A HISTORY OF CONNECTICUT’S ACUTE CARE HOSPITALS

Although Connecticut licensed its first physicians and surgeons in the 1650s and boasts medical societies and a medical college that are among the oldest in the country, it is only in the 20th century that its acute care hospitals became central providers of health care services. Prior to that time, hospitals were primarily charity institutions that offered boarding facilities to chronically ill paupers, veterans, and transients. Poor sanitary conditions and the constant spread of infection created a widespread popular fear of hospitals; therefore, only the poorest and most desperate entered them. Most people received medical care in their homes from physicians who were equipped with few diagnostic tools and homemade prescriptions.

However, health care in Connecticut and, in particular, the role of its hospitals, was transformed in the late 19th and early 20th centuries by a combination of socio-economic changes and medical breakthroughs. Sixteen of the state’s 31 currently operating acute care hospitals were established during the last decade of the 19th century and the first years of the 20th century. Following the Civil War, urbanization, industrialization, and immigration swelled the population of cities such as Bridgeport (+400%) and New Haven (+175%), thereby changing the nature of their public and private health needs. Medical advances such as the understanding and prevention of infection, diagnostic and surgical innovations, and the development of professional nursing catalyzed the development of urban modern acute care hospitals that offered a broadening range of services to meet their communities’ health needs.

After the First World War, Connecticut, like the rest of the country, experienced a period of new hospital construction that occurred primarily in its smaller communities. The expansion of health care services and their broader availability fueled significant increases in both the number and social diversity of people who utilized hospital care. These related trends continued throughout most of the 20th century as hospitals consistently expanded their physical facilities to provide more services and to meet the increased demand brought on by the spread of employment-based insurance that began during the Second World War. Despite the expanding market for their services, Connecticut’s acute care hospitals have, throughout their histories, faced challenges to their ability to provide access to quality care for all while maintaining their financial equilibrium. Since their inception at the turn of the 19th century, they have, however, been dynamic institutions that have grown and adapted to advances in medical technology, social change, and financial pressures that have and will continue to shape them and, more generally, the delivery of health care.

HOSPITALS AS CHARITY INSTITUTIONS (1830 – 1880)

In the rustic America of the 1820s, there were only three hospitals.1 Despite fifty years of transcontinental expansion, urbanization, immigration, and industrialization, the United States had only 120 hospitals around the time of its Centennial. Health care services in that era were almost exclusively delivered by physicians in the homes of their patients. Connecticut’s rich medical heritage extends back to the middle of the 17th century when it began to license physicians and surgeons. The Connecticut Medical
Society (founded 1792) and Yale Medical School (1813) are two of the oldest institutions of their kind in the nation. In the field of public health, the state in 1805 mandated the establishment of municipal boards of health; in 1878 it created one of the country’s first state boards of health. Yet at the time, Connecticut had only four acute care hospitals: New Haven Hospital (1826—nation’s 5th oldest), Grace Hospital (New Haven), Hartford Hospital (1854), and Bridgeport Hospital (1878). Given the level of medical technology at the time, public sanitation projects directed by boards of health had a greater effect on public health than did the hospitals.2

In its 1899 Annual Report, Grace Hospital’s Executive Board declared that theirs was largely a charitable institution. This was the case for nearly all 19th century hospitals as they provided room, board, and care to the indigent, transients such as sailors and itinerant laborers, and veterans. These people were chronically ill; hospital care generally consisted of bed rest, meals, exercise if possible, and often “moral correction.”3 Because hospitals treated the chronically rather than acutely ill, patients tended to stay for extended periods.4

As charitable institutions, the financial equilibrium of early hospitals relied upon the unpaid services of physicians, endowments from wealthy benefactors, as well as grants from local and state government for care of the indigent, and federal assistance for veterans. Providing long-term health care to the poor was an expensive endeavor, particularly as government stipends often failed to cover costs. In the 1870s, Hartford Hospital received a $2 weekly stipend from the state for each indigent patient, but estimated its per capita costs at $5.5 Federal law provided for the hospital admission of ill veterans in order to keep them out of almshouses; however, insufficient subsidies placed an enormous financial burden upon hospitals. The administrators of New Haven Hospital complained that while they received $4.50 for each veteran, they actually spent $7 per capita each week for their care. Hospitals faced the difficulty of providing access to health care to the poor while maintaining their financial balance. As a result, they consistently ran deficits and often relied upon emergency appeals to benefactors to stay in operation.

