Hennepin County Medical Center Whittier Clinic, Minneapolis, Minnesota; Hammel, Green and Abrahamson, Inc. Photography by Paul Crosby

**Chapter 7  
Politics and Healthcare**

**Overview**

Political decisions and other factors will shape the design of clinics in the future. Looking backward long enough to learn from the past, architects, interior designers, and other building industry professionals can develop a deep understanding of the history of care and how the need for environmental awareness can shape the future. Medical buildings today must meet immediate and long-term future needs.

This is an especially opportune moment for reviewing the historic interplay between politics and healthcare because healthcare reform is still in the early phases of implementation in the United States, and it is substantially altering the way that medical services are being delivered.

As has been the case in the past, politics and healthcare are clearly influencing each other, with the relationship ranging from synergistic to symbiotic or adversarial, depending on the specific issue at hand.

**1600s–1700s**

The first form of government healthcare starts in 1636 when the Pilgrims of the Plymouth colony vote to provide care for disabled soldiers, supported by the colony. During the Revolutionary War, the Continental Congress provides pensions to disabled veterans. By 1811 the first domiciliary is authorized by the federal government, providing care for wounded soldiers and veterans.

**1800s**

Abraham Lincoln in his second inaugural pronounces: “To care for him who shall have borne the battle and for his widow and his orphan,” President Lincoln makes a commitment that all the veterans will be cared for.[1](http://e.pub/6omuj6f9ada5iobouyb8.vbk/OPS/c07.xhtml#en001) During his term these benefits are extended to widows and their dependents. After the Civil War, the states provide care through domiciliaries.

During this century the prevailing belief is that the sick should be treated at home and paupers treated in hospitals. Public policy reinforces this belief. The post–Civil War era brought advances in medicine and the treatment of diseases. During the late 1800s a more central and organized medicine takes shape in urban areas of the United States.

**Politics**

Throughout the 1800s, the U.S. government takes no action to subsidize voluntary funds or make insurance for the sick compulsory. Instead, it leaves these decisions to the states, and the states leave these to private and voluntary programs.

The Roman Catholic Communities of Nuns is a key group that provides healthcare services for those who lack the means to pay for it. These sisters believe it is their mission to care for the poor and sick. By 1875, there are 75 Catholic hospitals in the United States. By the beginning of the 20th century this number nears 400. Over time, the Roman Catholic Church becomes one of the largest non-government providers of healthcare services in the world.[2](http://e.pub/6omuj6f9ada5iobouyb8.vbk/OPS/c07.xhtml#en002)

**Healthcare**

By the latter part of the 19th century, advances made by medical professionals and improvements in hospital facilities lead more members of the general populace to seek care at inpatient facilities. The field of medicine is increasingly viewed as scientific and those who want to practice it are required to obtain a standard level of education. Thus, from the late 1800s onward, the education of healthcare professionals blends firsthand experience with scientific research.

In the 1870s, for example, the State University of New York’s (SUNY) medical school becomes the first in the nation to be founded within a hospital so bedside training can be integrated into the medical students’ curriculum. In 1893, Johns Hopkins University’s Medical School revolutionizes physicians’ formal training by stressing scientific methods and combining laboratory research with professional practice.

San Francisco sees several healthcare facilities open in the 1800s. The California Pacific Medical Center has its start through the efforts of leaders of the German immigrant community. The German General Benevolent Society leads in constructing a hospital between 1856 and 1858. In 1871 the Episcopal Diocese of California opens St. Luke’s Hospital. In 1875 the Pacific Dispensary for Women and Children is founded, in large part through the efforts of Charlotte Amanda Blake Brown. It is a facility for women and children run by women.

**Florence Nightingale (1820–1910)**

The spread of infection is also a major focus in the work of nurse Florence Nightingale, who believes that disease arises spontaneously in dirty and poorly ventilated places.[3](http://e.pub/6omuj6f9ada5iobouyb8.vbk/OPS/c07.xhtml#en003) Although these beliefs prove to be only partially accurate, they make sense because hospital wards at the time have more than 100 beds with multiple patients in each ward. They lack sufficient light, are poorly ventilated, and are unsanitary. Infectious patients are not properly isolated.

Nightingale’s work leads to improvements in hygiene and healthier interior environments. She also advises on the development of district nursing and the establishment of a training program in Liverpool, England.

Nightingale and her nephew, Sir Douglas Galton of the Royal Engineers, test some of her theories by developing the pavilion design that Galton then uses in the design of the Royal Herbert Hospital. Each ward in this hospital connects to a central corridor to optimize access to natural light and ventilation. Each ward also has a large window at its end to provide patients with exterior views. St. Thomas Hospital in London and Johns Hopkins Hospital in Baltimore also use this plan.

**1900s**

Two other women help frame healthcare in the San Francisco area. Alta Bates opens the Alta Bates Sanatorium, now the Alta Bates Summit Medical Center, in 1905. She does so with credit from local merchants and $100 cash. Plans for the facility come from her father. Elizabeth Mills Reid, a prominent Millbrae community member, opens a six-bed facility in 1908.

By 1900 several rural areas begin to organize and construct hospitals.

The first decade of the 20th century is considered by many historians to mark the beginning of organized medicine. This is a time when people, typically more affluent, donated time and money to develop hospitals.

Theda Clark is the daughter of Charles Clark, who helps found Kimberly-Clark Corporation. Charles Clark is also a town mayor and later a member of Congress for Wisconsin. Theda is also a community activist who helps build the Neenah, Wisconsin, public library. She dies just after childbirth, leaving a $96,000 bequest. Her family uses this money and an additional $30,000 to build the Theda Clark Memorial Hospital that opens in Neenah in 1909.[4](http://e.pub/6omuj6f9ada5iobouyb8.vbk/OPS/c07.xhtml#en004)

In 1917 a new system that includes insurance, disability compensation, and rehabilitation comes into being. These services are administered by three different agencies. In 1930 Congress authorizes the president to consolidate these services, and the Veterans Administration (VA) is created. The VA currently has more than 152 hospitals, 800 clinics, 126 nursing homes, and 35 domiciliaries.[5](http://e.pub/6omuj6f9ada5iobouyb8.vbk/OPS/c07.xhtml#en005) In 1918, just after a devastating flu epidemic, Sacramento doctors and a civic leader come together to build a new hospital to meet the needs of the city. The hospital, one of California’s finest, opens in 1923. Another first comes in 1937, when Sutter Health opens a satellite hospital, the first institution in California and the second west of the Mississippi River to operate more than one facility.

During the first few decades of the 20th century, there is a shift in the design of hospitals from a sanatorium design to a hospital design. Most sanatoriums are not built for medical care. Many of them are converted from large homes, old schools, or public buildings into facilities where patients with communicable diseases like tuberculosis are treated. In some cases, small sanatoriums of four to eight beds are constructed and become the first hospitals in the community. Over the next 40 years, the older buildings will be surrounded by newer wings to form what we recognize as modern hospitals.

**Politics**

The 20th century opens with the rise of the Progressive Era, during which reformers strive to improve social conditions for the working class. President Theodore Roosevelt supports “social insurance” on a personal basis because he believes that a country cannot be strong if its citizens are sick and poor. However, most of the reform that occurs is outside of the public realm. For example, railroad companies develop extensive employee medical programs.[6](http://e.pub/6omuj6f9ada5iobouyb8.vbk/OPS/c07.xhtml#en006)

**Healthcare**

The American Medical Association (AMA) becomes a national force after consolidating the support of state and local associations into a single national organization. Between 1900 and 1910, its membership grows from 8,000 to 70,000 physicians—approximately half of the doctors then practicing medicine in the United States.

