Seeking the Salubrious Sea: The Health and Environments of Urban American Families, 1870-1930

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Abstract
More than seventy pediatric seashore hospitals lined the coasts of the northeastern United States and western Europe in the late 19th and early 20th centuries. Founded as responses to urban industrial life, physicians, reformers, and families sent poor children from their city homes to seaside hospitals with the belief that the marine environment would rebuild children's health and bodies.

This dissertation examines American seashore hospitals, focusing on the Children's Seashore House (CSH) in Atlantic City, NJ. I argue that these institutions created a "healthscape," a therapeutic vision of the seashore that inextricably bound health to leisure, and children to their environments. This healthscape could only exist in contrast to urban centers, and the dissertation begins with an examination of the ways in which working-class families and social workers shared a view of the city - including the homes it harbored - as inimical to children's health. Medical knowledge substantiated these views, and helped construct the seashore's salubrity. Chapter two explores the ideology of marine medication. I argue that physicians rationalized natural therapeutics, dosing and distilling the environment into its therapeutic elements, which placed marine medication within mainstream medical practices. Bringing working-class children and their mothers to seashore hospitals was meant to both restore their health and instill middle-class value structures. Chapter three examines how the CSH's built environments reflected those objectives. Then shifting from practitioners to patients, chapter four illuminates that by maintaining their urban caregiving networks and performing marine medication for middle-class tourists, working-class families were critical contributors to defining the seashore as a space where health and leisure were inextricably bound. Despite their popularity, seashore hospitals began to decline by the 1930s. Chapter five uses UV lamps to explore how "technologies of nature" reproduced nature's beneficial effects and rendered the seashore unnecessary to children's health. I conclude with a discussion of the vestiges of marine medication today, including the recent rediscovery that the seashore can improve pediatric patients' health.
Keywords
environmental health, pediatrics, Progressive Era, seashore hospitals

Subject Categories
History of Science, Technology, and Medicine | Medicine and Health Sciences | United States History
SEEKING THE SALUBRIOUS SEA:
THE HEALTH AND ENVIRONMENTS OF URBAN AMERICAN FAMILIES,
1870-1930

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SEEKING THE SALUBRIOUS SEA: THE HEALTH AND ENVIRONMENTS OF URBAN AMERICAN FAMILIES, 1870-1930

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For John, Timmy & Jack
ABSTRACT

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More than seventy pediatric seashore hospitals lined the coasts of the northeastern United States and western Europe in the late 19th and early 20th centuries. Founded as responses to urban industrial life, physicians, reformers, and families sent poor children from their city homes to seaside hospitals with the belief that the marine environment would rebuild children’s health and bodies. This dissertation examines American seashore hospitals, focusing on the Children’s Seashore House (CSH) in Atlantic City, NJ. I argue that these institutions created a “healthscape,” a therapeutic vision of the seashore that inextricably bound health to leisure, and children to their environments. This healthscape could only exist in contrast to urban centers, and the dissertation begins with an examination of the ways in which working-class families and social workers shared a view of the city - including the homes it harbored - as inimical to children’s health. Medical knowledge
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Introduction: Sending Children to the Seashore

"Hurrah!" thought the little Rabbit. "To-morrow we shall go to the seaside!" For the boy had often talked of the seaside, and he wanted very much to see the big waves coming in, and the tiny crabs, and the sand castles.

- The Velveteen Rabbit, 1922

Bringing children to the seashore has a history that is deeply rooted in ideas about health and the environment. These interconnections appear throughout academic and literary texts during the late 19th and early 20th centuries. In Louisa May Alcott’s Little Women, published between 1868 and 1869, thirteen-year-old Beth March develops scarlet fever after caring for a baby who dies from the disease.1 Her sister Jo pays for a trip to the seaside, with the hope that the sea-air would improve Beth’s health, and “though Beth didn't come home as plump and rosy as could be desired, she was much better.”2 When Beth’s condition began to deteriorate, Jo took Beth to the seashore again so she “could live much in the open air, and let the fresh sea breezes blow a little color into her pale cheeks.”3 The trip failed to restore Beth’s health; she died the following spring.

The little boy in The Velveteen Rabbit (published in 1922) also develops scarlet fever. Prior to becoming sick, “the Boy” played with the Velveteen Rabbit all day long and slept with him every night. When the Boy developed a fever, the Rabbit remained in bed with him even though the Boy’s “face grew very flushed, and he talked in his sleep,

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2 Ibid., 275-76.
3 Ibid., 379.
and his little body was so hot that it burned the Rabbit when he held him close.” Unlike Beth in Little Women, the Boy got better. His doctor prescribed a trip to the seashore to facilitate the Boy’s convalescence. He also ordered that the Boy’s room be disinfected and all of his books and toys be destroyed. When the grandmother inquired what to do with the Rabbit, the doctor replied, “That? Why, it's a mass of scarlet fever germs! – Burn it at once.”

These books are characteristic of the contemporaneous beliefs that the seashore was a space of health and healing, particularly for sick children. Between 1870 and 1930, families and physicians understood that a trip to the shore could restore children’s health and rebuild their weak and broken bodies. These beliefs were grounded in the latest medical knowledge and inspired the founding of more than 70 pediatric seashore hospitals over the course of the mid-19th and early 20th centuries. Seashore hospitals, including institutions located on beachfront properties and floating hospitals that sailed cities’ bays, stretched from Baltimore to Boston and across Western Europe. The institutions used “marine medication,” a natural therapeutic regimen that exposed patients to the sea-air, seawater, and sunshine, in order to provide medical care for poor urban children.

5 Ibid., 24.
6 Guy Hinsdale, Atmospheric Air in Relation to Tuberculosis (Washington, D.C.: Smithsonian Institution, 1914), 49. Although the term “pediatric” is anachronistic, I use it as a shorthand to refer to medical institutions that treated children. Moreover, I would argue that it is less anachronistic than it appears to be. Although pediatrics may not have formally coalesced until 1930 with the founding of the American Academy of Pediatrics, the Children’s Hospital of Philadelphia was founded in 1855, and by the 1880s there was an active community of physicians in Philadelphia who studied childhood diseases and focused their practices on caring for children. For more on this, see: Jeffrey P. Brosco, “Sin or Folly: Child and Community Health in Philadelphia, 1900-1930,” (PhD diss., University of Pennsylvania, 1994).
Little Women and The Velveteen Rabbit reflect a continued belief in marine medication, despite the radical changes in medical thought that occurred over this period. The doctor’s proclamation that the Rabbit should be destroyed because it was “a mass of scarlet fever germs” was the result of the germ theory, which emerged in the 1880s and pinpointed microorganisms as the causes of disease. Prior to germ theory, most people believed that disease arose from “miasma,” a foul “airborne substance thought to be produced by decomposing biological material.” Germ theory altered medical understandings of disease etiology, largely uncoupling disease from environmental causation. It also inspired a widespread popular faith that medicine would be able to provide specific, effective treatments for diseases. However, few such specific remedies resulted in the decades that followed, and physicians continued to depend on long-standing therapeutic practices, including marine medication.

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This dissertation examines American families’, physicians’, and nurses’ uses of pediatric seashore hospitals, and how their behaviors and the knowledge they produced constructed ideas about urban children, their environments, and health between 1870 and 1930.\textsuperscript{10} The first American seashore hospital, the Children’s Seashore House (CSH), opened in 1872 in Atlantic City, NJ. Over the next 40 years, philanthropists, religious leaders, businessmen, and physicians founded similar institutions in and around other northeastern cities. These included the Boston Floating Hospital (BFH) founded in 1894; Sea Breeze Hospital (SB) in Coney Island, NY, founded in 1904, and Crawford Allen Hospital (CAH) outside of Providence, RI, founded in 1906.

While there was some variation in seashore hospitals’ patient populations and therapeutic practices, all American seashore hospitals removed poor, and often immigrant, children from their urban homes and relocated them to the salubrious environment of the seashore. The time children spent at the institutions varied widely. While some boarded a hospital boat for a day-trip sailing around a city’s bay, patients who were convalescent or “run down” by city life might have stayed at a hospital for a week or two during the summer, while children with chronic orthopedic conditions could remain at a seashore hospital for months or even years.\textsuperscript{11} Regardless of their lengths of


stay, medical practitioners and the public alike believed that a trip to the seashore reinvigorated working-class children’s health, and could even rebuild their “crippled” bodies.12

The CSH in Atlantic City is characteristic of American seashore hospitals, and I use it as the primary site for this dissertation. Initially operating only as a summer hospital, the CSH treated patients with a wide range of conditions that included marasmus, debility, summer diarrhea, chorea, enlarged tonsils, melancholy, necrosis (of the humerus, tibia, femur, or both femurs), non-pulmonary tuberculosis, as well as children who were convalescing from contagious diseases.13 Beginning in 1910, the hospital remained open year-round and shifted its attention to treating children with chronic orthopedic conditions, especially patients with tuberculosis of the hips, joints and spine, infantile paralysis (polio), and osteomyelitis (bone infection). This change brought its work in line with other seashore hospitals that opened in the 20th century and primarily treated children with non-pulmonary tuberculosis, a disease that plagued working-class urban children.14

The CSH, like other American seashore hospitals, was a direct response to rapid, large-scale social changes that characterized the Progressive Era between 1870-1920.15

12 I use the term “crippled,” because it is the language my actors used.
13 CSH Annual Report for 1875, 10. There are slight variations in the titles of the Reports. For consistency, they will be noted as “CSH Annual Report for...” The Annual Reports can be found at the following archives: the College of Physicians; Historical Society of Pennsylvania; and Free Library of Philadelphia. 14 I use “non-pulmonary tuberculosis” to refer to the various types of tuberculosis that children had who were admitted to seashore hospitals. These conditions were also referred to as “surgical tuberculosis,” or by specific names like Potts disease (tuberculosis of the spine) and scrofula (tuberculosis of the glands). 15 This is a slightly expanded definition of the Progressive Era, which many other historians have bounded to the years between 1880 and 1920. The 1870s are often included in other eras/periodizations, such as Reconstruction, which marked the years following the Civil War, or the Gilded Age, which spanned from
During this time, the population of northeastern American cities swelled as a result of industrialization, large-scale immigration from southern and eastern Europe, and migration from the South and countryside. Philadelphia was like many cities. In 1860, approximately 500,000 people called Philadelphia home; by 1930, that number had reached two million.\textsuperscript{16} This dissertation’s focus on Philadelphia and other northeastern American cities is not because they are representative of the rest of the country, but precisely because they are not.\textsuperscript{17} The scale and rapidity of change in America’s northeastern urban centers resulted in great anxiety about the nation’s future and its citizenry. The move indoors and into the city seemed to result in a range of problems, including new diseases like neurasthenia and the exacerbation of old ones like tuberculosis.\textsuperscript{18}

\textsuperscript{16} Brosco, “Sin or Folly,” 76.
\textsuperscript{17} I have been unable to find any seashore hospitals in the American South or along the West Coast before 1920. The only other similar institutions existed in Chicago and Toronto. Chicago provided accommodations for sick children on a pier that extended into Lake Michigan. Toronto’s pediatric hospital, The Hospital for Sick Children, sent patients to islands located in Lake Ontario. These are the exceptions that prove the rule. Both Chicago and Toronto were highly industrialized urban centers at the turn of the 20\textsuperscript{th} century. Without having access to an ocean, they utilized their lakes’ shores to provide children with healthier environments in which to heal and recover. The only other similar institution that I can find record of is the Queen Alexander Solarium, founded in 1927 on Vancouver Island, British Columbia. That institution also catered to “crippled” children and sought to cure them with sun exposure. The hospital built a saltwater pool so that children could bathe and swim. See: Lenora Marcellus, “Tiny Cripples and the Sunshine of Life: 15 Years of Children’s Nursing at Vancouver Island’s Queen Alexandra Solarium, 1927-1942,” \textit{Journal of Pediatric Nursing} 19, no. 6 (December 2004): 413-14.

City life was particularly unforgiving to the young. Infant mortality statistics shed light on death rates that astonished physicians, government officials, and the public alike. The masses of children dying were seen as the result of city life and children’s disconnections from the natural environment. Seashore hospitals attempted to remedy that disconnect by bringing children to the sea. Prior to the founding of the CSH in 1872, there was little perceived need for such an institution. Childhood illnesses and deaths were experiences shared by families of all races, ethnicities, and classes before the 20th century. Babies were especially vulnerable: in 1870, over 22 percent of babies born in Philadelphia died before reaching their first birthday. While parents mourned their children’s deaths, they also believed they were God’s will and therefore unpreventable. This isn’t to say that parents did not tend to their ill children. Families faithfully nursed sick children and sought medical advice. But living in an era before antibiotics and most

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20 Indeed children’s hospitals were still a rarity in the United States when the CSH opened in 1872. The CSH was the fourth children’s hospital in the United, only preceded by Children’s Hospital of Philadelphia, which was founded in 1855, Children’s Hospital in Boston (1869), and Children’s Hospital Medical Center in Washington DC (1870). Mark Ditmar, “Requiem for a Hospital,” *Pediatrics* 88, no. 2 (August 2, 1991): 287. For more on the history of children’s healthcare and hospitals during this era, see: Janet Golden, Richard A Meckel, and Heather Munro Prescott, *Children and Youth in Sickness and in Health: A Historical Handbook and Guide* (Westport, Conn.: Greenwood Press, 2004).


vaccines, many children became sick and did not recover, regardless of their families’ best efforts.23

As the trips taken by Beth March and the Boy in The Velveteen Rabbit imply, sending loved ones to a healthier environment offered families the hope of relief or even a cure of disease. When and where a sufferer should go depended on a variety of factors, including a person’s illness, constitution, gender, and economic resources. For some health-seekers, the White Mountains presented a safe haven from hay fever, while a sea-voyage was understood to be beneficial for young men with consumption (tuberculosis). Women were often more limited in their travels, particularly given family responsibilities, but some went far, even travelling across the American plains in hopes of alleviating disease.24

Although health travellers’ diseases and destinations differed, they had one thing in common: they could afford the expenses of a trip. Before the mid-19th century, the financial and personal costs of health travel generally limited the practice to the wealthy, and often to men.25 Their health-seeking practices helped to establish resort destinations, including Cape May, NJ, Newport, RI, and the Adirondacks in NY.26 Around the mid-19th century, the practice of health travel began to spread to the middle class. As families moved into the cities and could afford the expenses of leisure travel, they took advantage

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of new transportation networks like railroads that brought them from their urban homes to resort towns that catered to middle-class clientele.\textsuperscript{27}

Even with the presence of more affordable lodging and transportation, vacations were still generally inaccessible to the urban working class. It was this very disparity that led to the founding of the CSH. A group of wealthy Philadelphians who were spending their summers in Atlantic City recognized “the great advantages of the place to their own and their friend’s children,” and “were naturally led to wish that the multitude of poor children, suffering in the heat of the city, could share these advantages.”\textsuperscript{28} The group became determined to open a hospital in Atlantic City after reading French physician André Brochard’s 1864 book \textit{Sea-Air and Sea-Bathing for Children and Invalids: Their Properties, Uses, and Modes of Employment}, which detailed the benefits of “marine medication” for sick children.

In 1872, the hospitals’ founders rented a cottage for the summer and admitted 27 children who received care under F. D. Castle, a University of Pennsylvania trained physician.\textsuperscript{29} The experiment was a success and attracted “much sympathy from the

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\textsuperscript{28} CSH Annual Report for 1875, 13.

\textsuperscript{29} Ibid. Castle is listed among the physicians in the archive finding aid: http://www.archives.upenn.edu/oids/upp9504p544invtr.pdf. Accessed May 30, 2013. In 1871, the group first inquired whether the Children’s Hospital of Philadelphia (CHOP) would be an interested partner, since the institution “already owned a lot there, given them for the erection of a convalescent branch.” CHOP’s managers declined, fearing they would be unable to financially support two institutions. Undeterred, the “ladies and gentlemen” of Philadelphia “resolved to test the practicability of their project by experiment.”
\end{flushleft}
visitors” at Atlantic City. The following year, “The Children’s Sea Shore House, at Atlantic City, for Invalid Children” was incorporated and the hospital moved to a permanent building overlooking the sea. By 1875, the hospital was filled to capacity and often had a waiting list. The institution continued to grow and moved to a larger beachfront hospital in 1901. The CSH cared for pediatric patients on Atlantic City’s shore until 1990, when the institution merged with the Children’s Hospital of Philadelphia (CHOP) and moved to Philadelphia.

Although the CSH preceded many of its peer institutions by several decades, it is representative of the core features that made seashore hospitals attractive and popular institutions between 1870 and 1930. One of the shared commitments was a dedication to caring for poor urban children. The CSH opened so that “children of the poorer classes, suffering from non-contagious diseases or from debility incident to the hot weather and a crowded city may have good nursing and medical care, without regard to creed, color, or nationality.”

In many ways the missions of pediatric seashore hospitals fit within the child-saving campaigns that were hallmarks of the Progressive Era. As historians have detailed, the decades from 1880-1920 were an “age of reform,” during which the urban middle class, and women in particular, sought to address the problems brought about by

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30 CSH Annual Report for 1880, 11; CSH Annual Report for 1883, 6. The Annual Report for 1880 noted that some mothers had to wait between 10 days and three weeks before being admitted; the report for 1883 noted that children had to wait for multiple weeks from the time they applied until they could go to the hospital.
31 Ditmar, “Requiem for a Hospital,” 286-89.
32 “The Children’s House, NE. Cor South Caroline and Pacific Avenues, Atlantic City, N.J,” no page. This was a report published during the first trial year of what would become the Children’s Seashore House.
urbanization, industrialization, and immigration. Reformers attempted to control the chaos they perceived around them by imposing a “moral order” that conformed to white, middle-class cultural beliefs. While the progressives’ efforts were wide-ranging, reformers shared a faith that the application of science would help solve many of the problems associated with urban life.

“Child saving” was one of the most prominent and successful reform efforts of the time. Reformers dedicated to combatting infant mortality employed a variety of strategies to reduce the number of deaths among children under the age of five. During the 19th century, child savers focused their efforts on large-scale environmental changes, such as housing reform, then shifted their attention to improving cities’ milk supplies in the early 20th century, and finally settled on educational campaigns directed toward teaching the poor, immigrant mothers scientific childcare techniques.

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37 Demographers Condran and Murphy show the flexibility of the category “infant” during this time period, particularly regarding the age of death. Condran and Murphy, “Defining and Managing Infant Mortality a Case Study of Philadelphia, 1870–1920.”

This focus on infant mortality, and children’s health more generally, was the result of changing ideas about childhood during this period. Not only were children seen as innocent victims of circumstance, they were also understood to be socially, morally, and physically malleable. Reformers saw working-class children as both more deserving and easier to mold than their parents.\textsuperscript{39} In addition, ideas about childhood began to shift as more families moved from the country into the city. Unlike on the farm, middle-class urban families no longer depended on their children’s labor. This resulted in children becoming both “economically useless” and “sentimentally priceless” in middle-class families.\textsuperscript{40}

Informing these views were a growing number of scientific and medical professionals who directed their attention toward children and childhood. For the first time, psychologists like G. Stanley Hall labeled childhood as a distinct stage that needed to be nurtured and developed through specially designed activities like school and play.\textsuperscript{41} The medical establishment also began to focus its attention on treatment and care of children. Many children’s hospitals emerged during the late 19\textsuperscript{th} century, and more physicians dedicated their practices to caring for young patients.\textsuperscript{42} Although few doctors focused solely on children’s healthcare at the turn of the 20\textsuperscript{th} century, the numbers

\textsuperscript{42} For more on children’s hospitals during this era, see footnote 20 above.
swelled as pediatrics formally coalesced in 1930 with the formation of the American Academy of Pediatrics.43

Regardless of these shifts, working-class children remained important contributors to their families’ economies throughout the early 20th century. Poor children performed a variety of jobs crucial to supporting the family, included selling newspapers, helping mothers with piecework, and caring for younger siblings.44 Yet new ideas about childhood did infiltrate the lives of poor urban children through the programs promoted by middle-class reformers. Informed by ideas about children’s connectivity with nature, reformers sought to provide poor urban children with access to healthier environments such as parks and playgrounds, and children readily took advantage of these spaces.45


45 From 18th century philosopher Jean-Jacques Rousseau to 20th century psychologist G. Stanley Hall, prominent figures had long declared the importance of children’s connections with the natural environment. The sick and “crippled” bodies of urban children testified to the negative effects of their dislocation from the “natural” environment. On ideas about children and nature, see: Leslie Paris, Children’s Nature: The
Giving children access to outdoor spaces served the dual purposes of creating moral order and building children’s health and bodies, processes that were inextricably intertwined in reformers’ minds.\footnote{Rise of the American Summer Camp (New York: New York University Press, 2008); Linker, War's Waste: Rehabilitation in World War I America, 41. On G. Stanley Hall, see: footnote 41.}

Children’s seashore hospitals not only offered a solution to many of the problems middle-class reformers identified with urban life, they also created the seashore’s “healthscape.”\footnote{On the playground movement, see: Dominick Cavallo, Muscles and Morals: Organized Playgrounds and Urban Reform, 1880-1920 (Philadelphia: University of Pennsylvania Press, 1981); Boyer, Urban Masses and Moral Order in America, 1820-1920. The edited volume Designing Modern Childhoods provides several cross-cultural examples of the roles of parks and playgrounds designed to facilitate children's healthy development. See: Marta Gutman and Ning De Coninck-Smith, Designing Modern Childhoods: History, Space, and the Material Culture of Children (New Brunswick, N.J.: Rutgers University Press, 2008).} I define healthscape as the therapeutic vision that is specific to a particular geographic location, climate, or landscape. It is created by health-seeking behaviors, medical practices, and the knowledge production about the healthful or harmful characteristics of place. Studying how urban working-class families, doctors, nurses, and reformers used seashore hospitals elucidates how each group contributed to constructing the healthscape of the seashore at the turn of the 20\textsuperscript{th} century. Families’ uses of seashore hospitals, social workers’ and nurses’ work with families, and physicians’ knowledge production about the marine environment’s beneficial effects on children’s

\footnote{Adele Clarke uses the term “healthscapes” as a framing concept in her chapter on the rise of medicine in the edited volume Biomedicalization. She argues that the term allows for “thick description of a particular place and era and simultaneously captures the traveling potentials of ‘things medical’ across transnational/global flow.” She is primarily interested in the ways in which medical iconography helped shaped medicine as a “cultural good” in the United States. I use the term differently. Specifically, I use it to refer to the ways in which practices and ideas shaped a broad cultural understanding of how a specific locality was defined by its ability to produce or deplete health in visitors and inhabitants. I agree with Clarke that it allows for a thick description of a particular time, place, and set of actions. Adele Clarke, “From the Rise of Medicine to Biomedicalization: U.S. Healthscapes and Iconography, circa 1890-Present,” in Biomedicalization: Technoscience, Health, and Illness in the U.S., ed. Adele Clarke et al. (Durham, NC: Duke University Press, 2010), 105.}
bodies, created and maintained a vision of the seashore that inextricably bound health with leisure, and children to their environments.

The healthscape of the seashore existed in relation to ideas about the deleterious nature of the city environment and urban life. As historians have shown, the city depended on the countryside for its definition and survival. Much like the flows of agricultural products that interconnected major metropolises to their “hinterlands,” the movement of working-class children between their urban homes and seashore hospitals defined these environments in opposition to one another while simultaneously tying them together.48 Yet physicians, reformers, and urban families viewed these environments as binaries, drawing critical distinctions between the city and its shore, particularly regarding those environments’ impact on children’s health. While the city’s dark skies, stagnant air, and crowded, unsanitary homes produced sick, crippled, and run-down children, the seashore’s sunny skies, ozone-laden air, and saline water transformed the cities’ youth into strong, healthy future citizens, complete with ruddy cheeks and round bellies. As working-class children travelled between the city and the seashore, their bodies offered corporeal proof of the popular and medical knowledge about the health of those environments.

The dichotomies that contemporaries made between the city and the seashore is the starting point of this dissertation. Chapter one opens with the story of Abraham, a

48 I am most directly referencing William Cronon’s work on the rise of Chicago in the late 19th century. He discusses how the flows of lumber, meat, and corn between the city and the country helped to co-construct both places. For more on the formation of ideas about the city in opposition to the country, see: William Cronon, *Nature’s Metropolis: Chicago and the Great West* (New York: W. W. Norton, 1991); T. Jackson Lears, *Rebirth of a Nation: the Making of Modern America, 1877-1920* (New York: HarperCollins, 2009).
child of immigrant parents who lived in Philadelphia. Abraham had been admitted and discharged from a Philadelphia hospital. The social worker conducting Abraham’s follow-up care determined that his home environment was hampering his recovery, and recommended that he go to the CSH. Abraham went to the Atlantic City hospital and returned home healthier, happier, and better behaved. Fearing that Abraham would regress if he returned home, the social worker sought another placement for him in the country.49

Using Abraham’s case and other reports from medical social workers, Chapter one examines the medical and popular beliefs that the urban environment caused working class children’s poor health. Historians have argued that during the Progressive Era, child-saving practices shifted from broad-based environmental reform to targeting individual families through educational programs.50 While this change occurred, there was also a continuity in environmental explanations of disease. Reformers and social workers targeted their efforts at teaching mothers how to create a “healthy home” environment in order to preserve their families’ health.51 Social workers and families alike engaged in health-seeking behaviors that removed children from the city centers to salubrious locations in the country. The existence, expansion, and use of seashore hospitals over the early 20th century demonstrates that physicians, reformers, and

50 Meckel, Save the Babies; Rima D. Apple, Perfect Motherhood.
working-class families shared the conviction that cities’ environments, including the homes they harbored, remained a source of children’s ill-health; a trip to the seashore provided an antidote to urban life.

Given the ascendance of germ theory in popular and medical thought, the continuity in beliefs about environmental causes of disease in the 1920s is surprising. So too is the expansion of marine medication. The numbers of seashore hospitals multiplied in the early 20th century, and practitioners continued to use natural therapeutics. Chapter two explores this continuity, specifically the medical knowledge production that underpinned marine medication. I examine how medical professionals understood, justified, and promoted sea-air, seawater, and sunbathing. Although therapeutic practices remained consistent between the years of 1870 and 1930, laboratory-based medicine shifted practitioners’ thinking about what made the environment healthful. Using medical publications, including articles published in elite journals, monographs, and popular treatises, I argue that there was a “rationalization of natural therapeutics” through which physicians distilled the environment into its therapeutic and non-therapeutic components. This allowed physicians to dose the environment and situate marine medication within the domain of elite, allopathic medical practices through the early 20th century.

Physicians’ belief that the environment determined children’s health not only informed their therapeutic practices, but also structured the built environments of seashore hospitals. Chapter three examines how the CSH’s buildings were physical manifestations of middle-class ideology regarding children’s development, their
connections to nature, and the importance of a healthy home environment. The CSH is a useful case study, because it inverted more typical 19th century hospital structures. Whereas children’s hospitals were often domestic residences converted for medical use, many adult institutions used an open ward, known as the “pavilion” system, for patient oversight and care. At the CSH, children who were admitted without their mothers stayed in one of main hospital’s open wards. The main building’s design maximized children’s exposure to the outdoor environment, from its location 200 yards from the ocean and its open porches and verandas, to the lofty ceilings and large windows that remained open throughout the day and night. The mothers’ cottages stood in stark contrast to the main hospital. The CSH provided mothers and their children private cottages that were situated between the main building and the ocean. The cottages were supposed to provide critically ill infants with life-saving medical care, yet the highly domestic and intimate structure of the cottages functioned to inculcate mothers in middle-class childcare practices. Recognizing that once children returned to the city they would no longer have access to a healthy outdoor environment, the managers, physicians, and nurses at the CSH sought to create a pocket of health within the urban environment by instilling working-class mothers with the values and practices of middle-class domesticity.

Chapter four illuminates how working-class mothers used the mothers’ cottages at the CSH, and examines how their health-seeking practices and participation in marine

medication shaped the healthscape of the shore. Analyzing the admissions records from the CSH illuminates the ways mothers maintained their urban caregiving networks, practices that established the seashore as a place of health and leisure. Mothers’ actions at the CSH, including traveling with friends, family and neighbors, recommending the institution to their acquaintances, and returning to the hospital for multiple summers with healthy children, tied children’s health with leisure. Families’ practices and presence at the hospital promulgated these ideas among their urban neighborhoods and the middle-class tourists who visited the institution. Given the CSH’s centrality to Atlantic City’s social scene, I argue that families’ participation in marine medication during the 20th century maintained connections between popular middle-class leisure activities, like sunbathing and swimming, and their therapeutic origins.

Despite the continued popularity of seashore hospitals among working-class families and middle-class tourists, by the 1920s the rationalization of natural therapeutics began to erode the foundation of marine medication. Chapter five examines the emergence of UV lamps, devices that replicated the sun’s health-giving UV rays and eventually replaced the sun as a primary therapeutic agent. However this is not a story of straightforward technological progress. Although American physicians had access to UV lamps in the 19th century, practitioners at seashore hospitals instead adopted “heliotherapy,” a program of natural sunbathing developed in the early 20th century by Swiss physician Auguste Rollier. American physicians’ continued belief in nature’s therapeutic supremacy fueled their decision. American physicians increasingly used UV lamps once the devices more closely replicated the sun and its therapeutic benefits. This
adoption did not represent physicians’ rejection of the natural environment as an important healer. Rather, the rationalization of natural therapeutics that made seashore hospitals successful within mainstream medicine in the late 19th and early 20th centuries also provided a path for the development of technologies that mimicked the health-giving elements of the marine environment. I argue that UV lamps were “technologies of nature,” devices that were imbued with medicine’s faith that nature can heal. By encapsulating nature’s therapeutic elements, technologies like UV lamps rendered a patient’s specific environment unimportant, while maintaining an allegiance to the place-based therapeutic practices upon which the devices were built.

By the 1930s, a constellation of factors that included technologies of nature, declining rates in infant mortality, and a changing political milieu, facilitated the gradual decline of seashore hospitals. In 1931, the Boston Floating Hospital relocated inland to the city of Boston; Sea Breeze Hospital in Coney Island was replaced by Neponsit Beach Hospital, a larger seashore hospital in 1914, which subsequently closed in 1943; by the mid-20th century, Crawford Allen Hospital in Rhode Island had shuttered its site as well. Some other seashore hospitals remained open in their marine locations until the late 20th and even the early 21st centuries. The CSH cared for patients on the beaches of Atlantic City until 1990 when it moved to the city of Philadelphia, and the New York City Floating Hospital provided patients’ healthcare aboard a ship anchored near Wall Street until September 11, 2001, after which it was unable to procure a safe and affordable place
to dock. With seashore hospitals’ gradual decline, memory has faded regarding what made these institutions seem critical to children’s healthcare and attractive to working-class families at the turn of the 20th century. This dissertation recovers that history, illuminating how the people that used and worked at seashore hospitals shaped popular and medical practices that remain with us today.

Chapter 1

Children in the City: Urban Environments, Health, and Reform

In November of 1921, the social worker for Ward G, the pediatric unit of the Hospital of the University of Pennsylvania (HUP), visited the home of a Russian boy named Abraham, a former patient of the Ward.54 Although the social worker did not record Abraham’s diagnosis, she noted that he had been referred by the surgical dispensary for “general building up.” His doctor recommended convalescent care “lasting if possible over several months as he is badly run down and in need of fresh air and good food.” Arriving at Abraham’s home, the social worker found his family “in very poor, dark rooms.” They faced difficult times. Abraham’s father had lost his bench-work position at Baldwin’s, a Philadelphia-based locomotive manufacturer, and was in debt from purchasing stock for the bicycle shop in which they lived and worked. Although Abraham had been a “long time patient in Ward G,” the social worker found that he was still unwell. To provide the necessary environment for Abraham’s convalescence, the social worker applied for free care at the Children’s Seashore House (CSH), a pediatric hospital in Atlantic City, NJ. Abraham received the financial aid and left his urban home for the hospital at the seashore.55

54 Only the first names of patients are used to ensure that their identities are protected.
55 Women’s Auxiliary of the Hospital of the University of Pennsylvania Ward G, Barbara Bates Center for the Study of the History of Nursing, School of Nursing, University of Pennsylvania, Social Service Report for HUP Ward G, November, 1921, p. 2. Hereafter referenced as: HUP Ward G followed by the date and page number. Although Abraham’s diagnosis is unclear, the fact that he was referred by the surgical
Abraham’s story is representative of many other urban working-class children’s experiences. As the United States underwent rapid industrialization along with immigration and urbanization, sick and weak children increasingly populated urban centers, and an organized pediatric medical marketplace emerged to help address their health needs. Medical workers blamed the urban environment for children’s poor health and employed a range of environmental interventions to help improve children’s conditions. Within the city, reformers focused their efforts on improving poor families’ homes, as well as creating healthy outdoor spaces like parks and playgrounds where children could play. A popular solution was to temporarily send children to the “country,” a space that included farmland, mountains, and the seashore. In the late 19th century, a multitude of institutions emerged which sent urban children beyond the city dispensary and recommended to go to the CSH during the winter suggests that he may have been suffering from surgical, or non-pulmonary tuberculosis, since that was the most common diagnosis of the primary patient population during the winter months at the CSH.

Although the fact that some of the children were noted as being “weak” suggests that eugenics may have been at play, I would argue that the goals for caring for these patients were not about racial improvement through reproductive programs, but for personal improvement wrought by environmental changes. There was a pervasive sense that environmental changes could reform children’s bodies and health, making them into stronger future citizens and workers. Thus, programs like pediatric seashore hospitals had more to do with “euthenics,” the term coined by Ellen Swallow Richards in the early 20th century, which promoted race betterment through environmental reform. See, for instance: Emma Seifrit Weigley, “It Might Have Been Euthenics: The Lake Placid Conferences and the Home Economics Movement,” American Quarterly 26, no. 1 (March, 1974): 79-96; Kathy J. Cooke, “The Limits of Heredity: Nature and Nurture in American Eugenics before 1915,” Journal of the History of Biology 31, no. 3 (Summer 1998): 270-73.

I use the term “pediatric” to denote that the institutions focused on caring for children. Although this use may seem anachronistic, Philadelphia was an early leader in the medical field of pediatrics. The Children’s Hospital of Philadelphia was founded in 1855, and many of the field’s early pioneers were based in Philadelphia in the late 19th century. Although more physicians began to practice children’s healthcare as distinct from adult’s care around this time, pediatrics did not formally coalesce until 1930 with the founding of the American Academy of Pediatrics. See footnote 43.

Paul Boyer has termed these efforts “positive environmentalism.” He contends that Progressive Era reformers intended everything from tenement reform to the development of parks and playgrounds as forms of moral-control of the lower classes. Specifically, he argues that reformers’ objective “was not to destroy urban vice through denunciatory rhetoric or legal repression, but by creating the kind of city where objectionable patterns of behavior, finding no nurture, would gradually wither away.” See: Paul S Boyer, Urban Masses and Moral Order in America, 1820-1920 (Cambridge, Mass.: Harvard University Press, 1978), 221.
limits. Groups like country week associations, camping organizations, convalescent homes, fresh air funds, and hospitals worked with urban reformers to provide poor children with a respite from the dirt and dangers of city life.59

Pediatric seashore hospitals operated as critical nodes of that network. Between 1860 and 1920, more than 70 such hospitals opened from Baltimore to Boston and across Western Europe. 60 Although many seashore hospitals focused on treating urban children with orthopedic conditions like non-pulmonary tuberculosis and infantile paralysis (polio), they also admitted patients with conditions including bronchitis, diarrhea, enlarged tonsils, marasmus, and melancholy, as well as children who were recovering from diseases like scarlet fever and typhoid.61 In addition, seashore hospitals provided a healthy environment for children like Abraham who were “run-down” and needed “general building up.” Despite the vast range of diagnoses, physicians believed that most of the admitted children suffered from conditions that resulted from city life and poor


home environments. Pediatric seashore hospitals are representative of the ways in which medical experts, reformers, and parents used non-urban environments to provide healthy spaces in which children could build their health and strength in order to withstand the depletive forces of urban life.

This chapter exposes how reformers and families shared and maintained a conviction that the urban environment was the root of poor children’s ill health. Some scholars have argued that reformers working to ameliorate infant mortality shifted from large-scale efforts that addressed environmental problems systemic to the city, to a more specific intervention educating poor, often immigrant mothers in childcare. While this change occurred, I argue that that reformers’ objective remained the same, but the site and scale of their work changed. The urban environment was always the cause of ill health; reformers just redefined the space that mattered from the larger city to the dark and filthy homes it harbored. The fact that removal from the city to institutions like seashore hospitals remained a popular solution among both medical workers and families is evidence of the continuity in their belief that the country provided a healthy alternative to city life.

