important role in reducing health disparities among these populations (**NACHC, 2013**). CHCs are key partners for Medicaid, as Medicaid seeks to accelerate practice innovations that drive savings while also improving outcomes (**NACHC, 2016d**).

A unique quality of health center programs is the emphasis placed on both primary care services and enabling services—that is, nonclinical services intended to eliminate geographic, linguistic, cultural, and socioeconomic barriers to care, such as transportation, interpretation, case management, and health education, among others. To care for the diverse nonclinical needs of their patients, health centers have increased their enabling services staff by 40% since 2010 (**HRSA, 2014**).

In 2011, the ACA provided $1 billion to CHCs to expand primary care to nearly 11 million underserved Americans who did not have a regular source of care. Under the ACA, access to health center services increased, particularly for Medicaid patients. Moreover, increased direct investment in health centers led to expanded primary care capacity (**Kaiser Family Foundation, 2017**).

Free Clinics

Modeled after the 19th-century dispensary, the **free clinic** is a general ambulatory care center, serving primarily the poor, the homeless, and the uninsured. Free clinics have three main characteristics:

- Services are provided at no charge or at a very nominal charge.
- The clinic is not directly supported or operated by a government agency or health department.
- Services are delivered mainly by trained volunteer staff.

Free clinics focus on the delivery of primary care. Other services offered by these facilities vary, depending on the number and training of their volunteer staff.

The number of free clinics has continued to grow nationally and is estimated at more than 1,200 across the United States (**National Association of Free and Charitable Clinics [NAFC], 2016**). Although mainly a voluntary effort, care delivery through free clinics has taken on the form of an organized movement. The NAFC focuses on the issues and needs of the free clinics and the people they serve in the United States.