Surgery becomes common for removing tumors, infected tonsils, and inflamed appendixes, as well as for addressing issues of gynecological health. Public health nursing is now widespread after Lillian Wald pioneers the idea of stationing nurses in public schools to help increase school attendance.

Although the charitable missions of most hospitals survive, doctors are no longer expected to provide free services for all hospital patients. Like other buildings, healthcare facilities are transformed by the use of electric lights, elevators, central heating and ventilation, and new processes for cleaning and deodorizing interior spaces.

Doctors identify the first case of a healthy disease carrier in Irish immigrant and cook Mary Mallon, who is later labeled Typhoid Mary because she spreads this disease to dozens of other people who live in the households where she has worked.

George Soper, an engineer for the New York City Department of Health, identifies Mallon as the disease carrier and has her committed to an isolation center in the Bronx. She is released in 1910, with the proviso that she will never accept employment that involves handling food. She breaks this promise and is thought to cause typhoid outbreaks at a sanatorium in Newfoundland, New Jersey; and at Sloane Maternity Hospital in New York City. She had worked as a cook at both of these locations. She is returned to North Brother Island, where she spends the rest of her life.[7](http://e.pub/6omuj6f9ada5iobouyb8.vbk/OPS/c07.xhtml#en007)

How a person can infect others without succumbing to a disease remains a mystery for decades. In 2013, however, scientists determine that the *Salmonella* bacteria that causes typhoid fever can hide in immune cells known as macrophages and “hack” into their metabolism to survive without the infected person developing symptoms.[8](http://e.pub/6omuj6f9ada5iobouyb8.vbk/OPS/c07.xhtml#en008)

**1910s**

Once Woodrow Wilson is elected president (1912) and the United States is drawn into the First World War (1917), momentum for providing sickness insurance for those in need wavers and, ultimately, dies. Germany has compulsory sickness insurance and, thus, “German socialist insurance” is denounced as inconsistent with American values.[9](http://e.pub/6omuj6f9ada5iobouyb8.vbk/OPS/c07.xhtml#en009)

**Politics**

In 1913, the American Association for Labor Legislation (AALL) holds its first national conference to address the issue of “social insurance.” Its leaders draft a model bill in 1915 that limits health insurance coverage to the working class and the poor. This coverage includes paying for the services of care providers and other hospital-related expenses as well as sick pay, maternity benefits, and a death benefit of up to $50 to cover funeral expenses. Costs for this program are to be shared by workers, employers, and the states.

Initially, members of the AMA support this bill. In 1916, the AMA’s board appoints a committee to work with the AALL to promote this legislation. However, when a number of state medical societies express opposition and disagreements arise over how to pay physicians, the AMA’s leadership withdraws its support.

At the same time, Samuel Gompers, the president of the American Federation of Labor (AFL), criticizes compulsory health insurance “as an unnecessary paternalistic reform that would create a system of state supervision over people’s health.” AFL leaders are concerned that a government-based insurance system could weaken unions by taking over their role of providing social benefits to workers.[10](http://e.pub/6omuj6f9ada5iobouyb8.vbk/OPS/c07.xhtml#en0010)

The commercial insurance industry adds its opposition to the discussion. In response to a general fear among working-class people that they will “suffer a pauper’s burial,” insurance companies have already been offering policies that pay death benefits and cover funeral expenses. The AALL’s health insurance plan also covers funeral expenses, and this creates unwanted competition for the association. The national debate over compulsory health insurance is suspended and does not resume until the 1930s.[11](http://e.pub/6omuj6f9ada5iobouyb8.vbk/OPS/c07.xhtml#en0011)

**Healthcare**

U.S. hospitals are now considered modern scientific institutions where cleanliness is highly valued. The need for private rooms begins to increase, although wards with many beds are still commonplace. The prevalent cause of death remains contagious diseases. The 1918 flu outbreak kills more than 600,000 people. It does not completely subside until the 1950s.

After Italian researchers discover and demonstrate how malaria parasites are transmitted to humans by infected mosquitoes (1899), a medical team led by Dr. William Crawford Gorgas, the chief sanitary officer for the Panama Canal project, applies this knowledge to develop a mosquito control program in Panama. Standing water is drained or has insecticide and oil added to it, adult mosquitoes are collected, and government buildings and workers’ quarters are screened-in to keep mosquitoes out. As a prophylactic measure, quinine is given to workers.

This multipronged disease-control strategy substantially reduces malaria-related illnesses and deaths among canal workers. In 1906, there are more than 26,000 workers assigned to this project, and more than 21,000 of them are hospitalized for malaria at some point. By 1912, approximately 5,600 of the 50,000 canal workers fall sick with this disease.

In 1914, Congress approves funds for the Public Health Service (USPHS) to control malaria in the United States. The USPHS establishes malaria control activities around military bases in the South, where this disease is a significant health threat.[12](http://e.pub/6omuj6f9ada5iobouyb8.vbk/OPS/c07.xhtml#en0012)

**1920s**

During this decade, there is limited government or citizen attention to the matter of health insurance. The fact that the relative cost of medical care begins to rise, however, does shift the emphasis of the public discourse to creating a social insurance program that would cover the cost of medical care rather than the loss of wages to sickness. The medical profession gains prestige, and a rise in physicians’ salaries accompanies this increase in influence. The decade ends with the onset of the Great Depression.

**Politics**

The general attitude of complacency toward politics means that there is no strong, broad effort to reform health insurance during this period. There is some progress toward improving access for portions of the population with specific needs.

For example, in 1921, Congress passes the Sheppard-Towner Maternity and Infancy Protection Act, marking the first federal program specifically created to serve women and children. At this time, the vast majority of women (80 percent) receive no prenatal advice or professional care. This, combined with poverty, leads to high rates of infant and maternal mortality. The act expires after eight years but is not renewed. During the time the act is in force, infant and maternal death rates fall by 16 percent and 12 percent, respectively.[13](http://e.pub/6omuj6f9ada5iobouyb8.vbk/OPS/c07.xhtml#en0013)

**Healthcare**

Although scientists and others had experimented with the phenomenon of “anti-biosis”[14](http://e.pub/6omuj6f9ada5iobouyb8.vbk/OPS/c07.xhtml#en0014) (“against life”) in the 19th century and some folk traditions used fungi and mosses for wound treatment earlier than that, no progress is made in developing a substance that can be used for medical treatment until 1928, when Alexander Fleming accidentally discovers penicillin. Although this is one of the most important discoveries for the fight against infectious diseases, 20 years pass until penicillin is commonly used. During World War II, penicillin will save many lives on the battlefield and in the hospital. This success prompts scientists to search for other microorganisms that can be used to combat infections.

In 1926, the Committee on the Cost of Medical Care (CCMC) meets to address concerns over the cost and distribution of medical care. This private group includes 50 economists, physicians, and public health specialists, as well as major interest groups. The CCMC’s research reveals that a general need for more medical care exists. Its findings are published in 26 research volumes and 15 reports over a period of five years. It recommends that more national resources be allocated for medical care and that premiums from voluntary health insurance be used as the primary means for covering these costs.

In 1929, a group of teachers arranges for Baylor Hospital in Dallas, Texas, to provide room, board, and specific medical services for a predetermined monthly cost. This agreement becomes the forerunner for Blue Cross health plans.

**1930s**

In the 1930s, the public’s focus shifts to expanding access because for most workers, the cost of medical care is now higher than the wages lost due to illness.

**Politics**

The Great Depression begins, and this further limits people’s ability to afford medical care. After being sworn into office in early 1933, President Franklin Roosevelt begins to draft social security legislation. Initially, this includes publicly funded healthcare programs, but he later removes these in response to organized opposition from groups such as the AMA. The Committee on Economic Security also fears that including public health insurance in the bill will weaken its chances of passing.