Examining the illness experiences of children and their families illuminates the complicated ways in which expertise and lived experience helped to shape a common perception of the city environment as a place that was anything but healthful. Sick, weak, and “crippled” urban children offered bodily proof of this indictment for parents and

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62 For more on this, see chapter two of this dissertation.
63 Meckel, Save the Babies; Condran and Murphy, “Defining and Managing Infant Mortality.”
medical experts, reifying conceptualizations about the relative health of place. Using social worker case files from Ward G provides a tantalizing view into the lived health experiences of immigrant children and their families. Although it would be reasonable to interpret patients’ stories within the dominant historiographical framework of social control and Americanization, this chapter illuminates the ways in which poor, urban children and their parents were consumers of the pediatric healthcare network in the early 20th century. Parents and children contributed to the forms of pediatric healthcare through a shared vision of the city as an unhealthy environment and the country as its healthy solution. The pages that follow elucidate how children and parents negotiated healthcare with socio-medical reformers – a group that included physicians, nurses, social workers, philanthropists, and religious leaders – and in doing so, helped to codify the urban-rural structure of children’s healthcare.

The Sick, Urban Child as a New Social Problem

As urban centers in the United States became more populated at the turn of the 20th century, working-class children became increasingly visible to socio-medical

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reformers. While all city-dwellers encountered sick, “crippled,” or dying children on the street, reformers had more consistent contact with them through home visits and at pediatric institutions. This section examines the visibility of the sick urban child and how medical professionals promoted the idea that environmental interventions could transform sick and weak patients into healthy and robust children.

Central to this work were the ways in which late 19th and early 20th century urban reformers, pediatricians, parents, and caregivers came to see the urban environment as antithetical to the ideal of American childhood. These concerns manifested most clearly and with greatest impact in the arenas of child health, illness, and mortality. New ideas about children and childhood emerged during the Progressive Era. For the first time, childhood was seen as a distinct period of development, and one that warranted special attention and treatment from parents and medical professionals alike. As middle-class families moved into the city, mothers’ and children’s roles shifted. Middle-class children no longer participated in the family economy as they would have on the farm. With this change, the value of children shifted from being economically valuable to sentimentally priceless. This transition did not extend to working-class families who continued to depend on children’s labor, either as workers or as caregivers for younger siblings.

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65 For the literature on the history of pediatrics, see footnote 43.
Although middle-class childhood became more contained, poor children continued to live public lives. With very limited indoor space, children played, worked, and begged in the streets. Some also died there. In March of 1919, Julia, a “colored” baby who had pneumonia, arrived with her grandmother at the Hospital of the University of Pennsylvania. The pediatric ward’s staff had previously treated Julia for pneumonia, and she “had been brought back to life and health.” According to the social service reports, “the irregular habits of life brought about by going back and forth to a day nursery, while the old grandmother worked, resulted in its return to the same serious condition.” When the grandmother returned to HUP with Julia, they were turned away because the ward was under quarantine. The grandmother attempted to bring Julia to another hospital, but it was too late. Julia died aboard a streetcar in her grandmother’s arms.

While Julia’s story seems tragic, public injury and death were common. Traffic accidents claimed many young victims, such as Jennie, a young girl who was run over by a trolley and treated at HUP. The fact that the urban environment yielded few safe outdoor spaces for children, particularly in working class neighborhoods, meant that children often resorted to playing in the streets. This was a precarious situation, since

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67 There is an argument in the history of childhood that children have been “islanded,” or isolated from the larger population through the creation of spaces meant only for children, such as schools, children’s hospitals, and playgrounds. I would argue that this is effect is largely relegated to the middle and upper classes, particularly at the turn of the 20th century. For more on the concept of “islanding,” see: John R. Gillis, “Epilogue: The Islanding of Children – Reshaping the Mythical Landscapes of Childhood,” in Designing Modern Childhoods, ed. by Gutman and De Coninck-Smith, 316-30.
68 I use the term “colored,” because it is the term used in the social service reports.
70 Ibid.
71 HUP Ward G, Nov. 1921, 2.
Children competed for space with horses, trolleys, and increasingly, cars.\textsuperscript{72} Children often lost the battle, and their injuries and deaths were publicly displayed. In New York, over 550 children died and more than 15,000 sustained injuries from traffic accidents in 1914 alone.\textsuperscript{73} Although poor children constituted the majority of traffic accident victims, as the twentieth century progressed, more cars populated the streets, and middle and upper-class children also fell victim to the so-called “devil wagons.”\textsuperscript{74}

The public also encountered disabled children who worked as newsboys and peddlers. These children’s bodies spurred intervention. Cities across the United States passed “ugly-laws” in the late nineteenth century, which prohibited the public display of deformity or disability. The existence of such laws, as well as court cases of cities that prosecuted “crippled” child beggars, suggests that public viewing of poor children’s disabled bodies was commonplace enough to warrant reaction and intervention.

In addition to seeing sick and disabled children on the city streets, the urban middle class also learned about the plight of working-class children through statistics, publications, and visits to institutions. Statistics such as infant mortality rates made suffering visible, calling attention to the thousands of children who died every year, many during the summer, and many of whom were younger than age five.\textsuperscript{75} For the first time in

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\textsuperscript{72} Sarah Jain, “‘Dangerous Instrumentality’: The Bystander as Subject in Automobility,” \textit{Cultural Anthropology} 19, no. 1 (2004): 61–94.

\textsuperscript{73} Zelizer, \textit{Pricing the Priceless Child}, 35. This statistic is true for NYC. According to sociologist Vivianna Zelizer, a great percentage of automobile fatalities were children under fifteen years of age, and such accidents resulted in almost three times as many deaths as any one disease.

\textsuperscript{74} The dramatic and traumatic nature of traffic accidents outraged the public, driving some witnesses to issue vigilante justice and the courts to issue harsh indictments for the drivers, Zelizer, 47-48.

\textsuperscript{75} In Philadelphia, nearly 20,000 children under the age of one died in the years between 1865 and 1870, a mortality rate of 22.36 percent.\textsuperscript{72} In July of 1876, more than 100 of New York City’s children died every day for a week straight, a statistic that led the \textit{New York Times} to deplore the “annual slaughter of little
the United States, the high rate of death among young children became visible on a city and nation-wide scale. The quantification of health experiences brought to light the scope and scale of suffering and influenced government agencies, public health officials, and medical reformers. Infant mortality was seen to be a particularly important marker of a nation’s worth and a measure of its civility and success: the higher the mortality rate, the more “uncivilized” the country.

Attempting to enroll support for combating infant mortality, organizations published reports and invited donors and the public to visit their institutions. Both efforts provided middle-class citizens the opportunity to view poor children’s health and care. One institution that allowed visitors was the Philadelphia Sanitarium Association (PSA), a private philanthropic organization that sought to “prevent sickness and alleviate disease among the poor children of the community,” by sending them to an open-air park and sanitarium located in New Jersey. Beginning in 1877, the PSA organized daily boat trips for the city’s indigent children and their mothers to a playground located seven miles down the Delaware River. In 1899, one visitor took the boat to and from Philadelphia with poor children and their caretakers, often the children’s mothers and

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79 Condran and Murphy, “Defining and Managing Infant Mortality,” 491.
older sisters. In an editorial in the *Ledger* newspaper, the visitor attested to children’s improved condition:

> A trip to the beautiful grounds of the Association at Red Bank, a look at the poor little mites whose sufferings are almost instantly checked by the fresh air, the sight of the kindness and universal charity displayed by the attendants to the unhappy mothers and their apparently dying children, will tell more and better than any verbal description could do, the vast usefulness of this most worthy charity.  

Such excursions allowed influential individuals the ability to witness the health and suffering of poor children and their families, as well as the impact made by institutions such as the PSA. Leaders of pediatric institutions believed that witnessing the health improvements first-hand would motivate people to donate and contribute to the work of the institution. It also demonstrated the positive health effects of bringing children from the city to salubrious sites beyond the city limits.

In fact, visiting pediatric healthcare institutions was so popular that some institutions became tourist attractions. The Children’s Seashore House in Atlantic City, NJ (CSH) provided daily visiting hours. William Bennett, a physician who graduated from the University of Pennsylvania medical school and studied “the diseases of childhood” while in Vienna, was the physician in charge of the CSH from 1874-1918.

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81 Visiting pediatric hospitals fell in line with other practices of viewing children’s bodies and medical exhibits more generally. For more on this practice, see: Susan J. Pearson, “‘Infantile Specimens’: Showing Babies in Nineteenth-Century America,” *Journal of Social History* 42, no. 2 (December 1, 2008): 341–370, doi:10.1353/jsh.0.0100. On the effects of tourism and the creation of the seashore’s healthscape, see Chapter four of this dissertation.  
82 D. J. Milton Miller, “Memoir of Dr. William Henry Bennett,” in *Transactions of the College of Physicians of Philadelphia* (Philadelphia, 1920), 188. Bennett may have been an exception at pediatric seashore hospitals, especially in the US. Physicians were often trained in orthopedics rather than “diseases
Bennett claimed that the hospital was a primary attraction for tourists, receiving over two thousand visitors during the summer of 1875.83 People came from across the United States and even abroad to tour the hospital.84 Likewise, Sea-Breeze Hospital on Coney Island, a hospital that served tubercular children from New York, reported that tourists lined the fences of the institution, watching patients play on the beach.85 Seashore hospitals capitalized on their popularity, soliciting donations from visitors and enrolling them in their mission to provide healthcare for ill and suffering urban children.

Although leaders of children’s health institutions invited visitors, they also realized that many people either could not or would not come to their institutions. At the CSH, Bennett lamented that few people would “see the wonderful transformation which Nature is constantly working in our invalid children.”86 In order to provide more people with insight into their work, institutions sent contributors annual reports, pamphlets, and donation requests that highlighted the institutions’ salubrious environments and patients’ remarkable recoveries. In an attempt to provide insight into the CSH’s achievements, Bennett recounted the following cases in the 1911 Annual Report:

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83 CSH Annual Report for 1875, 15.
86 CSH Annual Report for 1911, 15.
One pale, wizened faced boy of twelve, scarcely over an attack of typhoid fever brought from the hospital on a stretcher, returned to his home in a few weeks rugged, rosy, and strong, fourteen pounds heavier than when he came.

A little, emaciated whining three-year-old suffering with a tubercular knee for whom amputation of the leg seemed inevitable, is to-day a jolly, rosy-cheeked boy able to walk around and who will before long have a somewhat deformed but most useful leg.

One child sent back to the hospital from which he came, was met there by his mother, but she refused to take him away believing that it was not her child, and only after a night’s consideration was she willing to accept him the next morning as her very own.  

Bennett was an especially skillful storyteller and often included anecdotes of seemingly miraculous recoveries of his patients in his annual reports. Such documents also included other data, such as statistics and photographs. While statistics quantified patients’ outcomes, images provided visual proof of the hospitals’ health-giving effects, with children smiling, playing, and receiving medical treatment, appearing healthy and happy.

The dissemination of promotional materials enveloped a wider audience into the CSH’s work with indigent, urban children. This allowed readers to bear witness to the health that resulted from moving children from the city to the seashore. Such promotional materials conveyed the idea that environmental interventions could transform the masses of poor urban youth into happy, healthy, and productive future citizens. While these institutions’ work with “weak” and “sickly” children implies eugenic motivations, seashore hospitals’ goals and modes of intervention stood in

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87 Ibid., Spacing my own.
88 The CSH did not use before and after photographs, but depended more on stories about specific children’s improvement.
contrast to the main thrust of eugenic programs. Many of the institutions – like the CSH – admitted children regardless of race or ethnicity, and none were particularly concerned with heredity or preventing patients’ future reproduction. Rather, their conviction was that changing a child’s environment, either within the home or by removing patients from the city, resulted in children’s improvement.

Indeed, seashore hospitals faced criticism for working against eugenic principles, given the medical practitioners’ commitment to treating poor, “crippled” children. In 1907, Albert H. Miller, a physician at Crawford Allen Hospital (CAH), a children’s seashore hospital outside of Providence, Rhode Island, noted that, “It is urged, with some apparent reason, that an attempt to save the live of patients with tubercular joint disease is opposed to the law of the survival of the fittest, and that these children should be allowed to die rather than to grow up deformed, to pass on their tubercular taint to succeeding generations.” Yet Miller justified his work, noting that children with non-pulmonary tuberculosis often “suffer tremendously,” but the “seashore treatment” used at CAH alleviated the “acute pain of burrowing abscesses and of muscular spasm.” He encouraged his readers and fellow physicians to abandon their eugenic inclinations and “unite in believing that any time spent in freeing their distorted little bodies from suffering is time well spent.”

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91 Ibid.
Miller was clear that children’s environments were the keys to their health. He identified children’s home environments, rather than their heredities, as the causes of their illnesses. Describing the treatment used at CAH, Miller wrote, “Realizing the influence of bad surroundings and improper food in the development of the disease,” the institution provided patients with a salubrious and sanitary environment in which to heal and grow. Children were outside “from sunrise to sunset,” playing games and swimming in the ocean; at night they slept in rooms where the windows were never closed. The patients at CAH “developed astonishing appetites” and ate a diet of “cereals, bread, crackers, meat, fish, vegetables, fruit, simple desserts, several eggs a day and two quarts of milks for each patient.” Miller claimed that the results of these environmental interventions were “so good as to leave no room to question the wisdom of the methods used,” and quoted statistics such as children’s weight gains, increases in mobility, and closings of tubercular sinuses (open wounds) as evidence. Seashore hospitals, and other institutions that served sick urban children, focused on improving children and their health through environmental change. By altering children’s physical surroundings –

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92 Ibid. Miller characterized this treatment as “hygienic,” which has its own eugenic overtones.
93 Ibid., 659-60.
94 Ibid., 660-61. This dedication to environmental reform was more in line with what Ellen Swallow Richards, an industrial chemist, environmental reformer, and founding figure of home economics, termed “euthenics.” In 1910, Richards published “Euthenics: The Science of Controllable Environment A Plea for Better Living Conditions as a First Step Toward Higher Human Efficiency,” in which she proposed her plan for the science of the “betterment of living conditions, through conscious endeavor, for the purpose of securing efficient human beings.” Although Richards saw eugenics and euthenics as interrelated, she drew critical distinctions between them. In her forward she told readers: “Eugenics deals with race improvement through heredity. Euthenics deals with race improvement through environment. Eugenics is hygiene for the future generations. Euthenics is hygiene for the present generation. Eugenics must await careful investigation. Euthenics has immediate opportunity. Euthenics precedes eugenics, developing better men now, and thus inevitably creating a better race of men in the future.” Richards, Euthenics, viii.
95 Gail Cooper makes a similar argument for urban reform efforts directed toward children in Air-Conditioning America: Engineers and the Controlled Environment, 1900-1960 (Baltimore: Johns Hopkins University Press, 1998), 66; Brosco, “Sin or Folly.”
either within the home or by removing them from the city – practitioners believed they transformed sick and disabled children into stronger, future citizens.96

The Urban Home

In the city, sick children’s homes were primary sites of environmental interventions. Following HUP Ward G’s social workers into patients’ homes illuminates the conditions they confronted, what they sought to change, and why they believed that certain cases warranted temporarily transferring children from the city to the country. Examining the interactions between medical social workers and patients’ families provides a window into how and why the sick urban child was seen as a product of his or her environment, and how place shaped health. Although middle-class mores underpinned social workers’ frustrations with the environments they encountered, it is clear they also were reacting to dire environmental conditions in which urban children lived, worked, and played. Social workers’ nativist and moralizing approaches often blended with genuine concerns about the negative effects of children’s home environments.97


97 On Americanization and nativism, see footnote 64 above.
Reformers’ concern was a result of the massive transformations the United States underwent during the Progressive Era. As cities filled with emigrants from the countryside and immigrants from abroad, there was a pervasive fear about American’s dislocation from the “natural” environment. At the turn of the 20th century, America’s identity as a frontier nation was being increasingly challenged. Historian Frederick Jackson Turner argued that the 1890s marked a critical juncture in American history: the frontier had closed. Turner feared that its closing threatened a common national identity that was built on the “wilderness experience,” through which Americans had “fashioned a formula for social regenerations – the freedom of the individual to seek his own.”

Urban life seemed inherently un-American, not only in its environment, but also in its population. As more immigrants arrived in America, cities became increasingly foreign, in the heritage and daily lives and practices of newly arrived families.

Philadelphia is representative of this trend. In 1860 there were approximately 500,000

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100 There are interesting connections between American climatology and tropical medicine during this era. Scholars who have studied tropical medicine have focused primarily on the health concerns about white men in foreign countries and the depletive effects on their bodies. I would argue that climatologists in the United States were expressing similar sentiments about the urban environments and their impacts on all inhabitants. Cities, it seems, were filled with what I would term “bodies-out-of-place”: native-born Americans were meant to be either frontiersmen or farmers, while the waves of both immigrants from southern and eastern Europe and African American emigrants from the south were also displaced from their “natural” environments. For more on the history of tropical medicine, see for instance: Warwick Anderson, *Colonial Pathologies: American Tropical Medicine, Race, and Hygiene in the Philippines* (Durham: Duke University Press, 2006); Warwick Anderson, “Disease, Race, and Empire,” *Bulletin of the History of Medicine* 70 (1996): 62-67; Mark Harrison, “‘The Tender Frame of Man,’: Disease, Climate and Racial Difference in India and the West Indies, 1760-1860,” *Bulletin of the History of Medicine* 70 (1996): 68-93; Warwick Anderson, “Immunities of Empire: Race, Disease, and the New Tropical Medicine, 1900-1920,” *Bulletin of the History of Medicine* 70 (1996): 94-118. The Winter 2012 edition of the *Bulletin for the History of Medicine* is a special issue, “Modern Airs, Waters, and Places” guest edited by Alison Bashford and Sarah Tracy. Including the editors’ introduction and Charles Rosenberg’s epilogue there are seven articles on medical climatology. See: *Bulletin of the History of Medicine* Volume 86, No. 4 (Winter 2012): 495-670.
residents in the city; by 1930, that number quadrupled, mostly due to large waves of immigrants from southern and eastern Europe and African-American emigrants from the American south. Reformers lamented the housing conditions in poor, immigrant neighborhoods, noting dwellings’ small sizes, lack of light, poor ventilation, improper drainage, and general unsanitary nature. Their concern regarding children’s homes echoed their views about the city: both environments were marked by stale and stagnant air, the lack of sunlight, crowded and cramped quarters, and their un-American nature. The immigrant home was a microcosm of the larger urban environment: problematic, but possible to reform.

Medical social workers were key figures in helping to address this reform. As social workers professionalized in the early 20th century, they played an increasingly critical role in emerging pediatric healthcare networks by addressing the social, moral, and environmental causes of children’s ill health. One of the primary duties of Ward G’s social workers was conducting “investigation of homes and the environment of the children.” During her home visits the social worker evaluated the physical structure,

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101 Brosco, “Sin or Folly,” 76.
103 Although there was some question about whether or not social work really was a profession, pediatric hospitals’ dependence on this group suggests that they were part of the child healthcare network by the early 20th century. Brosco, “Sin or Folly,” 156-60.
104 HUP Ward G., Dec 1918, 1. As historians have noted, ensuring a sanitary home was an important aspect of infant welfare programs and was culturally valued among the middle class. For more on this, see:
which she saw as reflective of the social and moral environment created by parents. In December of 1921, the Ward G social worker visited the home of Nick, “a bad burn case,” who had been treated on the Ward. The social worker recounted that as she traveled to his home, she:

Pictured a broad paved street with double trolley lines, new, two story houses and small Italian stores, but at 64th St. Girard Ave. as a paved street terminated and beyond was a region of dirt roads, corn fields, dumps and old tumbled down planter houses. The corner druggist said the G’s. lived in a “shack house” at the end of a muddy lane, mostly fenced by rusty bed springs. It is a two room hovel standing by itself in a field, there is no under-drainage. The rent is $18 a month. There were two dogs, a cat, and a baby in the hot dirty cluttered up kitchen.105

Upon entering the home, the social worker found that the home’s poor physical conditions were compounded by the family’s financial circumstances. The father was currently unemployed and the family was in debt $100 to the grocer. To the worker’s dismay, the mother did not speak English and claimed she was unable to make it to the hospital by herself. This was particularly troublesome, because two boys in the family were unwell and needed treatment.

Attempting to address some of these issues, the worker approached the family’s priest, but found him unable or unwilling to provide assistance. He informed her that he could not help Nick’s family because he had hundreds of other families living in similar conditions. Additionally, he noted that he “had neither the time nor the money for

105 HUP Ward G., Dec, 1921, 1.
‘sociability.’” The worker reported that she arranged for the Housing Association to investigate the home and that the social service department referred the family to the Italian Federation for financial assistance and employment for the father. The worker concluded that she would “try to persuade the parents to let Nick go to the Country.”

The reports expose how reformers understood the home environments. In Nick’s case, the social worker believed that the family’s home and financial conditions stunted Nick’s ability to recover. This blending of the physical and social conditions demonstrates that medical social workers did not distinguish one from the other as a potential cause of ill health. She pointed to the home’s lack of drainage, cramped quarters, and physical surroundings as troublesome, as well as to Nick’s parents’ inability to provide him with proper care, through his father’s unemployment and his mother’s lack of assimilation. To her frustration, the social worker found that the problem was endemic to the community, and that local leaders were either disinterested or unable to address such problems. Her proposal to send Nick to the country, likely for temporary placement, illuminates her belief that the country offered a space of healing in contrast to his home environment.

While the insalubrious state of some working-class homes spurred social workers to recommend sending children to the country, less severe cases warranted parental education in how mothers could alter the home to make it healthier. For instance, the social worker noted that Paul, a boy admitted to the Ward with pneumonia, came from a

107 Adams, Architecture in the Family Way. Adams discusses the idea of a “healthy home” and how, among the middle class, it was a woman’s domain and directive to maintain a clean and sanitary home space in order to promote her family’s health.
"nice Italian family." She praised Paul’s mother who spoke English well, seemed “quite intelligent,” and kept her home very clean. The worker determined that Paul’s poor health was caused by his mother’s practice of only opening the windows at night during warm weather, and giving her children baths once a week in the winter. The social worker instructed Paul’s mother that the lack of fresh air and baths caused Paul’s frequent colds, which could be prevented “by daily cool sponges and plenty of fresh air.” She reported that she was confident that Paul’s mother would follow her directions.\textsuperscript{108}

Social workers’ interventions depended on their evaluation of the family and the condition of the home. The fact that the social worker determined Paul’s mother to be intelligent, compliant, and sufficiently assimilated, reassured her that she would follow instructions. In other cases the worker determined that patients’ homes were dangerous enough to involve additional agencies and government officials. In over ten years of reports, the Ward G social workers noted more than fifty different institutions and organizations that were involved in the care of pediatric patients on Ward G, including hospitals, convalescent homes, visiting nursing services, civic organizations, charities, schools, and camps.\textsuperscript{109} At times, social workers involved agencies to address problems with the physical structure of the homes, such as in Nick’s case, when the social worker contacted the Housing Association to ameliorate the drainage issues.

In very extreme cases, the worker determined that it was in the child’s best interest to be removed from the home either temporarily or permanently. For instance,

\textsuperscript{108} HUP Ward G, April 1921, 2.
\textsuperscript{109} Jeffrey Brosco also notes that patients used Philadelphia’s pediatric network in such ways that best met their needs and objectives, such as seeking specific dispensaries or clinics for care. See: Brosco, “Sin or Folly,”135; 174-76.
when the worker conducted her follow-up visit for the girl who was struck by the trolley, she found the home in deplorable condition. The social worker reported that, “A twelve year old girl was home from school taking care of the two dirtiest babies the Worker has ever seen. Although it was November the room was black with flies and the children in an unspeakable condition.” She determined that the living conditions were so injurious to health that she reported the family to the Society for the Prevention of Cruelty to Children (SPCC), a group that had the ability to remove children from their homes in extreme circumstances.\(^{110}\) Intervention by the SPCC was not necessarily common, but the social worker’s use of the organization suggests the degree of danger she felt some children faced from their home environment.\(^{111}\)

The HUP Ward G social worker entered the homes of poor, immigrant, and migrant populations with whom she had little in common. As a result, issues such as diet, dress, languages, and behaviors could become points of conflict between social workers and families. In January 1919, Helen Lois Jones wrote about Lucy, a young girl with influenza, “though Italian [she] has beautiful bronze hair and blue eyes.” In contrast, Jones characterized Lucy’s sister Concetta as “a typical undernourished Italian baby,” who was fed a diet of “buttermilk and macaroni.” Lucy, however, was healthy and deemed to eat properly.\(^{112}\) The family’s care of baby Concetta came into conflict with middle-class, medical professional advice regarding childcare. Feeding the baby

\(^{110}\) HUP Ward G., November 1921, 2.
\(^{112}\) HUP Ward G., Jan. 1919, 1. After writing Lucy, the writer switches to calling the girl Lizzie. I use Lucy since that is how it first appears in the record.
macaroni and buttermilk was at odds with the social worker’s beliefs about proper diet, leading Jones to admonish Concetta’s family for her lack of nourishment, a state she condemned as “typical” of Italian families.

In another case in which immigrant childcare practices conflicted with reformers’ agendas, the social worker wrote about Annie N., a young Italian girl with pneumonia. Ward G’s social service department was already familiar with the family through Annie’s sibling. The worker reported that during the first meeting she found “Mr. N. very intelligent and cooperative but Mrs. N. quite unamericanized.” At the follow-up home visit the worker determined that the parents were unchanged, noting that Annie’s mother refused to admit the child to the hospital at the doctor’s recommendation, but she brought the child to the hospital a day later when the baby’s condition had worsened. When the worker arrived at Annie’s home, she found the sick baby in a cradle in the kitchen, dressed in swaddling clothes, and being given patent cough medicine. To her frustration, the mother refused to adhere to the worker’s recommendation of bringing the baby back to the hospital, or even removing its swaddling clothes. In summarizing this encounter, the worker declared, “This case is typical of the average Italian-American family, the man progressive, willing and understanding, the woman childlike in her stupidity, absolutely unassimilable [sic] and very difficult to work with.”

Such nativistic assertions are unsurprising. Historians have traced such conflicts, noting the ways in which class, gender, and nationality impacted reformer’s practices,

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specifically when they clashed with the values and practices of poor, immigrant families.\textsuperscript{114} Social workers promulgated American standards of childcare that included the scientific ways to dress and feed children and how to keep a clean and sanitary home, echoing articles published in women’s magazines and newspapers that instructed mothers in the proper ways to raise children.\textsuperscript{115} Advice included dressing babies in loose, non-constricting garments, and eating an American diet, which might include milk, eggs, bread, oatmeal, meat, potatoes, and other fruits and vegetables.\textsuperscript{116}

Although Annie’s case demonstrates the ways in which medical reformers sought to Americanize immigrant families in the realm of health and childcare, it is also interesting for its exposure of the ways families negotiated the healthcare network. Annie’s mother did not comply with medical recommendations, choosing to care for her baby at home by using methods and medications with which she felt comfortable. Even under repeated pressure from the social worker, Mrs. N. refused to acquiesce to the medical workers’ recommendations, choosing to maintain her traditional childcare practices. Although the social worker was obviously frustrated by this encounter, she made no mention of involving outside agencies to remove the baby from the mother’s care.

\textsuperscript{114} On nativism during this period, see: footnote 64 above.
\textsuperscript{116} These are some of the items served at the CSH in Atlantic City, as noted in: \textit{CSH Annual Report for 1914}, 10. They also noted buying over 3700 pounds of meat in a single year, in addition to spending $222.28 on fruits and vegetables.
Social workers’ indictments of families who failed to comply with their recommendations are biting. Their interventions in the homes and lives of poor families may have, at times, been made out of contempt, but they also represented a desire to help children overcome the dangerous environments in which they lived. Reformers worked to address the medical suffering they encountered everyday on the Ward, and as they moved from the hospital to families’ homes, they confronted environments they believed threatened children’s health and recovery. Cases such as Annie’s seemed to support their work; when medical professionals’ advice went unheeded, the child suffered, as did Annie when she was admitted to the hospital in a worsened state than when originally examined.

Although reformers could levy harsh indictments of families, they also demonstrated great compassion. In 1922, seven children in a family contracted measles after one of the brothers was discharged from Ward G. The worker reported that during her home visit she found eight-year-old Michael "badly in need of rest and good food." She brought him to the dispensary, where he was referred to the Ward. The social worker noted that his family was very impoverished, with multiple children sharing one bed. Despite the children’s various medical conditions, the family’s cramped living quarters, and the difficult financial situation, the worker pronounced Mrs. C. “an excellent mother." This praise is striking, particularly given the number of children sharing a bed, a practice not condoned by the medical establishment. The worker may have been

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117 Cynthia Connolly makes a similar argument in: Saving Sickly Children.
119 Ibid.
forgiving in this situation, because Michael’s mother was compliant, as evidenced by her
decision to send Michael to the dispensary and Ward.

The social workers also showed compassion toward children whom others
misunderstood or treated with hostility, such as George, a patient with a neurological
condition that caused involuntary movements.\(^\text{120}\) His social worker, Helen Lois Jones,
described with dismay that George’s teacher mocked his facial expressions and called
him “a mean little animal.” While seemingly sympathetic to George’s situation, Jones
was less compassionate toward his mother. Labeling her “over-anxious” and “nagging,”
Jones assigned her some blame for George’s condition. Acting on medical professionals’
recommendation for fresh air as therapy, Jones arranged for George to attend a boys’
camp in the country. Given the importance prescribed to the home environment, it is
likely that Jones believed that attending camp would provide George the dual benefit of
separation from his mother and access to a physically and morally healthy environment in
the country.\(^\text{121}\)

In order to combat the pathological nature of these environments, reformers
worked to change children’s environments, either by encouraging families to improve

\(^{120}\) The specific diagnosis was “chorea,” which is related to Huntingdon’s disease.

conditions within their homes, or by moving children to a healthier place, such as hospitals or camps in the country. Patients’ social work cases provide a window into the lived health experiences of poor, urban children and their families, giving insight into working-class families health-seeking behaviors.

**Operating within the Network: Patients and Parents**

Between 1917 and 1926, Ward G social service workers reported on the health and welfare of their patients while they were in the hospital and after they were discharged. Although presented through the eyes of white, middle-class women, the social service reports illuminate the ways in which indigent, urban children and their families worked with the pediatric healthcare network and used it to achieve healthcare objectives for children. Envisioning this as a network – instead of a more top-down program – enables us to see parents and children as active participants in the healthcare economy. The following examination reveals the ways in which parents and children negotiated and shaped the structures of their healthcare. This section also highlights the lived experiences of sick and convalescent indigent children, a population difficult to access in the historical record. It exposes the hardships that working-class urban

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122 The workers sent summaries of their cases to the Women’s Auxiliary Club, and included information such as the child’s diagnosis or condition and notes about the patient’s home, family life, and healthcare. Although the diagnosis was not always recorded, the worker noted more than 50 different diseases or conditions, including: malnutrition, leukemia, rickets, chorea, bronchitis, syphilis, dwarfism, feeblemindedness, and mumps.

123 Although I don’t have specific demographic information for HUP Ward G’s social workers, social workers during this time were generally white, middle-class women.

124 The voices of children rarely even appear in histories of pediatrics, pediatric diseases, or child-saving campaigns. This is most striking in works that examine childhood diseases such as Evelyn Maxine
children endured, including familial disruption, lengthy stays at multiple institutions, and uncertainty about their future health and care.\textsuperscript{125}

One common experience children faced was the death of a parent. Helen Lois Jones, Ward G’s social worker at the time, reported that children suffering from influenza and pneumonia filled HUP’s pediatric ward in 1918.\textsuperscript{126} Her reports attest to the difficulties faced by children and their families. She noted that one of her most common duties was helping families in which one of the parents had died, such as her experience with Barbara, a young Lithuanian girl who was treated on the Ward. The influenza epidemic struck Barbara’s family with particular force; Barbara’s mother became “desperately ill,” as did Barbara and her two sisters. Unable to leave his wife’s side, Barbara’s father watched an ambulance carry away his daughters from their home to unknown locations. Barbara went to HUP, and when Jones visited Barbara’s home to investigate its condition, she found the father still caring for the girls’ ailing mother. He confided that he did not know the whereabouts of his daughters, and asked Jones to find them. Jones accomplished this, reporting that Emergency Aid provided care for the youngest daughter at a convalescent home in Chestnut Hill, while Barbara and her other sister went to the Little White Cottage (LWC), a convalescent home in Valley Forge. While the girls recovered, the mother’s condition worsened. She was taken to the Municipal Hospital where she died.


\textsuperscript{126} Nasaw, \textit{Children of the City}.

\textsuperscript{126} HUP Ward G, Summer 1918, 1.
When Jones returned to Barbara’s home, the father once again appealed to her, this time asking for assistance in finding a housekeeper. He told Jones that he was “desperate” to keep his family together, but needed assistance. While she worked to secure a housekeeper, the father informed her that he had decided to marry an old Lithuanian friend. Jones deemed this an effective solution, and noted that she “put no obstacle in his way.” The family relocated to Easton, PA, and Jones wrote to the Social Service League, asking for follow-up care for Barbara. Jones noted that the other children seemed healthy.\(^\text{127}\)

In contrast to Barbara’s experience, Jones often had to find new homes – either temporary or permanent – for children whose mothers had to work due to the death of their husbands, or whose fathers wished to “place-out” their children after their wives’ deaths.\(^\text{128}\) The latter was a particularly precarious scenario for children. Although Barbara’s father was devoted to keeping his family together, the social workers’ reports include multiple cases of children who were placed out of their family homes following the death of their mothers. In one instance, Jones sent William, a patient on the Ward during the summer of 1918, to the Northern Home for Friendless Children, an orphanage in Philadelphia. Jones had contacted William’s father, who confided that he “felt that William needed more careful care than he could give him.” Several of William’s younger siblings already lived in orphanages and Jones reported that William’s father was “very much pleased” with his son’s placement.\(^\text{129}\)

\(^{127}\) Ibid., 2.
\(^{128}\) Ibid., 1.
\(^{129}\) Ibid.
Comparing Barbara and William’s cases reveals the ways in which fathers worked with social workers to achieve personal objectives. While Barbara’s father worked with Jones to keep his family together, William’s father used her to access other child and health care institutions in order to relinquish guardianship. Together these cases suggest that fathers maintained authority in determining the best course of health and general care for their children, even when they sought opposing objectives.\(^{130}\) This isn’t to suggest that social workers simply complied with families’ wishes. Social workers’ approvals of the fathers’ decisions were important, as is implied by Jones’ note regarding her acceptance of Barbara’s father’s plan to remarry and move the family to Easton.

Although William and his siblings were scattered among different institutions, entering the pediatric healthcare system did not necessarily fracture families, even in cases in which children were institutionalized. Rather, children and their families moved in, out, and within the healthcare network as needs warranted.\(^{131}\) The permeable boundaries of the network are exhibited in the social workers’ notes, as in the case of Harold, a boy who was labeled a “low grade imbecile,” with Little’s Disease (cerebral palsy) and a speech defect.

After the death of his mother, Harold faced several different living arrangements. Harold’s father placed an application for him to attend the Polk Feeble Minded Institute.

\(^{130}\) There are interesting dynamics of both class and race at work in the case reports. For at least some social workers, they saw Italian fathers as easy to work with, given their willingness to assimilate, while Italian mothers often drew social workers’ ire. However, the most important factor in determining social workers’ praise seemed to be patients’ parents’ willingness to comply with their recommendations and meet their prescribed standards of living.

\(^{131}\) Other historians have noted this phenomenon, particularly with orphanages. Many children at such institutions had living parents, and parents used orphanages for temporary assistance in caring for children. See: David Macleod, *The Age of the Child: Children in America, 1890-1920* (New York: Twayne Publishers, 1998), 17.
located in western Pennsylvania. While waiting for an acceptance, Harold moved in with his paternal grandmother. However she, too, had to relinquish custody of Harold, as the family with whom she lived did not want Harold in their home.\textsuperscript{132} As Harold was a former patient of Ward G, the social worker found a temporary placement for Harold with Mrs. Walsh, a woman who took children as boarders. The social worker noted that Mrs. Walsh connected immediately with Harold despite his “almost complete helplessness and unintelligibility.”\textsuperscript{133} While under Mrs. Walsh’s care, Harold’s grandmother continued to bring him to Ward G’s dispensary, where the doctor pronounced him “much improved” and “capable of learning something despite his diagnosis.”\textsuperscript{134}

It is unclear from the reports why Harold’s father chose to relinquish guardianship, how long Harold lived with Mrs. Walsh, or whether he eventually attended the Polk Feeble Minded Institute. It is certain that after his mother’s death, a network of people and institutions worked together to provide Harold’s care.\textsuperscript{135} Mrs. Walsh, the social worker, the dispensary physician, and Harold’s grandmother all participated in his healthcare. Harold’s grandmother’s continued role in Harold’s care is most striking, as it

\textsuperscript{132} The term “foster parents” was not used by the actors, but it properly conveys the relationship. Adults offered to care for sick or ill children as boarders, suggesting that they received compensation for providing care for those children, much as foster parents do today.
\textsuperscript{133} HUP Ward G, Summer, 1922, 1.
\textsuperscript{134} HUP Ward G, Dec. 1922, 1.
suggests that families maintained connections with children even after they were placed-out for care.