While Connecticut’s earliest hospitals provided services to the poorest, the majority of whom were immigrants or soldiers, they generally did not attract patients from the rest of society. Hospitals offered no medical advantage over home health care as they lacked sophisticated equipment and procedures for diagnosing and treating illness. An equally important factor in the public’s refusal to go to hospitals was its fear of “hospitalism,” i.e., the likelihood of developing an infection as a result of medical treatment or catching a disease from fellow patients.7 Nationally, poor sanitary conditions and a limited understanding of infections contributed to the spread of contagions and post-operative death rates of up to 25%.8 Illustrative of the public’s well founded antipathy towards hospitals was their limited number of patients; for example, New Haven Hospital annually averaged less than 150 patients until the last quarter of the 19th century.
THE EMERGENCE OF THE MODERN URBAN HOSPITAL (1880 – 1918)

During the late 19th century and early 20th century, breakthroughs in medical knowledge and socio-economic changes transformed hospitals from refuges for the indigent into critical providers of acute health care. War has often catalyzed medical advances. Drawing from her experiences in the Crimean War, Florence Nightingale popularized a series of hospital reforms designed to ensure sanitary conditions. During the Civil War, Dr. Joseph Lister discovered that antiseptic procedures caused a decline in mortality. Physicians and hospitals did not, however, uniformly adopt antiseptic practices. Over time, the medical community debated and refined these practices but they were not broadly implemented by hospitals until after Dr. Koch developed germ theory in the 1880s. During that time, “antisepsis,” the chemical cleaning of medical implements, gave way to “asepsis,” the creation of a germ-free environment for medical care. Professionalized nursing care, sanitary conditions, asepsis, and an expanding understanding of germs, allowed hospitals to more effectively combat infections and other aspects of “hospitalism.”

Technological advances at the turn of the century diminished the negative aspects of hospital stays and broadened the range of services that hospitals offered.

While these advances diminished the negative aspects of hospital stay, they also broadened the range of services that hospitals offered and contributed to the centralization of acute care. Asepsis permitted greater surgical experimentation and this knowledge revolutionized the field. By the turn of the century, surgical procedures treated a broad range of acute illness and corrected physical deformities.

For example, the development of the appendectomy in 1890, first performed in Connecticut in 1892, permitted surgeons to treat a widespread fatal malady. The number of surgeries at Waterbury Hospital dramatically expanded from 19 in 1890 to 1,169 by 1917—an amazing 61-fold increase. At the same time, hospital laboratories were also expanding physicians’ diagnostic capabilities and pharmacies were pioneering modern pharmacology. They provided antitoxins for such widespread killers as rabies (1885) and diphtheria (1895). Connecticut’s hospital laboratories also contributed to public health by testing for pollution in the water supply and in milk.

While the decline of “hospitalism” diminished the public’s fear of hospitals, the expansion of services and increased effectiveness created reasons for people to seek hospital care. Physicians also became much more willing to refer patients for hospital treatment. Physicians and the public came to perceive the need for hospitals; America experienced its first boom in hospital construction. While there had been just 120 hospitals nationally in the 1870s, they numbered 6,000 fifty years later. In that same time period, 26 of Connecticut’s 31 current acute care hospitals were founded; sixteen of these were established in the twenty-year period from 1890 to 1910.