In 1935, President Roosevelt signs the Social Security Act into law. It includes programs for old-age assistance and retirement benefits, unemployment compensation, aid for dependent children and the disabled, and maternal and child welfare. The monthly benefit ranges from $10 to $85, remaining in this range until the 1950s.

Although some view the Social Security programs as necessary humanitarian measures, others worry that the programs will discourage people from working, because they can collect unemployment insurance, or from saving, because of the old-age and survivors benefits. The act also disregards sickness, which is the main cause of joblessness at this time.

A second push for national health insurance (NHI) comes from the Tactical Committee on Medical Care. This time, progress is stonewalled by southern Democrats, who align with Republicans to oppose the government expansion that passing any additional New Deal social reforms would require. The Wagner Bill, or National Health Act of 1939, which supports a national health program funded by federal grants to states, is introduced in the Senate. It dies in committee.

During World War II, government-mandated wage freezes prevent employers from using monetary compensation to woo workers during a labor shortage. The Internal Revenue Service addresses this with Section 104 of the Revenue Act of 1939, which allows companies to count benefits of up to 5 percent of the value of an employee’s wages as nontaxable compensation. These include workers’ compensation, as well as accident and health insurance. This ruling later becomes permanent (1954) and helps lay the foundation for the present-day insurance system in the United States.[15](http://e.pub/6omuj6f9ada5iobouyb8.vbk/OPS/c07.xhtml#en0015)

**Healthcare**

Individual hospitals begin to offer their own insurance programs. The first of these is Blue Cross, which offers private health insurance in locations across the United States. Groups of hospitals and physicians’ groups, such as Blue Shield, also begin to sell health insurance policies to employers, who offer these to their staff and collect the premiums.

During the 1930s and continuing through World War II, tens of thousands of workers are hired by Kaiser Shipyards in Richmond, California, to meet the demand for Liberty ships and aircraft carriers. Henry Kaiser, owner of the shipyards, faces the challenge of providing healthcare for an enormous workforce, which ultimately peaks at 90,000 employees (many of whom were in poor health prior to starting work for Kaiser).

In 1945, he forms an association with Dr. Sidney Garfield, founder of the prepayment form of compensation for medical services, to develop a contract under which physicians agree to bypass the traditional fee-for-service system. Instead, they are paid a regular fee to meet all the medical needs of Kaiser’s employees. After the war ends, Kaiser opens up this program to the public by forming a nonprofit organization called Kaiser Permanente. Within the first decade of its existence, enrollment surpasses 300,000 members in Northern California.

In 1935 and 1936, the U.S. Public Health Service conducts the first national survey designed to assess the health of the U.S. population and identify some of the underlying social and economic factors affecting health status. The survey shows that the health status of Americans is poor, despite declining mortality rates. It also demonstrates a strong link between poverty and illness.

Residency and specialized training are on the rise for healthcare professionals. Within a decade, 12 of the 15 specialty-certifying boards require at least three years of residency training. This helps to establish the basic components of the medical educational system in the United States. Students attend four years of college, then four years of medical school, followed by completion of an internship and a residency program. They take board exams as they progress through these steps.

**1940s**

**Politics**

In 1943, U.S. senators Wagner, Murray, and Dingell introduce a bill that proposes changes to Social Security and includes provisions for universal, compulsory health insurance that would be funded by a payroll tax. There is tremendous opposition to this bill. It generates extensive national debates and is never passed by Congress—even though it is reintroduced during every session for the next 14 years.

Harry Truman begins his first term as president in 1945 by proposing a broad restructuring of the healthcare industry that would include mandatory coverage and more hospitals. It would also double the number of nurses and doctors. This plan differs from President Roosevelt’s plan of advocating for universal health insurance that serves all classes of society. FDR’s plan separately addressed the provision of medical services for the needy. Truman’s plan also drops the funeral benefit.

The AMA criticizes Truman’s plan as “socialized medicine” at the onset of the Cold War, when the American people are especially afraid that communism will take hold and spread across the United States as it had in Eastern Europe. The chairman of the House committee refuses to hold hearings. Senior Senator Robert Taft says he thinks the plan came right out of the Soviet constitution, and he walks out of hearings in the Senate. The American Hospital Association also opposes Truman’s plan.[16](http://e.pub/6omuj6f9ada5iobouyb8.vbk/OPS/c07.xhtml#en0016)

In 1946, the Communicable Disease Center (CDC) is established based on the success that the Malaria Control in War Areas efforts have had in keeping the southeastern United States free of this disease during World War II. Initially, the CDC focuses on preventing malaria from spreading by spraying areas with the pesticide dichlorodiphenyltrichloroethane (DDT), which first becomes available in 1943. By 1949, malaria no longer poses a significant health problem in the United States. However, improper use of DDT will later be found to pose health risks for humans.

Based on evidence of the pesticide’s declining benefits and its environmental and toxicological effects, the U.S. Department of Agriculture takes regulatory action to prohibit many of DDT’s uses in the late 1950s and early 1960s. In 1972, the Environmental Protection Agency issues a cancellation order for DDT based on adverse environmental and health effects of its use.

CDC founder Dr. Joseph Mountain extends the center’s responsibilities to include other communicable diseases. By 1980, this agency evolves into the Centers for Disease Control and becomes one of the major operating divisions of the U.S. Department of Health and Human Services.

The 1946 Hospital Survey and Construction Act (also known as the Hill-Burton Act), provides states with grants to support the construction of new hospitals. From July 1947 through mid-1971, over $33 billion in funds are distributed for the construction and modernization of healthcare facilities.[17](http://e.pub/6omuj6f9ada5iobouyb8.vbk/OPS/c07.xhtml#en0017)

In 1949, after winning an upset victory over New York governor Thomas Dewey and being reelected president, Harry Truman includes national health insurance in his “Fair Deal”plan. Polls show that 74 percent of the public favors Truman’s plan. More than half of those surveyed support some form of national health insurance. However, no progress is made on this issue because of continued Congressional opposition to expansion of the social welfare state.[18](http://e.pub/6omuj6f9ada5iobouyb8.vbk/OPS/c07.xhtml#en0018)

Instead, the U.S. healthcare system evolves into one with private insurance available for those who can afford it (which includes those whose costs are partially covered by their employers) and public welfare services for the poor, elderly, and disabled. Prepaid group healthcare begins.

In 1948, the United Nations establishes the World Health Organization (WHO) as a special agency with authority for international health matters. Its priorities are to prevent and control disease, develop equitable health systems based on primary care, and promote health for individuals and communities. WHO also publishes practical manuals, handbooks, and training materials for specific categories of health workers.

**Healthcare**

In this decade, the number of Americans with private health insurance increases from 20.6 million to 142.3 million based on a combination of increased competition, growing demand (the baby boom), and governmental policies.[19](http://e.pub/6omuj6f9ada5iobouyb8.vbk/OPS/c07.xhtml#en0019)

In 1945, water fluoridation is tested in four communities in the United States and Canada. The success of these tests in reducing tooth decay leads to broader implementation of fluoridation for drinking water. Over the next few decades, fluoride-containing products, such as gels, solutions, and pastes, are developed for topical use.

After World War II ends, the Supreme Court upholds a ruling that employee benefits can be included in collective bargaining negotiations. Labor unions focus on expanding health coverage as well as on increasing wages. Nonunion employers realize that they must offer health insurance as a benefit to remain competitive in a tight labor market. Thus, when health insurance first becomes available on a mass basis across the nation, it is driven by private-sector business decisions that are supported by public policies.

**1950s**

By the beginning of this decade, the employment-based health insurance system is firmly in place, and it continues to expand rapidly for the next several decades. While both supply and demand for healthcare services increase, providers continue to be paid on a fee-for-service basis. This enables them to retain substantial control over pricing and to strongly influence regulatory decisions.