This was also true for children in hospitals and other institutions. Although institutionalization often meant children’s separations from their families, individual experiences varied. While it appears that Barbara, the Lithuanian girl admitted to Ward G during the influenza epidemic, saw neither her parents nor her siblings during her stay at HUP, she was reunited with one sister at the Little White Cottage. Other children’s parents were present throughout their time in the Ward. In the social service report for February of 1920, M. Ruth Butler wrote a note about Virginia, a patient with pneumonia who had “been at death’s door ever since her admission,” and whose father had recently died from influenza. Virginia’s mother remained at her daughter’s bedside throughout her hospitalization. Her presence seemingly did not pose a problem for the hospital staff, or at least for Butler who noted with regret that they were only able to provide comfort and convalescent care if Virginia recovered.\(^{136}\)

This level of parental involvement is striking. Although historians have argued that pediatric institutions discouraged or refused parental visitation, the social service reports make clear that at least some urban hospitals allowed and even supported parental involvement in the hospital.\(^{137}\) While few parents were able to maintain vigil at their

\(^{136}\) HUP Ward G, Feb 1920, 2.
child’s bedside, Virginia and Barbara’s cases indicate that parents and siblings had contact during hospitalization and that institutional boundaries were more porous than often imagined. In fact, parental – specifically maternal – involvement during institutionalization was not peculiar to Ward G; other pediatric institutions such as the CSH and the PSA actively encouraged it. These institutions admitted mothers and older female siblings to provide care for the sick and convalescent children. Not only did this help alleviate the nursing burden, it also provided an opportunity for nurses and physicians to teach mothers and so-called “little mothers” proper childcare techniques.\textsuperscript{138}

Despite language barriers, difficult environmental conditions, limited financial means, and judgmental medical workers, parents navigated the pediatric healthcare network to access healthcare for their families. This does not mean that immigrant families had it easy or received care equal to what wealthier families could afford. Parents faced great constraints in accessing healthcare for their children. Poor families had to depend on free care from neighborhood clinics and dispensaries, which could mean long lines and lost days of work. It also meant a bifurcation of care in comparison to families who could afford a family physician. Rather than going to a single source, poor families accessed medical information from physicians at the hospital or dispensary.

\textsuperscript{138} Older sisters were often referred to as “little mothers.” For more on this, see Eunice Pollack, “The Childhood We Have Lost: When Siblings Were Caregivers,” \textit{Journal of Social History} 36, no. 1 (Autumn, 2002): 31-61. Other historians who discuss “little mothers,” but in a more limited fashion, include: Nasaw, \textit{Children of the City}, 106-108; Meckel, \textit{Save the Babies}, 144-45; Apple, \textit{Perfect Motherhood}, 43-45. For more on little mothers, see Chapter four.
and received instruction about the social and environmental aspects of health during home visits from nurses and social workers.¹³⁹

What the preceding cases demonstrate is that despite their disadvantages, working-class families were able to use the social worker’s services to access an increasingly wide and well-established pediatric healthcare network.¹⁴⁰ The Ward G reports elucidate the interconnectedness of the network and how families of sick, indigent children were savvy consumers of the available resources. One illustrative example is the Presti family. In March of 1922, the worker wrote that the Babies Hospital contacted the social service department to “warn” them about the Prestis, a family well known to Philadelphia’s social agencies. The worker reported that at one year of age, Baby Presti weighed just 13 pounds and was admitted to the Ward four days after being discharged from the Babies Hospital. Mr. Presti, who the social worker noted as a neurasthenic, arrived at the social service department at HUP in tears, asking the social workers to send them to the country. Apparently concerned with the father’s state of mind, physicians conducted medical examinations of the father, during which they failed to uncover anything wrong with him. However, the social service department determined that the home environment contributed to Mr. Presti and his child’s ill health, and they asked the Society for Organizing Charity (SOC) to reopen the family’s case, agreeing to work with that organization on the family’s care.¹⁴¹

¹⁴⁰ As Jeffrey Brosco notes, the network of institutions dedicated to working with children and their various health and welfare needs was highly integrated into local communities and worked with one another so as not to duplicate efforts. See: Brosco, “Sin or Folly,” 144-46.
¹⁴¹ HUP Ward G, March 1922.
The Prestis’ case illuminates the interwoven nature of the healthcare network and parents’ health-seeking behaviors. Not only were multiple medical institutions in contact regarding common patients, but the social service department at HUP also involved outside charitable institutions in order to provide additional assistance for the families. Furthermore, Mr. Presti’s action of seeking the social service department’s help enabled him to work towards his objective of procuring a place to convalesce in the country. Parents like Mr. Presti are featured prominently in the social workers’ notes, and their work with reformers points to families’ uses of the pediatric health care system to achieve their goals, whether that was accessing additional social and medical agencies, keeping families together, or placing children in orphanages.

Although it is more difficult to find examples, children also operated as actors within the network. Claude, an eleven year old “very high class, well-mannered boy,” was scheduled to move from Ward G to the Little White Cottage. Being “devoted to his crippled mother,” Claude informed the worker that he would only go to the LWC if he could first visit his mother at home. The worker arranged the visit, which took place on his way to the LWC.142 Once Claude arrived at his home, the nurse overseeing his visit instructed Claude to speak to his mother from the porch, as the LWC forbid its patients from going into their homes. Although one can imagine that these circumstances did not fully meet Claude’s objectives, it remains a noteworthy example of the ways in which a child negotiated his healthcare experience.

Other children attempted to control their experiences through acts of resistance. Katherine, a “colored” girl with miliary tuberculosis who spent several months on the Ward without improvement, refused to interact with medical professionals. From the time she was admitted, Katherine remained “without any animation, never smiling or showing any interest when spoken to.” Other children misbehaved. Abraham, the Russian boy who was sent to the CSH, was noted by his social worker for his use “foul” language and his bad attitude. Although these behaviors indicate that some children were unhappy at the hospital, Claude, Katherine, and Abraham’s cases also demonstrate how children were active participants in their own care.

Read together, these case studies illuminate how parents and children influenced their healthcare experiences. The interactions between parents, children, and the social workers make clear that each of the actors in the healthcare network exhibited some degree of agency and control over the health and welfare of children. While poor, immigrant, urban families did not enjoy equal footing to medical experts, they were savvy consumers of, and important actors within, the healthcare network. The fact that parents sought specific medical attention and institutions and asked to be sent to country institutions demonstrates a shared commitment to children’s healthcare. It also illuminates their belief that the country could heal urban life’s ills.

143 HUP Ward G, March 1919, 1-2. My use of the word “colored” is consistent with the terminology used in the historical record.
144 HUP Ward G, Nov 1921, 2; HUP Ward G, March 1922.
The City versus the Country

As previously mentioned, a critical feature of the network was urban pediatric institutions’ dependence on the country to provide a space of health and healing for their patients. Children moved between these environments as they either improved or weakened. The fluidity of the system was facilitated by the emergence of transportation networks such as trains and street cars, as well as by the urban hospital’s maintenance of country and seashore branches of their institutions. The development of this interconnected network of urban and rural institutions resulted not only from new infrastructure, but also from a shared conceptualization of the city as an inhospitable environment for children’s health and well-being, and the country as its salubrious solution.

Medical experts and the urban families they treated had different approaches to children’s healthcare, but they often shared a vision of the city as a pathological environment of illness and suffering. The “country” was a reinvigorating, healthy space in which children could heal and strengthen their bodies. Drawing distinctions between urban and rural environments was not novel to the Progressive Era. The idea that the country was healthy, while the city was insalubrious, extended as far back as Virgil.145 Physicians and scientists conducted studies of the relative health of these environments.

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during the mid-19th century, concluding that the higher mortality rates in urban areas provided evidence of this long-standing belief.\textsuperscript{146}

While the boundaries were fluid, the conceptualization of the country and the city as distinct and opposing environments was important to historical actors, as they understood that each place would act differently upon their health and bodies.\textsuperscript{147}

Accepting that this distinction held a visceral reality for historical actors enables us to understand why this dichotomy was important at the turn of the 20th century in the United States. Examining pediatric healthcare exposes the city-country health divide to be a conception that bridged people from different classes, ethnicities, genders, and races. The shared understanding that the city drained the health and vitality of the country’s youngest citizens enabled a socio-medical network to develop in which children moved between urban and rural environments. The flows of sick, convalescent, and healthy bodies between the city and country demonstrates that although contemporaries understood these environments to be distinct landscapes, each depended on the other for definition of their relative health.\textsuperscript{148}

\textsuperscript{146} Peter Thorsheim, “The Corpse in the Garden: Burial, Health, and the Environmental in Nineteenth-Century London,” \textit{Environmental History} 16 (January 2011): 38–68. There was an emerging sense in the early 20th century that the country, like the city, could also be unhealthy. This was a somewhat shocking discovery, as it upended deeply held beliefs about the health of place. For instance, Better Babies contests often divided children into city babies and country babies, believing that country babies would have an unfair advantage when being compared to city babies.

\textsuperscript{147} Some historians, including William Cronon, have argued that conceptualizing the city and country as distinct environments erases their mutually constitutive nature. While the boundary between the city and country may have been “false” in that one depended on the other for definition and survival, they were understood and experienced as fundamentally different environments. The practice of health tourism was based on such conceptualizations. For instance, see: Gregg Mitman, “Hay Fever Holiday: Health, Leisure, and Place in Gilded-Age America,” \textit{Bulletin of the History of Medicine} 77, no. 3 (2003): 600–35.

\textsuperscript{148} Gregg Mitman argues for greater attention to health and medicine in environmental history as a way to further understand the use and conceptualizations of the environment. See: Gregg Mitman, “In Search of
Although medical experts and parents both looked to the country as a potential solution for the health problems of urban children, they did so with different motivations. Reformers viewed country-based institutions as antidotes to the insalubrious physical and moral environments in which urban children lived. Visiting the city homes of sick and convalescent children provided social workers with evidence that the unsanitary conditions, lack of ventilation, and cramped living quarters combined with immigrant parents’ childcare practices to create an unhealthy environment for children. In the Philadelphia region, charities such as the Country Week Association arranged placement for urban children to temporarily live with families in the country, while sick or convalescent children were sent to institutions including the Little White Cottage in Valley Forge, PA, and the Children’s Seashore House in Atlantic City, NJ. In the eyes of reformers, pediatric marine hospitals, convalescent institutions, and private homes in the country provided poor children with exposure to physically and morally healthy American environments.

Medical professionals and reformers believed that removing children from their urban homes to country-based institutions provided advantages on multiple levels. First, the physical, outdoor environment of the country provided therapeutic remedies inaccessible in the city, such as fresh air, sunlight, and open spaces in which children could live and play. Additionally, physicians believed that the built environments of the country institutions offered patients advantages over their city dwellings. In an appeal


149 For more on the medical knowledge production that underpinned these ideas, see chapter two of this dissertation.
for patients, William Bennett, the physician in charge of the CSH, wrote that his hospital would be more beneficial for sick and convalescent children living at home than for children residing in urban hospitals or institutions. He claimed, “In large cities, the children of the poorer classes in public institutions, are under better sanitary influences, and consequently need a change less than children of the same class in their own homes.” He noted with regret that only a small percentage of the CSH’s patients came directly from their homes.\(^\text{150}\)

Bennett’s claim that the clean, sanitary nature of medical institutions provided a superior environment to the urban homes of poor children fits with socio-medical reformers beliefs about the inherently injurious nature of urban life and housing. Interestingly, however, medical experts also argued that non-urban institutions could provide better care than their city counterparts because of the environments in which they were located. In a study conducted at a pediatric marine hospital in Britain, physicians found that children at the beach had metabolic rates 40 percent higher than children confined in a closed calorimeter, and 20 percent higher than those in well-ventilated hospital rooms.\(^\text{151}\) The authors concluded that the seashore provided a superior environment in which to heal, even in relation to sanitary urban hospitals. In addition to such studies, physicians in charge of country institutions provided anecdotal evidence of children’s improvements after their transfers from city to country hospitals, including stories of seemingly miraculous recoveries. Medical experts produced scientific evidence

\(^{150}\) CSH Annual Report for 1875, 9.
of the superiority of country and marine environments over that of the city, and offered children’s healed bodies as proof of nature’s ability to turn sick children into healthy youngsters.

Although some parents resisted or refused to send their children to the country, many others agreed that it was a solution to their children’s health problems. This participation is not necessarily surprising, given that many immigrants hailed from European countries in which practices such as sending sick children to the country, mountains, or seashore was established practice. Europeans had used the seashore as a health-giving environment since the 18th century, and the first pediatric marine hospitals emerged in the middle of the 19th century in Italy and France. Indeed, some of HUP Ward G’s parents specifically sought removal from the city to country in order to help their children, and themselves, heal.

For other families, sending a sick child to the country not only provided a healthy space for their child to heal, but it also relieved complicated family situations. In March of 1918, social worker Helen Lois Jones visited the home of Harry, “a pale, slight little boy of 8 years” who had been treated at the hospital for pneumonia. Jones reported that Harry still looked weak and was being cared for by his older brother and sister while his mother worked at the Roosevelt Woolen Mills. Concerned with Harry’s care and lack of recovery, Jones contacted the Country Week Association and procured Harry a free two-week outing near Brandywine Summit, PA. The objective was for Harry to “just eat,

sleep and grow fat.” Jones reported that he was “eager to go” and that his mother was relieved to know her son would be receiving proper care.\textsuperscript{153}

While it is possible that Jones’ reporting of this case represented her personal beliefs more than those of Harry and his mother, it is likely that they shared at least some of this sentiment. Without the financial support of a husband, Harry’s mother depended on her income from working at the Mill and was unable to care for Harry herself. Sending Harry to a family in the country represented a solution to a difficult situation. Given that social workers noted families who did not wish to send children meant that Harry’s mother had the ability to refuse the care if she did not want him to go. Jones made no such note.

Additional insights into the shared belief about the health of the country are found in the origin stories of pediatric institutions that depended on environmental therapeutics. Reverend Rufus Tobey, who founded the Boston Floating Hospital (BFH) in 1894, recalled the nightly ritual of crowds of children and mothers with infants in arms walking up and down the South Boston Bridge.\textsuperscript{154} Mothers sought relief from the heat of their homes for their sick and ailing children, staying outdoors late into the night in an attempt to expose their children to the open night air and breezes. Such actions indicate parents’ beliefs in the health-giving effects of cool, clean air.\textsuperscript{155} The popularity of the BFH provides further evidence of parents’ desires to remove children from the harsh urban

\textsuperscript{153} HUP Ward G, March 1918.
\textsuperscript{154} Boston Floating Hospital, “A Brief History of the Boston Floating Hospital,” (Boston, 1906), 5.
\textsuperscript{155} Ibid., 4.
environments and to provide them with increased access to the fresh, sea-air and sunlight.156

Every year, thousands of urban children went to country institutions, whether those were seashore hospitals, farm homes, or ships floating in a city’s harbor.157 Over the course of several years, the Ward G social workers referred dozens of patients to institutions like the LWC, the Children’s Country Week Association, and the CSH for medical and convalescent care and to restore the strength depleted by urban life. The country, however, was not a uniform environment, but a conglomeration of healthy spaces ideal for different populations. Depending on the nature of the illnesses, their states of recovery, and their ages and sexes, children went to different places in order to recover. Various agencies and institutions worked together to ensure that children went to the proper environment for their needs. For instance, in 1892, William Bennett, the physician in charge of the CSH, wrote that the Country Week Association “each year sends to us such of their children as seem specially to need the sea air and the care which we provide, while cases which we cannot receive, and which do not need the special provision which we make, are often referred by us to them.”158 Older boys were excluded from some institutions, including the CSH in its opening decades, as medical experts considered them to be too disruptive to the other patients. Camps – which the CSH

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156 Poor children it seemed also shared the conceptualization of the country as an attractive alternative to the city, particularly during the summer. For instance, George F. Williams, the editor of the New York Times, recounted overhearing a group of poor children in a park, “playing they were in the country.” This led him to founded a floating hospital for NYC’s indigent youth. See: Sarah Bessie Palmer, “The Floating Hospital of St. John’s Guild, New York City,” The American Journal of Nursing 4, no. 1 (Oct 1903): 4-8.


158 CSH Annual Report for 1892, 12.
established in 1897 – provided places for boys to gain strength and skills, such as fishing, boating, and swimming.\textsuperscript{159}

The seashore was one environment within the constellation of healthy spaces. Contemporary medical articles provided scientific evidence that the seashore was a particularly healthful environment for sick or convalescent children. Abraham, the Russian boy whose case opened this chapter, went to the CSH after the social worker determined that his parents could not provide a healthy home environment for him. In a follow-up report one year later, the social worker exclaimed that when Abraham returned from the CSH, she had “never seen a child so improved, both physically and mentally, by an outing. He looked and acted like a different boy, and was in such good spirits.” The social worker discussed the possibility of subsequently placing Abraham in the country, “as the home is a very poor one, and the mother, tho devoted, seems to have very little control of him.”\textsuperscript{160}

Abraham’s case represents many features of urban children’s lives and healthcare at the turn of the 20\textsuperscript{th} century. Abraham faced various obstacles to his health, resulting in lengthy stays in multiple institutions and continued separation from his family. The Ward’s physician determined that Abraham needed an environment that could provide him with fresh air and good food in order to facilitate his recovery, and after evaluating the family’s home, the social worker determined that Abraham’s Russian immigrant parents could provide neither the physical nor the moral environment necessary for

\textsuperscript{159} CSH Annual Report for 1897, 5. On camping, see footnote 121 above.
\textsuperscript{160} HUP Ward G, March 1922.
Abraham to heal. As such, she facilitated his removal from his urban home to a pediatric seashore hospital, located 60 miles away in Atlantic City, NJ. Abraham’s parents seemingly agreed with this plan, as the social worker made no mention of their protest.

This story also illuminates how people envisioned the dichotomy of the city and country, and how medical experts drew distinctions within “country” environments. Abraham moved in between the city and country, and each environment was understood to act on his health and body in specific ways. Abraham’s recovery hinged on his removal from his urban home to the salubrious seaside. The “poor, dark” rooms of Abraham’s home did not allow him the access to the fresh air and sunlight he needed to build his strength and health, and his family’s finances did not provide him with access to good food. The CSH provided the necessary elements for his convalescence, and Abraham returned to the city healthy, happy, and reformed. His urban home, however, remained a dangerous environment. Thus, the worker recommended sending Abraham to the country to continue his medical convalescence and social development.

**Conclusion**

Abraham, like many other children, moved between the boundaries of the city and its hinterlands, in search of improved and continued health. The movement of sick, convalescent, and well children between these environments exposes the ways in which people understood place-based health. Urban children faced many obstacles to their well-being, and the country operated as a space of health and healing. More than rhetorical
flourish or boosterism, the conceptualizations of the salubrious country held power for reformers, families, and physicians at the turn of the 20th century. Children who left the city sick, skinny, and weak, returned from the country with ruddy cheeks, round bellies, and healthy spirits. Their return offered corporeal proof of the country’s health benefits. As the concentration of sick urban children became increasingly visible at the turn of the 20th century, a network of people, institutions, and organizations emerged to address their health issues. Working-class families worked with, and at times against, reformers to provide healthcare for their children. Building on popular conceptions, lived experience, and medical expertise, physicians and parents sought an antidote to urban life, and found one in the seashore.
Chapter 2
“Nature’s Cure”: Marine Medication and the Treatment of Pediatric Patients

In the early morning hours of December 2, 1885, a rabid dog terrorized the streets of Newark, NJ, biting six children and seven dogs. Although it was a tragic scene, there was hope. French physician Louis Pasteur had recently developed a treatment for rabies, and a local Newark physician was determined to raise funds to send the children to Paris for the cure. People quickly responded to the doctor’s appeal, and Pasteur agreed to receive the children for care. On December 10th, four boys boarded a steamer bound for Paris.161 By then news of the “Newark Boys” had spread across the United States. Newspapers from New York City to Dallas, Texas published accounts of the boys’ experiences. One article detailed the boys’ exclamations of how the treatment’s needles tickled and felt “like the bite of a big mosquito.”162 Another described their triumphant return, the boys being exemplars of health with “rosy cheeks and sparkling eyes and happy as the day is long.”163

The American public’s fascination with the Newark boys reflected an excitement and faith in the ability of medicine to cure disease.164 In the 1880s, bacteriology and germ

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161 Only four of the children were determined to need Pasteur’s treatment.
theory were ushering in a new era of disease etiology and management.\textsuperscript{165} During this time there was shift from miasmatic theories, which held that disease arose from foul emanations in the air, to germ theory, which attributed illness to microbes. Germ theory gave people hope that diseases could be cured with a single, specific treatment. The Newark boys’ story gave credence to these beliefs. According to historian Bert Hansen, that single event helped “to change popular expectations about medicine more generally” by “cultivating a sensation about medicine’s being newly powerful, about scientific knowledge that makes a difference in a public arena.”\textsuperscript{166}

We would think that this new excitement and faith in medicine would have led away from older therapeutic practices of generalized, natural treatments. Some historians have suggested that this in fact occurred. Gregg Mitman argues that “the initial success of the germ theory of disease in the late nineteenth century had dominated understanding of the etiology and pathology of disease, locating illness in a single cause, the microbe.”\textsuperscript{167} He contends that physicians’ interests in the interrelationships between people and their environments only reemerged between World War I and II.\textsuperscript{168} Yet in the late 19\textsuperscript{th} and

\textsuperscript{165} As scholars have suggested, germ theory and bacteriology did not have the immediate therapeutic impact that physicians and scientists had initially hoped. While these theories resulted in some “magic bullet” treatments for diseases like rabies, the majority of diseases remained beyond the reach of therapies. It was not until the mid-20\textsuperscript{th} century with the invention of sulpha drugs and antibiotics that many infectious diseases were “effectively” treated. See, for instance: Nancy Tomes, \textit{Gospel of Germs: Men, Women, and the Microbe in American Life} (Cambridge, MA: Harvard University Press, 1998).

\textsuperscript{166} Hansen, “America’s First Medical Breakthrough: How Popular Excitement About a French Rabies Cure in 1885 Raised New Expectations for Medical Progress.”

\textsuperscript{167} Gregg Mitman, “In Search of Health: Landscape and Disease in American Environmental History,” \textit{Environmental History} 10, no. 2 (2005): 186.

\textsuperscript{168} Ibid. Linda Nash makes the argument that germ theory effectively neutralized the environment’s role in disease production, and that the environment became the purview of public health, while medicine turned to the laboratory. See: Linda Nash, \textit{Inescapable Ecologies: A History of Environment, Disease, and Knowledge} (Berkeley: University of California Press, 2006). For an overview of miasmatic theory, see: Peter Thorsheim, \textit{Inventing Pollution: Coal, Smoke and Culture in Britain since 1800} (Athens, OH: Ohio
early 20th centuries, expansive medical systems that included civic groups, charities, medical institutions, railroad companies, and businesses were established to send pediatric patients from the cities to the seashores. These systems, which stretched from Baltimore to Boston in the United States, were based on the principle that the marine environment could heal sick, urban children.

Tales of patients’ dramatic transformations at pediatric seashore hospitals supported these ideas. The Children’s Seashore House (CSH) in Atlantic City, NJ, reported that patients’ health improved so dramatically that some mothers failed to recognize their children at discharge. Children who came to the seashore skinny, pale, and weak, left the hospital having gained weight, strength, and the ability to walk. Children’s weight was a particularly important marker of their health and the seashore’s salutary effects. In 1911 the CSH’s Board of Managers reported that they admitted two children from another hospital. The physician from the referring hospital sent instructions that the boys “were to be forced to eat.” The CSH staff found that no such intervention was necessary. After the boys arrived at the CSH, “their awakened seashore appetite


169 Although there is substantial literature complicating the definition and meaning of “nature,” I am using the term as my actors did – to refer to the outdoor environment, specifically sea-air, seawater, and sun, that they believed constituted therapeutically beneficial elements. For scholarly discussions of nature and its contested meanings, see: William Cronon, ed. Uncommon Ground: Rethinking the Human Place in Nature (New York: W.W. Norton Co, 1996).

170 CSH Annual Report for 1910, 10; CSH Annual Report for 1911, 15.
demanded double helpings at their first breakfast and soon they were brown, round and hungry as sturdy whistling country boys.”

These celebratory tales are reminiscent of reports about the Newark boys, from patients’ travels to distant places, to their homecomings as healthy, happy, rosy-cheeked youngsters. Stories of pediatric seashore hospitals’ successes also gained national and even international attention. In July of 1905, the *New York Times* reported that President Theodore Roosevelt visited Sea Breeze Home (SB) on Coney Island, NY, and expressed his approval of the institution and its work. John D. Rockefeller also supported the hospital, donating $150,000 so Sea Breeze could expand its work. Prominent physicians devoted their attention to seashore hospitals, writing numerous journal articles, popular tracts, and even dedicating an entire morning to discussing the institutions and their work during the 1905 Fifth International Congress on Tuberculosis.

Studying seashore hospitals and the medical knowledge produced about the marine environment complicates our understanding of how people conceptualized the interactions between people, health, and the environment in the late 19th and early 20th centuries.

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171 CSH Annual Report for 1911, 15.
174 John W. Brannan, a physician with Sea Breeze Hospital noted this in the talk he gave at the 6th International Congress on Tuberculosis, held in Washington D.C. in 1908. See: John W. Brannan, “The Seashore and Fresh Air Treatment at Sea Breeze Hospital,” in *Transactions of the Sixth International Congress on Tuberculosis*, Vol. 2. (Philadelphia: William F. Fell Co., 1908), 682.
centuries. This chapter demonstrates that physicians maintained their convictions that certain environments produced health. Examining marine medication – a therapeutic system of sea-air, seawater, and sun-bathing – exposes how the medical establishment simultaneously rejected the environment as a causative agent of disease while using nature to cure patients of a wide range of illnesses and disorders. This seemingly contradictory stance makes sense when viewed through the lens of health rather than disease. Despite the Newark boys’ successful treatment, the vast majority of diseases remained untreatable, including highly prevalent and deadly conditions like tuberculosis. Physicians had little choice but to remain dedicated to centuries-old natural therapeutic practices in order to provide their patients with the best chances of health.

Despite this continuity, the reductionist trends that germ theory ushered in altered the ways in which physicians understood the environment’s impact on human bodies and health. There was an increasing trend toward what I term the “rationalization of natural therapeutics.” This process included scientific studies that reduced the environment into therapeutic and non-therapeutic components. Using chemistry, physics, measurement, and scientific inquiry, scientists and physicians distilled the sea-air, seawater, and

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175 Other historians have also complicated this trajectory, arguing for a hybrid view of disease causation. David Barnes has termed this the “Sanitary Bacteriological Synthesis.” Michael Worboys places this discussion within the seed-soil debate, through which physicians argued whether germs/bacteria (the seed) or the health, strength, or constitution of a person’s body (the soil) mattered more. David S. Barnes, The Great Stink of Paris and the Nineteenth-Century Struggle Against Filth and Germs (Baltimore: Johns Hopkins University Press, 2006); Worboys, Spreading Germs.

176 Diphtheria could be treated by the 1890s, while other diseases like smallpox had vaccinations available. For scholarship on tuberculosis, see footnote 18, in the introduction.

sunlight into their constituent parts. They concluded that the ozone and saline particles in the air, certain chemicals in the water, and UV rays from the sun were the tonic elements responsible for health. This reductionist move enabled physicians to create systems through which they could dose and control nature for the treatment of patients. Given that marine medication practitioners were part of the elite medical establishment, this rationalization was not a sleight of hand. Rather, physicians saw it as scientific evidence of what they already knew: that nature cured.

Physicians’ studies not only placed marine medication on scientific ground, they also created a popular therapeutic vision – or “healthscape” – of the seashore. As outlined in the introduction, a healthscape is the therapeutic vision of a particular geographic location that is created by a combination of health-seeking behaviors, medical practices, and knowledge production about the healthful or harmful characteristics of that place.¹⁷⁸ Many historians have discussed how middle-class vacationers in the late 19th century believed that they derived health benefits by traveling to the mountains or the seashore. Scholars have explained their actors’ assertions either as justifications of leisure practices, or as quaint and unscientific musings of a bygone era.¹⁷⁹ This chapter demonstrates that such statements were staked in the latest medical and scientific knowledge. It shows that vacationers’ discussions of traveling’s health benefits represented the latest medical evidence regarding nature’s healing power. Medicine, then,

¹⁷⁸ See the Introduction of this dissertation.
undergirded the rise of tourism by producing a healthscape that defined the seashore as a restorative environment for urban residents seeking to regain health that had been depleted by city life.

The Shore and Its Patients

Like many other seaside towns, Atlantic City began its life as a health resort. Town founder and physician Jonathan Pitney encouraged Philadelphians to take advantage of the barrier island’s naturally healthy climate. City residents needed little convincing. By the 1870s, tens of thousands of people made it their summer residence, while almost five hundred thousand traveled from Philadelphia to Atlantic City during a single season. People came in search of better health for themselves and their families. One group of visitors was so inspired by the changes in their children’s health they became determined to provide the same benefits to Philadelphia’s indigent youth. After reading a book on marine medication, they decided to open a pediatric marine hospital, and in 1872 the Children’s Seashore House (CSH) began admitting patients.

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180 The establishment of a rail line the connected Philadelphia to Atlantic City facilitated tourism. The first rail line opened in 1854, with other lines to open in subsequent decades. Charles Funnell, By the Beautiful Sea: The Rise and High Times of That Great American Resort Atlantic City (New Brunswick, NJ: Rutgers University Press, 1975), 12.
182 For more on the rise of tourism, including class dimensions, see: Simon. Boardwalk of Dreams; Aron, Working at Play; and John Kasson, Amusing the Million: Coney Island at the Turn of the Century (New York: Hill & Wang, 1978).
The hospital managers stated that their goal was to provide “the benefits of sea air and bathing to such invalid children of Philadelphia, and its vicinity, as may need them, but whose parents may not be able to meet the expenses of a residence at a boarding house.” Identified through a combination of hospitals, community organizations, and private referrals, prospective patients went to one of several “examining physicians” throughout Philadelphia and southern New Jersey in order to obtain admission to the CSH. The referring physicians determined suitability for admission, most importantly confirming that the patient did not suffer from a contagious disease, and therefore did not represent a health threat to other patients.

Physicians at the CSH targeted children suffering at home, given the belief that patients in urban hospitals had access to better sanitary conditions and therefore needed less of a change than homebound children. In practice, however, many patients came from urban institutions. The majority of the patients readily improved at the shore, regardless of the urban environment from which they came. According to the CSH’s published statistics, the vast majority of patients left the hospital either “cured” or “improved,” as indicated by weight-gain and other factors. Since many of the children were admitted from urban hospitals, patients’ improvements could not be explained by improved sanitary conditions or better nutrition, as might be the case for children who were admitted from their homes. The fact that children improved at the seashore to a

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183 *CSH Annual Report for 1872*, no page.
184 In cases in which a child developed a contagious condition, the patient was quarantined and discharged. *CSH Annual Report for 1875*, 9.
185 *CSH Annual Report for 1910*, 20. The majority of the annual reports included statistics for the children treated and included numbers for how many were cured, improved, remained in a similar condition, or died.
greater degree than they did in urban institutions supported practitioners’ arguments that the sea-air, sunshine, and seawater provided health benefits otherwise inaccessible to urban children.

This was true for a wide array of diseases and disorders. Those admitted to the CSH came with diagnoses that ranged from nutritional deficiencies like anemia and rickets, to gastro-intestinal diseases such as “summer diarrhea,” to “crippling” disorders including Pott’s disease (tuberculosis of the bones) and infantile paralysis (polio). Physicians and parents also sent children who were convalescing from acute diseases like pneumonia or typhoid fever, as well as youngsters who were “run-down” by city life and needed a “change in air.” One of the most common conditions among the CSH’s patients was “debility,” a condition marked by anemia, malaise, lack of strength or flesh, insomnia, and nervous irritability. While debility was not limited to the urban poor, it was a condition associated with urban life. The 1882 CSH Annual Report defined debility as a condition “incident to the hot weather and a crowded city.”

The range of the CSH patients’ conditions is representative of the diseases that physicians believed benefitted from marine medication. Critically, physicians associated most of the conditions with urban life, and many were specific to childhood.

Recommendations for who should travel to the shore were circulated through

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187 For more on childhood diseases and pediatric medical interventions during this period see footnote 43. 188 John A. Robison, “Ocean Climates: Their Effects and The Cases they Benefit,” The Journal of the American Medical Association 36, no. 18 (May 4, 1901): 1245. On debility, see: Julie Livingston, Debility and the Moral Imagination in Botswana (Bloomington, IN: Indiana University Press, 2005). 189 CSH Annual Report for 1882, 13. Physicians increasingly advocated for transitioning the patient population from treating those with debility, which they contended could be successfully treated in country homes or institutions, to groups of patients who needed the marine environment and constant medical oversight, like children with surgical tuberculosis. Debility and other seemingly vague diagnoses still constituted a large portion of the patients admitted, particularly during the summer.
professional and popular journal articles and books published by physicians. One widely-read text was French physician André Brochard’s 1864 book *Sea-Air and Sea-Bathing for Children and Invalids: Their Properties, Uses, and Modes of Employment*. In 1865, British physician William Strange translated the book from French into English, and by the early 1870s it made its way across the Atlantic Ocean and into the hands of the CSH founders. Brochard’s book outlined how to utilize the physical properties of the sea-air and seawater in order to improve patients’ health.¹⁹⁰ He claimed that children suffering from scrofula, debility, affections of the stomach and bowels, rapid or slow growth, worms, chronic bronchitis, nervous excitability, and “diseases of spoiled children” particularly benefitted from a stay at the shore.¹⁹¹

Similar lists appeared in subsequent publications, including prominent medical journals like the *British Medical Journal (BMJ)* and the *Journal of the American Medical Association (JAMA)*. An 1870 BMJ study found that eight groups of patients particularly benefitted from England’s northeast coast including people who were convalescing and those who were suffering from: active childhood diseases, scrofula (tuberculosis of the glands), some functional disorders of the nervous system, dyspepsia, debility produced by town-life, tissue degeneration, hay-asthma.¹⁹² The author, George Oliver, argued that sea-air was particularly beneficial for “debility produced by Town life,” claiming that the

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¹⁹¹ Brochard, *Sea-Air and Sea-Bathing for Children*, 103-28. For an example of a book published for a general audience on marine medication, see: John Packard, *Sea Air and Sea Bathing* (Philadelphia: Presley Blakiston, 1880). This book was published as part of a series on American Health Primers, which were meant to teach a general audience about how to properly practice preventive health measures.

“tonic properties of sea-air are of great value to those persons whose energies are exhausted by over-work, especially of the brain, or by what is commonly called worry.”

Sea-air exposure helped these patients by restoring their energy and calming their nerves. In addition, Oliver argued that sea-air and sea bathing induced an increase in appetite and assisted weak patients by restoring and forming new tissue. This result was valuable to those who needed to gain strength and weight, such as children and convalescents.

Throughout his article, Oliver stressed the importance of the local environment. He warned readers, “The climatic conditions of marine health-resorts differ very considerably...Hence the results of individual experience will probably be more useful than general remarks concerning the effects of sea-air on disease.”

He contended that the northeast coast of England at Redcar and Saltburn aggravated certain disorders, including inflammatory skin diseases, all stages of tubercular consumption (pulmonary tuberculosis), and Bright’s disease (nephritis). He additionally noted that the region’s “sudden fall of temperature, and a strong sea-wind, are apt to act injuriously upon the chest.” Concluding his remarks, Oliver claimed that while many patients benefitted from that climate’s dry polar winds and the bracing winter sea-air, other patients’ conditions worsened because of it.

194 Ibid., 550-51.
195 Ibid., 550. While this assertion was common, not all physicians agreed. John Packard argued that his book could be used as a guide by anyone seeking marine medication along the Atlantic Ocean’s shores. Packard, Sea Air and Sea Bathing.
196 Ibid., 551.
Climatotherapeutic recommendations like Oliver’s were common during much of the 19th century. Physicians and laypeople alike understood that particularities of specific climates and geographies rendered environments either beneficial or harmful for patients, depending on an individual’s diagnosis and constitution. Although some historians have claimed that physicians moved away from environmental explanations of disease production, articles and books published about marine medication in the 20th century demonstrate that physicians continued to believe that place mattered and that nature could cure or aggravate certain conditions.

In 1900, American physician W. Blair Stewart echoed Oliver’s argument about the importance of knowing the qualities and conditions of specific places. In an article published in *JAMA*, Stewart argued that Atlantic City’s location on a barrier island and its moderate year-round temperatures made it “the best location for pure sea-air; better than

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199 Linda Nash makes the argument that physicians moved away from environmental explanations of disease causation with the rise of laboratory-based medicine in the late 19th and early 20th century. Concomitantly, she argues, the environment became the domain of public health workers. See, Linda Nash, *Inescapable Écologies : A History of Environment, Disease, and Knowledge* (Berkeley: University of California Press, 2006).
any point on the eastern coast of the United States. Stewart claimed that Atlantic City’s environment could cure disorders including hay fever, childhood diseases, and neurasthenia. Unlike Oliver, Stewart contended that patients in the early stages of tuberculosis improved with sea-air and sun exposure, although he concurred with Oliver that the marine environment was detrimental for patients with advanced stages of the disease.