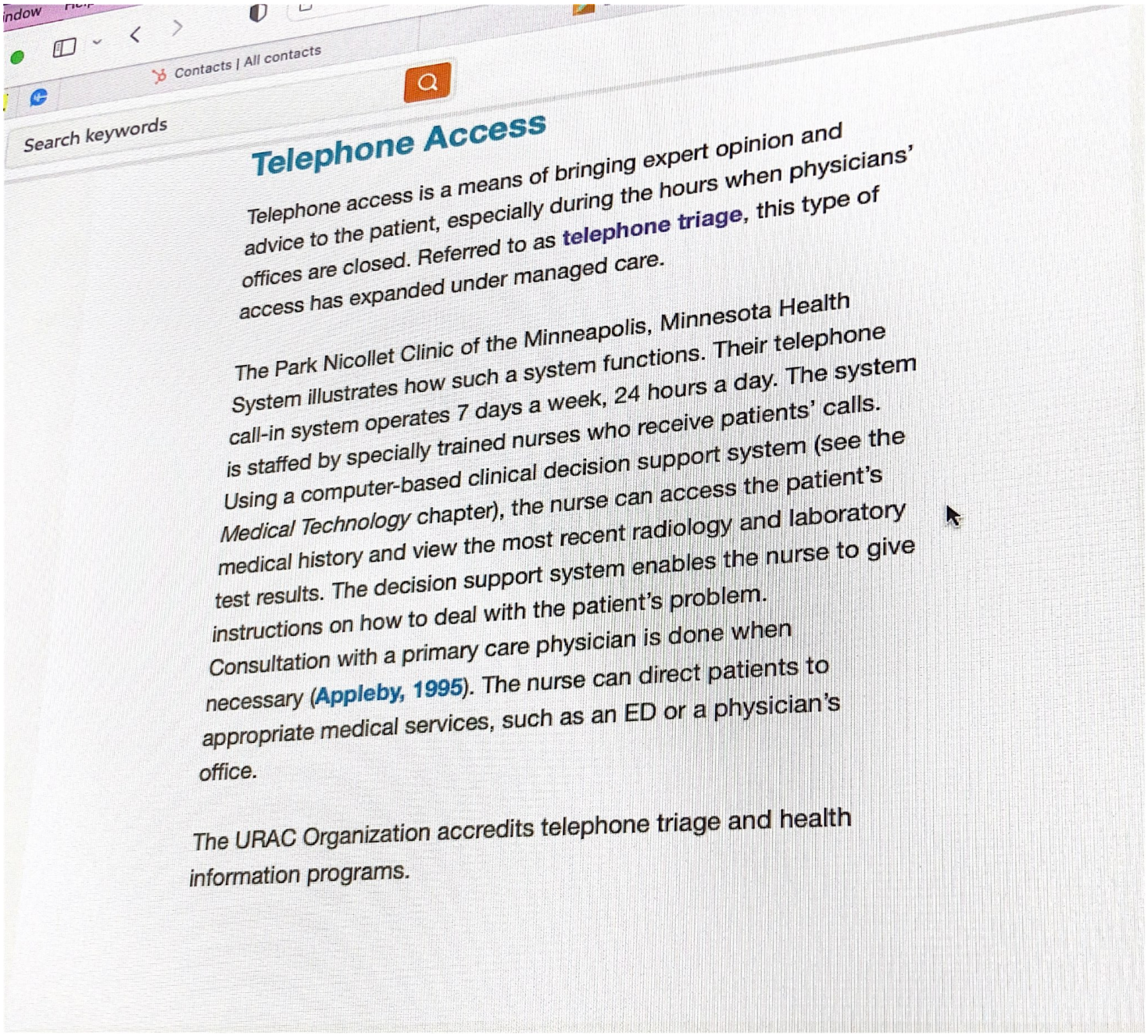
Other Clinics

Federal funding is used to operate migrant health centers that serve transient farmworkers in agricultural communities and rural health centers that serve populations in isolated underserved rural areas. The Community Mental Health Center program was established to provide ambulatory mental health services in underserved areas.

Telephone Access

Telephone access is a means of bringing expert opinion and advice to the patient, especially during the hours when physicians' offices are closed. Referred to as **telephone triage**, this type of access has expanded under managed care.

The Park Nicollet Clinic of the Minneapolis, Minnesota Health System illustrates how such a system functions. Their telephone call-in system operates 7 days a week, 24 hours a day. The system is staffed by specially trained nurses who receive patients' calls. Using a computer-based clinical decision support system (see the *Medical Technology* chapter), the nurse can access the patient's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The URAC Organization accredits telephone triage and health information programs.

Complementary and Alternative Medicine

Because of the tremendous growth of this part of the health care spectrum, the role of complementary and alternative medicine (CAM)—also referred to as "nonconventional therapies" or "natural medicine"—in the delivery of health care cannot be ignored. Although the terms "complementary medicine" and "alternative medicine" are often used synonymously, technically there is a distinction between the two: Complementary treatments are used *together with* conventional medicine, whereas **alternative medicine** is used *instead of* conventional medicine (**Barnes et al., 2008**).

In the United States, the dominant health care practice is biomedicine-based allopathic medicine, also referred to as conventional medicine. Complementary and alternative medicine refers to the broad domain of all health care resources other than those intrinsic to biomedicine (**CAM Research Methodology Conference, 1997**) and covers a heterogeneous spectrum of ancient to new approaches that purport to prevent or treat disease (**Barnes et al., 2008**).

CAM therapies include a wide range of treatments, such as homeopathy, herbal formulas, use of other natural products as preventive and treatment agents, acupuncture, meditation, yoga exercises, biofeedback, and spiritual guidance or prayer. Chiropractic is also largely regarded as a CAM treatment.

No particular settings of health care delivery are involved in CAM treatments. With few exceptions, most therapies are self-administered or at least require active patient participation. The types of trained and licensed health care professionals discussed in the *System Resources* chapter are rarely involved in the delivery of unconventional care. A doctor of naturopathic medicine (ND) degree and Diplomate of the Homeopathic Academy of Naturopathic Physicians (DHANP) are offered in the United States. Also, natural medicine–based private clinics are emerging across the United States.