Costs and aggregate expenditures for healthcare escalate rapidly, but are not of widespread concern because production, employment levels, and real wages are also increasing. These concurrent trends make it easy to attribute the increase in healthcare costs to investments in scientific research that are yielding medical advances as well as to economic prosperity.

The design of hospitals during this time is in transformation. While there are new hospitals being built, more often it is additions to existing hospitals that are being constructed. Also, mergers are taking place and creating medical centers or multiple campuses. Until this time, it is common for a hospital to provide inpatient (admitted) and outpatient services. This is noted by Theda Clark Memorial Hospital’s annual report for 1957. It states that the hospital had 6,307 admitted patients, 1,082 births, 6,234 outpatients, and 5,342 operations.[20](http://e.pub/6omuj6f9ada5iobouyb8.vbk/OPS/c07.xhtml#en0020) Once two hospitals merge, it is typical that one becomes an outpatient facility while the other remains a hospital. After World War II, this leads to the emergence of the medical office building (MOB).

**Politics**

In 1958, Rhode Island congressman Aime Forand introduces a proposal to cover hospital costs for people who receive Social Security benefits. Although the AMA launches a massive campaign to oppose this plan by presenting it as a threat to the patient-doctor relationship, the terms of this public debate begin to shift because of a strong focus on the needs of the elderly.

Senior citizens provide major grassroots support and force the issue of creating a national health insurance program back onto the national agenda. The AMA counters this by introducing an “eldercare plan,” a voluntary insurance plan with broader benefits and physician services. The government responds by expanding its proposed legislation to include the provision that doctors will be paid “usual and customary fees” for the services they provide and hospitals will be compensated on a “cost plus reimbursement” basis. These compromises and concessions later help lead to the Medicare and Medicaid programs being passed into law in the mid-1960s.

**Healthcare**

In 1952, the U.S. Surgeon General Dr. Leonard A. Scheele reports that the Communicable Disease Center is ready to combat possible biological warfare. While researching how to shorten the time it takes to identify organisms that could be used for this purpose, Dr. William Cherry develops the first practical uses for the fluorescent antibody technique.[21](http://e.pub/6omuj6f9ada5iobouyb8.vbk/OPS/c07.xhtml#en0021) He identifies the pathogens for salmonellosis, plague, and anthrax. This technique is later applied to research related to rabies, as well as to streptococcal and staphylococcus infections.

Staff members from the CDC investigate an outbreak of polio in Paulding County, Ohio. This leads to the development of the first effective polio vaccine, which is initially used to inoculate children against polio in Pittsburgh, Pennsylvania. Mass immunization follows and this ultimately eradicates polio from the Americas.

Research for the birth control pill begins, but its impact on society is not fully felt until a decade later, when it helps to catalyze the sexual revolution.

Staph infections are a leading cause of healthcare associated infections (HAI). Some strains of this bacterium are of particular concern because they are evolving into superbugs that are resistant to antibiotics. HAI staph infections typically include surgical wound infections, urinary tract infections, bloodstream infections, and pneumonia.[22](http://e.pub/6omuj6f9ada5iobouyb8.vbk/OPS/c07.xhtml#en0022)

**1960s**

Since the price of care doubles in the 1950s, people outside of the workforce, particularly the elderly, find it hard to afford health insurance. This leads to the establishment of Medicare and Medicaid programs. The Vietnam War also has a long-term impact on the provision of care, as an especially large percentage of veterans of this conflict (30 percent or more) suffer from what comes to be known as posttraumatic stress disorder.[23](http://e.pub/6omuj6f9ada5iobouyb8.vbk/OPS/c07.xhtml#en0023) The use of chemical herbicides to defoliate areas or kill enemy crops during this war is later determined to cause chronic illnesses and deadly diseases.

A concern that a shortage of doctors and other medical professionals will arise by the end of the 20th century leads to measures by federal and state governments to expand medical education. The number of doctors who are full-time specialists grows from 55 percent to 69 percent during this period.[24](http://e.pub/6omuj6f9ada5iobouyb8.vbk/OPS/c07.xhtml#en0024)

**Politics**

After winning reelection by a landslide, President Lyndon B. Johnson pushes through Congress the legislation that establishes the Medicare and Medicaid programs and signs the bill into law on July 30, 1965. This action further expands the U.S. healthcare market because it makes insurance coverage accessible for millions of Americans who do not have it. These programs also shift the composition of aggregate spending for healthcare services from people paying out of pocket to the government’s covering a larger portion of healthcare expenses.

**Medicare and Medicaid**

Medicare and Medicaid use the fee-for-service compensation model that has become prevalent as a basis for reimbursing care providers. Under this structure, third-party payments become one of the driving forces behind medical inflation because they incentivize medical professionals and healthcare organizations to maximize the quantity rather than optimize the quality of the services they provide.

Part A of the Medicare program covers hospitalization costs for people ages 65 years and older. It is funded by taxes collected from workers in the same way that the federal government does this for the Social Security program. Medicare Part B is designed to win the support of physicians by ensuring that they will receive the “usual and customary fees” for the medical services they provide. The third part of this legislation creates Medicaid, a federal–state program to expand healthcare for the poor.

Fears about the ability of Medicare and Medicaid to succeed persist long after this legislation passed. People wonder if doctors will refuse to see Medicare patients if the “usual and customary fees” are lower than those paid by others or by private health insurance plans.

**Other Significant Legislation**

Federal support for the creation of health centers begins in 1962 with passage of the Migrant Health Act. This legislation provides funds to cover healthcare services for migrant and seasonal farm workers and their families. Two years later, this effort is expanded to assist other families when the federal Office of Economic Opportunity (OEO) uses its demonstration authority to create the first Neighborhood Health Centers.[25](http://e.pub/6omuj6f9ada5iobouyb8.vbk/OPS/c07.xhtml#en0025)

In 1963, the Health Professions Educational Assistance Act provides $175 million over a three-year period to match funds that institutions raise to construct facilities for educating physicians, dentists, nurses, and other health professionals.

Social Security amendments passed in 1967 add optional Medicaid categories to provide healthcare for people who are not receiving cash assistance. Medicaid benefits are expanded to cover early and periodic screening as well as diagnostic testing services.

**Healthcare**

In 1964, the first surgeon general’s report that links smoking to lung cancer is released. It states that “cigarette smoking is a health hazard of sufficient importance in the United States to warrant appropriate remedial action.”[26](http://e.pub/6omuj6f9ada5iobouyb8.vbk/OPS/c07.xhtml#en0026) Over the next 50-plus years, periodic reports from the surgeon general move from presenting smoking as an issue of individual and consumer choice to one of epidemiology and public health.

In 1965, Jack Geiger and Count Gibson, physicians at Tufts University in Boston, open the first two community health centers funded by the Economic Opportunity Act of 1964. They establish an innovative care model for community-based primary care that blends social services with medical care and focuses on prevention and patient education. The community health center gradually becomes the dominant model for providing federally funded primary care as part of the U.S. healthcare safety net.

One aspect of community health centers (CHC) that make them unique is that at least 51 percent of all governing board members must be patients who have been treated at the CHC. A sliding-fee scale based on income is used to determine what each patient will be required to pay. By the early 21st century, CHCs provide primary and preventative care to more than 20 million people in the United States and its territories.[27](http://e.pub/6omuj6f9ada5iobouyb8.vbk/OPS/c07.xhtml#en0027)

**Measles Eradication**

The CDC announces a national measles eradication campaign in 1967, and within two years this program reduces the incidence of measles by more than 90 percent compared with prevaccine levels.

**The Medical Home**

In 1967, the American Academy of Pediatrics (AAP) introduces the phrase “medical home” in its *Standard of Child Health Care Manual* and advocates for the creation of a central location for all medical information related to children, especially those with chronic conditions or special needs. The definition of what constitutes a medical home will expand over the next 40 or so years until it evolves into a healthcare delivery model that emphasizes continuity of care and focuses on optimizing health and wellness through all life stages.