While physicians generally focused on the marine environments’ abilities to heal, there was a shared belief that marine medication aggravated pulmonary tuberculosis. In 1884, Atlantic City physician Boardman Reed argued that Atlantic City’s climate could benefit tuberculosis patients before the disease fully developed. He offered the experience of an 18-year-old girl as evidence. Having traveled from New York City to Atlantic City in the spring of 1882, the young woman saw a local physician who diagnosed her with early stages of consumption. The patient’s health improved over the subsequent month at the beach, evidenced by her weight gain, increased strength, and diminished cough. In the following year, the patient traveled to the mountains, back to New York City, and returned to Atlantic City the following spring. Upon her return to the shore, the doctor noted that her disease had progressed and was now marked by “profuse purulent

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201 Ibid.
202 Some physicians, including Oliver, found England’s northeast coast’s shore to be injurious to all stages of tubercular consumption. The fact that he included the clause about the specific locale of his treatment, in addition to the importance he placed on local specificity, suggests that he would not necessarily discredit physicians who suggested that other marine environments proved to be beneficial.
expectoration, with high fever.” Atlantic City’s environment exacerbated her condition. The patient’s health deteriorated quickly and she died three weeks after her arrival.\(^{203}\)

These claims about the marine environment’s effects on pulmonary tuberculosis are striking because seashore hospitals shared many practices with tuberculosis sanatoriums. Both types of institutions promoted removing patients from urban environments to give them access to fresh air, sunlight, and outdoor life. Yet, while the marine environment exacerbated pulmonary tuberculosis, the mountain climate was found to be particularly beneficial for it.\(^{204}\) Physicians’ recommendations differed, however, for children suffering from non-pulmonary or “surgical” tuberculosis. Children generally did not develop tuberculosis in their lungs, but rather in their joints, spines (Pott’s disease) and glands (scrofula).\(^{205}\) These manifestations of tuberculosis often led to permanent disfigurement or death. Even after the discovery of the \textit{tubercle bacillus}, physicians continued to admit patients with non-pulmonary tuberculosis to seashore hospitals. Contributing to this commitment was the fact that children with surgical tuberculosis improved dramatically after being treated with marine medication. While children in urban institutions suffered from the debilitating side effects of tuberculosis, including limited joint function, abscesses, and open wounds (called sinuses), patients at


\(^{204}\) Guy Hinsdale, \textit{Atmospheric Air in Relation to Tuberculosis} (Washington DC: Smithsonian Institution, 1914). For the secondary literature on tuberculosis, see footnote 18, introduction. Sheila Rothman details how sea-voyaging was considered to be healthy for young men with tuberculosis in the early 19\(^{th}\) century. Rothman, \textit{Living in the Shadow of Death}.

seashore hospitals regained mobility of their joints, and their sinuses and abscesses healed and closed.206

In addition to re-forming the bodies of crippled children, physicians proclaimed that one of the seashore’s benefits was its ability to fortify patients’ health. In an article included in the 1882 Annual Report for the CSH, the author argued that for boys and girls without well-defined disease but with “known scrofulous tendencies…sea air is the best possible tonic, and a stay at this institution often decides in their favor the question whether they shall grow up cripples or overcome the disease lurking in them and become strong men and women.”207 Physicians believed that the change in environment from the city to the shore resulted in an increased appetite, metabolism, and weight, all of which enhanced patients’ resistance to diseases.208

This attention to the preventive work of marine medication reflected transitions within the medical profession. In the 19th century, few physicians focused their practice solely on children’s healthcare, and those who cared for pediatric patients generally treated only those who were sick.209 As pediatrics grew over the opening decades of the

206 For more on the connections between orthopedics and children, see footnote 11, introduction.
207 CSH Annual Report for 1882, 18.
208 The healthful effects of changing children’s environments not only applied to those living inland, but to anyone who did not fare well in their present environment. In response to tensions with local residents who were upset the hospital would not admit local children, Bennett argued that “sick children living at the seashore are often benefited nearly as much by a change inland as children living inland are by being brought to the coast.” As such, the physicians at the CSH arranged for sick Atlantic City children to be admitted to Philadelphia hospitals with whom the physicians worked. See: CSH Annual Report for 1915, 19.
20th century, more physicians centered their practices on preventive care. The marine hospital operated as an important node in the burgeoning pediatric healthcare system. In 1911, William Bennett claimed that urban social service workers were:

making more and more use of our Institution as a “Preventorium,” sending us those whose inheritance and environment point them out as probable future victims of disease. A few weeks of sea air, plenty of good food, unaccustomed cleanliness and happiness have successfully fortified many a little frame against an attack of disease to which it would otherwise have succumbed.

The preventive work of the CSH enabled the physicians to rationalize admitting children during the summer with vague diagnoses such as being “run-down” or “[needing] change of air.” Even “well” children were seen to benefit, given their urban home environments and their perceived risks of developing disease.

Publications on marine medication established that the seashore was beneficial for patients suffering from a wide range of diseases, from debility to non-pulmonary tuberculosis. Extending their work to the “well” children not only fit within emerging trends in pediatric medicine, it also demonstrated a continued belief in the ability of the marine environment to build health and strength. By casting such a wide net, physicians created a therapeutic vision of the marine environment that allowed almost all urban residents to see a vacation at the seashore as a tonic to their everyday lives. Yet physicians’ use of the seashore as a therapeutic environment became increasingly specific, and they stressed the need for medical oversight of popular practices like sea

\[210\] Brosco, “Weight Charts and Well Child Care,” 91-120.
\[211\] CSH Annual Report for 1911, 15. Preventoriums were institutions dedicated to caring for patients who did not yet have tuberculosis, but were at risk of developing the disease. For more on preventoriums and the care of “pre-tubercular” children, see: Connolly, Saving Sickly Children.
and sunbathing. While nature still cured patients, it needed to be dosed and administered by doctors and nurses.

**Marine Medication: Water, Air, and Sun**

Practitioners often traced the origins of marine medication from the ancient Greeks who utilized sun and water baths, through more contemporaneous sea-voyaging practices. Doing so allowed physicians to draw upon longstanding medical beliefs in the healing power of the marine environment. The advent of marine medication in the mid-19th century expanded the therapeutic practices to an increasing number of people, particularly middle-class patients who could not afford the cost of a sea voyage, but could access the beaches close to the urban centers in which they lived. The establishment of pediatric seashore hospitals further expanded the reach of marine therapies by admitting poor, urban children and their mothers, groups generally unable to access the seashore through other means.

Patients at the CSH experienced marine medication as a combination of sea-air, seawater, and sunbathing. Physicians contended that each had important health benefits. In the 19th century many physicians viewed sea-bathing as the most important, claiming

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its benefits were due to the ocean’s chemical composition, temperature, and movement. At its most general, physicians agreed that “surf baths” were a form of mineral baths, thereby placing it within a spectrum of bathing practices, such as taking waters at springs and spas, or indoor cold or warm water baths.\textsuperscript{214} However, physicians drew distinctions between sea-bathing and taking waters at spas. While medical elites dismissed spas for their associations with charlatans and/or tourism, they continued to endorse sea-bathing in the opening decades of 20\textsuperscript{th} century.\textsuperscript{215}

In 1900, Philadelphia physician W. Blair Stewart wrote in favor of ocean-bathing, pointing to studies of its chemical composition as evidence of its medicinal power. He noted that chemists had determined that seawater contained “3.5 per cent solids and 96.5 per cent of water,” with the solids including sodium chloride, magnesium chloride, magnesium sulphate, calcium carbonate, and iodine, among other chemicals.\textsuperscript{216} Its chemical composition influenced bathers’ well-being, leading Stewart to caution that surf baths “must be taken under limitations by the sick and well.”\textsuperscript{217} Although Stewart’s article is reminiscent of spa operators’ claims about the importance of water’s specific chemical composition, the ocean had an additional benefit that increased its therapeutic value: its motion. Physicians celebrated the waves’ movement because it heightened patients’ responses and forced bathers to exercise.\textsuperscript{218} The constant motion also made sea-bathing potentially injurious to patients who were too young or weak to withstand the

\begin{footnotes}
\item[214] On spas, see footnote 197.
\item[215] George Weisz argues that elite American medical practitioners disregarded spas as either places of tourism or examples of outright charlatanism, which led to their eventual decline. Weisz, “Spas, Mineral Waters, and Hydrological Science in Twentieth Century France,” 453.
\item[216] Stewart, “Influence of Sea-Air,” 678.
\item[217] Ibid.
\item[218] Ibid.
\end{footnotes}
waves and currents. For these patients, seashore hospitals pumped ocean water indoors so that all children could benefit from its mineral properties.219

Given the ocean’s composition and movement, physicians insisted that medical expertise was necessary for determining the proper length of time and number of days a person should ocean bathe. At the CSH, the resident physician designated 11 a.m. as the bathing hour. Depending on age and health, children would sea-bathe between three and seven days a week. Ambulatory children would wade to a spot designated by a nurse, and then fully submerge themselves beneath the water. Children who were too young or weak would either bathe indoors or would be assisted into the surf by a “bather,” who was often a young man carrying who would carry a child into the ocean in his arms, in a chair, or in a stretcher.220 At the CSH, children were not permitted to stay in the water for more than four minutes, as the physician believed longer exposure would be injurious to the patients’ health.221

Dosing sea-water was critical. Physicians warned that medical professionals must determine how long a patient could withstand an ocean bath. They made this judgment

219 Both the CSH and the Boston Floating Hospital – a hospital ship that took daily cruises around Boston Harbor – utilized indoor sea-bathing practices for their pediatric patients.

220 In one article published on the CSH, the bather was noted as being a black man, a description subsequently left out of articles on the hospital. Bathers at other institutions appear to be Caucasian in images, although their ethnicities and/or races are not explicitly mentioned. Given the medical proclamations about the need to strictly control exposure to the ocean water, the bather’s job was likely understood to be potentially hazardous. Why the young men in the photographs either chose, or were chosen, for the job is unclear. One possible explanation is that the general public did not adhere to the same beliefs as the medical profession about the potentially harmful effects of sea-bathing – an occurrence that physicians often lamented. Another possibility is that the medical professionals saw these men as either expendable or able to withstand the effects of sea-bathing, perhaps due to their races, ethnicities, or general health.

221 CSH Annual Report for 1875, 15.
based on a patient’s overall strength and condition.\textsuperscript{222} Timing was important, because over-bathing could induce injury or illness. During a sea bath, patients were expected to experience a progression of reactions. The first reaction was what French physician and marine medication advocate André Brochard termed the “phenomena of immersion.”\textsuperscript{223} He characterized the experience as:

A sensation of cold, often sharp, sometimes even painful; immediately followed by a general spasm. The skin is chilled, it becomes pale, puckered, like the skin of fowls, sometimes blue...breathing is catching; if the bather tries to speak, his words are ejaculated one by one; a trembling seizes the jaws and limbs, and the pulse becomes small and thready.\textsuperscript{224}

This initial response generally lasted only seconds, after which the beneficial “phenomena of reaction” occurred.\textsuperscript{225} During the second phase, bathers experienced a sense of expansion or invigoration, which was characterized by a return of warmth, regular breathing, a decrease in heart rate, a “full” pulse, and rosy skin.\textsuperscript{226} Depending on the age, health, and “constitutional powers” of the bather, the second reaction could last several minutes.

As is apparent from the four-minute limit imposed at the CSH, physicians believed that it was imperative for bathers to remove themselves from the ocean before the second phase subsided. If patients remained in the ocean too long, the symptoms of the “phenomena of immersion” returned, but to a potentially harmful extent. Doctors

\textsuperscript{222} On sea-bathing practice, see: Stewart, “Influence of Sea-Air,” 679.
\textsuperscript{223} Brochard, \textit{Sea-Air and Sea-Bathing for Children}, 83.
\textsuperscript{224} Ibid.
issued stern warnings, writing that bathing too long could result in patients’ systems becoming depressed, which could cause “coma, syncope, throbbing headaches, apoplexy in the aged, congestion of the internal organs, subnormal temperature or death.” If practiced correctly, however, the shock of the initial immersion forced internal organs to release warm blood, which then traveled to the surface of the body, thereby increasing circulation. This was understood to improve the quality and quantity of the patient’s blood, help respiration become deeper, longer, and more regular, increase appetite, make skin become firmer, warmer, and rosy, and help the patient sleep more soundly.228

By dosing ocean bathing, physicians tried to control the practice and keep it under the auspices of medical authority.229 This was an important distinction from earlier programs of natural therapeutics such as sea-voyaging, during which a person would submit themselves to the marine environment for extended periods, generally without the supervision of a medical practitioner.230 By the mid to late 19th century, physicians argued that exposure to the ocean needed to be controlled and limited in order to achieve the best medical results. This change in views of the natural environment and its therapeutic capabilities reflected shifts in the medical profession. During this period, not only was medicine becoming more laboratory-oriented, but physicians were also becoming increasingly professionalized. One of the effects of professionalization was doctors’ attempt to limit who could determine and deploy therapeutic regimens. By

228 Brochard, Sea-Air and Sea-Bathing for Children, 86-87.
229 In many of the publications written about sea-bathing, physicians expressed frustration by the number of people sea-bathing without the supervision or advice of a physician. They claimed concern about the potential for people to be harmed by employing improper bathing techniques.
230 Rothman, Living in the Shadow of Death.
asserting that improper sea-bathing could injure patients, doctors sought to establish their authority and expertise, while simultaneously distinguishing themselves from their patients as well as from “quack” practitioners.231

Physicians also studied the specific elements that gave nature its therapeutic potential. This is apparent in studies they conducted on sea-air. As important as sea-bathing was to marine medication, it constituted a small portion of a pediatric patient’s day. Children spent the majority of their time outside in the sea-air and sea-breeze. At the CSH, young patients spent their afternoons digging in the sand, flying kites, and playing croquet; older boys went boating, fishing, and hiking,232 while older girls walked along the beach and visited the local lighthouse.233 The regimen of sea-air exposure can be understood as part of the more general program of outdoor living, which promoted the benefits of fresh air, especially for the urban poor and pulmonary tuberculosis sufferers.234 In 1901, William Bennett wrote an appeal for expanding the CSH from a summer institution to one that would be open year-round to care for patients with chronic orthopedic conditions that required more than a summer of medical care. He noted that European marine hospitals had established the therapeutic value of outdoor life, proving

233 CSH Annual Report for 1889, 7.
“no medicines have the magic power to bring back health and strength which lie in the invigorating sea air.”

Physicians grounded the sea-air’s “magic power” in scientific investigations of its chemical composition, density, and movement. They argued that the marine climate induced changes because of its contrast to the “devitalized air of large cities.” The seashore’s air was characterized as being fresh, pure, and laden with ozone and saline particles. Since its discovery in the mid-19th century, scientists and physicians believed that ozone, a reactive and unstable gas that consists of three oxygen atoms (O₃) instead of the usual two (O₂), provided important health benefits by purifying the air. Studies conducted in cities showed little or no presence of the chemical, particularly during epidemics, whereas ozone was more abundant in healthy regions like the seashore and mountains. These studies led physicians to conclude that ozone helped purify the air and promote health. Ozone was also understood to impact patients’ bodies. In 1884, Atlantic City physician Boardman Reed claimed that ozone was “the most powerful oxidizing agent known, and its presence unquestionably enhances the vigor and activity of all vital processes.” He explained that ozone and the increased density of sea-air produced increased oxidation in patients, which he saw as beneficial. As people travelled from the city to the shore, the air density increased, causing them to inhale more air,

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237 Reed, “The Effects of Sea Air Upon Diseases,” 51.
238 On ideas about ozone, see: Peter Thorsheim, Inventing Pollution: Coal, Smoke, and Culture in Britain since 1800 (Athens: Ohio University Press, 2006), 22-25.
239 Reed, “Effects of Sea Air Upon Diseases,” 51.
which contained more ozone. This, in turn, increased oxidation of the blood, and improved bodily functions.\textsuperscript{240}

Sea-air was also noteworthy for what it lacked. In 1884, Reed argued that the near constant motion of the sea-air meant that it was free from both “noxious effluvia,” and bacteria.\textsuperscript{241} Reed’s statement offers insight into a moment of transition during which noxious effluvia and bacteria, miasmatic and bacteriological theories, blended together to produce disease.\textsuperscript{242} Under this new rubric, the sea breeze benefitted patients by removing both miasmatic emanations and bacteria.

In addition to delineating specific health-giving elements like ozone and saline particles, physicians also conducted scientific studies of patients’ physiologic responses to marine medication. Sea-air had long been lauded for its ability to improve patients’ appetites and increase their metabolisms. In the 1920s, Drs. Hill, Campbell, and Gauvain at Hayling Island hospital for children in Hampshire, England used a calorimeter to determine the precise effects of sea-air and sun exposure on children’s metabolisms. The doctors looked at the effects of three different environments on pediatric patients’ metabolisms: a closed calorimeter, a well-ventilated hospital room, and the open beach. Their study showed that children at the beach had metabolic rates 40 percent higher than

\textsuperscript{240} Ibid., 51. In addition to the presence of ozone, physicians determined that sea-air was beneficial to patients, because it was impregnated with saline particles. Boardman Reed claimed saline particles were beneficial, because they were alkaline.\textsuperscript{240}  
\textsuperscript{241} Ibid., 54.  
\textsuperscript{242} David Barnes also discusses this intermingling of medical theories, which he terms the "sanitary-bacteriological synthesis." For more on this, see: David Barnes, \textit{The Great Stink of Paris and the Nineteenth-Century Struggle Against Filth and Germs} (Baltimore: Johns Hopkins University Press, 2006), 135.
children confined in a closed calorimeter, and 20 percent higher than those in well-ventilated hospital rooms.\textsuperscript{243}

These results provided scientific evidence of the seashore’s positive effect on young children’s bodies and health. Many of the children admitted to marine hospitals suffered from malnutrition, and studies like Campbell, Hill and Gauvain’s provided proof that the marine environment could remedy this issue. Patients’ weight gains were offered as another form of evidence of the seashore’s health-giving effects. As pediatrics established itself as a medical discipline specializing in preventive treatment, physicians looked to development and weight gain as quantifications of health.\textsuperscript{244} Capitalizing on this trend, the physician in charge of the CSH included a chart of patient information in the 1915 Annual Report that documented children’s ages, diagnoses, lengths of stay, and weight gains.\textsuperscript{245} By including information about children’s weights, he provided his medical colleagues a form of scientific evidence measuring the efficacy of marine medications.

In the 20\textsuperscript{th} century, marine medication practitioners expanded their practices to include heliotherapy, a therapeutic program of natural sun exposure. Developed by internationally renowned Swiss physician August Rollier, heliotherapy began by exposing patients’ feet to the sun for a few minutes on the first day. The dose of sun

\textsuperscript{244} Brosco, “Weight Charts and Well Child Care,” 91-120. In the early 1900s, few physicians fully dedicated their practices to pediatric patients, and most of those who did focused on sick children instead of preventive care.
\textsuperscript{245} CSH Annual Report for 1915, Appendix.
gradually increased until the child could withstand full body exposure for several hours a day.\textsuperscript{246} Although heliotherapy depended on natural sunlight, the practice was built upon scientific evidence that demonstrated that only part of the sun’s spectrum – the UV rays – provided bactericidal properties.\textsuperscript{247} In 1877, an article in the \textit{Proceedings of the Royal Society of London} concluded that UV light killed bacteria. Physicians quickly mobilized this study to support their use of sun therapies. Marine medication practitioners contended that the sun’s UV-rays killed surface bacteria, thereby facilitating healing and the closure of wounds. They also argued that natural sun exposure increased the number of blood platelets, thereby improving the blood’s “bactericidal power,” and patients’ resistance to disease.\textsuperscript{248}

Doctors contended that the sun improved children’s mental and psychological well-being, as well as physical health. Discussing the therapeutic effects of sunlight in 1933, British physician Henry Gauvain argued “sunlight exhilarates and enlivens. It induces gaiety, liveliness, and a sense of well-being. It braces up and cheers the soul.”\textsuperscript{249}

Not only did sunlight improve patients’ happiness and vivacity, Gauvain argued that it

\textsuperscript{246} Rollier developed a system of heliotherapy that dictated the gradual and increasing exposure of a patient’s body to the sun’s rays, with the goal of complete bodily exposure. Physicians at American seashore hospitals adopted variations of this regimen, often only exposing the diseased areas of the body, rather than having children sun-bathe nude or with a loin-cloth, as they did in Rollier’s institution. For more on Rollier, see Sally Romano, \textit{“The Dark Side of the Sun: Skin Cancer, Sunscreen, and Risk in 20th-Century America,”} (Ph.D. diss, Yale University, 2006), especially chapter 1; and Daniel Freund, \textit{American Sunshine: Diseases of Darkness and the Quest for Natural Light} (Chicago: University of Chicago Press, 2012).

\textsuperscript{247} Most heliotherapists referenced the work of Arthur Downes and Thomas Blunt, who published their findings that the sun’s UV rays had bactericidal properties. See: Arthur Downes and Thomas P. Blunt, “Researches on the Effect of Light upon Bacteria and other Organisms,” \textit{Proceedings of the Royal Society of London} 26 (1877): 496-97. Heliotherapy stood in contrast to actinotherapy, which was artificial UV light treatment produced by sun lamps.

\textsuperscript{248} Frederick F. Tisdall, “Sunlight and Health,” \textit{The American Journal of Public Health}, 16, no. 7 (July 1926): 698.

also increased children’s intelligence levels. Working in conjunction with another physician, Gauvain studied the mental capacities of pediatric patients in the town of Alton and at Hayling Island hospital, located on the seashore. The physicians concluded that the children who received heliotherapy had a ten percent higher mental intelligence than those who did not undergo the sun-bathing regimen. Heliotherapy, they concluded, increased children’s “potentialities and prospects.”

Although there was some debate among physicians about which environmental therapy was most beneficial to health, the majority agreed that the combination of the sea-air, seawater, and sun-bathing was critical for patients’ improvement. In their 1922 study on metabolism, Hill, Campbell, and Gauvain concluded that the rise of metabolism was primarily the result of exposure to open air rather than the effects of sunbathing alone. They did not dispute heliotherapy’s ability to assist in arresting disease, but argued that its utility was heightened when used in combination with sea-air and seawater bathing. Additionally, Hill and Campbell contended that balneotherapy (bathing) was an effective method of increasing a patient’s metabolism.

Investigations of the environment’s therapeutic components as well as patients’ physiological responses helped to place marine medication on a scientific foundation. This was increasingly important in the early 20th century, as elite physicians sought to separate their practices from quack practitioners while simultaneously depending on natural therapeutic practices that these physicians had used for decades. Medical journal

250 Ibid.
251 Hill, Campbell, and Gauvain, “Metabolism of Children,” 301-03.
articles reveal that physicians rationalized the environment’s therapeutic potential by using the increasingly powerful doctrine of lab-based medicine. Conducting investigations of the marine environment, physicians and scientists distilled the environment into its therapeutic and non-therapeutic components. This reductionist move helped place marine medication in line with larger trends in medicine. It also allowed physicians to claim expertise over natural therapeutics. They contended that only trained professionals could properly administer and dose nature’s remedies, including ocean and sunbathing. By substantiating their programs with scientific studies, practitioners of marine medication were able to sustain their therapeutic program, and even expand them in the opening decades of the 20th century. The convergence of science, technology, and natural remedies is particularly visible in the application of marine medication to children with non-pulmonary tuberculosis.

Non-Pulmonary Tuberculosis: Marine Medication in the 20th Century

Although the CSH maintained its mission to treat any child suffering from diseases incident to city life, by the early 20th century it increasingly focused its attention on children suffering from “surgical” or non-pulmonary tuberculosis. This aspect of the hospital’s work gained momentum in 1910, when for the first time the hospital remained open through the winter in order to treat a small number of patients suffering

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252 I use the term “non-pulmonary tuberculosis” to refer to the multiple forms of tuberculosis noted among patients at seashore hospitals. Physicians and surgeons alternatively referred to these forms of tuberculosis as “surgical tuberculosis” or by more specific names, such as Pott’s disease (tb of spine); scrofula (glands), or tuberculosis of specific joints.
from chronic orthopedic conditions. Bennett declared the winter program a success, evidenced by patients’ weight gains, closed sinuses, and increased mobility. From that point, the CSH was open year-round in order to treat patients with non-pulmonary tuberculosis and other chronic orthopedic conditions.

This expansion of the CSH’s marine medication program aligned with an emerging medical literature on the benefits of marine medication for children with the disease. It also corresponded to the work done at other northeastern U.S. pediatric marine hospitals, such as Sea Breeze (SB), founded in 1904 in Coney Island, NY, and the Crawford Allen Hospital (CAH), founded in 1906 and located outside of Providence, RI. Both hospitals primarily treated children with spinal and joint tuberculosis and other orthopedic conditions, such as polio, and osteomyelitis, a bone infection. Albert Miller, a physician with CAH, argued that marine medication offered the best means of treating and curing orthopedic patients. Historically, the treatment of surgical tuberculosis included operations to remove diseased bone, to clean wounds, and to correct deformities. Following surgery, physicians would immobilize a patient’s affected limb or joint with instruments like braces, splints, and plaster casts. Although these interventions reduced deformities, Miller argued that they did not ameliorate the suffering or fatality of the disease. The failure to address these issues led physicians to seek other remedies. Marine medication offered one solution.

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253 The CSH had remained open during some winter months previously to test the effectiveness of providing patients’ care, and Bennett had long agitated for the institution to remain open year-round. It wasn’t until 1910 that the hospital procured the funds to be able to stay open through the winter.
Like patients at the CSH, children at Crawford Allen spent their days and nights in the open air, ate nutritious food, and enjoyed “freedom from restraint, both mental and physical.” Patients also participated in sea-bathing, including children in hip-braces and plaster jackets. Children who required hip-braces were outfitted with removable devices held together with straps, while patients in plaster jackets were allowed to wade in the shallow water. Attendants bathed bed-bound children by wheeling them into the water on a bed-frame or carrying them in a basket. As noted above, physicians argued that sea-bathing was beneficial because the salt water cleansed and closed sinuses, and bathing encouraged children’s movement. Rather than immobilizing patients during hospitalization, medical professionals at CAH encouraged patients’ active lifestyles. Most children participated in wrestling, playing games, and baseball matches, although physicians and nurses kept affected joints “quiet.”

Given the “experimental” nature of using marine medication for non-pulmonary tuberculosis patients, the physicians at CAH closely monitored patients. At the end of the summer season, Miller reported that at admission 12 patients were either in beds or wheelchairs, 13 on crutches, and seven walked unaided. By the end of the summer, only two children returned to urban hospital wards (presumably bed-ridden), two were in beds or wheelchairs, 18 on crutches, and 12 walked without assistance. He reported that patients’ weights and joint mobility increased, and all of the children’s sinuses improved.

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255 Ibid., 660.
256 Ibid. Beth Linker discusses orthopedists’ different approaches to treating conditions, from those who advocated immobilization to those surgeons who believed movement provided better results. See Linker, War’s Waste.
with some healing entirely. Miller stressed that the patients’ improvements outstripped
the results obtained by more restrictive orthopedic methods. Despite the limited scope of
his trial, Miller argued that the outcomes obtained at CAH supported a program of
treatment for surgical tuberculosis that included marine medication and freedom from
“unnecessary restraint.”  

Sea Breeze offered a slightly different therapeutic program. Like CAH, SB
provided an “essentially conservative” treatment for children, giving them “the best
possible surroundings, hygiene and food.”  

In contrast to Crawford Allen, however, the
physicians at Sea Breeze utilized bed-rest for acute cases, immobilizing patients on a
Whitman frame or placing them in traction. Sea-bathing regimens also differed. 

Patients at Sea Breeze remained in their orthopedic devices at all times, which meant that
patients with hip disease were unable to swim due to their plaster casts. The physician in
charge allowed only one patient with hip tuberculosis to sea-bathe given his severe
symptoms, including the thick and “offensive discharge from the sinuses.” That patient
wore a specially designed removable cast, which he took off to bathe. That patient’s
results were so encouraging that SB physician B. H. Whitbeck decided to use similar
casts for more patients the following summer, but intended to cover them with rubber so
that patients could swim in them.

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258 B.H. Whitbeck, “A Review of the Ten Year’s Work at Sea Breeze Hospital for Surgical Tuberculosis,”
259 Roland Hammond, “Treatment of Bone Tuberculosis at The Crawford Allen Hospital,” _Boston Medical
and Surgical Journal_ 165 (July 13, 1911): 50.
Despite these differences, the physicians at CAH and SB agreed that the marine environment improved pediatric orthopedic patients’ conditions. In 1911, Roland Hammond, a prominent orthopedic surgeon affiliated with the CAH, noted that many orthopedic surgeons considered the seashore climate to be superior to that of urban, and even country-based, hospitals. Orthopedic surgeons variously pointed to the composition of the sea-air, the invigorating effects of seawater, and out-door life as the basis of patients’ improved conditions. Hammond commented that through the combination of environmental conditions, as well as “the best of food, and the comradeship of other happy children, the opsonic index is raised and nature is provided with her best weapons for fighting disease.” Hammond’s assertion exposes the extent to which physicians interwove marine medication, bacteriology, and preventive medicine. The opsonic index is the degree to which bacteria are susceptible to being consumed or eliminated by other cells. By claiming that CAH’s therapeutic system raised the opsonic index and fortified children’s health, Hammond discursively placed marine medication within the dominant medical trends of the early 20th century.

This blending of scientific claims and natural therapeutic systems was further institutionalized with the introduction of heliotherapy. As previously discussed, practitioners claimed heliotherapy was derivative both of long-standing climatotherapeutic systems and contemporary scientific studies of the sun’s bactericidal properties. At pediatric seashore hospitals, physicians sought laboratory-based evidence

\textsuperscript{260} Ibid. When Hammond notes the “opsonic index” he is referring to the process by which bacteria are made to become more readily and efficiently subjected to phagocytosis by other cells. For definition, see: http://medical-dictionary.thefreedictionary.com/opsonization.
of the physiologic effects of sunbathing. In 1912, and for the first time, every child at CAH with bone disease sun-bathed on a specially constructed porch outfitted with windscreens and sunshades to protect patients’ heads. To determine the impact of heliotherapy, Hammond compared the weight gain and hemoglobin levels between patients treated in 1911 and 1912. Children who received heliotherapy in addition to sea-bathing experienced a greater increase in weight on average (4.2 versus 3 pounds) and a noteworthy increase in hemoglobin (17 percent vs. 0.8 percent increase). Hammond suggested that patients were healthier in the spring of 1913 after a winter spent in the city, as compared to any previous year. He attributed this result to sunbathing.

In order to fully benefit from the sun’s healing properties, surgeons developed special devices to maximize exposure while maintaining the necessary immobilization. Patients needing casts wore devices with openings over their sinuses and the infected area of the body, so that the sunlight could reach the affected area. Writing of his results, Whitbeck noted that children who sunbathed all day showed “marked” improvements, with the sinuses becoming increasingly clean and clear of discharge until they closed altogether. This is noteworthy, as tubercular sinuses were difficult to treat, and physicians debated about the best methods of intervention. Some surgeons argued for invasive treatments, including lancing and injections, while others advocated for more conservative measures such as keeping the wounds cleaned and covered with gauze. At Sea Breeze, the physician noted that they had attempted to treat patients’ sinuses with

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262 B.H. Whitbeck, “Ten Year’s Work at Sea Breeze Hospital,” 125.
injections of bismuth paste with only moderate success.\textsuperscript{263} Sea-bathing and heliotherapy, he contended, were far more effective. Children would bathe with dressings covering their sinuses, which nurses replaced with fresh bandages after the children exited the ocean. Patients who underwent this treatment experienced a rapid reduction in the quantity of discharge, the elimination of odor, and even the complete closure of wounds.\textsuperscript{264}

Urban orthopedic surgeons took note of their patients’ improvements after receiving care at the seashore. In 1910, Bennett argued that Philadelphia-based physicians had become “keenly appreciative of the value of the sea air, and of the out-of-door life of our institution, for their little tubercular patients.” Supporting these sentiments, Bennett reported that nearly all orthopedic patients admitted to the CSH during the winter months greatly improved, with some cases seeming “almost miraculous,” in their recoveries.\textsuperscript{265}

With a focus on treating children with orthopedic conditions, marine medication increasingly blended natural with technological interventions. In 1910, Dr. Edward Holt, an orthopedic surgeon, joined the staff at the CSH. Holt became the senior resident physician and surgeon in charge of the orthopedic dispensary for local Atlantic City children by 1913. Following Bennett’s death in 1919, Holt took over as physician-in-

\textsuperscript{263} For more on this, see Chapter five of this dissertation.
\textsuperscript{264} B.H. Whitbeck, “Ten Year’s Work at Sea Breeze Hospital,” 123-24.
\textsuperscript{265} CSH Annual Report for 1910, 9. Patients admitted with chronic conditions often stayed for many months, with one particularly sick patient staying for a year.
charge, a position he maintained until 1949.\textsuperscript{266} At the beginning of Holt’s tenure, the medical staff was already addressing the needs of children with chronic orthopedic conditions. In the summer of 1910, the staff changed 1456 surgical dressings; by the following summer that number increased to 2273, and their work expanded to include the application of 52 plaster casts. When the hospital opened for the winter in 1912, it provided patients with access to constant medical care, an operating room, and “every needed surgical appliance.”\textsuperscript{267} In 1915, this included an x-ray machine, which changed physicians’ diagnostic and therapeutic capabilities.\textsuperscript{268} For the first time, every child with a bone condition received an x-ray, and Bennett noted that the physicians were often surprised with the results and wondered how they had managed without it.\textsuperscript{269}

The convergence of technological interventions and natural therapeutics represented another way in which marine medication kept pace with changes in the medical establishment. As historian Joel Howell has argued, technologies occupied an increasingly central role in medical diagnoses and practice over the early 20\textsuperscript{th} century.\textsuperscript{270} The introduction and use of devices like x-ray machines placed pediatric marine hospitals in line with prevailing trends. Yet even with the increasing use of technological devices, practitioners maintained their reliance on the natural environment as their most effective therapeutic intervention. The casts and braces that children wore offer visual proof. Physicians developed devices that maximized patients’ exposures to the natural elements,

\textsuperscript{266} Carol Romano, \textit{Children’s Seashore House: The house built on caring and healing. A 125\textsuperscript{th} Anniversary Commemorative} (np), 13.
\textsuperscript{267} CSH Annual Report for 1912, 15.
\textsuperscript{268} CSH Annual Report for 1915, 15.
\textsuperscript{269} Ibid.
\textsuperscript{270} Joel Howell, \textit{Technology in the Hospital: Transforming Patient Care in the Early Twentieth Century} (Baltimore: Johns Hopkins University Press, 1995).
from removable braces and rubber-covered casts that facilitated swimming, to full body casts with openings for sun exposure. In 1912, Bennett wrote that:

hearty appetites, rosy cheeks and rounded limbs attest to all the value of this method of Nature’s cure, while physicians, accustomed to the slow progress which takes places in these chronic ailments, look often with surprise upon the changes wrought in their little patients by their residence by the sea.271

Despite his hospital’s increased use of technological and surgical interventions, Bennett continued to convey his conviction that nature had the power to heal.

**Conclusion**

The increasing use of marine medication for children with non-pulmonary tuberculosis provides insight into how practitioners rationalized their natural therapeutic practices after germ theory. Their use of devices, like specially designed braces and casts, demonstrates how physicians both kept pace with prevailing trends in medicine while maintaining their belief in the power of nature to cure and heal. Scientific studies like that of Hill, Gauvain, and Campbell placed marine medication within the domain of scientific medicine in the bacteriological era.272 Producing evidence of the physiologic effects of specific environmental elements like ozone, minerals, and UV rays legitimized marine medication throughout the opening decades of the 20th century. It also altered

271 *CSH Annual Report for 1912*, 16.

272 David Barnes argued that professionals negotiated and resolved such tensions by applying new theoretical frameworks to old ideas, in what he terms the “Sanitary Bacteriological Synthesis.” See: David Barnes, *The Great Stink of Paris and the 19th-Century Struggle against Filth and Germs* (Johns Hopkins University Press, 2006), 135.
conceptions of how the environment influenced human health. Whereas during earlier
time periods physicians and laypeople held a more holistic view of the environment’s
impact on bodies and their health, the reductionist trends in medicine narrowed ideas
about what made the marine environment healthy. Ozone-rich air oxidized the blood,
while the seawater’s minerals cleansed young patients’ wounds, and the sun’s UV-rays
killed the surface bacteria that lived therein.