As health care was being revolutionized, Connecticut was itself undergoing a social and economic transformation. Its “old Yankee” character was being altered through sustained Irish and German immigration in the mid-19th century and later waves of Italians, Poles,
Swedes, Russians, and others from Eastern Europe. These immigrants were largely settling in burgeoning industrial cities like Bridgeport, Hartford, New Haven, and Waterbury. Between the Civil War and the turn of the century, Bridgeport's population surged from 17,000 to 82,000 and New Haven's grew from 39,000 to 108,000. Urbanization and industrialization created many public and private health problems. Industrial accidents and those caused by streetcars and the increase in traffic created a demand for acute care. Hartford Hospital was founded in 1854 in the wake of a boiler explosion. Furthermore, tenement housing, poor public sanitation, and the insufficient diets of most industrial workers created ideal conditions for the spread of infectious disease.

The founders of both Bridgeport and Waterbury Hospitals recognized that industrialization and urbanization had transformed their communities and created the need for hospitals. Similar concerns were most likely behind the establishment of hospitals in Danbury (1885), Derby (later Griffin, 1909), New Britain (1893), Norwalk (1893), and Stamford (1896). Bridgeport Hospital was founded in 1878 by Dr. George Lewis, who had been a surgeon during the Civil War along with a group of businessmen and community leaders that included P.T. Barnum. The campaign for a hospital in Waterbury was started in 1882 by a newspaper editor and several clergy, including Dr. Edmund Rowland, and culminated in 1890 as the “Brass City” founded its own hospital. Both Bridgeport and Waterbury Hospitals were financed in part through local fundraising campaigns that included “Hospital Sundays” as churches took up collections for their construction. They both also received matching grants from the state.

From their establishment, urban hospitals treated a large and ever-expanding number of patients. Between 1878 and the turn of the century, the number of patients admitted each year to Bridgeport Hospital rose five-fold and nearly quadrupled between 1900 and the beginning of the First World War to a total of 3,000 people annually. At that time, Bridgeport’s 360-bed hospital was one of the largest in the country. At New Haven Hospital, the annual number of patients grew from 394 in 1878 to 3,609 in 1915—an 816% increase. While they had lower patient volumes, Danbury and Waterbury Hospitals also recorded dramatic increases. Between 1910 and 1917, the number of patients treated annually by Danbury more than doubled from 582 to 1,256. From its inaugural year of 1890 to 1917, Waterbury Hospital’s annual number of patients soared from 86 to 2,095—a startling 23-fold increase.

A particularly dramatic area of hospital growth was maternity care. The first few decades of the 20th century in Connecticut witnessed a shift from home births supervised by midwives to hospital deliveries. Aseptic conditions and improved medical technology made hospitals safer places for birth. Waterbury Hospital recorded only two births in its first year (1890) but 268 in 1917. Similarly, the number of births at Grace Hospital grew from 23 in 1900 to 5,000 in 1919. New Haven Hospital saw 11 births in 1878, 184 in 1917, and over 5,000 by 1925.

In addition to inpatient care, Connecticut’s urban hospitals also provided outpatient services. New Haven and Waterbury Hospitals’ dispensaries provided inexpensive medical care to their cities’ working classes. In its first year (1925), Waterbury’s dispensary treated 13,000 people; a decade later at the height of the Depression, New Haven’s provided services to 116,000 outpatients.
Connecticut’s large urban hospitals incorporated and even pioneered many early advances in health care. In 1873, New Haven Hospital founded the country’s third nursing school. Two decades later, it was the first American hospital to offer X-ray service. By the turn of the century, it was providing blood transfusions and, a decade later, EKGs and ECGs. Yale-New Haven also has one of the country’s oldest pediatric departments (1920).

Bridgeport Hospital has the state’s oldest radiology and occupational therapy departments. Bridgeport, New Haven, and Waterbury Hospitals also created special facilities to care for those with infectious diseases such as tuberculosis, typhoid, and yellow fever.