**1970s**

Healthcare costs escalate rapidly, due in part to unexpectedly high Medicare expenditures, “stagflation,” rising hospital expenses and profits, and changes in medical care that include greater use of technology, medications, and more conservative approaches to treatment. American medicine reaches a state of crisis.

The major healthcare-related legislation that passes during this period focuses on containing costs through better operational and management practices. Two major examples of this are the federal Health Maintenance Organization (HMO) Act of 1973 and the National Health Planning and Resources Development Act of 1974.

From the 1970s to the present, the design of medical facilities has been influenced by health and seismic standards set by individual state agencies. California, for example, enacts the Hospital Facilities Seismic Safety Act (HSSA) in 1971 with the intention of ensuring that hospitals are reasonably capable of providing services to the public after a disaster.

**Politics**

Major political events of this decade, including the end of the Vietnam War, the energy crisis, the Watergate scandal, and the Iran hostage crisis, distract political leaders from efforts to address the escalating costs of healthcare and the burgeoning number of uninsured people in the United States. By the middle of the decade, the country is mired in a deep economic recession.

In 1971, President Nixon imposes a price and wage freeze that includes specific annual limits for physicians’ fees and hospital charges. The initial 90-day period for this freeze is extended three times until it reaches a total of 1,000 days. The medical limits are not lifted until 1974, more than a year after the other controls have expired.

Passage of the National Health Planning and Resources Development Act in 1974 requires states to develop plans that prevent the duplication of healthcare services. This leads to the widespread adoption of Certificate of Need (CON) programs because all 50 state health agencies must have a structure for reviewing and approving proposals for major capital projects or for investing in high-tech devices and equipment. Although the federal mandate is repealed in 1987, three dozen states still have some kind of CON program.

The Employment Retiree Income Security Act (ERISA) is also enacted in 1974. It permits employers to design their own coverage packages and allows them to refuse to cover services like in-vitro fertilization or to satisfy state requirements for minimal mental health coverage.

**The Recession**

In the midst of a major recession in 1975, President Gerald Ford says he will veto any health insurance reform. In January 1976, however, he proposes adding catastrophic coverage to Medicare that will be offset by increased cost-sharing.

By 1977, when President Jimmy Carter takes office, the need for a national health insurance program resurfaces, with cost containment being the top priority. However, his proposals are weighed down by debates in Congress that compare the merits of competition to regulation. Presidents and lawmakers try and fail to overhaul the healthcare system over the next few decades.

**Healthcare**

Attempts to combat the rising cost of healthcare services range from the wage and price controls imposed by President Nixon in 1971 prompt the creation of the Professional Standards Review Organization (PSRO). The PSRO requires regional groups of physicians to review the services provided under the Medicare, Medicaid, and Maternal Child Health programs, to verify the need for such programs, and to ensure that they comply with specific criteria, norms, and standards.

The HMO Act that President Nixon signs into law in 1973 leads to managed care being the prevalent healthcare delivery model for some four decades. An HMO is an organization that provides healthcare to people who make regular payments to it and who agree to use the care providers and facilities that belong to or have a contractual agreement with the organization. Care providers agree to comply with the HMO’s requirements in exchange for a steady supply of patients.

The HMO Act provides federal endorsement, certification, and assistance for these types of healthcare organizations. It represents the first major step by the federal government to effect structural change in the delivery of medical services. Although it establishes standards for HMOs that operate under federal law, it leaves almost all other regulatory authority in the hands of individual states. Thus, the regulation of managed care continues to vary significantly across the nation.

President Nixon’s plan for national health insurance is rejected by liberal politicians and labor unions, but his War on Cancer centralizes research at the National Institutes of Health (NIH).

Although the health risks associated with using asbestos as a building material have been observed and documented for many years, by the end of this decade a number of studies document the extent to which asbestos workers have been affected. One study shows that asbestosis is present in 10 percent of asbestos workers who had been employed in the industry for 10 to 19 years, in 73 percent of workers who had been employed in the industry for 20 to 29 years, and in 92 percent of workers who had been employed in the industry for more than 40 years. Thus, the EPA and OSHA begin regulating the use and safe removal of asbestos.[28](http://e.pub/6omuj6f9ada5iobouyb8.vbk/OPS/c07.xhtml#en0028)

The shift from surgery taking place only in hospitals to having it done in ambulatory surgery centers (ASCs) begins in the 1970s. The first ASC opens in Phoenix in 1970. The two physicians wanted to provide a more timely and comfortable setting for patients in their community.

**1980s**

By 1982, Americans have experienced 17 consecutive years of double-digit increases in healthcare spending, with healthcare inflation outpacing growth in gross domestic product (GDP). Wages can no longer keep pace with the sustained escalation of healthcare costs. Slow economic growth, a recession, and erosion of middle-class incomes intensify the public’s general dissatisfaction with the state of the healthcare system.

These factors combine to fuel the managed-care revolution of the 1980s and 1990s. Federal aid that had helped to support nonprofit operations of nearly all of the nation’s HMOs is eliminated, and many of these organizations transform themselves into for-profit ventures. By 1987 the Census Bureau reports that 31 million Americans do not have health insurance coverage.[29](http://e.pub/6omuj6f9ada5iobouyb8.vbk/OPS/c07.xhtml#en0029)

**Politics**

The Reagan era is characterized by deregulation and a strong faith that letting the market take its course will iron out inefficiencies and bring costs down in many areas of the economy, including healthcare. Corporations enter numerous healthcare-related businesses, and there is a general shift toward privatization.

When President Reagan takes office in 1981, the nation is in the midst of a two-year recession, with double-digit inflation and unemployment. Several trends and events of the 1970s have contributed to this period of “stagflation,” including the reduction in industrial production in the Rust Belt and the energy crisis.

**The OBRAs**

The Omnibus Budget Reconciliation Act of 1981 (OBRA 81) requires states to restrict Medicaid eligibility and gives them more flexibility for using cost-containment strategies. In 1982, states are allowed to provide Medicaid to children with disabilities who require intensive care but can be cared for at home.

The Federal Budget Reconciliation Act of 1986 (OBRA 86) gives states the option of offering Medicaid coverage to infants, young children, and pregnant women up to 100 percent of the poverty level regardless of whether they receive public assistance. This is raised to 185 percent of the poverty level in the following year. OBRA 89, signed into law in 1989, mandates coverage for pregnant women and children under the age of six who are living at 133 percent of the poverty level.[30](http://e.pub/6omuj6f9ada5iobouyb8.vbk/OPS/c07.xhtml#en0030)

**COBRA**

In 1985, the Consolidated Omnibus Budget Reconciliation Act (COBRA) amends the Employee Retirement Income Security Act of 1974 to provide some employees with the ability to continue health insurance coverage for 18 to 36 months once they leave a job.

**Emergency Medical Treatment**

Passage of the Emergency Medical Treatment and Active Labor Act (EMTALA) in 1986 requires all hospitals that are part of the Medicare system to screen and stabilize all patients who use their emergency rooms, regardless of their ability to pay for healthcare services. The Consolidated Omnibus Budget Reconciliation Act (COBRA) is enacted in the same year to regulate how employees who lose their jobs can extend their healthcare coverage for 18 months.