Medical publications and scientific studies show how physicians rationalized
marine medicine, distilled the environment, and pinpointed the seashore’s therapeutic
elements. This medical knowledge production contributed to the construction of the
seashore’s healthscape by defining its environmental elements as beneficial to patients
and visitors, and more specifically as tonics to the ills associated with urban life. Indeed,
the seashore became a popular destination for thousands of ill and worn-down city
residents every summer. Yet, as marine medication practitioners employed the
reductionist schema that marked scientific medicine, and developed technological devices
in the treatment of children, they opened the door for other forms of medical intervention
that would eventually supplant programs of natural therapeutics. In the short term,
however, the rationalization of marine medication allowed for the continued use and
expansion of natural therapeutic practices like sea-air, seawater, and sunbathing. Urban
families took advantage of the opportunities offered at institutions like CSH and traveled
to the seashore in search of better health and a respite from the ills of city life.
Chapter 3
Building Health:
Pediatric Seashore Hospitals as Spaces of Reformation

Every summer, hundreds of Atlantic City’s vacationers toured the Children’s Seashore House (CSH), making it one of Atlantic City’s premier tourist destinations in the late 19th and early 20th centuries.273 Visitors would enter the grand, white, wooden building that stood three stories tall in its main portion and was flanked by two-story wings on both sides. Inside they saw three wards for children, each of which was a large, open room with high ceilings and windows that opened to the floor. Exiting the back of the hospital, tourists discovered that they were standing just 200 yards from the ocean, and that the hospital was closer to the sea “than any other house in that portion of the island.”274 Stretching between the main building and the water stood two rows of cottages for mothers caring for their sick infants. The small buildings each housed a family in a single furnished bedroom. All of the patients, including the mothers, ate together in the large dining room that occupied the first floor of the east wing in the main hospital.275 [Figures 3.1, 3.2, and 3.3]

The CSH’s design was similar to other hospitals founded in the late 19th century. The institution is noteworthy, however, because it inverted most hospitals’ structures.

273 CSH Annual Report for 1875, 10. In 1875, just its third year of operation, the hospital hosted over 2000 visitors during the summer.
274 Ibid., 13.
275 Ibid., 14.
This difference provides insight into the medical professionals’ and reformers’ beliefs about how to provide the best medical care for children and mothers. In the 19th century children’s hospitals were often small, domestic dwellings converted for hospital use, while adult hospitals were larger institutions that included pavilion style open wards. The CSH’s accommodations for the two groups of patients – small cottages for mothers and their infants, and large, open wards where children without caregivers stayed – reflected the healthcare objectives for the populations they served. This chapter uses the CSH’s design to examine healthcare professionals’ belief in the ability of different built environments to promote health and well-being. Contrasting the main hospital building with the mothers’ cottages reveals that physicians and lay reformers valued the outdoor environment as the primary mode of medical intervention for pediatric patients, while creating a middle-class domestic environment was the key to health for immigrant mothers and their children.

I examine how healthcare workers, including doctors, nurses, and social reformers, used the CSH as a means for poor urban children to access “nature.”


277 Both apparently inspired visitors. In 1875, William Bennett, the physician in charge of the CSH from 1874 until his death in 1919, wrote that the cottages elicited “many spontaneous and cordial expressions of approval” from those who saw them, as well as monetary donations. The institution’s young patients also caught the attention of tourists. As late as 1911, tourists still came to view children, with Bennett noting that, “Few visitors at first sight of our children can believe that the fat, rosy, happy occupants of the beds are invalids with serious bone trouble. They are indeed a healthy looking set of invalids.” See: *CSH Annual Report for 1911*, 15.
specifically the sea-air, seawater, and sunshine. From its oceanfront position to its porches and verandas, the main hospital building was less about the medical care provided within its walls, and more about its ability to place children in contact with the salubrious marine environment. This objective was central to the operation and success of the CSH. The founders and healthcare professionals who worked at the hospital believed that the change of environment would benefit their young patients. They contended that moving children from their unhealthy urban homes to the salubrious seashore would result in improved health and the ability to resist the negative influences of urban life. As detailed in the previous chapter, physicians argued that nature could physically re-form children’s crippled and weak bodies. The structure of the CSH’s main hospital building reflected these ideas.

While the main hospital building was meant to maximize pediatric patients’ exposure to the natural environment, physicians and nurses intended the “mothers’ cottages” to provide spaces of social reformation. When the cottages opened in 1874, their objective was to care for infants suffering from “summer complaint,” a range of gastrointestinal disorders that comprised the majority of infant deaths during the summer months. Over the following decades, the cottages’ purpose increasingly included

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278 Nature, as many historians have noted, is a problematic term given its multiplicity of meanings and uses. For scholarly discussions of nature and its contested meanings, see: William Cronon, ed. Uncommon Ground: Rethinking the Human Place in Nature (New York: W.W. Norton Co, 1996). Here I use the term as my actors did – to describe the outdoor, marine environment. For them, the salubrious marine environment stood and was understood in contrast to the urban environment, which contemporaries believed to be unhealthy and deleterious to health.
educating mothers in childcare and housekeeping. By the early 20th century, the middle-class dedication to cleanliness and sanitation redefined the primary mission of the cottages. With the decline in infant mortality, physicians, nurses, and reformers used the cottages to provide poor urban mothers with a model for how to create and keep a “healthy home.” Reformers sent families to the cottages at the CSH, hoping the families would return more “Americanized.” Healthcare professionals viewed mothers’ stays at the hospital as opportunities to educate them in proper health, home, and childcare techniques. Their intention was that mothers would return to the city and create a home that would protect children against the deleterious urban environment.

Using the CSH as a lens, this chapter examines how hospitals can be read as reflections of contemporary understandings and values about the health of children and families. The CSH’s structures expose how health remained inextricably bound to the environment, and show how healthcare professionals and reformers intended the CSH to function as a place where urban children could gain access to nature in order to shore up their strength and physically mold their bodies, while providing immigrant mothers the opportunities to practice American, middle-class domesticity. The buildings of the CSH

suggests that middle-class professionals understood children’s health as determined by both the outdoor environment and a sanitary, clean, and therefore healthy home.\textsuperscript{282}

\textbf{Bringing Children to Nature and Nature to Children: The Main Hospital}

After taking the train from Philadelphia to Atlantic City, children arriving at the CSH were admitted to one of the hospital’s wards depending on age and sex. Patients quickly discovered that they would spend little time indoors. As detailed in Chapter two, most children spent their days outside playing on the sandy beaches in the sun and sea-air. Even children confined to their beds were rarely inside. Bedridden children slept and played on second story porches in the open air and sun.\textsuperscript{283} In the evening, patients retired to a ward that housed fourteen children. The children slept in iron beds that were situated between two windows. They covered themselves with as many blankets as necessary to keep warm, because the windows remained open around the clock in order to maximize access to fresh air.

The main hospital was built to capitalize on the sea-air and sunshine. Images in the CSH’s promotional materials highlighted the importance of natural environment in the hospital’s treatment of children. Beginning in the early 1900s, the CSH annual reports

\textsuperscript{282} Adams, \textit{Architecture in the Family Way}, 73-102. In chapter three, “Female Regulation of the Healthy Home,” Adams discusses middle class women’s role in keeping and promoting “healthy” homes, specifically in the prevention of disease among its inhabitants. They achieved this by insuring proper sanitation, cleanliness, and caring for the sick in accordance to the latest scientific principles.

\textsuperscript{283} \textit{CSH Annual Report for 1915}, 15.
included many pictures of patients. Children were rarely pictured inside.\textsuperscript{284} The most common images showed patients, some on crutches or in braces, playing on the beach or beneath the boardwalk, or sitting on one of the hospital’s porches. Bed-bound children were shown receiving “outdoor care” on one of the CSH’s verandas, lying in the sun and bundled against the cold winter air. [Figure 3.4] Only a few images of the interior of the hospital appeared in the annual reports, and those that did were almost entirely devoid of patients or staff. In one of the few images that showed a patient indoors, a lone girl lays in bed, surrounded by seemingly empty cots. A figure sitting at a desk in the dark background appears to be a nurse.\textsuperscript{285} [Figure 3.5] The selection and use of images in promotional materials suggests that the CSH’s managers and healthcare staff prioritized the outdoors as the primary sites of medical care. The photographs reflected patients’ experiences while at the CSH. After breakfast, morning prayers, and a visit from the hospital physician at 8 a.m., children spent the rest of the day on the beach, breaking only for meals until dinner.\textsuperscript{286}

The main hospital building’s design supports healthcare professionals’ regard for the sea-air, seawater, and sunlight’s therapeutic qualities. It also operated as a technological system that was engineered to facilitate pediatric patients’ access to healthy

\begin{footnotesize}
\textsuperscript{284} Beth Linker, “Shooting Disabled Soldiers: Medicine and Photography in World War I America,” \textit{Journal of the History of Medicine and Allied Sciences} 66, no. 3 (2010): 313-46. Although the practice of photographing children outside may have been used to encourage donations, it is also largely representative of what patients actually experienced. According to newspaper articles and CSH annual reports, children spent the vast majority of their day outdoors on the beach, from approximately 8 a.m. until 5 p.m., breaking only for meals. See: \textit{CSH Annual Report for 1875}, 14-15.
\textsuperscript{285} \textit{CSH Annual Report for 1905}, 30.
\textsuperscript{286} \textit{CSH Annual Report for 1875}, 14-15. These images were also meant to inspire donations from recipients of the annual reports, suggesting that patrons would have approved of the hospital’s outdoor therapeutic program.
\end{footnotesize}
nature. The large windows that lined the wards allowed the fresh, saline and ozone-laden sea-air to “bathe” patients inside the hospital. This was important since sea-air constituted one of the primary benefits afforded to urban children during their stays at marine hospitals like CSH. Physicians and urban residents bemoaned the air quality in cities, which they characterized as being still, stale, and polluted. While urban air was unpleasant, the air inside city homes was dangerous. In the 19th century, physicians believed that respired or “vitiated” air was among the most hazardous due to its chemical composition. The sea-air stood in direct contrast to urban air. Physicians believed patients benefitted from the chemical composition, saline particles, and near constant motion of sea-air. Doctors argued that the sea-air improved patients’ sleep, appetites, metabolisms, and weights.

Leaving the large hospital windows open day and night allowed the sea breezes to remove the vitiated air from the wards, replacing it with fresh sea-air. The only times the nurses closed the windows were during dressing time and snow or rainstorms, when they closed the windows for the children’s safety. Despite a wide acceptance of the seashore as a healthy environment, many middle-class visitors were taken aback by this practice, as it was contrary to the “air-tight” rooms in which they lived. In 1912, William Bennett, the physician in charge of the CSH, argued in response that, “Draughts are no longer

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288 For more on the health benefits of sea-air, see chapter 2. Medical literature during the 19th century often discussed sea-air “baths,” which referred to the time patients spent in contact with the sea-air.
290 For more on this see chapter 2.
looked upon as death-dealing enemies, but as beneficent friends, bringing every moment into every corner a supply of fresh air to take the place of that which has been breathed and is impure.”

In addition to accessing fresh air, the CSH was built to bring seawater indoors so nurses could bathe children who were too young or too weak to endure ocean-bathing. Like all dwellings in Atlantic City, the hospital initially depended on rainwater for fresh water. The hospital collected rainwater in a 20,000-gallon brick cistern, and the hospital staff used hand pumps to distribute the water throughout the building. Waterworks brought fresh water from the mainland to Atlantic City for the first time in 1882; that same year, the Atlantic City Water Works Company supplied CSH with fresh water free of charge. For patients who were too sick or weak to sea-bathe, saltwater was pumped into the hospital from a “large hogshead” which was replenished every day. The hospital installed a system in order to heat both salt and fresh water. It worked by using a circulating boiler connected to the kitchen stove to first heat the fresh water. That water then traveled in pipes through a tank that held saltwater, thereby heating the seawater without coming in contact with it. This method allowed children and staff access to hot

292 CSH Annual Report for 1912, 28. On the fear of drafts, see: Peter C Baldwin, “How Night Air Became Good Air, 1776-1930,” Environmental History 8, no. 3 (2003): 412–429.; On ventilation, see: Gail Cooper, Air-Conditioning America: Engineers and the Controlled Environment, 1900-1960 (Baltimore: Johns Hopkins University Press, 1998). As Melanie Keichel shows in her dissertation, “‘The Air We Breathe’: Nineteenth Century Americans and the Search for Fresh Air,” physicians understood that because exhaled air was the most deleterious to health, the air needed to be refreshed as thoroughly as possible.
295 CSH Annual Report for 1882, 3. There is a slight disagreement in the sources regarding the date fresh water was provided by the Atlantic City Water Works Company. A history of the CSH states it was 1883, whereas the Annual Report for 1882 places the date as 1882.
and cold saltwater, as well as hot and cold fresh water for indoor bathing, cooking, and laundry.\textsuperscript{296}

In addition to providing patients access to the sea-air and seawater, it was imperative that the CSH remove harmful elements from its surroundings, such as wastewater and sewage. Although heralded for its naturally healthy environment, Atlantic City did not have the infrastructure to provide sewerage when the CSH opened in 1874. The hospital depended on “communicating pipes” to remove waste from the laundry and kitchen, depositing the waste in brick reservoirs where the sandy beach served as a filter.\textsuperscript{297} This system was far from ideal. As Bennett noted in 1885, “The healthful disposal of the sewage of the institution has for several years been a problem difficult to solve.”\textsuperscript{298} The problem of waste disposal was not unique to the hospital. As more people visited Atlantic City, sanitary issues arose that threatened to contaminate the environment. The removal of waste products, including “laundry-water, kitchen-slops, and human excreta,” became imperative in Atlantic City by the mid 1880s.\textsuperscript{299}

Waste removal was difficult to achieve at seaside locations given their flat topography. This was particularly true along New Jersey’s coast, since towns lacked “sufficient grades to insure efficient natural drainage” or a “convenient river into which to discharge” the waste.\textsuperscript{300} Some seashore resorts emptied sewage into the ocean where people bathed, or into creeks or open ditches that ran through the towns. Atlantic City

\textsuperscript{296} CSH Annual Report for 1875, 14.
\textsuperscript{297} Ibid.
\textsuperscript{298} CSH Annual Report for 1885, 8.
\textsuperscript{299} Boardman Reed, “Improved Sewerage and Sewerage-Utilization at Atlantic City,” Medical Times (April 3, 1886): 493.
\textsuperscript{300} Ibid., 492.
physician Boardman Reed characterized both practices as “highly objectionable” and “dangerous.”

Prior to 1885, Atlantic City depended on a vault system that used ventilating chimneys and frequent removal by “odorless excavators” in order to safeguard the public’s health from human waste. In 1885, Atlantic City installed an underground sewer system that carried waste from the town and emptied it into the bottom of a 20-foot deep, 30-foot wide cement reservoir, where it was filtered until it was “clear and pure enough even to drink.”

The CSH was connected to the sewer system soon after it commenced operation in July of 1885. Bennett was so delighted that he characterized it as “among the important events of the year.” Removing waste from the hospitals’ premises was important because it helped maintain the sanitary and salubrious qualities of the environment that they used for patients’ treatment.

The focus on maintaining rather than creating a healthy environment is a twist on the more common historical narrative regarding how unhealthy places were engineered to improve the landscape’s health. Historians have examined how public health officials sought to transform unhealthy environments, ranging from northeastern cities to California’s central valley, by implementing a variety of technological systems. Atlantic

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301 Ibid.
302 Addressing skeptics in 1886, Reed claimed that the system worked so well that one could not detect any odor at the reservoir, even when the trap door was open. Furthermore, the slight odor at the filter-beds did not reach Atlantic City given their distance from the town and that the filtered water was only slightly discolored. Reed published an article three years after the system’s introduction, concluding the system was “perfectly efficient” and an overall success. The only change made since its initial construction was the replacement of the terra cotta pipes with iron ones. Reed once again heralded the filtration system, writing that sewage was “rendered comparatively innocuous before being discharged into the bay in the rear of the town.” Boardman Reed, “The Sanitary Condition of Health Resorts: With Some Pertinent Facts About Atlantic City,” Maryland Medical Journal 22 (1889): 124.
303 CSH Annual Report for 1885, 8.
City was different. The town was founded on the principle that its salubrious properties would bring health to sick and worn down urban residents. As the town’s popularity increased it began to face the same sanitation issues as the cities from which tourists were trying to escape. Officials in Atlantic City employed technological systems like sewers and water delivery systems in order to maintain, rather than create, a healthy environment. Ensuring such conditions was paramount for the CSH, given its dependence on the environment for therapeutic interventions.  

Children in Nature

The importance of maintaining a healthy environment for children reflected contemporary beliefs about the interconnection between children and nature. Philosophers and scientists had long believed that children were closer to nature than adults. With increasing rates of urbanization and industrialization in the 19th century, there was a pervasive fear that children’s connection with the natural world was becoming increasingly fractured. Their crippled bodies testified to the physical impact of this dislocation.

The CSH operated within a network of institutions and programs that sought to ameliorate the dislocation of children from the natural environment. By the early 20th

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304 Maureen Ogle, All the Modern Conveniences: American Household Plumbing, 1840-1890 (Baltimore: Johns Hopkins University Press, 2000).
century, physicians and lay health reformers blamed a multitude of health problems on limited access to clean air and sunlight, and the dark, windowless, and cramped quarters in which poor urban children lived. Emerging scientific research confirmed these fears. Physicians in Philadelphia and elsewhere conducted scientific studies that demonstrated that a lack of sunlight resulted in rickets, a debilitating disease that “crippled” young children. The CSH’s structure provided poor urban children access to an environment that was otherwise beyond their reaches.

Given that the CSH was originally built in 1874, it is unsurprising that the institution would have been built to maximize patients’ access to sea-air and seawater. In the mid to late 19th century, medical practitioners remained largely dependent on centuries-old “natural” therapeutic practices. Changing a patient’s environment, especially leaving the city during the hot summer months, was a persistent and popular medical intervention for the prevention and treatment of disease. However, it is significant that the hospital’s structure changed very little over the subsequent decades. This was true despite the fact that the hospital moved in 1902 into buildings newly constructed for the CSH.

Images and diagrams of the second hospital building are strikingly similar to the first. [See Figures 3.1 and 3.2] In 1901, the Board of Managers wrote that the new hospital buildings were “modern throughout,” yet highlighted the fact that the hospital

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had the “largest front to the ocean and to the prevailing summer sea breeze and provides a large quadrangle as a playground.”  

As with the previous site, the main hospital building faced the ocean and was situated very near the water. [Figure 3.6] It also maintained its system of porches and verandas, on which patients were often photographed. [Figure 3.4] Notwithstanding the turn to laboratory-based medicine in the wake of the Bacteriological Revolution, marine medication maintained its status as the primary mode of therapeutic intervention at the CSH and other pediatric marine hospitals.  

The new hospital buildings were physical manifestations of 20th-century beliefs in the ability of nature to cure.  

The continued preeminence of the natural environment in therapeutic practice is in keeping with larger cultural sentiments regarding children, nature, and America’s future at the turn of the 20th century. The Progressive Era, roughly 1880-1920, was a period marked by dramatic social transformations including urbanization, industrialization, and immigration.  

307 CSH Annual Report for 1901, 3.
groups including physicians, nurses, and social workers, as well as specialization within the medical field. \(^{311}\) Pediatrics was among the medical subfields that gained prominence during this period, with an increasing number of practitioners dedicating their practices to the care of children. \(^{312}\) With these changes came new views of childhood as a distinct period of life that was separate from adulthood. \(^{313}\) Medical professionals and social reformers emphasized children’s physical and social plasticity. \(^{314}\) They targeted children in their efforts to “Americanize” immigrant families, believing children were especially receptive to their messages, and would help institute changes within families. \(^{315}\) Healthcare professionals and other “child-savers” also believed that children’s bodies were physically pliable and could be re-formed through environmental changes. In 1914, physician and Director of Child Hygiene for the New York Department of Health, S. Josephine Baker wrote that children were “plastic material,” and were “the most easily molded and most responsive material that nature can give us.” \(^{316}\) Given this pliability,
physicians claimed that children’s bodies could be physically re-formed by changing their environments and healthcare.

Moving children from the city to the seashore was one means of altering children’s environments and, therefore, their bodies and health. As detailed in chapter two, physicians’ and scientists’ studies of the outdoor environment provided evidence that the marine environment created physiological changes that were particularly pronounced in pediatric patients. Medical professionals’ and reformers’ beliefs in children’s pliability and the reformative power of nature is most evident in marine hospitals’ focus on caring for orthopedic conditions like non-pulmonary tuberculosis, rickets, and polio. William Bennett often called attention to marine medication’s role in the improvement of these patients. In 1917 he advocated for expanding the number of children the institution cared for during the winter months, writing:

When day after day of glorious sunshine through the long winter months we see our children growing ruddy and strong as they lie on their beds on the porches, or swiftly hobble on their crutches over the beach, we cannot help thinking of the one hundred and twenty beds now empty which might be occupied by other children at present in their little, unsanitary homes or the City Hospital wards, who, if we had the means, might also be growing ruddy and strong in our sunshine and sea air.  

The seashore’s nature, Bennett claimed, provided children with the best chances of straight spines and fully functioning joints, particularly in comparison to the urban environments in which they lived. Physicians at pediatric marine hospitals pointed to

\[317\ CSH\ Annual\ Report\ for\ 1917, 19.\]
their discharge statistics, as well as the re-formed bodies of patients, as proof of their claims.318

Building patients’ bodies was important, because it ensured their ability to participate in the work force. As the United States shifted from an agrarian-based economy to an urban and industrial world leader, and the frontier “closed,” many people, including prominent leaders like Theodore Roosevelt, feared the health effects of modern urban life on the body politic.319 There was a pervasive concern that modern life led to a weakening and degeneration of the nation’s citizenry. Newly defined diseases, like neurasthenia (a weakened state caused by excessive mental exertion), and a declining birthrate among native-born citizens gave credence to these beliefs.320 Living in the city was seen as unnatural, particularly for Americans who defined their national identities in relation to the land and wilderness.321

318 “Smiling Joe Marron” exemplifies pediatric marine hospitals’ uses of patients’ re-formed bodies as proof of the benefits of their natural therapeutics and orthopedic success. “Smiling Joe” was a patient at Coney Island’s Sea Breeze hospital whose picture was widely used in promotional materials. He was diagnosed with tuberculosis of the spine and was strapped to an arched backboard while in a plaster cast. Despite his confinement and condition, Joe looks at the camera with a wide and easy smile. His image reportedly inspired Rockefeller to donate $150,000 to the hospital. “$250,000 Raised by a Sick Boy’s Smile,” New York Times, May 2, 1909, accessed January 11, 2012, http://query.nytimes.com/mem/archive-free/pdf?res=F10617F63F5D12738DDDAB0894DD405B898CF1D3.

319 This is referred to as the Turner Thesis. Frederick Jackson Turner, a 19th century historian, pronounced that America’s frontier had closed by the 1890s. See: Roderick Frazier Nash, Wilderness and the American Mind 4th ed. (New Haven, CT: Yale University Press, 2001), 145-47.


321 Nash, Wilderness and the American Mind. This is also interesting vis-à-vis contemporaneous imperialist concerns about the health effects of tropical environments on white bodies, and men in particular. It seems
A multiplicity of programs emerged to redress the negative effects of the dislocation of urban residents from American “nature.” The conservation and preservation movements were among the most visible efforts and included the federal government’s establishment of national parks and protected lands. At the local level, urban reformers established playgrounds and gardens in cities, as well as programs like New York City’s Fresh Air Fund, and Philadelphia’s Sanitarium Association and Country Week Associations. These groups temporarily relocated urban children to rural areas.

Camping groups, such as the Boy and Girl Scouts and Camp Fire Girls, also provided children with access to the “wilderness” in an attempt to reconnect them to the country’s frontier past. Pediatric marine hospitals operated as part of this network. By dedicating their services to sick and poor urban children, they served a population that was often excluded from other programs. While camping groups often focused on middle-class that like white men in tropical environments, cities were filled with “bodies-out-of-place,” regardless of whether those bodies were immigrants from foreign countries or native-born Americans who emigrated from the country’s farmlands. For more on concerns about the tropical environment’s impact on white bodies, see: Warwick Anderson, Colonial Pathologies: American Tropical Medicine, Race, and Hygiene in the Philippines (Chapel Hill: Duke University Press, 2006); Mark Harrison, “‘The Tender Frame of Man’: Disease, Climate and Racial Difference in India and the West Indies, 1760-1860,” Bulletin of the History of Medicine 70 (1996): 68-93; Warwick Anderson, “Immunities of Empire: Race, Disease, and the New Tropical Medicine, 1900-1920,” Bulletin of the History of Medicine 70 (1996): 94-118. In addition, the Winter 2012 edition of the Bulletin for the History of Medicine is a special issue, “Modern Airs, Waters, and Places,” guest edited by Alison Bashford and Sarah Tracy. Including the editors’ introduction and Charles Rosenberg’s epilogue, there are seven articles on medical climatology. See: Bulletin of the History of Medicine 86, no. 4 (Winter 2012): 495-670.

Many projects and programs were directed at adults or the population in general. Perhaps most noteworthy, and most discussed in the historiography, is the establishment of the conservation and preservation movements during the Progressive Era. See, for instance: Nash, Wilderness and the American Mind; Hays, Gospel of Efficiency.


Camping groups were most often geared toward middle-class children. See footnote 121.
children, programs that served children of lesser means generally relegated their efforts to children who were well or had “simple debility.”  

The fact that the CSH admitted patients from all races, religions, and ethnicities suggests that experts saw all children as being physically malleable. Popular publications supported the idea that children were innocent victims of circumstance, and that every child, regardless of parentage, could be physically transformed given the right environment. There were, however, important differences for boys and girls. Initially the CSH only admitted boys under the age of twelve and girls fourteen and younger. Adolescent girls were not initially admitted given a perceived difference in the care they required. As Bennett argued, such girls were “too old to be subjected to the usual restraints of little children, and too young to have the liberty necessarily granted in an institution for women.” Yet he also acknowledged that this population would benefit from the CSH.

In 1887, Bennett advocated for establishing a separate ward for older girls, where they would be supervised by a “motherly woman” who would “seek not only their welfare… but who will also endeavor to instill such lessons of purity and right living as shall be profitable to them throughout their lives.”

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325 *CSH Annual Report for 1880*, 10. In this report the physician in charge noted that by working with the Country Week Association they were better able to serve those children who needed hospital care by referring children who were primarily well to the CWA. As noted in the previous chapter, while children were admitted with a range medical diagnoses, during the summer many of the children who were admitted to the CSH were listed as being as “well” or with “debility.”

326 Connolly, *Saving Sickly Children*, 18. Women’s magazines like the *Woman’s Home Companion* promulgated this message in articles as well as in their support of better babies contests. Meghan Crnic, “Better Babies.”

327 *CSH Annual Report for 1887*, 8.

328 Ibid.
and admitted 72 older girls during the summer. Patients came with a range of conditions. Some were “weak from over work or study,” while other girls were “bed-ridden sufferers from chronic disease.” Miss McKim, the matron in charge of the ward, oversaw patients who required medical care, as well as the activities of ambulatory patients. The “largest possible liberty” was given to the latter group. While at the hospital the girls enjoyed “daily walks upon the beach, their ocean baths, their visits to the light-house, their excursions to neighboring Longport and their indoor reading, games, and music.”

The hospital staff viewed the older girls admitted to the main hospital more like the mothers in the cottages than the other children admitted to the hospital. As with the mothers, William Bennett required that the older girls “present a testimonial of good character,” which he claimed resulted in “an estimable class of patients.” Their activities were also highly gendered. Older girls strolled along the beach and read indoors, activities that fit the institution’s objectives of instilling the “purity and right living” that they believed would prepare girls for their future roles as mothers and wives.

In contrast, older boy’s activities were far more rigorous and rugged. The CSH founded a Boys Camp in 1897 which admitted boys between the age of 10 and 17. The camp was located apart from the hospital grounds and consisted of a kitchen that was housed in a permanent wood building, with water supplied from the city, a large tent for a

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329 CSH Annual Report for 1889, 7.
330 Ibid.
331 In this way, the older girls were treated like “little mothers.” For more on little mothers, see Chapter four.
332 Boys of this age were seen as being too disruptive to the other patients.
dining room, and a raised sleeping tent furnished with cots.\textsuperscript{333} As with boys admitted to the main hospital building, the boys came to the camp without their parents. While camping, boys went sea-bathing, rowing, crabbing, fishing, and sailing. The physician in charge of the CSH claimed that the “camp furnishes the best and most economical means of giving the masses of delicate boys in our city the summer outing which they greatly needed,” and that many of the boys’ conditions improved greatly.\textsuperscript{334}

The camping program fit within experts’ theories of child development by allowing boys to engage with American “wilderness.” This interaction facilitated their development into stronger and healthier men.\textsuperscript{335} American psychologist G. Stanley Hall was among the scientific experts who were concerned about modernity’s effect on the health of the nation and its citizens. As part of a growing number of professionals who studied children, Hall saw childhood as a distinct period of development that provided an opportunity for intervention against the negative impact of modern life. Known for his theory of “recapitulation,” Hall posited that as boys aged, they progressed through the stages of man’s evolution, beginning as savages and ending as civilized men.\textsuperscript{336} Hall advocated for allowing boys to re-enact man’s savage past, as a way of developing into adults strong enough to withstand the depletive forces of modern urban life.\textsuperscript{337}

\textsuperscript{333} CSH Annual Report for 1897, 8.
\textsuperscript{334} Ibid., 8-9.
\textsuperscript{335} The aforementioned camping literature discusses the connections between Hall and programs such as Boy Scouts and YMCA.
\textsuperscript{336} On G. Stanley Hall see footnote 45.
\textsuperscript{337} As scholars have noted, Hall focused his attention on boys in particular.
While camping programs grew out of concerns about modern urban life, the CSH operated as a response to, rather than against, the growing urban economy. Although the hospital’s staff and managers sought to expose sick and crippled urban children to nature, they did so with the goal of building patients’ bodies and strength so they could withstand the forces of city life and eventually become productive citizens, mothers, and workers. As noted in chapter two, 1882 Annual Report claimed that marine medication benefitted children by facilitating their development into healthy and strong future citizens.

Patients’ development into “strong” adults who could participate in America’s growing industrial economy was one of the goals of the CSH. This is evident in William Bennett’s plea for funds for the Boys Camp. Expressing his desire for a donor, Bennett wished that someone would contribute money “and then come often and see what happiness, health and moral upbuilding he is giving each year to four hundred boys who are soon to be a power for good or for evil in our city.” In order to further prepare patients for urban citizenship, the CSH provided work training for older patients. In 1914, Bennett noted that older boys were “rapidly learning to become telegraph operators,” while, “The girls are rivaling the boys by their progress in plain sewing and fancy work.” Patients, many of whom were bed-bound and in traction, also attended school at the hospital. A teacher instructed patients in reading, writing, and “such elementary

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338 Some scholars have referred to this response as being “anti-modernist,” or a critique and rejection of industrial urban life. Perhaps the most in-depth and influential work on anti-modernism is: T. Jackson Lears, *No Place of Grace: Antimodernism and the Transformation of American Culture, 1880-1920* (Chicago: University of Chicago Press, 1994).
341 *CSH Annual Report for 1914*, 11.
branches as are suited to their mental capacity.” All of these activities were meant to help children develop into productive citizens who could contribute to the urban economy.

To be a productive citizen meant having a fully functioning and healthy body. The fact that children often returned home heavier, taller, and stronger after staying at the CSH supported popular contentions about the importance of nature to children’s health and development. While the hospital’s structure reflected the popular and pervasive notion that nature could heal the physical and social ills produced by modern life, the institution was not a rejection of modern, industrial life. Rather, using means common to other cultural practices such as camping and health travel, the CSH was built upon widespread assumptions about gendered behavior and the premise that fresh air provided children the best chance at productive citizenship by building their bodies to withstand American city life.

Making Modern Mothers, and Mothers Modern

342 Ibid. Other seashore hospitals also provided children with schooling. See, especially: Bruno Vanobbergen, “Belgian Sea Hospitals and the Child at Risk: Exploring an Educational Paradox,” The Journal of the History of Childhood and Youth 2, no. 2 (Spring 2009): 234-48. Open-air schools were another response to concerns about children’s health and modern, urban life. See, for instance:
343 Citizenship is often defined by the ability to be a productive worker, a status that required being fully able-bodied. Beth Linker, War's Waste: Rehabilitation in World War I America (Chicago: University of Chicago Press, 2011); Susan Schweik, The Ugly Laws: Disability in Public (New York: NYU Press, 2009).
344 Open-air schools are another example of institutions that were built on the premise that exposing children to the fresh air would improve their health. On open air schools, see: Linda Bryder, “‘Wonderlands of Buttercup, Clover and Daisies’: Tuberculosis and the Open-Air School Movement in Britain 1907-39,” in In the Name of the Child, ed. Roger Cooter (London: Routledge, 1992), 72-95; Anne-Marie Chatelet, “A Breath of Fresh Air: Open-Air Schools in Europe,” in Designing Modern Childhoods: History, Space, and the Material Culture of Children, ed. Marta Gutman and Ning de Coninck-Smith (New Brunswick, NJ: Rutgers University Press, 2008), 107-27. On the implementation of open-air schools in American pediatric institutions, see: Connolly, Saving Sickly Children, 41-46.
The mothers’ cottages stood in contrast to the main hospital building. In 1874, the staff at the Children’s Seashore House decided to conduct an “experiment” by admitting mothers with sick children under the age of three years old. The physician in charge stated that the objective was to provide care for infants with “summer diarrhea,” a condition that claimed scores of children’s lives every summer. Four mothers and their babies received care the first summer, each having the use of a private cottage.345 William Bennett declared the program a success. The young children “rapidly recovered,” during their stay at the sea.346 At Bennett’s recommendation, the institution built a total of eight cottages in 1875; by 1878, the institution boasted 16.347

After being admitted to a cottage, a mother and her children would have walked onto its covered piazza and through the front door. Inside she saw a single room that was furnished with a double iron bed with a woven wire mattress, a table with chairs, and a rocking chair. Two large windows flanked the front door. The back of the cottage boasted a floor to ceiling windows that stood directly opposite the front door, a design that provided “ample light and ventilation.”348 Off the back of the cottage was a second covered piazza. This arrangement provided each mother and her children a “shady place

345 CSH Annual Report for 1874, 10. As with most admissions, there isn’t a record of how these four families came to know about the CSH. Some families were referred by Philadelphia organizations, and the annual reports appealed to their readers to reach out to impoverished families they knew and encourage them to attend.
346 Ibid.
347 CSH Annual Report for 1875, 4; William H. Bennett, “Communications: The Children’s Seashore House, at Atlantic City, and Its Clinical Teachings in Regard to the Value of the Seashore as a Resort for Sick Children,” The Medical and Surgical Reporter 38, no. 7 (Feb 16, 1878): 124.
348 Bennett “Communications,” (Feb 16, 1878): 124.
out-doors, both morning and afternoon.” Each mother had the “exclusive use” of a private cottage, which was a wooden structure 1000 feet in size. She would stay in the cottage for one to two weeks, caring for her ill infant as well as any older children who came with her.

Although the stated intention of the mothers’ cottages was to provide care for critically ill infants, the structure of the cottages suggests that the social reformation of immigrant mothers was paramount. Set within a period of widespread social reform that included educating urban, immigrant mothers in “American” and “scientific” health and childcare, medical experts and social reformers used the cottages as a way to teach poor urban mothers how to perform middle-class domestic practices. Indeed the structure of the cottages more closely resembled middle-class vacation homes than the hospitals dedicated to treating the urban poor.

The mothers’ cottages provided spaces in which nurses could teach indigent mothers about sanitation and cleanliness, and oversee mothers’ applications of those lessons during their hospital stays. Education was as central to the nurses’ work as the medical care they provided. William Bennett argued that nurses work demanded “only such a knowledge of nursing as will make them useful in their own families, better social

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349 Ibid.
351 The number of children that each mother was allowed to bring varied over time. Initially mothers were only allowed to bring one other child; by the 1920s, mothers came to the CSH with upwards of four and five children.
workers, or attendants upon chronic invalids.\textsuperscript{354} Given this perspective, only the matron in charge of the institution was formally trained, at least through the early 20\textsuperscript{th} century. The hope was that by providing mothers with lessons on creating a healthy home, mothers would return to the city and create a pocket of health in the otherwise deleterious urban environment. Although caring for critically ill infants was a priority, as infant mortality decreased over the opening decades of the 20\textsuperscript{th} century, doctors and nurses increasingly used the cottages as spaces of social reform, rather than physical healing.\textsuperscript{355}

**Marine Medication for Infant Mortality**

Initially the mothers’ cottages’ primary function was to treat babies dying from “summer complaint.” The focus on this specific population fit within the infant welfare programs of this time period. Addressing the rates of infant mortality was a key feature of public health and social reform efforts. People had long known that childhood, and infancy in particular, was a precarious period of life. Losing a young child to ill health was an all too common experience.\textsuperscript{356} There was a sense that the rapid rates of urbanization and industrialization exacerbated childrens’ poor health, and the emerging field of statistics supported this idea.\textsuperscript{357} As recorded by Philadelphia’s Board of Health

\textsuperscript{354} CSH Annual Report for 1916, 19.
\textsuperscript{357} Philadelphia was far from unique in experiencing high rates of infant mortality, particularly during the summer months. It was so pervasive that combatting infant mortality became a primary focus of public
and reported in major urban newspapers like *The Inquirer*, poor, urban babies died by the thousands during the summer months. In 1871, over 22% of the babies born died before reaching their first birthday.\textsuperscript{358} Physicians and public health officials contended that the city’s heat was the underlying cause for infant mortality.\textsuperscript{359} Most of the children who died during the summer were under the age of one, and nearly all were under the age of five. “Summer diarrhea,” was the primary cause of death.\textsuperscript{360}

Leaving the city for cooler and “healthier” climates provided one of the few medical interventions available during the 19\textsuperscript{th} century. Philanthropists and city officials founded groups that attempted to combat infant mortality by removing infants and their mothers from the city. The Philadelphia Sanitarium Association (PSA) provided day trips for poor urban children and their mothers to a riverside park to escape the city heat.\textsuperscript{361} The mothers’ cottages at the Children’s Seashore House also provided poor urban families with a respite from the summer’s heat. It was the only institution in the region health work during this time, particularly in urban centers like New York City. For more on infant mortality during this period, see: Meckel, *Save the Babies*. On the rise of statistics and the increasing dependence on quantification, see: Theodore Porter, *Trust in Numbers: The Pursuit of Objectivity in Science and Public Life* (Princeton, Princeton University Press, 1995).