Despite the fact that modern urban acute care hospitals had established themselves as central to the provision of health care services by the first decade of the 20th century, they still regularly coped with financial difficulties. Although the average patient’s length of stay had declined from 25 days in the 1880s to 15 by the early 1920s, any possible savings from this decrease were offset by rising labor and capital costs. While medical advances had significantly improved the quality of health care, they had also substantially increased its cost. Hospitals had to purchase expensive medical and laboratory equipment, including X-rays and autoclaves. The Executive Board of Waterbury Hospital observed that the expanded use of surgery had substantially increased the costs of medical care. After the turn of the century, labor costs expanded as hospitals began to pay their physicians. To handle the exponentially-increasing public demand for services, urban hospitals were also constantly expanding and modernizing their facilities: electrification, the installation of telephones, hot water systems, power plant expansion, and new wards were all necessary but extremely costly additions. An additional burden upon urban hospitals was that few patients could afford to pay the full cost of their care. In 1925, Waterbury Hospital reported that only 13% of its patients paid the full costs of their care. Although the state of Connecticut and municipal governments provided aid, hospitals believed that these funds were insufficient. As a result, chronic financial shortfalls had to be covered by emergency appeals, community fundraising efforts such as “Hospital Sundays,” and increased prices.

CATHOLIC HOSPITALS: SERVING THE NEEDS OF IMMIGRANTS

From the mid-19th century until the 1920s, Connecticut’s burgeoning industry attracted Catholic immigrants who were escaping political and economic oppression in Europe. Irish, Italians, Poles, Germans, Hungarians, Slovaks, and other nationalities preserved their cultures within ethnic communities and founded their own parishes. The Catholic Church established six hospitals in Connecticut: St. Francis (Hartford), St. Vincent’s (Bridgeport), St. Mary’s (Waterbury), St. Raphael’s (New Haven), St. Joseph’s (Stamford), and St. Joseph’s (Willimantic) which in the 1930s became Windham Community Memorial, a non-sectarian institution. In addition to serving immigrants, Catholic hospitals were also founded to administer to the urban poor.

Although Catholic hospitals provided the same health care services as their non-sectarian counterparts, they were...
nevertheless distinct in a few respects beyond their religious nature. First, Catholic hospitals admitted the chronically ill and, in particular, the elderly. Just ten years after it opened, St. Vincent’s Hospital established the Hillside Home Hospital (today the Dinan Center) for the care of older adults. Second, women played a crucial role in the development of Catholic hospitals. Religious orders such as the Sisters of St. Joseph, the Daughters of St. Vincent De Paul, and the Sisters of Charity of St. Elizabeth not only staffed the hospitals as nurses, but also served as key administrators. Hospital directors such as Mother Ann Valencia at St. Francis Hospital guided the early development of their institutions and were fundamental to their success. Finally, U.S. Catholic hospitals normally charged their patients at least a nominal fee. Payment for services, albeit limited, helped to diminish the image of hospitals as a place where only the indigent sought care and thereby allowed patients to maintain a sense of dignity. Furthermore, Catholic benevolent societies, often ethnic in character, offered members the opportunity to join medical insurance plans or prepay for hospitalization. Catholic hospitals also received financial assistance from local dioceses.

**EXTENDING ACCESS TO MODERN HEALTH CARE: COMMUNITY HOSPITALS (1918 – 1938)**

Although residents of Connecticut’s urban centers could obtain hospital care by the early 20th century, those living outside of these areas, particularly in northeastern and northwestern sections of the state, did not have access to modern acute health care. Aware of this void, civic groups and political leaders in smaller communities such as Sharon, New Milford, and Putnam initiated efforts to construct facilities to serve their citizens and those of surrounding towns. The Great Influenza outbreak of 1918 also dramatized the need for modern health care facilities. From the First World War until the Great Depression, the U.S. experienced another boom in the construction of hospitals. During that period, ten of Connecticut’s current “community hospitals” were constructed, adding to the five already built. Hospitals such as Manchester, Rockville, and Charlotte Hungerford (in part) were constructed as memorials to World War veterans.