**Healthcare**

After being elected president in 1980, Ronald Reagan declares that the U.S. healthcare system relies too heavily on federal funding, and he tries to shift this responsibility into the marketplace. HMOs grow in popularity as huge numbers of employers choose this option. By 1993, 67 percent of people with employer-provided coverage are enrolled in managed-care plans.[31](http://e.pub/6omuj6f9ada5iobouyb8.vbk/OPS/c07.xhtml#en0031)

In 1984, Roger Ulrich publishes his seminal study “View through a Window,” which finds that patients with a view of trees have shorter postoperative hospital stays, need less pain medication, and have slightly lower rates of postsurgical complications.[32](http://e.pub/6omuj6f9ada5iobouyb8.vbk/OPS/c07.xhtml#en0032)

**HMOs**

The managed-care model changes the fee-for-service reimbursement structure by compensating providers according to fee schedules rather than in relation to the cost incurred. This helps to rein in healthcare costs from 1982 to 1986. By the end of the decade, however, healthcare inflation reaches 16 percent annually.[33](http://e.pub/6omuj6f9ada5iobouyb8.vbk/OPS/c07.xhtml#en0033) This is due, in part, to the fact that HMOs serves as intermediaries between the patient and the care provider, adding a layer of management costs.

Medicare shifts to a payment-by-diagnosis compensation structure instead of payment-for-treatment. Many private health insurance providers quickly shift to this model. There is growing concern by insurance companies that the traditional fee-for-service method of payment can be exploited by care providers and healthcare organizations. This leads to “capitated” payments becoming more common.[34](http://e.pub/6omuj6f9ada5iobouyb8.vbk/OPS/c07.xhtml#en0034) Under this system, care providers are compensated on a per-capita basis instead of being paid a fee for each service and procedure provided along the continuum of care. This is one of the first steps toward shifting the U.S. healthcare industry from a “pay for production” to a “pay for performance” compensation structure.

**1990s**

Healthcare costs rise at double the rate of inflation, which helps to bring the goal of reforming the U.S. healthcare delivery system back to the top of the political agenda. When Bill Clinton runs for president, he makes this issue a cornerstone of his campaign. Shortly after he takes office in 1993, he announces that his wife, First Lady Hillary Rodham-Clinton, will lead a task force charged with developing a plan for national healthcare reform. The Clinton policies in the 1990s stop all construction for a time, until healthcare systems can understand how they will be funded. Once this is ironed out, design and construction resum.

Since senior citizens have had a national health insurance plan for nearly three decades, Democrats resuscitate the long-standing, progressive goal of extending national health insurance to everyone in the country. Hundreds of experts are called in to help draft a plan. Congress feels excluded from this process, and the plan is never brought to a vote in the House or Senate. Although the dot.com bubble and baby boomer spending habits fuel rapid economic expansion, by the end of the decade 44 million Americans (16 percent of the nation’s population) have no health insurance whatsoever.

Retirees begin to lose access to affordable healthcare during this decade because a 1990 ruling by the Financial Accounting Standards Board (FASB) requires businesses that offer health benefits to their retirees to include the future healthcare expenses for this group in their current financial reports. The implementation of this regulation reduces the market valuation of these firms. As a result, the percentage of midsize and large firms that offer healthcare to retirees falls by almost 50 percent of what it was in 1980.[35](http://e.pub/6omuj6f9ada5iobouyb8.vbk/OPS/c07.xhtml#en0035)

Steady advances in communications technology (most notably the Internet) not only facilitate collaboration among healthcare professionals and researchers but also increase patients’ access to health information. These changes in technology and the delivery of care services are then extended into design of the built environment.

**Politics**

In 1990, Congress passes the Ryan White Care Act and President George H.W. Bush signs the American with Disabilities Act (ADA) into law. The Ryan White Care Act provides access to healthcare services for people living with HIV/AIDS who have no health insurance, have insufficient health coverage, or lack the financial resources they need. The ADA prohibits private employers, government agencies, and other organizations with 15 or more employees from discriminating against people with disabilities. Under Titles II and III of this legislation, public places, such as restaurants, stores, and modes of transportation or communication, are required to make “reasonable modifications” to remove physical barriers to access unless this creates an “undue hardship.”

The Clinton healthcare plan is introduced as the Health Security Act on November 20, 1993. It includes universal healthcare for all Americans by way of “managed competition,” which strives to maximize value for consumers and employers. Under this model, the entity purchasing the healthcare insurance for a group of subscribers (for example, an employer or a government agency) selects the participating plans, manages enrollment, and makes other decisions aimed at obtaining competitive prices while maintaining quality of care services.

During the latter half of this decade, the political will for overhauling the U.S. healthcare industry is lost as the U.S. economy experiences the strongest expansion it has had in decades and employers become more focused on recruiting and retaining staff than on controlling costs. However, some significant healthcare-related legislation is passed.

The Health Insurance Portability and Accountability Act of 1996 (HIPAA) establishes standards for achieving and preserving the privacy of patients’ healthcare information. This leads healthcare organizations and design professionals to develop and refine strategies for maintaining visual and acoustical privacy in all locations where a patient’s health information is exchanged.

**Healthcare**

Passage of the ADA during the same year plays a major role in the design of medical facilities. The ADA includes tax deductions for businesses of any size to remove barriers for people with disabilities. This includes providing accessible parking spaces, ramps, and curb cuts as well as making all interior areas of a facility wheelchair accessible. Accessibility is now a part of every a project. Meeting the requirements is a part of the design of all facilities and becomes a part of the Architect’s licensing exam and the continuing education programs of several states’.

In 1993, a group of healthcare and design professionals found the Center for Health Design to collaborate on research and advocate for the ways that design can be used to improve patient outcomes in healthcare environments.

**Evidence-Based Design**

Roger Ulrich coins the phrase “evidence-based design” in 1999, and his research helps to build interest in the relationship between design of the built environment, health, and wellness.[36](http://e.pub/6omuj6f9ada5iobouyb8.vbk/OPS/c07.xhtml#en0036) Later in that year, the Institute of Medicine (IOM) publishes *To Err is Human: Building a Safer Health System,* a report that asserts that preventable medical errors may contribute to between 44,000 and 98,000 deaths. It defines “medical error” as “the failure of a planned action to be completed as intended or the use of the wrong plan to achieve an aim.”[37](http://e.pub/6omuj6f9ada5iobouyb8.vbk/OPS/c07.xhtml#en0037)

The Healthcare Research and Quality Act of 1999 requires the Agency for Healthcare Research and Quality (AHRQ) to “conduct and support research and build public partnerships to: identify the causes of preventable health care errors and patient injury in health care delivery; develop, demonstrate, and evaluate strategies for reducing errors and improving patient safety; and disseminate such effective strategies throughout the health care industry.”

**2000–Present**

Interest in and knowledge about the relationship between the design of healthcare facilities and health outcomes steadily increases. For example, the Pebble Project is launched to “identify built environment solutions that measurably improve patient and worker safety, clinical outcomes, environmental performance and operating efficiency.”[38](http://e.pub/6omuj6f9ada5iobouyb8.vbk/OPS/c07.xhtml#en0038)

**Politics**

The United States has been fighting terrorist movements for more than a decade. This increases and alters the demand for healthcare services in ways that will likely shape how care is provided for veterans well into the future. For example, improvements in military technology, such as body armor and vehicle shielding, improve survival rates from injuries that would have proved to be fatal in earlier wars. As a result military and civilian care providers must learn how to treat new types of traumatic injuries, such as those affecting the brain.

A Rand Corporation report calls for more research to improve knowledge about “invisible wounds,” the psychiatric and mental health consequences of combat trauma and repeated deployments.[39](http://e.pub/6omuj6f9ada5iobouyb8.vbk/OPS/c07.xhtml#en0039) This report indicates that more than one-quarter of military personnel who have served in Iraq and Afghanistan may suffer from some type of mental disorder.

In 2002, President George W. Bush launches the Health Center Growth Initiative in order to increase access to primary care services by expanding the health center program. This initiative adds or expands health centers in the most underserved areas of the United States. Over the course of five years, federal spending on the health center program nearly doubles.