\textsuperscript{358} Condran and Murphy, “Defining and Managing Infant Mortality,” 481.

\textsuperscript{359} Condran and Murphy, “Defining and Managing Infant Mortality.”

\textsuperscript{360} Bennett, “Communications,” (Feb 23, 1878): 144. Bennett deemed it unnecessary to distinguish between types of diarrhea “as practically nearly all forms seem to be equally benefited by a change to the seashore.” He did note, however, that most of the infants admitted to the CSH had enterocolitis, while few had “cholera infantum,” which he attributed to receiving more applications from mothers than they could admit. The result was that patients with cholera infantum “would either die, recover, or pass into cases of entero-colitis before they could be received” at the CSH. For babies who survived but developed enterocolitis, Bennett argued that “no place is better suited for its treatment” than the seashore. High rates of infant mortality were commonplace during the summer months in American cities during the 19\textsuperscript{th} century.

\textsuperscript{361} Condran and Murphy, “Defining and Managing Infant Mortality.”
that offered prolonged accommodations for mothers caring for their sick babies.\textsuperscript{362} The CSH was particularly successful in this mission.

William Bennett calculated that the infant mortality rate at one of Philadelphia’s best hospitals was approximately 50 percent for babies with diarrheal diseases; the CSH’s rate was less than 3 percent. By 1878, 142 babies with diarrhea had been treated at the CSH, and only four had died. Most of the babies admitted to the cottages either “improved” or recovered completely, a remarkable achievement when compared to the outcomes for children suffering from diarrhea in the city.\textsuperscript{363}

William Bennett attributed infants’ recoveries to the seashore’s moderate temperature, the tonic and soporific effects of the sea-air, and sea-bathing.\textsuperscript{364} Bennett’s conclusions were logical given contemporary understandings of summer diarrhea’s etiology and environmental understandings of disease. The city’s higher temperatures, lack of fresh air, and limited sunlight exacerbated the problem. Bennett explained in an 1878 article published in \textit{The Medical and Surgical Reporter} that:

\textsuperscript{362} While mothers were allowed and even encouraged to go to the PSA, the organizers precluded ill children and only provided day trips for mothers and children. As with the CSH, however, nurses instructed mothers in childcare, including feeding and milk preparation. Additionally, the PSA ran a very small hospital for children who were too ill to be transported back to the city. Although staffed by a doctor and nurses, the institution stressed that they were not equipped to run as a medical facility and should not be used as such.

\textsuperscript{363} Bennett himself noted that this was not a scientific study, but nevertheless argued that the difference was indicative of the benefits of his institution. “Improved” is the term the CSH used to characterize patients at discharge. They reported this status in the annual reports and the patient logbooks. Other possible outcomes were: Died, Unimproved, and Well. All of these categories are vague and lack definition from the institution. However, the fact that the mortality of these infants is significantly lower than infants in urban hospitals suggests that it is possible that ill babies’ conditions did improve, especially in comparison to babies who remained in Philadelphia.

\textsuperscript{364} See Chapter two for a detailed discussion of medical professionals’ understandings of the health effects of the marine environment.
The breezes coming from the ocean in summer have a much lower temperature than the land atmosphere. This sea breeze prevails on a large majority of the days during the hot weather, thus making the average temperature much lower at the seashore than further inland. On some days the difference is most marked, and few have failed to experience the relief afforded by the first breath of sea air after spending a hot day in the city…. To the invalid, the relief afforded from the depressing influence of excessive heat is marked in all cases, but especially is it so in the summer complaint of children, in the development of which heat plays so important a part.365

Bennett claimed that the change in temperature and pure sea-air were directly responsible for infants’ improvements.

While the CSH claimed success in this arena in the 19th century, treating sick infants became less critical as Philadelphia’s infant mortality lowered and fewer babies died from summer complaint.366 By the 1920s, very few children admitted to the cottages were sick at all. The majority of the children who stayed with their mothers came and left “well,” without any medical diagnosis. As this demographic changed, so too did the CSH’s objectives. With less of a focus on caring for critically ill infants, the medical staff increasingly turned its attention to the education and oversight of mothers.

**Modeling Middle-Class Domesticity**

The cottages’ structure – and name – suggests that the physicians and managers of the CSH oriented the cottages towards mothers, rather than infants. Unlike the main

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365 Bennett, “Communications,” (Feb 23, 1878): 144.
building with its large open wards, the private, intimate structure of the cottages placed a
greater value on the containment and domestication of individual families. The
families at the CSH never included fathers, a practice that aligned with broader middle-
class cultural practices and political movements. Wealthy urban families who could
afford to go to the country would often send mothers and children away for the summer,
while the father would work in the city during the week and join his family on the
weekends. Moreover, there was increasing political attention to mothers’ role in the
family. During the late 19th and early 20th century a multitude of programs emerged that
sought to address the needs of the mother-child dyad, including mothers’ congresses, the
U.S. Children’s Bureau, and the implementation of welfare programs like mothers’
pensions. Operating in concert with maternal education and reform movements, the
CSH provided medical authorities and reformers with a way to “Americanize” immigrant
families by educating mothers about health, house, and childcare techniques within a
middle-class environment.

The CSH’s cottage system reproduced middle-class environments that were
common to medical institutions and resort towns. The cottage system was popular in
British hospitals by the 1870s, and spread through northeastern North America by the

367 I use the term families as shorthand and in recognition that the people admitted to the cottages were not complete family units. Fathers were never admitted, and older children did not always attend. That said, mothers did often bring multiple children, as well as nieces and nephews at times. For more on the familial connections of mothers’ cottages patients, see chapter 4.
369 For more on Americanization, see footnote 64.
1890s. It was particularly prevalent among private tuberculosis sanatoriums.\(^{370}\) As Annemarie Adams and Stacie Burke note in their article, “‘Not a Shack in the Woods’: Architecture for Tuberculosis in Muskoko and Toronto,” the cottage system helped institutions meet paying patients’ expectations of privacy and comfort. At the Muskoka Cottage Sanatorium in Canada, the cottages were “deliberately domestic” and modeled on upper-middle class urban homes in structure, furnishing, and decoration. Given their separation from the main hospital building, they provided patients with a greater degree of independence and privacy. This organization meant additional work for the medical staff, since they could not as easily oversee their charges as they could when patients were confined to an open, pavilion-style ward.\(^{371}\)

The implementation of a cottage system made sense for hospitals trying to attract middle-class clientele. Its institutionalization at the CSH is more surprising.\(^{372}\) Given the hospital’s dedication to treating the urban poor, one would expect that medical oversight would have been a primary concern for the doctors and nurses. Indeed, Bennett claimed that mothers were under the “constant oversight” of nurses, yet the structure of the cottages made such an arrangement impossible. In order to oversee her charges, the Cottage Nurse visited each mother three times a day to provide medical care, assist in feeding the infant, and ensure that mothers were following the institution’s rules. If a


\(^{372}\) Although Bennett claimed that the construction of multiple cottages was cheaper than building one large, permanent structure, this was only due to donors supporting each cottage.
mother required assistance, she rang an electric bell that connected her cottage to the main building.\textsuperscript{373}

While William Bennett acknowledged the difficulties associated with the cottage system, he argued that the benefits outweighed the drawbacks. In 1878, he wrote that maintaining a “series of detached cottages is a less convenient arrangement, in the matter of administration, than one large building would be.” However, he listed several advantages, including: an increased likelihood that mothers would follow the rules; a greater degree of neatness; improved hygienic conditions and decreased likelihood of diseases spreading; and the ability to attract a “much more respectable and deserving class of persons.”\textsuperscript{374}

Instilling mothers with the values of cleanliness and sanitation was one of the CSH’s nurses’ primary roles. As historians have documented, during the Progressive Era middle-class mothers responded to new theories about germs by placing an increasing value on keeping a clean and sanitary home.\textsuperscript{375} Since middle-class women led many of the reform efforts during this time, these practices translated into programs that targeted educating poor and immigrant mothers in methods of children’s healthcare. In the view of middle-class reformers and medical professionals, it was a mother’s duty to keep a clean home in order to maintain a healthy family.\textsuperscript{376} It was difficult for poor urban mothers, such as the women admitted to the CSH, to adhere to middle-class standards, given limited resources and the confines of the homes in which they lived.

\textsuperscript{373} Bennett “Communications,” (Feb 16, 1878): 124-25.
\textsuperscript{374} Ibid., 127.
\textsuperscript{376} Adams, \textit{Architecture in the Family Way}.
The buildings and labor within the CSH’s cottages reinforced middle-class value structures, particularly surrounding housekeeping and childcare. The structure of the cottages, both as individual units and as a group, facilitated this objective by reproducing other middle-class domestic environments, including the private residences in Atlantic City and the cottages in Oak Bluffs on Martha’s Vineyard, MA. [Figure 3.7] By the 1860s, cottages comprised a substantial portion of vacation residences along the northeastern seaboard. As historian Dona Brown argues, vacation cottages were a distinctly middle-class phenomenon. Their private, domestic structure and relative affordability offered middle-class urban families the opportunity to vacation in a safe and morally acceptable environment. While the mothers’ cottages at the CSH were not explicitly tied to Wesleyan Grove, a cottage community on Martha’s Vineyard, both sites were “eminently domestic,” and meant for families with children.\textsuperscript{377} Unlike large hotels, the domestic structure of the cottages and the close proximity of the residences provided children with a safe place to wander and play.\textsuperscript{378}

Advocates for cottage communities also promoted the moral virtues of vacationing there. Largely devoid of the perceived idle or immoral pursuits associated with large resort hotels, like gambling, drinking, and dancing, “cottage cities” provided families a way of maintaining their domestic routines in a more relaxed, leisurely setting.\textsuperscript{379} Proponents of vacations also heralded the association between travel, leisure, and health. Making these connections was important, because it provided moral

\textsuperscript{377} Dona Brown, \textit{Inventing New England: Regional Tourism in the Nineteenth Century} (Washington D.C.: Smithsonian Institution Press, 1995), 90. Wesleyan Grove was an outgrowth of a religious retreat.\textsuperscript{378} Ibid.\textsuperscript{379} Ibid., chapter 3. One visitor to Wesleyan Grove even noted the prevalence and visibility of women’s housework.
justification for vacationing. Religious leaders who defended the practice proclaimed the virtues of traveling to places such as the seashore or mountains as a way for middle-class urban residents to restore their energy that was depleted by urban life.\textsuperscript{380} As Hebron Vincent, the secretary of Wesleyan Grove, wrote in 1864, “Is not health a blessing, which, as Christians, we are bound to preserve and promote?”\textsuperscript{381} When Atlantic City’s founder Dr. Jonathan Pitney heralded the salubrity of its location, he was participating in a larger conversation about the virtues of travel and attempting to establish his city as an appropriate destination for middle-class Philadelphians. The subsequent popularity of cottage residences suggests that middle-class Philadelphians readily took advantage of Atlantic City as a virtuous and beneficial vacation destination.\textsuperscript{382}

The CSH’s mothers’ cottages fit within the middle-class cultural value system that associated cleanliness with health and morality. The work performed by nurses and mothers at the CSH’s cottages exemplified these interconnections. As with their middle-class counterparts, mothers were responsible for a range of domestic duties during their cottage stays, including washing laundry, scrubbing floors, and maintaining cleanliness.\textsuperscript{383} The Cottage Nurse inspections ensured that mothers were fulfilling their domestic responsibilities and maintaining the “perfect neatness” required by the

\begin{thebibliography}{9}
\bibitem{380} Ibid., 80-81.
\bibitem{381} Hebron Vincent, “History of the Camp-Meeting and Grounds at Wesleyan Grove, Martha’s Vineyard (for the eleven years ending with the meeting of 1869),” (Boston: Lee and Shepard, 1870), as quoted in Brown, \textit{Inventing New England}, 81.
\bibitem{382} As discussed in chapter 2, tens of thousands of people maintained summer residences in Atlantic City, and over half of a million people visited the town in a single summer. For more on the history of Atlantic City, see: Charles Funnell, \textit{By the Beautiful Sea: The Rise and High Times of That Great American Resort Atlantic City} (New Brunswick, NJ: Rutgers University Press, 1975); and Bryant Simon, \textit{Boardwalk of Dreams: Atlantic City and the Fate of Urban America} (Oxford: Oxford University Press, 2004).
\end{thebibliography}
The daily inspections of the mothers cottages’ also provided nurses with the opportunities to instruct mothers in what they believed to be the proper methods of childcare. This aspect of the institution’s work was so important that the physician in charge advocated for lightening the Cottage Nurse’s other duties so she could dedicate a larger portion of her time to educating mothers. In 1892, Bennett called for additional nurses to help care for sick babies so that mothers could attend classes without having to oversee their children. Bennett explained that the objective was that mothers’ “unskilled efforts and mistaken kindness should be guided by an educated and experienced hand.” Bennett hoped that all members of the family would be “benefited by the knowledge of better methods of nursing which she would carry away with her.”

One critical aspect of the nurses’ work and educational efforts was infant feeding. The Cottage Nurse oversaw the “preparation and distribution of the infants’ food.” Very ill infants received a combination of “condensed milk, fresh milk with bread, condensed milk thickened with arrow root, or one of the brands of prepared wheat, beef tea, chicken soup.” Infants with “simple diarrhea,” or “mild cases of entero-colitis” drank cinnamon water. Proper feeding was critical, because medical and public health

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384 In the annual report for 1875, the physician in charge noted with irritation that some mothers were either unable or unwilling to maintain the “perfect neatness” that he felt was necessary. See: CSH Annual Report for 1875, 9.
385 CSH Annual Report for 1892, 12.
386 Ibid., 12-13.
387 Mothers and older children took their meals in the hospital’s main dining room.
388 Bennett, “Communications,” (Feb 16, 1878): 127. Bennett determined that infants were better served by condensed rather than fresh milk, given local cows’ poor pastures and water quality, their “constant annoyance” from mosquitoes and flies, and the great distance the milk had to travel to the institution, which made it potentially injurious to consume. The dietary interventions, in conjunction with the seashore’s beneficial environment, were enough to cure many of the infants who were admitted with diarrhea. See Bennett, “Communications,” (Feb 23, 1878): 141. For more on the importance of feeding and food preparation during this period, see: Rima Apple, Perfect Motherhood: Science and Childrearing in America
professionals believed that soiled or tainted milk, and other “improper” feeding practices, contributed to infant mortality. At marine hospitals along the northeastern seaboard, nurses taught mothers how to properly prepare food for their infants and families.

The physicians and nurses at the CSH intended for mothers to transfer the housekeeping and childcare practices they learned at the cottages to their urban homes. Mothers learned that while they might not be able to alter the outside urban environment, they could – and should – control the environment within their homes. Advice literature instructed women how to create a sanitary home that would protect their family members’ health and prevent illness from entering the home. The fact that the CSH admitted well children with their mothers in the 1920s suggests that physicians and

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389 There was a particular attention paid to the best method of feeding babies, particularly regarding whether breast-feeding or artificial feeding was better. There was an increasingly awareness by the early 20th century that babies who were breastfed were less likely to die than babies who received formula or cow’s milk. For more on the history of infant feeding, see in particular: Rima Apple, *Mothers and Medicine: A Social History of Infant Feeding, 1890-1950* (Madison: University of Wisconsin Press, 1987); Jacqueline H Wolf, *Don’t Kill Your Baby: Public Health and the Decline of Breastfeeding in the Nineteenth and Twentieth Centuries* (Columbus: Ohio State University Press, 2001); Janet Golden, *A Social History of Wet Nursing in America: From Breast to Bottle* (Cambridge: Cambridge University Press, 1996); Kara Swanson, "Human Milk as Technology and Technologies of Human Milk: Medical Imaginings in the Early Twentieth-Century United States," *Women's Studies Quarterly* 37, no. 1-2 (Spring/Summer 2009): 20-37.

390 As noted in chapter one, social workers and nurses encountered feeding practices in family homes that they believed were detrimental to children, and were “un-American” such as the Italian family who fed their baby buttermilk and macaroni. Lewis Edwin Theiss also noted what he characterized as “ignorant” feeding practices among the mothers who frequented New York City’s marine hospitals in his article, “The Least of These: What the Fresh Air Movement Means to the Children of the Slums,” *Outline Magazine* 54 (August 1909): 538-49.

391 This fits with what other historians have detailed in middle-class homes, as well as reform efforts. On mothers’ roles in creating protective, preventive home environments; see: Adams, *Architecture in the Family Way*, especially chapter 3. On reformers work with working-class mothers on creating a healthy home environment, see: Melanie Kiechle, “‘The Air We Breathe’: Nineteenth Century Americans and the Search for Fresh Air,” (PhD diss., Rutgers University, 2012), chapter 3.
nurses believed they could help children by teaching their mothers how to create a healthier home in the city.\footnote{\textit{CSH Annual Report for 1909}, 12.}

One way that the CSH encouraged mothers to institute the practices learned at the cottages was through a “social visitor.”\footnote{\textit{CSH Annual Report for 1909}, 12.} Beginning in 1909, Miss Bartley conducted home visits of previous and future patients. She reported receiving “many expressions of gratitude from the mothers,” she visited, “for the benefits which they and their infants derived from the Mothers’ Cottages.”\footnote{\textit{Ibid}.} Although the annual reports did not cite specifics, they suggest that the mothers were grateful for the instruction they received. Based on Miss Bartley’s findings, Bennett advocated making provisions “to relieve each mother of the care of her children a short time each day that she may get a little needed rest and receive at our hands some instruction in the care of her children and her home which will be helpful throughout the year.”\footnote{\textit{Ibid}.} In order to accomplish this, the managers and medical professionals considered opening a small day nursery on the hospital’s

\footnote{It is also likely that physicians and nurses believed that a stay at the CSH would bolster healthy children’s strength and therefore improve their well-being once patients returned to the city.\footnote{Although her title was social visitor, Miss Bartley seemingly performed duties similar to social workers affiliated with hospitals, like the Hospital of the University of Pennsylvania in Philadelphia, such as conducting home visits. For more of an overview of the history of social work, see: Laura J. Paglin, “Ida Cannon, Ethel Cohen, and Early Medical Social Work in Boston: The Foundations of a Model of Culturally Competent Social Service,” \textit{Social Service Review} 81, no. 1 (March 2007): 27-45. On the professionalization of social work, see: Roy Lubove, \textit{The Professional Altruist: The Emergence of Social Work as a Career, 1880-1930} (New York: Atheneum, 1969); John Ehrenreich, \textit{The Altruistic Imagination: A History of Social Work and Social Policy in the United States} (Ithaca: Cornell University Press, 1985). On the intersections of social work and women’s history, see: Laura Abram and Laura Curran, “Between Women: Gender and Social Work in Historical Perspective,” \textit{Social Service Review} 78, no. 3 (September 2004): 429-46.} \footnote{\textit{CSH Annual Report for 1909}, 12.} \footnote{\textit{Ibid}.}
premises where babies could stay while their mothers received “personal instruction in
the preparation of food for the baby and the household.”

The CSH’s interest in teaching mothers proper childcare techniques is in keeping
with contemporaneous child-saving programs. As historians including Richard Meckel
and Steven Mintz have argued, child welfare programs in the early 20th century were
marked by an increasingly professionalized group of social workers, nurses, and
physicians who attempted to address issues of child and maternal welfare through
education. Enrolling mothers in what historian Rima Apple has termed “scientific
motherhood,” nurses and social workers used educational campaigns to teach poor and
immigrant mothers the “proper” methods of childcare, which largely aligned with white,
middle-class ideas about children and families. While public health officials often
focused efforts on teaching mothers about preparation of milk and food for their children,
maternal educational campaigns were more far-reaching and included advice on how to
dress children, the importance of outdoor life and sunlight, and how to properly bathe
children, among many other topics.

396 Ibid.
397 Other programs included reforming the juvenile detention system, child labor, and public education, to
name a few. For more on this, see: Michael Katz, In the Shadow of the Poorhouse: A Social History of
Welfare in America (New York: Basic Books, 1996); Mintz, Huck’s Raft; and Meckel, Save the Babies.
398 Apple, Perfect Motherhood.
399 Ibid. In a pamphlet that described how to organize a Little Mothers’ League, the authors outlined the
various lessons that girls should be taught in order to help them care for younger siblings and prepare them
for their future roles as mothers. Among the lessons were how to bathe, feed, and dress the baby, how to
prepare a babies’ bed, and how to provide the baby with enough sunlight and fresh air for its health. Starr
Centre Association of Philadelphia Records, Barbara Bates Center for the Study of the History of Nursing,
School of Nursing, University of Pennsylvania, MC 9 Series VI, Folder 132, Little Mothers’ Leagues:
The CSH’s program of maternal education aligned with the work done at other pediatric marine hospitals. The Boston Floating Hospital and the Philadelphia Sanitarium Association also admitted mothers with sick children. Maternal education was an essential aspect of the nursing staffs’ work at each of these institutions. It also met the objectives of reform groups that sent patients to the hospitals. The Starr Centre Association, a reform group dedicated to the “educational and social improvement” of poor residents of South Philadelphia, referred immigrant families to the CSH during the summer.\(^{400}\) In 1919, the Starr Centre sent thirty families to the mothers’ cottages. They recorded their appreciation for the “good, substantial American food” and instruction that mothers received during their stay.\(^{401}\) In praise, the Starr Centre’s report celebrated that the families “came home with a different attitude and outlook, really Americanized in a noticeable degree.”\(^{402}\)

Reformers, as well as medical professionals, viewed the mothers’ cottages as way to “Americanize” immigrant mothers in their housekeeping and childcare techniques.\(^{403}\) Medical professionals saw educational efforts as a great benefit for the mothers with whom they worked, and they attempted to ensure their lessons reached “worthy” women. At the CSH, William Bennett was preoccupied with admitting women who he deemed deserving of the instruction and care that his institution would provide. In 1880, he wrote

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\(^{400}\) By and large, the families sent to the CSH seem to be of Italian heritage, based on their last names and on the populations that the Centre served. This is noteworthy because of the group’s interest in “Americanizing” these families, as well as the fact that the Starr Centre served a diverse population that included Jewish and African American families.

\(^{401}\) Starr Centre Association of Philadelphia Records, Barbara Bates Center for the Study of the History of Nursing, School of Nursing, University of Pennsylvania, MC 9 Series I Folder 42 (Annual Reports 1910-1920), Starr Centre Annual Report, 1919, 16-17.

\(^{402}\) Ibid.

\(^{403}\) For more on Americanization efforts during this time, see footnote 64.
that while a large majority of mothers were “most excellent women … a very few have been of such a quarrelsome and slovenly disposition that their presence, even for a few days, would be a misfortune to any institution.”404 He advocated screening mothers before admission in order to maintain the hospital’s image and attract only the “most deserving women.”405

Referring physicians and Miss Bartley, the hospital’s social visitor, screened mothers to prevent “undesirable” women from being admitted.406 Miss Bartley’s duties included distinguishing “between the worthy and the unworthy” families and insuring that “abuses…by the well-to-do,” did not occur. Miss Bartley’s visits determined if families were abusing the charitable institution by claiming poverty when they could afford alternative care.407 Worthiness, then, mapped onto a family’s financial need.408 Mothers who were too wealthy looking earned the CSH’s nurses’ condemnation.409 In July of 1924, the Cottage Nurse wrote that Harriet M., a mother who was admitted with one child, was “entirely too prosperous.”410 In June of 1925, a nurse wrote up another

404 *CSH Annual Report for 1880*, 11.
405 *CSH Annual Report for 1887*, 7.
406 Patients could only be admitted to the CSH after receiving a referral from a Philadelphia-based physician. The primary objective of the “examining” physicians was to prevent patients with contagious diseases from being admitted; screening for worthiness was an added responsibility.
408 Ibid.
409 [Perrecca, June 14, 1924], [Patient Register – Cottages, 1920-1924], MSS 6/0013-02, Children's Seashore House. Mrs. Perrecca was admitted with three children, the oldest of whom suffered from malnutrition. The family stayed for 14 days.
410 [Marsh, July 15, 1924], [Patient Register – Cottages, 1920-1924], MSS 6/0013-02, Children's Seashore House.
mother for asking for free admission despite being “well dressed” and having “money to lend.”\textsuperscript{411}

The hospital’s mission was to reach mothers who would not otherwise be familiar with middle-class life and practices.\textsuperscript{412} Despite their frustration with some mothers, the hospital staff deemed most of the mothers “worthy.” As early as the 1870s, Bennett claimed that most mothers were so “desirable” that the “cottages and their inmates…elicited the praise of hundreds of visitors.”\textsuperscript{413} Miss Bartley concurred over thirty years later. From her home visits she determined that “most of the families whom we helped last year were respectable poor people worthy of all we did for them.”\textsuperscript{414} The Cottage Nurses’ notes from the 1920s further support this trend, as the vast majority of mothers escaped nurses’ mention. Most mothers met the institution’s expectations of middle-class decorum.

The doctors and nurses of the CSH sought to limit their care to “worthy” mothers, who they defined as indigent women who were compliant and socially flexible enough to adopt white, native-born, middle-class American practices. By providing each mother the “exclusive use” of a cottage, medical professionals at the CSH created an environment in which they could teach poor women childcare and housekeeping practices. The cottages were not meant to disconnect mothers from their urban homes.

\textsuperscript{411} [Cepresso, June 18, 1925], [Patient Register – Cottages, June 1925-July 1930], MSS 6/0013-02, Children's Seashore House.
\textsuperscript{412} The notes in the logbooks don’t specifically indicate whether or not a family would have been allowed admission in future years. However, given Bennett’s objective in treating families of limited financial means, and his equation of being too prosperous with unworthiness, it seems likely that he would have precluded such families from future admission.
\textsuperscript{413} CSH Annual Report for 1876, 9.
\textsuperscript{414} CSH Annual Report for 1909, 11.
Rather, by providing them with a space in which they could learn and perform as middle-class mothers, medical professionals hoped the women would return to the city and make a healthier, more “American” home environment for themselves and their families. Although not all mothers complied, many returned home changed, much to the satisfaction of medical and social reform workers.

**Conclusion**

The structure of the CSH’s buildings reveals that patients’ physical and social reformation was critical to the hospital’s mission. Medical professionals’ goal was to reform children’s health and mothers’ behaviors so they could better combat the unhealthy, deleterious forces of urban life. The main hospital acted as a conduit to the natural environment for pediatric patients. While children returned to the city physically stronger, medical professionals hoped that mothers returned home strengthened with the knowledge of how to create a sanitary, clean, and therefore healthy home environment for their families.

By all accounts, the CSH achieved its objectives. Children gained health and strength, and mothers returned to the city “really Americanized.” Yet mothers and children were far from passive subjects of medical and social reform efforts. During their stays at the CSH, they actively and continually worked to define their experiences. Some

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followed the institution’s rules, meeting medical professionals’ expectations of performing middle-class decorum and cleanliness, while other mothers actively fought them. Regardless of their views of the institution, mothers’ participation in marine medication helped define a therapeutic vision of the beach that inextricably bound health to leisure, and the seashore to the city.
Chapter 3: Figures

Figure 3.1. First permanent hospital building, used from 1874-1901. *CSH Annual Report for 1898*, np.

Figure 3.2. Second hospital building, used from 1902-1952. *CSH Annual Report for 1905*, 1.
Figure 3.3. Drawing of individual cottages and their arrangement on the hospital grounds, 1902. *CSH Annual Report for 1902*, 15.
Figure 3.4. Children on second-story porch receiving heliotherapy. *CSH Annual Report for 1922*, 27.
Figure 3.5. One of the only images published in the Annual Reports of a patient inside. The other beds appear to be empty. *CSH Annual Report for 1905*, 30.
Figure 3.6. Layout of the newly built hospital buildings, which opened in 1902. *CSH Annual Report for 1902*, 6.
Figure 3.7. Proposed design for new cottages. The design is reminiscent of the middle-class cottage communities in resort towns, such as Wesleyan Grove. *CSH Annual Report for 1891*, 4.
In the summer of 1901, Helen Stainthorpe wrote to the administrators at the Children’s Seashore House (CSH) requesting admission for her three-year-old daughter Amy. As she recounted, Amy was tiny and so frail that she could not walk. Doctors had diagnosed her with rickets. The CSH approved Mrs. Stainthorpe’s request, and on August 7, 1901, Helen brought Amy and her two siblings, five-year-old Winifred and Ida, twenty-one months, to the mothers’ cottages. After staying eleven days, all of the children’s conditions had “improved,” but Amy stayed at the hospital for further treatment. Mrs. Stainthorpe wrote to the editor at the *Philadelphia Inquirer* to express her gratitude to the Children’s Seashore House and to the paper for publishing an article about the hospital. Helen concluded her letter stating her confidence that Amy would recover, writing, “may God bless…the Children’s Seashore House.”

Mrs. Stainthorpe was one of thousands of mothers who brought children to stay at the CSH between 1874 and 1930. The institution admitted mothers with their sick

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417 “Grateful Woman Praises Children’s Seashore House;” *Philadelphia Inquirer*, August 25, 1901

418 Ibid.
children for one to two weeks during the summer months.\textsuperscript{419} Each family stayed in a private cottage that was a single room, 1000 feet in size.\textsuperscript{420} The room was furnished with an iron bed, a table and chairs, and a rocking chair.\textsuperscript{421} The CSH first opened the cottages in 1874 in order to provide medical assistance to mothers caring for infants suffering from “summer diarrhea,” a condition that claimed the lives of thousands of children every summer.\textsuperscript{422} Between 1874 and 1930, the patient population changed as infant mortality in Philadelphia began to decline.\textsuperscript{423} By 1901 when Mrs. Stainthorpe brought Amy to the CSH, over 300 mothers stayed in the cottages each summer.\textsuperscript{424} Like the Stainthorpe children, they came with a range of non-contagious disorders including nutritional deficiencies like rickets, and non-specific diagnoses like being “delicate.” The patient population continued to shift over the next 20 years. By 1920, the majority of the children admitted to the cottages were listed as being “well” at both admission and discharge.

\begin{footnotesize}
\begin{itemize}
\item \textsuperscript{419}For more on the mothers’ cottages, see Chapter three of this dissertation.
\item \textsuperscript{420}I use the term “family” as shorthand to describe the mothers and children who stayed at seashore hospitals like CSH. Fathers were never admitted, or even discussed in the literature. This is likely because hospital administrators assumed that fathers had to remain in the city to work, in order to provide for their families.
\item \textsuperscript{421}William H. Bennett, “Communications: The Children’s Seashore House, at Atlantic City, and Its Clinical Teachings in Regard to the Value of the Seashore as a Resort for Sick Children,” \textit{The Medical and Surgical Reporter} 38, no. 7 (Feb 16, 1878): 124.
\item \textsuperscript{423}Gretchen Condran, Henry Williams and Rose A. Cheney, “The Decline in Mortality in Philadelphia from 1870-1930: The Role of Municipal Services,” \textit{The Pennsylvania Magazine of History and Biography} 108, no. 2 (April 1984): 153-77; Condran and Murphy, “Defining and Managing Infant Mortality.” 492-93. This is not to say that infant mortality was no longer an issue, or that the CSH couldn’t have filled their cottages with ill babies. This change instead corresponded to changes in the medical treatment of children, specifically in pediatricians’ increasing focus on prevention and treating the “well” child.
\item \textsuperscript{424}CSH Annual Report for 1901, 11.
\end{itemize}
\end{footnotesize}
As the nature and severity of children’s illnesses changed over this 50-year period, so too did mothers’ uses of the CSH. Although epidemiological changes shifted families’ engagements with the hospital from interactions more intimately focused on health in the late nineteenth century, to those increasingly driven by the pursuit of family leisure by the 1920s, I argue that both health and leisure were critical factors across time. Moreover, mothers remained solicitous seekers of their children’s health. Drawing upon the CSH admissions books, this chapter reveals the patterns, changes, and continuities in mothers’ health-seeking behaviors over the course of the late nineteenth and early twentieth centuries.

The CSH’s policy that allowed mothers to stay with their children was a key factor that shaped mothers’ decisions and behaviors. It also made seashore hospitals unique among pediatric institutions during this era. The predominant historical narrative tells us that hospitals catering to children sought to isolate patients from their families and communities. Physicians and reformers believed that parents’ immoral and un-American behaviors were the roots of children’s ill health. As such, pediatric institutions restricted patients’ contact with their parents by severely limiting visiting hours and

425 Although this chapter uses the archival sources for a single institution, the CSH is representative of the many other pediatric seashore hospitals that also admitted mothers with their children.
426 It is impossible to know the mothers’ specific motivations for attending pediatric marine hospitals. Unlike Mrs. Stainthorpe, most mothers did not leave written records of their experiences. By examining their patterns of behaviors we can gain insight into the various factors that shaped their experiences and decisions to bring their families to institutions at the seashore.
placing institutions far enough away from children’s homes to make the trip too difficult for poor parents. This separation allowed physicians and nurses to inculcate children with middle-class American values and behaviors that they believed would foster better health.

Contrary to this larger convention, pediatric seashore hospitals did not isolate children from their parents, or patients from their communities. Although children admitted to the CSH’s main hospital building often did not see their parents given the hospital’s distance from Philadelphia, those who came to the cottages stayed together as a family unit. In addition, “day-trip” institutions including the Boston Floating Hospital, the Philadelphia Sanitarium Association, and New York City’s St. John’s Guild Floating Hospital, all admitted mothers with their children. This served multiple purposes. From the institutions’ perspective, mothers’ presence provided help overseeing children and provided nurses with the opportunity to educate mothers in proper childcare practices. From the mothers’ points of view, it allowed them to maintain oversight of their children’s healthcare throughout institutionalization. This was particularly important given parents’ fears of hospitals, which resulted from their inability to control what was done to their children during institutionalization.

428 Connolly, Saving Sickly Children.
429 For more on the ways in which the CSH used mothers’ cottages to instill middle-class domesticity, see Chapter three.
430 Susan Lederer, “Orphans As Guinea Pigs: American Children and Medical Experimenters, 1890-1930,” in In the Name of the Child: Health and Welfare, 1880-1940, Roger Cooter, ed. (London: Routledge, 1992), 102. Lederer notes that medical experimentation on institutionalized children was a widespread phenomenon during this era. At least one physician remonstrated a fellow doctor for his experimentation on hospitalized children without receiving mothers’ consent, as he believed it would further fuel parents’ fears of institutionalizing children.
Mothers’ abilities to stay with their children fostered seashore hospitals’ popularity among the working class. The institutions were highly embedded in patients’ urban neighborhoods. Mothers engaged in – and institutions allowed – a range of practices that maintained patients’ connections with their city communities, despite hospitals’ physical distances from urban centers. Mothers traveled with friends and relatives and brought other families’ children with them to the hospital. Many also recommended the hospital to their neighbors. These practices provided mothers with camaraderie and assistance with childcare, while at the same time integrating pediatric seashore hospitals into working class caregiving networks. Maintaining their caregiving responsibilities also meant that mothers transferred their domestic duties to the shore, which was similar to middle-class mothers who vacationed in cottage communities. Although mothers who came to the CSH had to clean their cottages and care for the children, they also received assistance with their daily responsibilities, including meal preparation. Perhaps most importantly, going to the hospitals meant mothers could provide their families with a healthier environment and a respite from their daily urban lives, thereby blending health and leisure.

Working class families’ practices and behaviors around seashore hospitals demonstrates that working-class urban families were critical contributors to creating the “healthscape” of the seashore. As outlined in the introduction, a healthscape is an amalgam of the knowledge about healthful or harmful environmental characteristics and the health-seeking behaviors that shaped a vision of a particular geographic region or

431 For more on these connections between middle-class tourism and the CSH cottages, see Chapter three.
landscape. Just as wealthy vacationers transformed the White Mountains into a health destination for hay fever relief in the 19th century, working class families’ participation in marine medication helped shape the northeastern seaboard as a restorative environment for children in the late 19th and early 20th centuries.