While community hospitals are proportionate to the areas that they serve, they have experienced many of the same trends and problems as their larger urban counterparts. Starting with 20 to 50-bed facilities, they were quickly overwhelmed by the public’s demand for health care services. In just over 25 years, Charlotte Hungerford Hospital treated 50,000 patients. Sharon Hospital experienced spectacular growth, treating just under 100 at the time of the First World War to around 2,000 per year by the Second World War. By the early 1940s, Windham Community Hospital was also admitting nearly 2,000 patients and performing 1,400 operations per year.

Faced with strong demand in the early 20th century, community hospitals soon recognized that they would need to expand and modernize their facilities. After four years at its first location, New Milford Hospital moved into a newer and larger facility. After six years, Sharon Hospital left its original quarters, a house rented by its founder Dr. Chaffee. It subsequently added a new lab and a nurses’ home. Just nine years after its founding,
Charlotte Hungerford Hospital commissioned an architect to draw up plans for a new facility.

Expansion and modernization were particularly difficult for community hospitals. They were in small markets and so generated limited revenue. Community hospitals also relied greatly on the generosity of benefactors and fundraising efforts of local civic organizations. Although the average patient's length of stay declined from 15 days to around 11, technological advances increased hospital costs. Unlike labor, many of these costs were fixed, so that Yale-New Haven and Sharon Hospital would pay the same price for the same instrument. Community hospitals, like their urban and Catholic counterparts, also carried the financial burden of caring for the indigent and those who could not pay the full cost of their care. The Great Depression exacerbated this situation as it swelled the ranks of the unemployed. Nationally from 1929 to 1930, receipts per patient dropped from $236 to $59 and charitable donations precipitously declined. Given all these factors, it is not surprising that many community hospitals operated with deficits from the time that they were founded.

THE IMMEDIATE POST-WAR YEARS

With the country’s resources primarily dedicated to the war effort, hospitals in the early 1940s suffered critical manpower and material shortages. Although volunteer auxiliary associations in many hospitals swelled and extended their services to ease the labor shortage, they could not compensate for the paucity of physicians and experienced nurses.

While in the short term the war effort limited the growth and development of hospitals, its legacies had far-reaching effects upon American health care. As with most wars, great medical advances, such as the clinical utilization of penicillin, had taken place. After World War II, physicians and hospitals adopted these innovations. While the technology of health care was being transformed by the war, significant changes were occurring in the way that people paid for these services. To control wartime inflation, President Roosevelt had imposed wage restrictions. Employers, desperate to attract labor, began to offer medical insurance plans to their employees. Just prior to America’s entry into the war, the American Hospital Association had helped to create the first Blue Cross Hospitalization plan in New York; this was followed by the first Blue Shield plan in California to cover physician services. Although the American Medical Association (AMA) helped to defeat a post-war initiative for a national health system, employer-based and private insurance plans still dramatically increased people’s access to health care.

Following the war, Connecticut’s hospitals were deluged by the public’s increased demand for health care services. Large urban hospitals such as Waterbury experienced a near doubling in the number of patients, as did community hospitals such as Windham Memorial. Charlotte Hungerford Hospital treated 50,000 patients from its founding in 1916 through 1942, yet it saw its 100,000th patient just 11 years later. By the 1950s, Waterbury Hospital averaged over 4,000 operations annually and its dispensary treated over 10,000 people per year. Bridgeport Hospital cared for 20,000 patients annually and reached an additional 10,000 in its twelve clinics, while its pharmacy filled 380,000 prescriptions. Maternity wards served record numbers as the “baby boom” accelerated the trend
toward hospital births. Comparing the pre- and post-war eras, a doubling in the number of births occurred at community hospitals such as Windham Memorial and urban ones such as Waterbury Hospital. In 1947, St. Francis Hospital delivered a hospital record of 2,688 newborns. The post-war baby boom also fostered great advances in neonatal care that allowed physicians to save the lives of more premature infants.