In 2003, President Bush signs the Medicare Modernization Act into law. The act mandates a prescription drug plan for elderly and disabled Americans.

During their 2004 presidential campaigns, President Bush and Senator John Kerry present proposals for expanding healthcare coverage in the United States. Bush’s proposals are more modest, and a variety of experts judge them to be less expensive to implement than Kerry’s more comprehensive plan.

**State Models for Reform**

In 2006, Massachusetts and Vermont pass reform laws that strive to provide universal or near-universal healthcare coverage for their residents. The legislation in Massachusetts requires residents to obtain coverage and calls for the responsibility for financing expanded coverage to be shared by individuals, employers, and the state. Within two years, the number of uninsured residents in Massachusetts is cut in half.

Vermont’s law creates the Catamount Health Plan for uninsured residents. By 2014, Vermont has developed Vermont Health Connect, an online healthcare marketplace where people can enroll in public healthcare programs such as Medicaid or Dr. Dynasaur, buy insurance from a private company, and determine if they are eligible for subsidies.

In 2007 the CDC reports that more people in the United States die from the staph infection “methicillin-resistant *Staphylococcus aureus*” (MRSA) than from AIDS.[40](http://e.pub/6omuj6f9ada5iobouyb8.vbk/OPS/c07.xhtml#en0040) This statistic helps to bring the issue of healthcare-associated infections (HAIs) into the national spotlight.

**Behavioral Health**

The Mental Health Parity Act is amended in 2008 to require insurance companies to treat behavioral health conditions the same as physical conditions when their policies provide coverage for both. During this election year, the two leading presidential candidates, President Barack Obama and John McCain, present proposals for healthcare reform. McCain’s proposal focuses on providing tax credits for people who do have healthcare through their employers. He includes a guaranteed access plan in his proposal to help people who are denied coverage by insurance companies. In contrast, Obama advocates for universal healthcare coverage based on his belief that everyone living in the United States should have affordable access to quality care. His plan calls for the creation of a national health insurance exchange that would include private insurance plans and a “public option.” The prime concern for voters of all political allegiances is affordability.

**ARRA**

In 2009, the American Reinvestment and Recovery Act (ARRA) makes a substantial investment in healthcare. For example, it does the following:

* Extends the transitional medical assistance program so that low-income parents can be eligible for Medicaid coverage for up to six months after their earnings have increased above the maximum allowed.
* Provides subsidies to enable some individuals to afford COBRA coverage if they were terminated between September 1, 2008, and December 31, 2009.
* Offers $17 billion in Medicare and Medicaid incentives to encourage providers to invest in electronic health record systems and to strengthen the measures they are using to protect patient privacy. The Congressional Budget Office (CBO) estimates that the health information technology (HIT) investments resulting from these incentives will generate $12 billion in savings from improved care coordination and reduced medical errors and duplications.
* Allocates $2 billion for construction and operation of community health centers ($1.5 billion for construction projects, the remainder for operations).

**ADA Updates**

In 2010, the Department of Justice issues updates regulations for Titles II and III of the ADA and makes them effective as of March 15, 2011. These revisions include an “element by element safe harbor” that allows facilities built or altered in compliance with the 1991 ADA standards to remain as they are until they are “subject to a planned alteration.” This safe harbor protection also applies to elements within the “path of travel” to an altered area.[41](http://e.pub/6omuj6f9ada5iobouyb8.vbk/OPS/c07.xhtml#en0041)

**Affordable Care Act**

On March 23, 2010, President Obama signs the Patient Protection and Affordable Care Act (ACA) into law. This is the first time in American history that a comprehensive healthcare bill is passed. Its primary goal is to provide affordable, quality healthcare services to all Americans. Some of the significant changes it makes include the following:

* The law calls for the creation of a website, www.healthcare.gov, which is to be designed to help consumers learn about the insurance options available to them, compare plans, and pick the best option for them and their families.
* Beginning in 2010, insurance companies are no longer permitted to deny coverage to children under the age of 19 with preexisting conditions. This requirement gradually expands to include people of all ages.
* Insurance companies are prohibited from cancelling a person’s health insurance coverage (unless that person completes a fraudulent application) and from imposing lifetime dollar limits on essential benefits. During the drafting of the ACA, insurance companies have successfully lobbied to have an “individual mandate” also included in this legislation. This mandate requires everyone to buy into the system so that the costs of providing healthcare for those who are ill and injured are spread across a large patient population.
* Medicaid and the Children’s Health Insurance Plan (CHIP) are expanded to cover 15 million men, women, and children who fell through the cracks in the past. However, some states choose to opt out of this expanded coverage.
* For new health insurance plans, essential health benefits and preventative services are covered, with no out-of-pocket costs for the patient.
* Young adults can remain covered under their parents’ health insurance plans through the age of 26.
* Senior citizens and others enrolled in Medicare now receive free preventive services, such as annual wellness visits. In addition, people who have Medicare Part D prescription drug plans and who fall into the “donut hole” will receive discounts and other savings until this coverage gap is closed in 2020.[42](http://e.pub/6omuj6f9ada5iobouyb8.vbk/OPS/c07.xhtml#en0042)
* The 2015 employer mandate requires that full-time employees of large firms have access to health benefits. Small firms are exempted from this mandate. Large firms are those with 50 or more employees.
* For plans sold to individuals and small employers, the premium must be spent on health services and quality improvement. If insurance companies do not meet these goals because their administrative costs or profits are too high, they must provide rebates to consumers.
* The law creates an affordable, voluntary long-term-care insurance program (CLASS) that provides benefits to adults who become disabled.
* In the individual and small-group market, insurance companies are prohibited from charging higher rates based on gender or health status.
* Tax credits and reduced cost–sharing are provided to make health insurance coverage affordable for most Americans.
* Beginning in 2014, people who do not have coverage under an employer-based health plan will be able to purchase health insurance directly by way of an exchange. This online marketplace offers a choice of health plans that meet the benefit and cost standards established by the ACA.
* Members of Congress and federal employees will be purchasing health insurance through exchanges.
* When the second phase of the small-business tax credit is implemented, qualified small businesses will receive available credit for up to 50 percent of the employer’s contribution so that they can afford to provide health insurance for their employees. There will also be a credit for small nonprofit organizations, whose employees will be eligible for a credit worth up to 35 percent of the employer’s contribution.
* People earning less than 133 percent of the poverty level will be able to enroll in Medicaid. States will receive 100 percent federal funding for the first three years to support this expanded coverage. After that, they will receive 90 percent.
* Most people who can afford basic health insurance will be required to purchase coverage or pay a fine to help offset the costs of caring for uninsured people.
* As of 2015, physicians’ compensation will be tied to patient health outcomes rather than being based on fees charged per service rendered.[43](http://e.pub/6omuj6f9ada5iobouyb8.vbk/OPS/c07.xhtml#en0043)

On October 1, 2013, however, the much-anticipated launch of healthcare.gov, the website designed to make comparison-shopping for health insurance easy, becomes one of the largest, most public software failures in recent history. Delays related to making sure that the website can keep up with demand and function well in other ways initially have a negative impact, and the actual number of people who sign up for coverage using the exchanges falls short of projections.

**Healthcare**

Healthcare spending in the United States continues to grow, and in 2008 reaches an average annual cost of $7,538 per person. This is substantially higher than spending in the next-highest countries of Norway and Switzerland, which spend $5,003 and $4,627 per capita on healthcare services, respectively.[44](http://e.pub/6omuj6f9ada5iobouyb8.vbk/OPS/c07.xhtml#en0044) According to a 2007 report by the National Coalition on Healthcare, someone in the U.S. files for bankruptcy every 30 seconds as a consequence of a serious health problem.[45](http://e.pub/6omuj6f9ada5iobouyb8.vbk/OPS/c07.xhtml#en0045)

Regardless of the fact that the U.S. spends more money on healthcare than its main international competitors, it ranks far behind other developed countries in terms of health outcomes such as longevity and child mortality rates.