Even though the efficacy of most CAM treatments has not been scientifically established, their use has exploded. CAM's growth has happened mainly for the following reasons:

- Most people who seek CAM therapies believe that they have already explored conventional Western treatments but have not been helped. Most of these patients have chronic disorders, such as persistent pain, for which Western medicine can usually offer only symptomatic relief rather than definitive treatment.
- People who want to avoid or delay certain complex surgeries or toxic allopathic treatments are persuaded that at least there is no harm in trying alternative treatments first.
- Most people feel empowered by access to a vast amount of medical and health-related information available through the Internet and feel in control to pursue what they think is best for their own health.
- Many patients report that they seek alternative therapies and individuals who practice them because they want practitioners to take the time to listen to them, understand them, and deal with their personal life as well as their pathology. They believe that alternative practitioners will meet those needs (**Gordon, 1996**).

According to the 2012 National Health Interview Survey (NHIS)

According to the 2012 National Health Interview Survey (NHIS), 33.2% of adults in the United States age 18 years and older and 11.6% of children age 4 to 17 years used some form of complementary health approach in the previous 12 months (**CMS, 2012**). Although people of all backgrounds use CAM, its use among adults is greater among women and those with higher levels of education and higher incomes (**National Center for Complementary and Integrative Health [NCCIH], 2016a**). In a 2010 survey of people age 50 years and older, conducted by the NCCIHI and AARP, 33% of respondents reported that they had discussed CAM with a health care provider (**NCCIH, 2016b**).

People use CAM for a wide array of diseases and conditions. American adults are most likely to use CAM for musculoskeletal problems such as back, neck, or joint pain (**NCCIH, 2016a**).

Effective coordination of conventional medical services and CAM has the potential to save money and improve quality because, for some chronic problems, conventional medicine offers few proven benefits. Examples include psychosomatic ailments and cases in which patients have recurring complaints of unexplained painful symptoms or spells of dizziness. Such nagging complaints can cause the patient to rack up high medical costs and compromise the individual's quality of life. Lower-cost therapies, such as stress management and meditation classes, can save numerous trips to physicians and costly diagnostic tests.

One study found median expenditures to be $39 for CAM care, compared to $74.40 for conventional outpatient care (**Lafferty et al., 2006**). In 2012, Americans spent $30.2 billion out-of-pocket on complementary health approaches—$28.3 billion for adults and $1.9 billion for children—during the 12 months prior to the survey

approximately one-fourth of what they spent out-of-pocket on prescription drugs ($54.1 billion) (Nahin et al., 2016; NCCIH, 2016a).

CAM also appears to be popular in Europe, Canada, and other industrialized countries. Even though most of these countries provide universal access to medical care, a significant number of people try alternative treatments.

Given the growing public demand for complementary medicine and its claims for health promotion, disease prevention, and promise for certain chronic conditions, mainstream medicine has shown a growing interest in better understanding the value of alternative treatments. Even so, skepticism is justifiable because alternative medicine is predominantly unregulated. Also, the efficacy of most treatments and the safety of some have not been scientifically evaluated. Some recent findings suggest that cranberry juice cocktail has no effect on preventing recurrent urinary tract infections (Barbosa-Cesnik et al., 2011), but white tea extract has potential anticancer benefits (Mao et al., 2010), and Echinacea does not reduce the duration and severity of the common cold (Barrett et al., 2010). Only rigorous scientific inquiry and research-based evidence will bring about a genuine integration of alternative therapies into the conventional practice of medicine. A 2013 publication in the *Natural Medicine Journal* noted that published research studies have revealed that CAM therapies are cost-effective and may present cost savings, but more research is necessary on individual treatments (Tais and Zoberg, 2013).

Nevertheless, some developments are noteworthy. In 1993,

Utilization of Outpatient Services

In 2010, Americans made approximately 922,596 million visits, or three visits per person, to office-based physicians (TABLE 7-5). Physicians in general and family practice accounted for the largest share of these visits (22.8%), followed by physicians in internal medicine (13.6%), pediatrics (11.1%), and obstetrics and gynecology (6.4%). Doctors of osteopathy accounted for 6.7% of the visits. The South led the United States in the proportion of physician visits (36.0%), followed by the West (23.2%), the Northeast (21.3%), and the Midwest (19.4%). Most physician office visits (91.2%) took place in metropolitan areas.