Working-class families contributed to this vision within their urban communities and the seashore towns in which the institutions were located. Pediatric marine hospitals were an integral part of social life for the towns in which they resided. In Atlantic City, community members held popular fundraising events, and celebrities, athletes, and prominent politicians visited the institutions. So too did tourists. People visited the hospital during their vacations to witness patients participating in marine medication. What they saw were common vacation activities like children swimming and sunbathing, as well as mothers caring for children and cleaning their cottages. The fact that patients engaged in familiar activities within the bounds of a hospital tied vacationers’ leisure activities to therapeutic practices. Working-class mothers’ uses of pediatric seashore hospitals illuminate their roles in shaping and maintaining a therapeutic vision of the

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433 Adele Clarke also employs the term “healthscape” in her chapter, “From the Rise of Medicine to Biomedicalization: U.S. Healthscapes and Iconography, circe 1890-Present,” in Biomedicalization: Technoscience, Health, and Illness in the U.S. (Durham, NC: Duke University Press, 2010). My use differs from Clarke’s in its definition in terms of health-seeking behaviors, medical knowledge production, and geographic specificity. For more on this, see footnote 22 in the introduction.

434 The CSH welcomed everyone from Herbert Hoover, President of the United States, to famed boxer Jack Dempsey, and even hosted the circus. Carol Romano, Children’s Seashore House: The house built on caring and healing. A 125th Anniversary Commemorative (np), 6, 8-9.

435 On the connections between the cottages and middle-class practices, see Chapter three.
seashore that inextricably tied leisure and health throughout the opening decades of the 20th century for both the working and middle-classes.

Creating a Healthscape

Helen Stainthorpe’s decision to go to the CSH illustrates several important features of mothers’ uses of seashore hospitals. First, it indicates that mothers actively sought admission and willingly brought – and left – their children for medical care. Mrs. Stainthorpe believed that a hospital at the seashore could provide her daughter with something that urban institutions could not: the ability to heal and recover in and through the marine environment. It also illuminates Helen’s appreciation for the care she and her family received at the CSH. The fact that she took the time to write a letter to the editor of the Philadelphia Inquirer indicates the depth of her gratitude.436 In the paragraph preceding the letter, the editors noted Mrs. Stainthorpe’s note was “an unusual one as being an outspoken expression of gratitude from one who has received favors and has no others to ask for.”437

Yet many mothers concurred with Mrs. Stainthorpe and recommended the institution to their friends and family. In July of 1919, Mrs. Stockman stayed at the CSH for nine days with her four healthy children who ranged in age from 11 months to 12

436 It is also possible that she may have been trying to further ingratiate herself with the medical staff and/or procure a return stay at the hospital.
years.\textsuperscript{438} Returning to her home on Tree Street in Philadelphia, Mrs. Stockman recommended the hospital to her neighbors; three weeks later, Mrs. Steer, who lived on the same block, went to the CSH for six days with her three children, ages one, four, and six.\textsuperscript{439} The following year, the Steer and Stockman families went to the hospital together and were joined by the Browns, the Stockmans’ next-door neighbors.\textsuperscript{440} The Stockman family was not unique; many mothers recommended and some returned to the institution. Women like Mrs. Stockman and Mrs. Steer used the CSH as a way to escape the confines of their urban homes and provide their healthy children with a vacation at the shore.

Previously the sea had been a space of migration, employment, and danger. During the 19\textsuperscript{th} century in the United States there was a gradual shift to seeing its shore as a place of recreation and health. This transition began when the upper classes sought the cooler climates at the seashore to escape the sweltering heat and concomitant diseases found in cities and on southern plantations. Their practices trickled down to the working classes by the late 19\textsuperscript{th} century.

When children returned from seashore hospitals having gained weight, strength, and ruddy-cheeks, they provided visual evidence of the benefits of the marine environment. In 1909, \textit{Outing Magazine} published an article, “The Least of These: What

\textsuperscript{438} [Stockman, 7/28/1919], [Patient Register – Cottages 1920-1924], MSS 6/0013-02, Children's Seashore House.
\textsuperscript{439} [Steer, 8/22/1919], [Patient Register – Cottages 1920-1924], MSS 6/0013-02, Children's Seashore House.
\textsuperscript{440} [Stockman, Steer, and Brown; 7/26/1920], [Patient Register – Cottages 1920-1924], MSS 6/0013-02, Children's Seashore House.
the Fresh Air Movement Means to the Children of the Slums." The author, Lewis Edwin Theiss, detailed the work of New York City-based institutions including Sea Breeze Hospital in Coney Island, the St. John’s Guild Floating Hospital (a hospital ship), and its affiliated Seaside Hospital at New Dorp on Staten Island. Theiss recounted that the policeman who supervised the pier where the New York City Floating Hospital docked noted that patients’ health changed so dramatically that, “When that gang comes home to-night, you won’t know them.” Theiss supported the officer’s account. Writing about the hospital ship, he claimed, “Night after night it comes back to its dock with its human freight made over. The tonic effect of sea air on babies is like that of water on thirsty flowers. The poor little tots sail away like wilted blossoms. They come back straightened out so that you would think they were wired.”

The straightened out gangs of tots who returned to their urban homes and neighborhoods provided physical proof of the positive effects of marine medication. In a single summer, over 44,000 mothers and children received treatment on the New York Floating Hospital, and another 2,261 went to the Seaside Hospital at New Dorp. Similarly large numbers of children and mothers received treatment at Philadelphia-based organizations including the CSH and the Philadelphia Sanitarium Association (PSA), an institution that provided daily trips to an open park downriver from the city.

Approximately 1800 children and mothers attended the PSA every day during the

442 Ibid., 545.
443 Ibid.
444 For more on the Philadelphia Sanitarium Association, see: Condran and Murphy, “Defining and Managing Infant Mortality,” 491-94.
summer in the late 19th century. By the early 20th century, the CSH had treated more than 20,000 children since its first summer, and admitted over 3000 patients each year. If the hospital reports and Theiss’ account are to be believed, the patients who returned to their urban homes provided extensive visual evidence of the positive effects of a stay at a marine hospital.

Working-class families’ uses of seashore hospitals also helped establish the healthscape of the seashore for middle-class vacationers. Written accounts like Mrs. Stainthorpe’s letter to the editor, hospital annual reports sent to donors, and newspaper and academic articles promulgated the idea that the seashore was a space of health and healing. As long as patients sought admission to seashore hospitals, physicians continued to practice marine medication and advocate for its benefits. Indeed, patients’ demands for admission to the CSH often outstripped the hospital’s capacity. In 1901, the board of managers reported that they had to turn away more than 300 patients due to lack of space. The popularity of seashore hospitals enabled medical professionals to promote the seashore’s health benefits to middle-class patrons through publishing statistics and reports, as well as giving tours of their institutions.

Tours of the Children’s Seashore House were a popular attraction for Atlantic City vacationers, and hundreds, if not thousands, of people visited every summer. The

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445 Condran and Murphy, “Defining and Managing Infant Mortality,” 492.
446 For 20,000 patients: CSH Annual Report for 1902, front cover. It is unclear if this number includes patients who came for multiple summers. For the statistic on the number of patients treated per summer, see: CSH Annual Report for 1904, 5. Three thousand represented an increase of more than 1000 over previous year’s admissions. This was the result of new, larger hospital buildings. Previously the institution accommodated just under 2000 patients each summer. See: CSH Annual Report for 1901, 3.
447 CSH Annual Report for 1901, 3.
mothers’ cottages were a particular draw in the 19th century. In 1875, Bennett claimed that visitors made “many spontaneous and cordial expressions of approval” after seeing them in operation.\footnote{448} The experience of witnessing poor mothers care for their sick babies captured tourists’ interests and purse strings. In 1887, Bennett claimed that the presence of mothers caring for their ill babies continued to garner “the largest share of interest and commendation,” from visitors and the press alike.\footnote{449} Welcoming tourists and the press integrated the institutions into their local seaside communities. Rather than isolating patients from Atlantic City’s middle-class visitors, the institution was woven into the fabric of the town’s social life. Tourists continued to visit the institution in the 20th century. After moving to their new buildings in 1902, the physician in charge reported that, “Hundreds visited the new buildings and showed a warm appreciation of our work.”\footnote{450}

From the institutional perspective, tourists were potential donors. This was important because the CSH, like many other seashore hospitals, was a charitable institution that depended on donations for its operation. William Bennett, the physician in charge of the CSH, appealed to tourists to visit his hospital, believing that they would be inspired to give money after witnessing the benefits the patients derived from marine medication. Tourists met his expectation. They left donations and organized fund-raising events that became a newsworthy part of Atlantic City’s social landscape.\footnote{451} In 1902, Bennett noted that the hospital’s executive committee hosted a successful series of teas,
attended by vacationers staying in Atlantic City’s hotels. In the same year the Mask and Wig, an all-male theater group from the University of Pennsylvania, donated 1700 dollars from “an entertainment.”  

The centrality of the CSH in Atlantic City’s social scene helped to embed its therapeutic practices into middle-class culture. Tourists’ practices of visiting seashore hospitals integrated the institutions into their seaside communities. For tourists, a visit to a seashore hospital was part of a larger cultural interest in health exhibits as a form of self-education. Touring the hospital aligned with a widespread interest in viewing bodies, and children in particular. During the late 19th and early 20th centuries, a variety of exhibitions emerged that captured the public’s interest such as baby shows and Fitter Family contests. Atlantic City offered several such spectacles, including a baby-incubator display and the first Miss America pageant. Tourists valued the visual

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452 CSH Annual Report for 1902, 12.
453 Janet Miron, “‘In View of the Knowledge to be Acquired’: Public Visits to New York’s Asylums in Nineteenth Century,” in Permeable Walls: Historical Perspectives on Hospital and Asylum Visiting, eds. Graham Mooney and Jonathan Reinarz (New York: Rodopi, 2009), 243-66.
experience through which they “sought to uncover and understand the world around them.” In the case of visits to seashore hospitals, tourists were reminded of the therapeutic dimensions of their leisure activities like swimming and sea-bathing.

Vacationers’ visits to the CSH had more in common with attending a baby show than a freak show. An article published by the *Philadelphia Inquirer* on July 3, 1880, underscored the benefits of a visit in order to drum up support for the institution’s fundraiser. The author wrote that there was “no better way of celebrating the Fourth than a trip to the city by the sea, with a generous contribution to be left in passing at this admirable institution.” The article noted that visitors would be:

> [e]nlightened as to its character…by the very pretty spectacle, which, during most hours of the day, the small inmates present as they disport themselves on the sand or in the sea. For the latter healthful pastime the children are divided into three classes. The first two bathing thrice a week, the third going in daily for a tumble in the surf. The bathing is always done under the vigilant supervision of faithful nurses.

While at the CSH, tourists would have seen familiar sights including children swimming and playing on the beach, and women watching their children, cleaning their cottages, and interacting with fellow mothers. Witnessing families engage in popular vacation activities within the confines of a hospital reminded visitors that such activities were rooted in long-standing medical practices. The presence of the “faithful nurses”

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456 Miron, “In View of the Knowledge,” 251.
457 On the role of baby shows in American cultural history, see: Pearson, “Infantile Specimen.”
459 Dona Brown discusses the public nature of middle-class women vacationers’ domestic practices, particularly within the cottage communities on Martha’s Vineyard. See Brown, *Inventing New England*, 88-90.
substantiated the idea that more than just a “pretty spectacle,” visitors were witnessing therapeutic regimens that required medical supervision.

Touring the hospital embedded seashore hospitals and their therapeutic practices into middle-class vacationers’ consciousnesses. The practice also contributed to building the healthscape of the seashore. Viewing marine medication helped define the seashore in terms of its health benefits, even as sea-bathing and sunbathing began to lose their popular association with therapeutic practice. Mothers who went to seashore hospitals with their children helped promulgate these ideas for tourists as well as their friends and families back in Philadelphia. The ways in which mothers used pediatric seashore hospitals illuminate how women helped shape and spread a therapeutic vision of the seashore within their Philadelphia neighborhoods by recreating urban networks within the hospitals’ walls.

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460 As scholars have noted, by the 1920s sunbathing was a popular beach activity, and a tan became a marker of middle-class stature. This was a significant change from earlier periods when a tan identified one as a laborer. As the United States industrialized, working-class occupations increasingly moved indoors and into factories, while the middle class had the time and income to be able to spend leisure time on vacation and outdoors. For more on this transition, see: Sally Romano, “The Dark Side of the Sun: Skin Cancer, Sunscreen, and Risk in 20th-Century America,” (Ph.D. diss, Yale University, 2006); Tanio Woloshyn, “La Côte d'Azur: The Terre Privilégié of Invalids and Artists, c. 1860—1900,” French Cultural Studies (2009): 383-402; Daniel Freund, American Sunshine: Diseases of Darkness and the Quest for Natural Light (Chicago: University of Chicago Press, 2012).
Seashore Hospitals: Homes Away from Home?

Despite the fact that seashore hospitals primarily served poor, tubercular children, the institutions admitted mothers with their children and as a result were highly integrated into urban working-class communities. Mothers facilitated this integration by maintaining critical caregiving relationships with their families and friends. They played a central role in the care and welfare of their children while at seashore hospitals and were active participants in institutional life. Mothers sought admission, stayed with their children, and traveled with friends and family to the institution.

In this aspect seashore hospitals stand in stark contrast to the majority of pediatric healthcare institutions during this era. Conventional narratives tell us that when the CSH opened in 1872, hospitals were squalid institutions, overrun with vermin, and populated by only the most destitute and desperate members of society. No one wanted to be hospitalized. Institutionalization meant being separated from family and friends, sometimes for months or even years. This was particularly true for children and tuberculosis patients. Historians have detailed how institutions catering to those groups sought to isolate them from their communities. In the case of tuberculosis, officials justified the practice in terms of protecting other families and the community from infection. The reason for limiting parents from visiting their children was more social

than medical. As historian Michael Katz has outlined in his book *In the Shadow of the Poorhouse*, the majority of child-welfare institutions during the 1870s and 1880s operated with the assumption that removing children from their families provided them with the best opportunities for recovery and reform, since the home environments were the roots of children’s problems.\(^{464}\) Since middle-class reformers believed that mothers were responsible for creating and maintaining a healthy home, it is unsurprising that the majority of pediatric hospitals would have limited or prohibited parents from visiting their children.

The emergence of a new “child-saving” ideology in the 1890s shifted reformers’ focus from institutionalization to keeping families together by providing them with monetary assistance.\(^{465}\) Although there was a general trend toward deinstitutionalization during the early 20\(^{\text{th}}\) century, pediatric institutionalization expanded faster than the population’s rate of growth.\(^{466}\) Most pediatric hospitals maintained policies that prevented parents from visiting their children. As historian Howard Markel has noted, the Boston Children’s Hospital restricted parents’ visiting hours to as little as two one-hour visitation periods per week through the first half of the 20\(^{\text{th}}\) century.\(^{467}\) Administrators and physicians justified such policies by arguing that it allowed them to instill middle


\(^{465}\) On this shift, see: Katz, *In the Shadow of the Poorhouse*. On child-saving ideology, see: Meckel, *Save the Babies*.


class values and practices in patients. They achieved this in a variety of ways, including the home-like structure of hospitals and through children’s interactions with hospital staff and visitors.\textsuperscript{468} Visitors in this capacity were well-to-do women who spent time on the hospital wards with the patients, modeling middle-class decorum.\textsuperscript{469} Administrators hoped that encouraging interactions with visitors and staff, and limiting contact with parents, would reform children in body, mind, and health.

The CSH cottages provided an ideal solution that addressed various contemporary movements in children’s healthcare. Given the trend of deinstitutionalization, the cottages provided a way of maintaining a middle-class family structure: mothers cared for children while fathers (ostensibly) worked to provide monetary assistance for their families.\textsuperscript{470} As outlined in chapter three, the cottages also provided healthcare workers the ability to educate mothers in middle-class childcare and housekeeping practices. The hope was that providing working-class women with knowledge about how to improve their home environments would result in better health for all of the families’ members.\textsuperscript{471}

\textsuperscript{468} Sloane discusses the use of home-like structures for pediatric hospitals in his chapter, “A (Better) Home Away from Home.”
\textsuperscript{469} On visitors, see: Graham Mooney and Jonathan Reinarz, eds. Permeable Walls: Historical Perspectives on Hospital and Asylum Visiting (New York: Rodopi Press, 2009); and Janet Miron, Prisons, Asylums, and the Public: Institutional Visiting in the Nineteenth Century (Toronto: University of Toronto Press, 2011).
\textsuperscript{471} Richard Meckel makes the argument that there was a general shift away from environmental reform to maternal education between the late 19\textsuperscript{th} and early 20\textsuperscript{th} centuries. While this is generally accurate, I would suggest that the ultimate goal remained the same – to produce a healthier environment – but the scale shifted from the city to the home. Meckel, Save the Babies, especially chapter four.
Allowing mothers to travel together helped the medical staff spread their messages throughout working-class urban communities. In July of 1919, four families came to the CSH together, having all been referred by the Starr Centre Association, a social organization located in South Philadelphia. Rose Frugoli, Sabatina Frugoli, Mary Realli, and Josephine Risselli all brought children who were three years old and younger, except for Josephine, whose eldest was five years old. The families all stayed for one week. These neighbors were close: Rose and Sabatina Frugoli may have been sisters-in-law, making their children cousins as well as neighbors. The following year, Rose and Sabatina came to the CSH together, once again bringing their children and staying for a week. The practice of traveling with friends and families was quite common. Between 1918 and 1923, over 120 separate families came to the seashore hospital with other families from their neighborhoods.

Going to the hospital with relatives and friends provided mothers with familiarity and camaraderie, as well as assistance in caring for their children. Mothers also brought older, non-related girls with them to the Children’s Seashore House to help care for younger children. Between 1918 and 1921, more than 60 girls, generally ranging in age from 10 to 14, came to the hospital with a family other than their own. Although they were often listed as coming from the same address, the older girls had different surnames.

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472 The Frugole families are listed in 1919 as “Frugole” and 1920 as “Frugoli.” Given their first names and the names and ages of their children, it is clear that the families are the same. See: [Frugole, July 24, 1919] [Patient Register – Cottages 1920-1924], MSS 6/0013-02, Children's Seashore House. [Frugoli, July 8, 1920], [Patient Register – Cottages 1920-1924], MSS 6/0013-02, Children's Seashore House.

473 This number is probably a gross underestimate. There are a number of families who came to the hospital having been referred through the same Philadelphia-based organization or institution. This number reflects my survey of the addresses from which families were admitted.

474 Nurses also provided oversight of children that were playing on the beach, or mothers placed them in the day nursery that was established in the 20th century.
than the mothers and the other children, suggesting they were not related to the families. Not only did mothers derive assistance from this practice, but it was another way for them to maintain their caregiving networks.

Seashore hospitals were particularly open to mothers’ practice of bringing older girls as caregivers. Admitting adolescent girls as caretakers for younger children was not unique to the CSH. Other seashore institutions, like the Philadelphia Sanitarium Association, allowed older sisters to attend the riverside park with younger siblings. Older sisters or neighborhood girls – or “little mothers” as they were sometimes called – would have helped care for the younger children with whom they came.

Adolescent girls were also the objects of institutional educational efforts. As historian Rima Apple has shown for New York City public health campaigns, health professionals saw educating adolescent girls as practical and forward-looking. In many working-class families, older sisters were often responsible for taking care of younger siblings while their parents worked. Showing girls how to properly care for younger children presented doctors, nurses, and reformers with opportunities to prepare young women for their future roles as mothers. This practice was in keeping with the Philadelphia’s Little Mothers’ League, which taught girls ages eight to 14 how to properly care for babies, including lessons on hygiene of the home, how to bathe, change, and dress the baby, and the importance of sunlight and fresh air to babies’ health. The author noted that its most important work was “the intelligent preparation that it gives the

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475 There is limited scholarship on “little mothers.” See footnote 139.
child for the care of her own baby when she becomes a real mother.”⁴⁷⁶ Given their ages, these girls were the ideal population to target for education. They were young enough to still be malleable, but old enough to understand and apply the lessons they were taught.⁴⁷⁷

Mothers’ practices of bringing a “little mother” and traveling with friends shows that women recognized the work that was incumbent to relocating her family to the seashore. While a stay at the CSH offered mothers some relief from their domestic duties, such as cooking, they were also held to rigid standards of cleanliness. Mothers were expected to keep their cottages orderly and the floors clean, which would have been no small task given children’s sandy feet after spending the day on the beach. Pediatric marine hospitals’ leisure benefits more directly applied to children. Mothers brought their healthy children to the hospital, because it afforded them what the city could not: a place to play in the fresh air and sunshine.

In addition to bringing their own children and “little mothers,” women also brought young children from other families to the CSH’s cottages.⁴⁷⁸ This practice served a variety of functions. While the vast majority of children were well at admission, in some cases mothers brought a child who needed medical care. In June of 1919, Anna Quinn brought her five children Margaret (15), Helen (12), Francis (10), Dorothy (9), and

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⁴⁷⁸ Although it is possible that some mothers were the primary caregivers for children with different last names, the extent of the practice suggests that many mothers were bringing friends’ and neighbors’ children as well.
Joseph (7), as well as nine-month-old Owen Gallagher to the CSH. All of the Quinn children were admitted and discharged as “well.” Owen, however, was teething. Although teething is part of normal development, at the time it represented a precarious time in an infant’s life. In the late 19th and early 20th centuries, teething was associated with high rates of mortality and thought to be an underlying cause of summer diarrhea.479 Bringing Owen allowed Anna Quinn to gain admission for her family; it also helped Anna to maintain ties with her urban caregiving networks.480

Women also maintained their connections to friends and neighbors by bringing healthy children from other families. Many mothers brought children who were of similar ages as their own kids, suggesting that they came as playmates.481 Not only would this have been enjoyable for the children, it was also a way for women to help one another with childcare. This practice alleviated some responsibilities for the mother who remained in in the city. Assisting fellow working-class mothers included bringing children who were neither old enough to help supervise younger children, nor similar in age so that they would be playmates.482

Between 1918 and 1923, over 100 families attended the hospital together, dozens of mothers brought older girls as helpers, and many more came with another family’s

479 Although not a primary point of their article, Gretchen Condran and Jennifer Murphy’s study of infant mortality in Philadelphia points to this view. Condran and Murphy, “Defining and Managing Infant Mortality,” 484; 487-88.
480 Anna may also have been helping a family friend by providing Owen with access to marine medication, thereby further maintaining connections with her network of friends and family in Philadelphia.
481 See, for instance: [Harty, 8/25/1919], [Patient Register – Cottages 1920-1924], MSS 6/0013-02, Children’s Seashore House. David Brady and Warren Harty were both eight years old and admitted as “well.”
482 For instance, in July of 1919 Catharane McKenney brought her one year old to the CSH, as well as a six-year-old boy of a different last name.
young children. These practices were not mutually exclusive. In August of 1919, the Carlin and Donahues families traveled from the same block of South Bailey Street in Philadelphia. Mrs. Carlin brought her three children, Amy (10), Francis (8), and Mary (3), while Mrs. Donahue brought her two and a half year old son William, and Mary Stroup, an eleven-year-old girl who is listed as coming from the same address. Given their ages, three-year-old Mary and William may have been playmates; and while Mary Stroup came with Mrs. Donahue to help care for William, she was also a companion to Amy who was just a year her junior.

While going to the seashore hospitals represented a dislocation from a much larger community network, traveling with friends and family meant mothers were able to maintain important ties to their urban communities. It is clear that medical professionals at marine hospitals did not deem it necessary to separate children from their mothers, or women from their urban communities. Recreating urban caregiving networks provided mothers with multiple benefits, including camaraderie and help with childcare. It also helped establish the healthscape of the seashore within urban working-class neighborhoods. This isn’t to say all women approved of or appreciated their time at the CSH. For some mothers the experience was marked by tension as they negotiated the terms of their experiences and their children’s healthcare.

483 This is in contrast to the trend associated with pediatric urban hospitals, as documented by historians. See footnote 137.
Conflict and Control in the Cottages

As early as 1875, William Bennett noted his staff’s frustration with some of the women admitted to the cottages. They bemoaned mothers’ “unwillingness” “to submit to the few simple rules absolutely necessary to the good order of an Institution.” They found others “intolerable” due to their “ineradicable untidiness.” Bennett was optimistic, however, that these issues could be overcome by greater scrutiny of the mothers before admission and by introducing a Cottage Nurse who was responsible for the oversight of mothers and their children. The next year Bennett happily reported that:

The cottages and their inmates were kept clean and neat, to a degree which elicited the praise of hundreds of visitors. The few simple rules found necessary, were cheerfully complied with. The children for the most part greatly improved, and the mothers left with many expressions of gratitude for the kindness and benefits received during their stay.

The success was short-lived. In 1880, Bennett acknowledged that the vast majority were “most excellent women,” but lamented that some continued to vex the staff. In 1887, Bennett noted that mothers “whose moral sense is so low as to unfit her for association with those whom we specially desire to help,” not only infringed on the comfort of the “worthy” and “most excellent” mothers, but “marred” the name of the institution. As a result, Bennett advocated for a more stringent selection process for mothers, requesting

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484 CSH Annual Report for 1875, 9.
485 For more on the role and professionalization of nurses, see: Patricia D’Antonio, American Nursing: a History of Knowledge, Authority, and the Meaning of Work (Baltimore: Johns Hopkins University Press, 2010)
486 CSH Annual Report for 1876, 9.
487 CSH Annual Report for 1880, 11.
testimony of their characters before admission. This, he hoped, would result in only the “most deserving women” being admitted.488

Conflict, however, remained. Mothers responded in a variety of ways to what they perceived as adverse conditions, and nurses annotated admissions records with their frustrations with mothers’ behaviors.489 The Cottage Nurses were particularly vexed by “undesirable,” “dirty,” “annoying,” and “prosperous looking,” mothers. They also lamented women who “did not stay” their allotted time. These notes not only reveal the institution’s behavioral agenda, but also how mothers navigated their institutional experiences and drew support from fellow patients.490

A mother’s – and her children’s – behavior was a critical marker of worthiness.

Some mothers’ disciplinary practices drew the nurses’ ire.491 In 1923, the nurse noted that Rose A. not only “did not observe rules,” but was “rough with children.”492 Children

488 CSH Annual Report, 1887, 7.
489 It is unclear from the logbooks who is making the notations, but it is not a physician because the writer(s) discuss the physicians in the third-person. Given the fact that the CSH had a specially designated nurse who oversaw the cottages, I have inferred that person is the author.
490 As scholars including Roy Porter and Deborah Lupton have claimed, examining the patients’ perspectives also helps provide a more well-rounded perspective of the medical encounter, which has historically leaned more heavily on the side of the practitioners than the patients. Roy Porter, “The Patient’s View: Doing Medical History from Below,” Theory and Society 14 (March 1985): 175-98; Deborah Lupton, “Foucault and the Medicalisation Critique” in Foucault: Health and Medicine, Alan Petersen and Robin Bunton, eds. (London: Routledge, 1997), 94-110.
492 [Rose Andrassey, June 30, 1923], [Patient Register – Cottages 1920-1924], MSS 6/0013-02, Children's Seashore House. Indictments of mothers for being too harsh are noteworthy, given that few protections existed for children regarding either abuse or parental discipline. As historian Michael Katz has written, it was only in the 1870s with the establishment of the Society for the Protection of Cruelty Against Children in New York City that the government provided some protections for children from abuse. Even after the formation of various child welfare and protection agencies, however, parents maintained great latitude in their abilities to wield physical punishment. For more on the SPCC, see: Sherri Broder, Tramps, Unfit Mothers, and Neglected Children: Negotiating the Family in Nineteenth-Century Philadelphia
were also problematic. In June of 1926, the Cottage Nurse wrote that while Mrs. M. was “desirable and worthy,” her eleven-year-old son was “disobedient” and a “bad influence on the other children.” Nurses particularly objected to children’s disrespectful behaviors toward other patients, taking note of a group of siblings who were “prejudiced against colored folks.” Nurses likely saw these behaviors as troublesome, because they did not align with the institution’s mission to care for “desirable” and “worthy” families regardless of race and ethnicity.

Unsurprisingly, the CSH nurse admonished mothers who were “untidy,” characterizing one mother as “Undesirable – Very dirty.” Nurses also condemned mothers who improperly cared for the cottages and their property. In August of 1922, the nurse wrote up Anna D., a mother who was admitted with her two “well” children. Anna annoyed the nurses because she “used bed pillows in baby coach.” Two years later, a nurse similarly denounced Mrs. De Marina for her vulgar language and leaving a “soaked mattress.” As previously noted, mothers were responsible for maintaining their cottages during their stay, which included washing the floors and keeping the rooms


493 [Michalaec, June 29, 1926], [Patient Register – Cottages June 1925-July 1930], MSS 6/0013-02, Children's Seashore House.
494 [Speiser, June 15, 1926], [Patient Register – Cottages, June 1925-July 1930], MSS 6/0013-02, Children's Seashore House.
495 [August 1, 1922], [Patient Register – Cottages, 1920-1924], MSS 6/0013-02, Children's Seashore House.
496 It is noteworthy that by the 1920s, the majority of children admitted were listed as being “well” upon admission, which marked a distinct change from the earlier period in which mothers were admitted due to their babies’ potentially fatal conditions. See chapter four for more on this trend.
497 [August 7, 1923], [Patient Register – Cottages, 1920-1924], MSS 6/0013-02, Children's Seashore House.
498 [August 22, 1925], [Patient Register – Cottages June 1925-July 1930], MSS 6/0013-02, Children's Seashore House.
Some mothers were either unable or unwilling to adhere to these expectations.

As detailed in chapter three, the staff at the CSH sought to provide care for women they deemed deserving of their medical care. This mapped onto the medical staff’s perception of whether a mother was willing to conform to the institution’s rules. From the medical staff’s point of view, tidiness indicated a mother’s desirability for institutionalization. Disregarding institutional rules intimated that such mothers were unlikely to institute proper house-cleaning practices once back in their urban homes. It is possible that some mothers were unable to meet the strict standards of the CSH given their need to oversee the care of their children, or that mothers’ standards of cleanliness differed from the Cottage Nurse’s expectations. It is equally plausible that some mothers deliberately disregarded the hospital’s standards as a way of rebuffing “constant” medical oversight, or because they sought a break from their daily responsibilities.

For instance, some mothers disregarded the institution’s rules regarding childcare. In 1924, Mrs. Edwards and her five children stayed at the hospital for twelve days. While four of the children were admitted as being “well,” Margaret, the second eldest, suffered from tuberculosis of the hip. During their stay, the nurse wrote that the mother was “undesirable” because she “always insists on leaving children in Wards,” instead of

500 For more on reform work for the worthy poor, see: Katz, In the Shadow of the Poorhouse.
501 In 1887, William Bennett noted that the CSH was unique among other Philadelphia institutions because of its “provision for a prolonged stay of a sick infant and its mother in a salubrious place under the constant oversight of a physician and nurse.” CSH Annual Report for 1887, 7.
watching the children herself.\textsuperscript{502} Still others ignored rules relating to therapeutic interventions. In 1925, the nurse admonished one mother because she “violated bathing rules,”\textsuperscript{503} and another for taking “visitors to Bath House on Sunday after being told not to.”\textsuperscript{504}

Mothers’ actions demonstrate how they sought seashore hospitals as places of both leisure and health. As with mothers in the city, some women at the CSH resented what they perceived as intrusion into personal decisions about childcare. Yet being at a hospital, they had limited ownership over their accommodations. Mothers’ disregard of rules regarding the cottages’ cleanliness derived from a view that a stay at the seashore ought to bring benefits of a vacation with fewer domestic responsibilities. As we saw in chapter three, this hope stood in stark contrast to the CSH’s intentions of instilling working-class mothers with middle-class domesticity.

Mothers believed that going to the CSH would allow them to access leisure activities enjoyed by middle-class patrons in Atlantic City, including hosting visitors. Rather than isolating patients from their communities, seashore hospitals allowed patients to entertain visitors while at the hospital. Having access to a network of friends and family within the hospital provided women with a peer-based support system that empowered mothers in their decision-making, including ignoring the hospital’s rules.

\textsuperscript{502} [Edwards, July 1, 1924], [Patient Register – Cottages 1920-1924], MSS 6/0013-02, Children’s Seashore House.
\textsuperscript{503} [Tronco, July 23, 1925], [Patient Register – Cottages June 1925- July 1930], MSS 6/0013-02, Children’s Seashore House.
\textsuperscript{504} [Ianelli, June 30, 1925], [Patient Register – Cottages June 1925- July 1930], MSS 6/0013-02, Children’s Seashore House.
This is evident by the actions of a group of women who were at the CSH together in June of 1925. Years earlier, William Bennett recommended that the hospital build a day care “to relieve each mother of the care of her children a short time each day that she may get a little needed rest and receive at our hands some instruction in the care of her children and her home.”  

Not all mothers welcomed the opportunity. In June of 1925, four families left after refusing to place their babies in the nursery. The nurse noted that one mother “Stayed 2 days. Would not take child to nursery.” The other three mothers similarly “refused” to place their children, and left the hospital before their allotted time had elapsed. These patients’ refusals and early departures give insight into how mothers controlled their hospitalization experience. When faced with a policy they disagreed with, mothers did not acquiesce. Nor did the nurses or physicians. Both mothers and medical professionals stood their grounds, and the mothers left the hospital with their children.

This episode exposes how mothers derived support from one another. It also suggests mothers’ distrust of medical authority. Separation from one’s child likely provoked anxiety for mothers. Poor families shared concerns about the potential for medical experimentation during hospitalization, as well as the possibility for a child to be removed from their family. These concerns are reflected in stories relayed in the CSH

505 CSH Annual Report for 1909, 12.
506 [June 18, 1925], [Patient Register – Cottages June 1925- July 1930], MSS 6/0013-02, Children's Seashore House.
507 Sheila Rothman, Living in the Shadow of Death, especially Part IV "Becoming a Patient, 1882-1940."
508 On the use of children in experimentation, see: Susan E. Lederer, “Orphans As Guinea Pigs,” in Roger Cooter, ed., In the Name of the Child: Health and Welfare, 1880-1940 (New York, 1992), 102. Lederer notes that at least one physician in the early 20th century protested experimentation on children, because it would further exacerbate an already deep-rooted fear of hospitalization among the working class. The fear
annual reports. In 1910, William Bennett reported on the “blessed work” of the hospital during its first winter season. He wrote about a child who was admitted to the main hospital:

One poor mother who came for her children refused to believe that it was her own, so great was the change for the better, until she had examined critically for a scar with which she was familiar, and then joyfully clasped it in her arms. She was not the only mother who experienced a momentary doubt at the first site of a child blooming with health with whom she had parted a month or two before, fearing the parting was forever.\(^5\)

Bennett likely intended this story to promote the institution’s health benefits, which it perhaps accomplished for his audience of donors and middle-class Philadelphians. However it also illuminates mothers’ fears of medical authorities and institutionalization.

While Bennett attributed this woman’s fear to losing her child to illness, the fact that a mother searched her child for a scar suggests she also worried that the CSH may have misrepresented another child as her own. She was not alone. One mother refused to bring her son home upon his return to the city, not believing that the child was really her own. Another mother grew increasingly upset during a visit to the hospital when she was unable to locate her son in his Ward. She turned to a nurse “with evident grief and…asked ‘but where is my child? He is not here,’” and found him only after he called

\(^{5}\) Bennett of physician indiscretion is also highlighted by a story Cynthia Connolly recounts in her book, Saving Sickly Children. In NYC, anxious parents stormed a school believing that physicians were slitting children’s throats; in reality the doctors were performing tonsillectomies. Connolly, Saving Sickly Children, 31. Heather Prescott notes that anti-vivisectionists were “appalled” by the use of orphans (among other institutionalized populations) as clinical material. Heather Munro Prescott, “Using the Student Body: College and University Students As Research Subjects in the United States during the Twentieth Century,” Journal of the History of Medicine and Allied Sciences 57, no. 1 (January 2002): 4.\(^5\)

\(^{5}\) CSH Annual Report for 1910, 10.
out to her.\footnote{CSH Annual Report 1911, 15.}

Far from being paranoid, poor mothers knew there was the potential to lose their children through systems that ostensibly operated to care for them. This fear of losing a child or being unable to control what was done to him or her during hospitalization was substantiated by programs like New York City’s orphan trains that sent children out of state for adoption, and medical research conducted on institutionalized children.\footnote{On orphan trains, see: Linda Gordon, The Great Arizona Orphan Abduction (Cambridge, Harvard University Press, 2001); and Marilyn Holt, The Orphan Trains: Placing Out in America (Lincoln: University of Nebraska Press, 1994).} The mothers’ cottages offered poor families a solution. There they could both access healthcare for their children and maintain oversight during their hospital stay.

Although the logbook marginalia do not directly reflect such sentiments, working-class mothers at times resented and refused to conform to the standards of childcare promoted by social workers, visiting nurses, and other medical professionals.\footnote{See, for instance: Apple, Perfect Motherhood, 47-48.} Regardless of their motivations, the fact that four mothers refused to place their babies in the nursery and left the hospital early demonstrates that they derived confidence and power from their affiliation with other patients in the institution. Although Bennett claimed that one advantage of the cottage system was the ability to separate mothers from one another, the common dining and bathing areas and proximity of the cottages to one another provided ample opportunities for mothers to gather, talk, and form bonds. These four mothers’ decision to refuse nursery care was the result of a shared discomfort with the practice. The support of one another empowered women to dictate the terms of their
babies’ care and their hospitalization experience. While the medical staff did not bend the rules for these mothers, this case illuminates how patients drew lines in their health-seeking practices for their children.