The number of people living without health insurance in the United States continues to climb. By 2007, the Census Bureau places this number at 45.6 million. This number exceeds 48 million by 2011 but begins to decline in 2012, fueling hopes that the Patient Protection and Affordable Care Act will, in fact, provide access to health insurance for millions of people who could afford it prior to the time that phased implementation of this law begins.

**More Integration**

The delivery of healthcare services is more holistic, integrated, and team-based. Services that were once considered “nontraditional” or “alternative” in the United States (acupuncture, for example) are now considered “complementary.” As the baby boom generation ages, the rate of chronic illnesses rises. But information about health and wellness becomes more easily available and more widely discussed, and healthcare organizations shift their emphasis from treating diseases and injuries to preventing them.

**Consolidation**

Colocation and consolidation become more common. Generally, this occurs in two ways: various healthcare practices choose to locate near each other (primary, dental, and behavioral health practices, for example), or medical care is paired with community services such as housing assistance. Some private practices or organizations choose to open a clinic on hospital campuses so that they can share lab, diagnostic, and treatment facilities. This strategy can make care more convenient for patients when they can complete tests, physical exams, consultations, and follow-up care at a single location. It also allows clinics and hospitals to optimize utilization of expensive high-tech equipment such as magnetic resonance imaging (MRI) or x-ray machines.

**EDAC Certification**

In 2009, the Center for Health Design launches a specialized accreditation program for “evidence based design” (EDAC). To achieve EDAC certification, design professionals must pass an exam demonstrating that they not only understand how to apply the evidence-based process to designing healthcare facilities but also know how to measure and report the impact that design decisions have on the patients’ safety, perceptions, and health outcomes.

**Green Design**

Awareness of and interest in green design grows. As more building owners, property managers, and developers use certification programs such as Leadership in Energy and Environmental Design (LEED), industry-specific guidelines are created for healthcare facilities, such as *The Green Guide for Healthcare* (2002), LEED for Healthcare (2011), and the Green Globes CIEB Healthcare (2011) programs.

**Man-made and Natural Disasters**

The attacks on September 11, 2001, shake the confidence of citizens from coast to coast. Within a month, anthrax-contaminated letters are mailed to several media outlets and to two U.S. senators (Daschle and Leahy). Twenty three people contract anthrax, and five of them die.

In 2002, a severe acute respiratory syndrome (SARS) appears in China. Since China suppresses news of the outbreak, it spreads to neighboring countries and then to more distant lands by way of international travelers.

Hurricane Katrina hits the U.S. Gulf Coast in 2005, and massive flooding destroys much of New Orleans. The resulting contamination of water from decaying bodies, chemicals, and other matter creates the largest public health disaster in American history.

These and other major events cause public health officials to more thoroughly analyze how major cities can prepare for and respond to man-made and natural disasters, which include various forms of terrorism. “Resilient design” becomes a common phrase. It is defined by the Resilient Design Institute as “the intentional design of buildings, landscapes, communities, and regions in response to vulnerabilities to disaster and disruption of normal life.”[46](http://e.pub/6omuj6f9ada5iobouyb8.vbk/OPS/c07.xhtml#en0046)

**Present Time Onward**

Driven by the Affordable Care Act, the U.S. healthcare system keeps evolving into a decentralized, tiered system of clinic-based care with the outmigration of services extending into the workplace and home. However, today and well into the future, political factors beyond this historic piece of legislation will continue to influence where and how health and wellness are promoted and achieved across the United States.

**Healthcare**

As more healthcare organizations form accountable care organizations (ACOs) and medical homes, hospitals acquire or form partnerships with local clinics. These new alliances are expected to improve utilization as healthcare organizations determine how to use excess capacity on hospital campuses more flexibly.

For example, the University of Michigan’s Trauma and Burn Center has developed a strategy for making its intensive care unit more flexible by moving patients down to a lower acuity of care as they recover. The patients remain in the ICU, but payers are charged fees commensurate with the actual care provided. This has improved the continuity of care and patient satisfaction levels while putting a department with high fixed costs to better use.

The increased recognition of the mind/body connection is expected to continue to transform the way care services are provided, with more emphasis being placed on keeping people well in both of these realms. Since research completed by the CDC has demonstrated that four modifiable behaviors increase the risk of developing chronic diseases, public agencies, nonprofit organizations, and private companies have all developed programs to encourage people to be more physically active, to improve their access to and knowledge about nutrition, to quit smoking, and to limit alcohol consumption.

As electronic health record systems become the norm, the coordination of care between providers will improve. The emphasis of how technology is employed has begun to shift from diagnosis to prevention and health maintenance. Only the sickest patients and those recovering from major surgery or injuries will be treated in hospitals.

**Politics**

Several states’ decisions to legalize same-sex marriage have begun to make healthcare benefits that were once limited to heterosexual married couples available to gay spouses.

U.S. involvement in wars in Iraq and Afghanistan during the first decade of this century has increased the number of patients requiring long-term care. This is one of the factors fueling the trend toward outmigration of care. It has helped spur innovations in telehealth and in-home healthcare services as well as the addition of infusion, dialysis, and other specialized services at convenient care clinics and other community-based locations.

**Operationalized**

While understanding that the historical interplay between healthcare and politics provides important context for design professionals, clients value action over rumination. The healthcare industry has for decades felt pressure to simultaneously lower costs and improve quality. Thus, the most highly valued design professionals quickly determine how much analysis is merited, effectively communicate the value of research and planning, and know how to efficiently progress from schematic design through construction. They also consult and collaborate with clients on an ongoing basis to make sure that healthcare facilities continue to adapt to changes in operational and care delivery processes.

For this reason, some of the major questions explored throughout this textbook include:

* How have design professionals addressed the constantly changing challenges presented by political forces and other factors?
* How have they acted on new opportunities?
* What can design professionals do to maintain and enhance their valued position as trusted advisors for their clients?

Research has shown that over the course of a 30-year period, there is a 1:10:200 relationship between the costs of designing and operating a healthcare facility and the costs of attracting and retaining the highly skilled and professionally trained staff who deliver health and wellness services with in it. This means that for every dollar spent on construction costs, $10 are spent on the ongoing operational expenses (energy costs and maintenance, for example) and $200 on employee compensation. The potential for design decisions to have a positive, exponential impact on the healthcare industry is clear.

Technology in healthcare has pushed the boundaries of culture, morality, and politics. Gene therapy has become a political agenda in the United States. Questions are being asked such as “if a heart can be grown for a transplant, should it be?” Or “is a child worse off without altering the genes to avoid illness or lifelong disabilities?”

The outcome of these political decisions will influence not only the building architecture but the type of service and facilities altogether.

The baby boomer’s need for healthcare and facilities will mean more ASC and MOB facilities. The chapters of this book outline some of the design considerations for these facilities. We will likely see advances in the design of infusion centers, along with full cancer centers, diabetic treatment, obesity, and small hospitals and larger ASCs. The design will be centered on patient’s experience while visiting. The design will also focus on overall health and planning to prevent visits to the emergency room.

Globalization is another trend in healthcare. While the United States is not seeing as many large hospital projects, other countries are developing large medical campuses that include complete medical centers combined with hotels and recreation facilities. This is called destination healthcare. These campuses are often designed entirely in the United States and Europe, are typically run by American and European healthcare executives, and are staffed with physicians from around the world.

New overseas facilities are providing services more cost effectively, with some on a cash-only basis. We will see an increase in destination healthcare and likely political agendas to help keep some of this employment in the United States.

Douglas Whiteaker

**Notes**

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