TABLE 7-5 U.S. Physician Characteristics, 2013

Physician Characteristics	Number of Visits (in Thousands)
All visits	922,596
Physician Specialty	
General and family practice	210,771
Internal medicine	125,776
Pediatrics	102,172
Obstetrics and gynecology	59,402
Orthopedic surgery	47,858

Primary Care in Other Countries

Around the world, there is little consistency in how primary care services are accessed and how physicians get paid. In the United Kingdom, Netherlands, and New Zealand, patients register with a primary care doctor. In Australia, the Netherlands, New Zealand, Norway, Sweden, Iceland, Italy, Denmark, and the United Kingdom, patients go through primary care for referrals to specialists and are often required to register with primary care practices (except in Australia). Canada, France, and Germany use financial incentives to encourage registration with primary care practices and coordinated referrals (**Schoen et al., 2012**; **Thomson et al., 2012**). The German "sickness funds" (insurance plans) offer an enrollment option.

The United Kingdom offers the most comprehensive coverage with little or no patient cost sharing. Canada covers physician visits in full, but medication coverage varies by province. Australia, New Zealand, and Germany include varying degrees of cost sharing (**Schoen et al., 2012**). Other countries may use moderate cost sharing (**Schoen et al., 2012**).

In Australia, Canada, France, Germany, Switzerland, and the United States, payers typically use fee-for-service payments and employ performance incentives (**Schoen et al., 2012**; **Thomson et al., 2012**). Conversely, the Netherlands, New Zealand, Norway, Denmark, and the United Kingdom use a combination of capitation, fee for service, and incentives (**Schoen et al., 2012**;

capitation, fee for service, and incentives (Schoen et al., 2012; Thomson et al., 2012).

Approximately 59% of doctors in France, the Netherlands, New Zealand, and Switzerland report that their patients can get same- or next-day appointments when sick, compared to only 22% in Canada. In Australia, Canada, France, Germany, New Zealand, and Norway, more than 60% of providers report long waits to see specialists. In the United States, physicians complain that they spend a significant amount of time with insurance-related issues, which limits access to care for their patients (Schoen et al., 2012).

Primary care is mostly privatized in all the countries mentioned earlier, with the exception of Iceland (mostly public) and Sweden (mixed). Physicians in Australia, Canada, Norway, the United Kingdom, and the United States are more likely to work in group practices of five or more doctors. Physicians in the Netherlands, France, Germany, and Switzerland are more likely to work in smaller practices.

In the 2015 International Health Policy Survey of Primary Care Physicians survey conducted by the Commonwealth Fund (2016), doctors in 10 countries reported that their practices struggle to coordinate care and communicate with other health and social services providers, and also questioned their preparedness to care for patients with challenging issues. There has been conceptual convergence in recent years on the need to redesign primary care to meet the health care needs of aging populations and address the increased prevalence of chronic disease around the world (Schoen et al., 2012).

Summary

In the history of health care delivery, the main settings for ambulatory services have come full circle. First came a shift from outpatient settings to hospitals. Now, ambulatory services delivered outside the hospital have mushroomed. The reasons for this shift are mainly economic, social, and technological. Many physicians have broken their ties with hospitals and started their own specialized care centers, such as ambulatory surgery centers and cardiac care centers. A variety of general medical and surgical interventions are provided in ambulatory care settings. Thus, ambulatory services now transcend basic and routine primary care services. Conversely, primary care itself has become "specialized." Primary care is no longer concerned simply with the treatment of simple ailments; primary care physicians must coordinate a plethora of services to maintain the long-term viability of their patients' health. Application of principles to establish patient-centered medical homes and delivery of community-based primary care is slow in taking shape.

In response to the changing economic incentives within the health care delivery system, numerous types of outpatient services have emerged, and a variety of settings for the delivery of services have developed. The growing interest in complementary and alternative medicine is largely consumer driven. Compared to the conventional Western medicine found in the United States, alternative medicine, with its emphasis on self-care, is an area where many patients feel more in control of their own destiny.