Responding to increased public demand, Connecticut’s hospitals in the 1950s and 1960s embarked upon an intense period of modernization and expansion. As medical science and nutrition conquered many of the principal causes of mortality such as infectious disease, hospitals began to focus their attention on illnesses such as cancer and heart disease. They either founded or expanded their radiation departments; Waterbury and Danbury Hospitals also opened tumor clinics. St. Raphael’s, Danbury, Bridgeport, and St. Francis Hospitals all established cardiac care units. In 1949, Yale-New Haven implanted the first artificial heart pump. Fifteen years later, the first open-heart surgery was performed at Bridgeport Hospital. Most hospitals also expanded their physical facilities. Recognizing that it had a patient waiting list of 200 to 300 individuals, Bridgeport Hospital in 1955 embarked on a 15-year construction campaign. Community hospitals such as Johnson Memorial, Charlotte Hungerford, Windham Memorial, Sharon, and New Milford also significantly expanded their facilities. Sharon Hospital, like others, converted much of its ward space into semi-private rooms to accommodate the increasing number of insured patients who could afford these accommodations. In 1965, Yale-New Haven formally absorbed Grace Hospital. A decade later, St. Vincent’s and Johnson Memorial Hospitals moved into entirely new structures.

This extensive hospital expansion and modernization was costly. Many of Connecticut’s hospitals received federal grants under the Hill Burton Act (1946), a statute that provided money for hospital modernization. State and municipal governments provided assistance and hospitals also undertook their own fundraising campaigns. In addition to these increased capital expenditures, the cost of health care was again rising. After the war, America experienced a period of inflation; during the 1940s medical costs rose 155%. Despite the decline in average patient lengths of stay from around eleven days in the 1930s to between six and seven in the 1950s, the AMA reported that hospital operating costs doubled again in the 1950s. Furthermore, Connecticut’s acute care hospitals had to absorb the cost of treating the uninsured, the indigent, and those who could not pay the full amount of their care. All of these factors generated financial pressures upon hospitals that intensified throughout the final third of the 20th century.
This historical examination of Connecticut's acute care hospitals has revealed a few key points. First, the delivery of acute health care has radically changed over the last 100 years from house calls by physicians to medicine centralized within hospitals. The centrality of acute care hospitals was established through a wave of hospital construction during the early decades of the 20th century and their modernization and expansion in the 1950s and 1960s. Second, the transformation of hospitals from small charity institutions that served chronically ill paupers and veterans to modern acute care facilities treating tens of thousands of patients every year was driven by medical advances and socio-economic changes. Medical progress has continually improved care and expanded the breadth of hospital services. These advances, combined with the state's urbanization, industrialization, and population growth created a strong and ever-increasing public demand for health care services. The development of employment-based insurance during the Second World War greatly expanded access to health care, thus further increasing hospital utilization. Third, Connecticut's acute care hospitals have faced persistent threats to their financial equilibrium. They have made continual capital investments, purchasing advanced medical equipment while modernizing and expanding their physical facilities in order to keep up with public demand. Labor and capital costs have continued to rise. Connecticut hospitals also accept all patients regardless of their ability to pay and so have had to absorb at least part of this expense. Fourth, implicit in the prior three points is the issue of access to health care. Over the last 100 years, urban hospitals brought care to the industrial working class, Catholic hospitals provided services to immigrants, and community hospitals extended modern health care to smaller communities, particularly in northwestern and northeastern Connecticut. Increased access, particularly the care of charity cases in the past or today's uninsured, has placed a financial strain on all acute care hospitals. Although urban hospitals treat greater numbers of uninsured, community hospitals have less revenue to absorb this cost as well as that of expensive medical equipment. Regardless of size, all hospitals have had to balance the quality of care, access, and financial considerations.

History has shown Connecticut's acute care hospitals to be dynamic institutions that have grown and adapted as a result of advances in medical technology, social changes, and financial pressures. It is likely that these forces will continue to shape them and, more generally, the delivery of health care.
NOTES

5Rosenberg, op. cit., 105.
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7Vogel, op. cit,. 9.
8Rosenberg, op. cit., 126.
9Vogel, op. cit., 60.
11Waterbury Hospital Annual Reports.
12Hiscock, op. cit., 148.
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19A Brief History of Danbury Hospital.
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