In addition to leaving, mothers also lodged complaints with the staff and managers. The nurse noted that several mothers and some children complained about the food provided by the hospital, resulting in at least one family leaving early from the hospital. Another mother who was admitted with four children requested to be moved from her assigned cottage due to a bug infestation. While it is unclear if the staff acquiesced, the mother enjoyed her experience enough to request an extension. When she learned that her request was denied, the woman threatened to report the cottages’ “filthy conditions” to the managers.

Filing complaints provided mothers with some leverage over their experience, whether they sought specific accommodations or to simply have their voices heard.

Such anecdotes, while not representative of the typical patient experience, hint at dimensions of patient expectations and patient-staff interactions that resist reduction to

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513 The four mothers who refused nursery care were not the only ones who left early from the CSH. The Cottage Nurse did not provide reasons for everyone who left early, merely noting some as “dissatisfied,” and others as leaving without notice or explanation. However a variety of factors motivated mothers’ early departures. In August of 1925, Mrs. Ferri left with her three children after just one day at the hospital because she “Didn’t like food. Objected to doing washing.” Other mothers also left in objection to doing work required by the institutions, such as the mother who left after being told to clean her cottage. See: [Ferri, August 13, 1925], [Patient Register – Cottages June 1925- July 1930], MSS 6/0013-02, Children's Seashore House; [Wykel, August 12, 1924], [Patient Register – Cottages 1920-1924], MSS 6/0013-02, Children's Seashore House.

514 See, for instance, [Waber, July 14, 1925], [Patient Register – Cottages June 1925- July 1930], MSS 6/0013-02, Children's Seashore House. On the family who left early due to food, see: [Ferri, August 13, 1925] [Patient Register – Cottages June 1925- July 1930], MSS 6/0013-02, Children's Seashore House,

515 [Hebron, June 16, 1925], [Patient Register – Cottages June 1925- July 1930], MSS 6/0013-02, Children's Seashore House.
simple categories like acceptance or rejection. Most mothers stayed their allotted time, some requested extensions, and still others returned for multiple summers. Over the course of the five years in study, the Cottage Nurse made just over 250 notes about mothers’ behaviors and “deservingness.” While the vast majority detailed problems she encountered, not all of them were negative. Some recorded particularly deserving mothers, while others noted extenuating circumstances that lead to patients’ early departures, such as an illness in the family. If mothers voted with their feet, the fact that very few left and others came back for multiple summers suggests that most mothers felt their families benefitted from the institution.

A Healthy Vacation: Working-Class Families at Seashore Hospitals

Families’ primary motivations for seeking admission to seashore hospitals changed over time. In August of 1881, The Daily Graphic, a New York City newspaper, ran a drawing entitled “Summer Resorts of the Poor.” Set in an impoverished urban neighborhood, a glum looking father sits beside his wife who is holding an infant while two girls sleep beneath her legs. A young boy is in the background using a large shovel to scoop dirt into a pail, while another child sits with his hand cocked, ready to throw something in the direction of the sleeping girls. The caption reads: “Mother: “Tom, Stop throwing pebbles at your sisters. Let the poor things sleep! Tom (sadly) – “Well, Mother, this is all of the sea shore we can have, we might have a little fun with it.” This scene

516 “Summer Resorts of the Poor,” The Daily Graphic, New York. Thursday, August 11, 1881.
517 Ibid.
offers a glimpse into 19th century working-class families’ perspectives on the seashore. Tom and his brother’s actions imply that they saw the seashore as a place to have fun, play, and dig in the sand.\textsuperscript{518} The scene also indicates that poor urban children understood that there was little chance they would be able to go to the beach. Given their squalid surroundings, it is easy to imagine that Tom and his family would have been eager to get out of the hot, dirty city and go to the shore. Pediatric marine hospitals gave them that opportunity.

The same summer the \textit{Daily Graphic} published the drawing of Tom’s family, William Bennett wrote about patients’ overwhelming demands for admission to the institution. Bennett claimed that the number of applications for the mothers’ cottages outstripped the hospital’s capacity. Although the CSH could accommodate 100 mothers each summer, Bennett wrote of having to repeatedly:

\begin{quote}
…listen to the entreaties of mothers asking to be allowed to stay until their infants were beyond the danger of relapse; and on the other to receive by letter and telegram appeals from parents or friends for the immediate admission of children who had been long waiting for vacancies and whose only hope seemed to be prompt removal from the city.\textsuperscript{519}
\end{quote}

Given these circumstances, in 1881 Bennett appealed to donors for money in order to increase the number of cottages. While he may have sensationalized his report in order to inspire generosity among his readers, Bennett’s statement suggests that mothers in the

\textsuperscript{518} \textit{The Daily Graphic} used drawings to “give real pictures of current events, which by their truthfulness will commend themselves to our readers as far preferable to the most highly-spiced scenes penciled from imagination. Honesty is the best policy in pictures, as in every other class of human work.” “Our Illustrations,” \textit{The Daily Graphic}, New York, Tuesday, March 4, 1873, Vol. 1 No 1, pg. 2.

\textsuperscript{519} \textit{CSH Annual Report for 1881}, 9-10.
city were eager to attend the hospital, and those already at the CSH wanted to stay. Philadelphia based physicians confirmed the institution’s popularity. In 1885, one of the “examining physicians” claimed that he assessed nearly 600 mothers and children every summer to determine their suitability for admission to the CSH. Many women, he wrote, walked to his office with a “sick babe, and frequently one or two little children, a mile or two, through the heat of July and August,” just for the chance of going to the hospital.520

Working-class mothers’ behaviors unveil how poor families viewed seashore hospitals and how their uses of the institutions changed over time. In the span of 50 years, mothers’ primary objectives shifted from accessing healthcare for sick children to providing their families with vacations. In the 1870s and 1880s, mothers brought critically ill children to the hospital for what they hoped was lifesaving medical care. In 1875, all 16 babies admitted to the cottages were sick. The physician reported that 13 had “some form of summer diarrhea,” and “one was suffering form Chronic Bronchitis, one from Debility, one from Marasmus.”521 By the late 1910s, the number of children admitted to the cottages swelled to over 1100 in a single summer, and the vast majority of those children came and left “well.”522 By 1920, mothers’ major motivations were no longer to provide healthcare for sick infants, but to bring their families to the beach.523 Yet the seashore still represented a better, healthier environment than the cities from

520 CSH Annual Report for 1885, 7-8.
521 CSH Annual Report for 1875, 8.
523 “Well” is the terminology used by the hospital staff. The category is obviously, and perhaps intentionally, vague. It does denote that the children were neither sick nor convalescent, categories that were generally noted by the hospital staff. Being "well" did not imply that the children didn’t benefit from their stay. The physician in charge of the CSH noted that the preventive function of a stay at the hospital was among its most useful benefits for patients.
which families came. And as the drawing of Tom and his family suggests, health and leisure were never mutually exclusive. The seashore represented both, even as the primary thrust of families’ motivations shifted from one direction to the other.

As outlined in chapter three, when the CSH first admitted families in 1874, the vast majority of the mothers brought babies who suffered from some form of diarrhea, a known “baby killer” during the summer months. The extent to which mothers believed that seashore hospitals could help their dying babies is underscored by the story of two infants who were admitted to the hospital in 1886. One was the child of a servant who worked for a family in Atlantic City; the medical staff found the other baby being “carried by its unhappy mother, wandering helpless, unhoused and unfed, on the boardwalk in front of the institution.” The physician in charge noted that the staff admitted both babies given their grave conditions and despite not having the necessary referral from an examining physician. Although the staff recognized that the babies were “beyond mortal succor,” they brought the babies into the hospital so “that their last hours might be made more comfortable.” The babies later died at the hospital.

Both mothers sought admission in an attempt to procure medical care for their critically ill infants. They were not alone. The physician in charge of the CSH argued that these two cases indicated “the great usefulness of the House,” and noted “the poor mothers feel that the House was a refuge for them in their distress.” The hospital’s annual reports record other instances of mothers ignoring admissions procedures and

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524 Meckel, Save the Babies.
525 CSH Annual Report for 1886, 7.
526 Ibid.
directly appealing for admission for their dying babies. These stories suggest that there was a pervasive sentiment that the hospital could provide life-saving care for sick infants. Reports from seashore hospitals supported these beliefs. In 1908, the CSH’s Board of Managers reported that of the 177 babies admitted with “diseases which usually make up the summer mortality,” two died at the hospitals and another five or six died after being discharged. The fact that nearly 170 out of 177 infants survived was remarkable when compared to infant mortality rates at the best urban hospitals, which often approached 50 percent.

Although mothers most likely did not read these reports, the fact that more mothers requested admission than could be accommodated suggests that they believed that the hospital could provide their children with the best chances of survival.

Although infant mortality declined over the period in study, mothers continued to use seashore hospitals to access healthcare for their children through the early 20th century. As recounted above, Helen Stainthorpe wrote to the Philadelphia Inquirer after staying in one of the mothers’ cottages in the summer of 1901. A recent immigrant and self-described poor woman and coal-miner’s wife, Mrs. Stainthorpe lived in Wilkes-Barre, PA, an industrial town located 120 miles northwest of Philadelphia. She wrote to the institution to request care for her daughter after reading an article the

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527 See, for instance, CSH Annual Report for 1876, 8.
528 CSH Annual Report for 1908, 11.
529 This is also indicated by the previous example for the 1908 annual report and the statistics on infant mortality.
531 Ibid. According to the 1900 Census, the Stainthorpe family emigrated from England in 1898.
Philadelphia Inquirer published about the CSH. At the time of her letter, Amy was three and a half years old and had been sick for more than two years. Describing her situation, Mrs. Stainthorpe recounted:

She is…not as big as some children at six months. Her legs are tiny and she cannot walk. The doctors say she has rickets. We have done everything we could for her. When I read in your paper about the Children’s Seashore House I wished my little girl could go there, and so I wrote to ask them about it and I got a letter back to tell me to come and bring the three children, and I went by an excursion on the 7th of August.  

Mrs. Stainthorpe brought Amy, and her two other daughters Winifred (five years) and Ida (21 months) to the CSH. The doctors confirmed Amy’s diagnosis of rickets, and noted that Winifred and Ida were both “delicate.” All of the children had “improved” by the end of their 11-day stay in the mothers’ cottages. Amy remained at the CSH for further care, despite her improvement. She was readmitted to the mothers’ cottages when her grandmother came to the hospital for five days in September. When the CSH closed at the end of the summer, Amy went to St. Christopher’s Hospital in Philadelphia, the hospital’s winter “annex.”

Mrs. Stainthorpe believed that she was providing her daughter with her chance of health by leaving her at the CSH. In her letter to the editor, Helen expressed her confidence that Amy would heal and be cared for well. She wrote, “everyone treated me so well,” during her stay at CSH and specifically credited Miss Jeffrey the “lady

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533 In contrast to the more common sequence, William Bennett helped to establish St. Christopher’s Hospital as the winter institution for the patients at the CSH. The CSH was only open during the summer months until 1910 when it became a year round institution.
superintendent” for her kindness. In the concluding remarks in her letter, Mrs. Stainthorpe proclaimed that “If she [Amy] gets well, as I believe she will, I shall bless the day I read of it in your paper.” It is clear that Helen Stainthorpe’s primary motivation was to access healthcare for Amy. Yet the Stainthorpe family also represents a shift from earlier cases. Unlike patients in the 1870s and 1880s, Mrs. Stainthorpe did not bring a baby with summer diarrhea. Rather, Amy suffered from rickets, a nutritional disorder that caused chronic debilitation and even death. Additionally her sisters were both noted as being “delicate,” a non-specific condition that medical workers associated with poverty and urban life. The fact that Mrs. Stainthorpe noted the kindness with which she was treated intimates that she also benefitted from her stay at the hospital. Helen’s desperation to help her daughter was clear, as was her appreciation for the support she received in caring for Amy. Mrs. Stainthorpe’s letter demonstrates her health-seeking for Amy, her appreciation for the care her daughter received, and the peace of mind she gained knowing she was providing her Amy with the best possible chance at survival.

While health remained a motivation for mothers seeking admission to the CSH in the early 20th century, leisure became an increasingly common draw over the next 20 years. The Oates family is emblematic of this transition. In August of 1916, Nellie Oates

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534 “Grateful Woman Praises Children’s Seashore House,” Philadelphia Inquirer, August 25, 1901. Information about the Stainthorpe children can be found in: [Stainthorpe, August 7, 1901], [Patient Register – Cottages, 1901-1904], MSS 6/0013-02, Children’s Seashore House; [Stainthorpe, September 2, 1901], [Patient Register – Cottages, 1901-1904], MSS 6/0013-02, Children’s Seashore House. Amy was readmitted to the cottages with her grandmother on September 2, but was entered in the log book with the admissions from September 6, 1901; she is listed as patient no. 1423. Her disease remained “rickets,” and her result was listed as “improved.”


536 It appears that Amy died at some point between 1901 and 1910. While I could not locate a death record, Amy does not appear in the 1910 census, although her family, including her mother and sisters Winifred and Ida, do.
brought her three children Helen (9), Laura (4), and Jack (infant) to the CSH. Each child came with some ailment, ranging from indigestion to eczema. Nellie and her children returned every summer for the next five years. By their third summer, all of her children were healthy. Nellie and her children continued to go to the CSH for two more summers, despite Helen, Laura, and Jack’s good health. By 1920, their last year at the hospital, Helen, Laura, and Jack were like most of the patients who stayed in the cottages: they came and left the institution “well.”

Mothers who brought healthy children to the CSH did so to provide their families with a vacation. In 1924 one mother wrote a postcard to an acquaintance proclaiming that the hospital was “a pleasant place to be as far as location is concerned,” but proclaimed that the “many distressing cases of invalidism…rather overtaxes one’s sympathies.”

Poor mothers living in urban centers at the turn of the 20th century had limited opportunity to leave the city during the summer months, and few could afford leisure travel. Seashore hospitals represented an economical way for working-class mothers to access a stay at the beach for themselves and their children. Fathers never attended with their families. Although not explicitly stated, seashore hospitals likely excluded fathers based on the assumption that they needed to remain in the city to work and support their families. For the rest of the family, the CSH charged between two and three dollars per week to stay in a cottage. This price covered each family’s food and provisions for the week. Mothers who were unable to pay were admitted at reduced rates or free of charge.

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537 [Postcard, From Edna to Mrs. T. S. Mussay, July 8, 1924], [Box 4, Folder 18], MSS 6/0013-02, Children’s Seashore House.
Railroad companies subsidized patients’ tickets, further reducing the expenses associated with traveling to the shore.

Journalists interested in seashore hospitals depicted them as a way to escape the burdens of daily urban life. A 1909 magazine article suggested that mothers used seashore hospitals both for their children’s healthcare and as a respite from the hardships of home life. The magazine reported that one Italian mother brought her sick infant to the New York City Floating Hospital, proclaiming, “Bambino verra verra sick…but the biga ship maka well.” Other mothers focused on the benefits they derived from a stay at the hospitals. One mother expressed her appreciation for Seaside Hospital, saying it “is the only place this side of Heaven that a poor woman doesn’t have to work,” while another concurred, exclaiming that if “Heaven is anything like the Seaside Hospital, I don’t care how soon I get there.” The fact that these mothers saw seashore hospitals as providing them with opportunities to rest lends further credence to the idea that seashore hospitals had become leisure destinations as well as medical institutions.

As recounted above, most mothers admitted to the cottages at the CSH maintained the bulk of their domestic responsibilities. Their children, however, enjoyed the leisure and amusement provided by the hospital. As the drawing in the Daily Graphic intimated, poor city children saw the beach as a place to play and dig in the sand. Seashore hospitals gave them that opportunity. While at the CSH, children played in the sand and flew kites

539 Ibid., 545.
540 Ibid., 546.
on the institution’s expansive beachfront. They also enjoyed Atlantic City’s many amusements, thanks to donations from local businesses. In 1898, the CSH managers thanked Atlantic City’s boardwalk business owners for “the great kindness shown to the children.” In a single summer, the children went to the Japanese Tea Garden, Children’s Play-Ground, the Mystic Maze, the Ferris Wheel, the Moving Pictures, and the merry-go-round, among other destinations. Patients also had weekly front row seats at Young’s Pier to watch the trained birds and lions, and “greatly enjoyed” their visits to “‘The Educated Monkey’ and ‘Beautiful Jim Key,’ the educated horse.”

The CSH provided pediatric patients with opportunities otherwise inaccessible to them, whether that was enjoying amusements on the boardwalk, attending shows with trained animals, or playing outside in a safe and healthy environment. As noted in chapter one, poor children had few places to play in cities. Given their cramped living quarters, most children resorted to playing in the streets where they fought for space with horses, trolley cars, and automobiles. Seashore hospitals’ oceanfront locations provided children with safe places to play, and physicians touted the health and pleasure their patients derived from beach’s fresh air and sunshine.

Children’s happiness was directly tied to their health, and both physicians and parents made this connection. In 1910, William Bennett, the physician in charge of the CSH, proclaimed, “A few weeks of sea air, plenty of good food, unaccustomed

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541 CSH Annual Report for 1875, 15.
542 CSH Annual Report for 1898, 27.
544 The playground movement also emerged during this period as a way to address the need of giving children a protected place to play. See footnote 46.
cleanliness and happiness have successfully fortified many a little frame against an attack of disease to which it would otherwise have succumbed.”

Physicians at other seashore hospitals agreed. As noted in chapter two, a doctor affiliated with Crawford Allen Hospital located outside Providence, RI, claimed that patients’ abilities to fight bacterial infections was strengthened by a combination of marine medication, good food, and the company “of other happy children.”

Pleasure and leisure could not be divorced from therapeutics. Even mothers in the 20th century who primarily used the CSH for its leisure benefits may have seen seashore hospitals as ways to build their children’s strength and potentially prevent disease. Physicians had long touted the marine environment’s preventive work. In 1911, the CSH Board of Managers noted that urban social service workers were using the hospital as a “Preventorium,” sending children “whose inheritance and environment point them out as probable future victims of disease,” but were otherwise healthy. By 1913, the physician in charge of the CSH proclaimed that the institution’s “work of fortifying children who are not sick that they may be able to resist attacks of illness is a very large one.” Even common beach activities like swimming and playing outside were part of a therapeutic regimen when performed within the bounds of seashore hospitals.

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545 CSH Annual Report for 1910, 16.
546 Roland Hammond, “Treatment of Bone Tuberculosis at the Crawford Allen Hospital,” Boston Medical and Surgical Journal 165 (July 13, 1911): 50. When Hammond notes the “opsonic index,” he is referring to the process by which bacteria are made to become more readily and efficiently subjected to phagocytosis by other cells. For definition, see: http://medical-dictionary.thefreedictionary.com/opsonization.
547 CSH Annual Report for 1911, 15. On preventoriums, see: Connolly, Saving Sickly Children.
548 CSH Annual Report for 1913, 25.
While mothers’ primary motivations may have shifted from providing their children with healthcare to giving them a vacation, both health and leisure defined patients’ experiences across time. When mothers brought dying babies to the CSH in the 1870s and 1880s, the hospital not only provided medical care to the infants, it also acted as a “refuge” for their weary mothers. Even when bringing healthy children to the hospital in the 1920s, families still participated in marine medication. Health and leisure practices were intertwined regardless of when or why patients came to seashore hospitals. Mothers’ and children’s participation in marine medication helped to maintain the association of the seashore with health, despite a general trend toward viewing the seashore in terms of its potential for recreation and leisure.

**Conclusion**

Working class families’ continued uses of seashore hospitals helped shape the healthscape of the seashore, maintaining its association as a therapeutic and restorative environment into the 20th century. Despite this continuity, a major shift had occurred by the 1920s. The seashore’s popularity continued to rise among all socio-economic classes. As patients’ participation in mothers’ cottages at the CSH indicates, vacationers of all ilks viewed the beach primarily as a place of leisure and recreation rather than a therapeutic environment. Yet as this chapter has shown, health and leisure could not be disentangled. Both always characterized some portion of families’ experiences of staying in the hospital.
Although the beach remained a popular tourist destination and the Children’s Seashore House continued to accept patients at its Atlantic City location until 1990, by 1930 other seashore hospitals shuttered their sites or moved inland to cities. These changes corresponded to an increasingly reductionist view of the environment and the perception that man could reproduce nature’s therapeutic effects through technological intervention. By encapsulating marine medication within technological devices, physicians were able to free therapeutic practices from the constraint of place and move their practices from the seashore to the city.
In July of 1905, Theodore Roosevelt visited Sea Breeze Home on Coney Island, NY, a hospital that cared for tubercular children. Roosevelt had learned about the hospital from Jacob Riis, a Danish-born New Yorker and influential social reformer. Riis had recently visited the hospital and was so impressed that he invited the president of the United States to witness the “good being done” there. Roosevelt accepted the invitation and spent two hours touring the grounds and meeting the young patients. After visiting the wards, the president walked onto a piazza that overlooked the ocean. The *New York Times* reported that the president then, “took off his hat,” and upon feeling the sea breeze exclaimed, “Ha! They can’t help getting well here.” Inspired by his visit, Roosevelt concluded “there can be few more beneficent works than that which is being accomplished with the Fresh Air Fund and this seaside hospital for tenement children suffering from bone tuberculosis.”

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Pediatric marine hospitals had garnered popular attention in the United States since the CSH opened in Atlantic City in 1872. In 1909, John D. Rockefeller donated $150,000 to Sea Breeze Hospital and President Herbert Hoover visited the CSH in 1921. Pediatric seashore hospitals reached their zenith in the second decade of the 20th century. In 1910, the CSH expanded to a year-round institution in order to care for children suffering from chronic orthopedic conditions like non-pulmonary tuberculosis – including tuberculosis of the hips, spine, joints, and glands. In 1914, nine years after President Roosevelt’s laudatory remarks, the Association for Improving the Condition of the Poor and New York City officials raised enough money to build a larger pediatric seashore hospital to replace Sea Breeze. Neponsit Beach hospital opened in 1917 with room for more than 100 patients.

Yet the institutions began to change and fade from popular and medical sight by the 1930s. The Boston Floating Hospital, a pediatric hospital ship, moved onshore and into the city of Boston in 1931. Neponsit Beach hospital closed its doors fewer than 30 years after it opened. By the mid-century, other American pediatric seashore hospitals moved onshore and into urban environments, including Crawford Allen Hospital in

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553 CSH Annual Report for 1910, 9-10.
554 Crnic and Connolly, “‘They Can't Help Getting Well Here,’” 229.
Rhode Island. Even those hospitals that maintained their beachside locations, like the CSH, shifted their objectives. In the mid-1920s, the CSH began to transform its identity from a convalescent institution to a rehabilitative center, introducing both physical and occupational therapies.

This chapter seeks to explain what happened to American pediatric seashore hospitals. Many factors led to the institutions’ decline, including limited funding and the reduction in cases of non-pulmonary tuberculosis. But perhaps the most critical factor was the rationalization of environmental therapeutics that characterized marine medication as described in Chapter two. While distilling and dosing the environment gave marine medication scientific authority, it also paved the way for “technologies of nature,” devices that mimicked the natural environment, to supplant the marine environment. During seashore hospitals’ heyday, physicians were developing UV lamps,

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555 Hasbro Children’s Hospital, “Growing DelSanto Family Fund Invigorates Child Life Program,” All For One: A Magazine for Friends and Supporters of Hasbro Children’s Hospital Fall 2011-Winter 2012: 5. According to this magazine, Crawford Allen Children’s Hospital closed by 1958, and a pediatric unit was established in Rhode Island Hospital in its absence. It is somewhat unclear if this is the same institution as the Crawford Allen Memorial Hospital, or if the memorial hospital was a branch of the Children’s Hospital. Regardless, the marine hospital site was certainly closed by the mid-20th century.

556 The CSH remained in Atlantic City until 1990, when the institution moved to Philadelphia and became part of the Children’s Hospital of Philadelphia’s network. Carol Romano, Children’s Seashore House: The House Built on Caring and Healing, A 125th Anniversary Commemorative, 6-7. The CSH’s trajectory was not unique. Historian Marie Nelson detailed a similar fate for Swedish pediatric seashore hospital Apelviken. Like the CSH, it remained opened but shifted in patient population, and increasingly focused on rehab services and eventually admitted older patients. The facilities were sold to a private holder in 1985, and some of the original buildings re-opened as an exclusive spa, which remains today. Marie C. Nelson, email to the author, May 7, 2013. For more on the history of rehabilitation, see: Beth Linker, War’s Waste: Rehabilitation in World War 1 America (Chicago: University of Chicago Press, 2011); and Glenn Gritzer and Arnold Arluke, The Making of Rehabilitation: A Political Economy of Medical Specialization, 1890-1980 (Berkeley: University of California Press, 1989).

ozone generators, ventilation systems, and saline solution, technologies that reproduced the seashore’s beneficial elements. These devices freed marine medication from its constraints of place, allowing practitioners to produce the sun, sea-air, or saltwater in any climate or location.

Despite the development and availability of “technologies of nature,” this is not a story of straightforward technological progress. Although historian Joel Howell has characterized 1900-1925 as the period when technologies became a routine part of medical care, devices did not dislodge American physicians’ use of, or belief in, the ability of “nature” to cure. In the late 19th century, physicians developed ultra-violet (UV) lamp to reproduce what they believed to be the therapeutically effective spectrum of the sun’s rays. UV lamps earned international acclaim for their successes in treating various forms of tuberculosis, especially tuberculosis of the skin (lupus vulgaris).

Although the devices produced positive results, American physicians chose instead to

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adopt “heliotherapy,” a therapeutic regimen developed by Swiss physician Auguste Rollier in the early 20th century. In contrast to “actinotherapy,” or artificial light treatment, heliotherapy depended on graduated exposure to natural sunlight. American orthopedic surgeons and practitioners of marine medication lauded heliotherapy’s benefits for pediatric patients and argued for natural sunlight’s superiority over artificially produced UV rays.

This chapter exposes the period from 1900-1920 as a critical junction at which American practitioners had access to both natural and technological sun therapies, and chose the former. Although some historians have argued that UV lamps and heliotherapy together helped institute sunbathing as a medical and social practice in the 1920s, this chapter shows that physicians drew critical distinctions between artificial and natural therapeutics between 1900 and 1920.559

This study of phototherapy – both natural and artificial light therapies – also complicates our understanding of American physicians’ adoptions of technology into medical practice in the early 20th century. Contrary to historian Christian Warren’s argument that “society” displayed “whole-cloth recourse to technological rather than natural solutions” for diseases like rickets, elite American physicians did not initially

favor artificial-sun interventions. This particularly held true at pediatric marine hospitals and other institutions that depended on outdoor therapy to care for children with chronic orthopedic conditions like rickets and non-pulmonary tuberculosis. Beliefs about the sun’s ability to prevent and cure disease fueled physicians’ dedication to heliotherapy.

Yet the landscape had changed by the 1930s. Although environmental therapeutics continued in certain medical spheres, physicians increasingly employed UV lamps, particularly in urban hospitals. New devices more closely mimicked the sun’s spectrum and overcame many of the original lamp’s limitations. The fact that lamps could reproduce the sun’s rays enabled some physicians to rationalize treating patients indoors in urban hospitals rather than outdoors at the seashore. The reductionist trends that allowed physicians to define specific elements as therapeutically effective, like the sun’s UV rays or the air’s ozone, also enabled practitioners to view “technologies of nature” like UV lamps as physical manifestations of nature’s ability to cure. This belief


562 It is also important to note that Vitamin-D fortified milk emerged as the most widely used method of prevention of rickets prevention by the 1930s. For more on this see: Warren, “The Gardener in the Machine,” and Freund, American Sunshine.
made it unnecessary to send urban children to the seashore in order to access a healthy environment.\footnote{CSH Annual Report for 1872, np. As noted in the introduction, people have understood cities as being “unnatural.” See footnote 19 in introduction.}

**Children and the Sun**

By the early twentieth century, a wide variety of institutions emerged that facilitated children’s exposure to the sun. From hospitals and playgrounds, to camps and open-air schools, adults concerned with children’s welfare sought to provide them with the health-giving effects of sunlight.\footnote{Daniel Freund provides the most extensive account of different institutions and programs that utilized sunlight therapies; however, he does not discuss why so many of the interventions were directed toward children specifically. See: Daniel Freund, *American Sunshine: Diseases of Darkness and the Quest for Natural Light* (Chicago: University of Chicago Press, 2012). As previously mentioned, there is extensive literature on camping. See footnote 121.} This was particularly true for urban children. As American cities grew, buildings and smoke-filled skies blocked the sun’s rays from reaching the cities’ inhabitants.\footnote{Peter Thorsheim, *Inventing Pollution: Coal, Smoke, and Culture in Britain Since 1800* (Athens, Ohio: Ohio University Press, 2006); David Stradling, *Smokestacks and Progressives: Environmentalists, Engineers and Air Quality in America, 1881-1951* (Baltimore, MD: Johns Hopkins University Press, 1999).} Poor families’ dwellings only exacerbated the problem. As documented by reformers including Jacob Riis, the homes in which indigent children lived were dark and dirty with few windows or ways for children to access natural light.\footnote{Jacob Riis, *How the Other Half Live: Studies Among the Tenements of New York* (New York: C. Scribner’s sons, 1904). Riis’ study is specific to the tenements in New York City and not necessarily entirely representative of the housing of urban poor everywhere. For instance, many of Philadelphia’s urban poor lived in rowhouses.} Reformers and physicians blamed the lack of sun and fresh air, and the cramped, unsanitary homes of the urban poor for causing and spreading diseases like rickets and
tuberculosis. Children’s pale and crippled bodies testified to the negative effects of urban life and the lack of sunlight in particular.  

If urban life was the problem, a return to nature was the solution. The U.S. Children’s Bureau’s 1926 pamphlet, “Sunlight for Babies,” informed mothers that sunlight was critical for infants’ health. The pamphlet warned, “If a baby is constantly deprived of direct sunlight his bones will not develop normally, his muscles will be flabby, and his skin will be pale. He probably will have rickets.” In order to prevent this fate, a 1928 pamphlet encouraged mothers to give their children daily sunbaths in direct sunlight, gradually increasing exposure until they became “quite tanned.” At that point, mothers were told to let their children “play entirely naked in the sunshine for two hours a day,” in either the early morning or late afternoon. Mothers apparently received the message. In 1930, “Sunlight for Babies” was the Bureau’s second most popular pamphlet with a distribution of more than 63,000 in a single year.  

This belief in the sun’s curative function corresponded to a cultural shift in views about sun exposure and tanning. During the Victorian era a pale visage was considered

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567 Freund, American Sunlight. chapter two. Freund gives a particularly useful summary of the ways in which people understood the constructed urban environment to contribute to ill health, given physical and social constraints to accessing health. He also provides interesting examples of innovations made to redress the issue, including Vitaglass and UV lamps.  
570 Freund, American Sunshine, 116. Freund notes that the most popular pamphlet was “Why Sleep?” and that the Bureau distributed 63,344 copies of “Sunlight for Babies,” in 1930.
beautiful and a sign of one’s social status. For most of the 19th century the United States was an agrarian nation, and a tanned face was an indication of one’s labor outdoors. As the country began to urbanize and industrialize, the working-class moved into factories. Their pale skin and pallid cheeks were physical evidence of a life spent toiling indoors. Concomitantly, the cultural elites’ value of beauty shifted from a porcelain complexion to rosy cheeks. Tanned skin became a marker of the ability to afford leisure time and access a sunny climate.\(^{571}\) It was also a sign of a person’s good health.

Physicians and public health experts underscored the sun’s importance to children’s well-being. In 1925, W.A. Evans, a physician and former president of the American Public Health Association, and J. Mace Andress, Ph.D., a lecturer on health education, published *Health and Success*, a textbook for children. In the chapter, “Our Friend the Sun,” the sun is depicted as a physician in a suit and top-hat, carrying a bag inscribed with “Dr. Sun.” He smiles as he extends his arm to the silhouettes of children running and playing behind him, implicitly claiming credit for their health and happiness.\(^{572}\) [Figure 5.1] The chapter’s text supports the depiction of the sun as health-provider, informing readers that “sunshine, good air, and good food are all necessary for health” and that children needed the sun in order to become healthy, “rosy-cheeked” individuals.\(^{573}\)

\(^{571}\) See, for instance: Freund, *American Sunshine*, 106.


Mace and Andress informed children that the sun could bolster health and cure diseases, telling them “in the days of old, children often had a disease which was called ‘the king’s evil.’ One reason that it was called by that name was that people believed a touch of the king’s hand can cure it.” They explained that the disease had been renamed scrofula, or tuberculosis of the glands. By the 1920s, people no longer believed that a royal touch could cure the disease, but Mace and Andress argued, “In a sense it is ‘the king’s evil’ but the king is the sun. Those who do not get enough sunlight are liable to have this disease. The touch of King Sun cures it. He is one of the world’s best friends.” Mace and Andress warned children that living and playing in dark homes put them at risk for scrofula.

Publications like “Sunlight for Babies” and *Health and Success* provide insight into government, public health, and medical professionals’ views of the interconnection between sunlight and children’s health. Physicians and scientists commonly drew analogies between the health of plants and children to explain this relationship. In a 1926 article published in *The American Journal of Public Health*, Toronto physician R.I. Harris wrote:

Plants deprived of sunlight grow up pale, weak and spindly; so do children. Plants grown in sunlight become deeply colored sturdy and strong…In children the analogy holds. Sunlight makes them brown and prevents or cures rickets, a disease of skeletal tissues. It may well be that this action of sun upon skeletal tissues explains its almost specific effect upon tuberculosis of bones and joints.

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574 Ibid., 116.
575 Ibid.
576 Ibid., 119-20.
Children, like plants, depended on nature and their environment to grow up sturdy and strong. Andress and Evans echoed this sentiment when they asked children to think about potatoes one might find in a cellar. Such potatoes may have sprouts or even leaves, the authors claimed, but “they were very pale and unhealthy looking, very different from the green potato plants which grow out of doors in sunlight.”578 The authors informed readers that children who “live in dark houses and spend little time in playing the fresh air and sunshine are likely to be pale and unhealthy like the potatoes that grow in a cellar.”579

More than rhetorical flourish, such passages illuminate how medical professionals conceptualized the interactions between children and nature. As with plants and potatoes, the sun and outdoor environment built children’s bodies and provided them with health. Physicians contended that children were “plastic” and “pliable,” and therefore their health and bodies could be reformed through environmental changes.580 Children’s physical malleability enabled them to overcome diseases associated with urban life if given access to the sun and outdoor environment. The sun’s ability to reform children’s health and bodies was important, because health experts and social reformers were concerned that ill children would “swell the ever-growing numbers of that pitiable mass of humanity, the useless and the unfit.”581 The sun altered that course for young patients.

578 Andress and Evans, Health and Success, 117.
579 Ibid., 119-20.
These texts waxed poetic about the sun’s curative and preventive work for children’s health. At the same time, American medical practitioners used UV lamps to provide patients with the same benefits. In 1926, the Boston Floating Hospital annual report promoted the institution’s use of artificial light therapy. A picture shows a young child lying in a hospital bed wearing goggles, partially covered by a sheet. A physician in a long white coat and goggles presides over the treatment, while a nurse looks on with unprotected eyes. The caption beneath reads: “Ultra-Violet Treatment for Rickets by Dr. Lawrence W. Smith.” [Figure 5.2] Dr. Smith’s use of artificial light therapy seems at odds with exclamations about the importance of sun and nature to children’s health. Indeed, American physicians were initially skeptical about a lamp’s ability to produce the same health benefits as the sun. However, a closer examination reveals how UV lamps bridged the nature-technology divide, enabling natural and artificial remedies to coexist in the 1920s and render marine medication obsolete.

The Artificial Sun

Before the advent of both UV lamps and heliotherapy, doctors, scientists, and the general public had turned to the sun for its health-giving effects. Phototherapy (artificial or natural light therapy) advocates often drew attention to the practice’s history, tracing its origins to the Greeks and Romans, through Newton, and to contemporary scientists.

582 “The Boston Floating Hospital Thirty Second Annual Report” (Boston, 1926), 32-33. This image also appears in the thirty-third annual report between pages 34 and 35.
who studied the sun’s remedial properties.\textsuperscript{583} By the end of the 19\textsuperscript{th} century, physicians and scientists claimed that they had scientifically proven that the sun killed bacteria and was therefore therapeutically beneficial.\textsuperscript{584}

British physician Arthur Downes and chemist Thomas Blunt were often cited as the first to scientifically prove the sun’s bactericidal properties. In 1877, they published an article in the \textit{Proceedings of the Royal Society} that detailed their experiments on sunlight’s effects on bacteria and fungi. They concluded that: (1) “Light is inimical to the development of Bacteria and the microscopic fungi associated with putrefaction and decay;” (2) that under the right conditions sunlight prevented bacterial development, or at least slowed its progress; (3) direct sunlight was ideal, but diffuse sunlight was also effective; and (4) that the actinic, or chemical, rays were responsible for the majority of the sunlight’s bactericidal properties.\textsuperscript{585} Although Downes and Blunt were careful not to speculate about the applicability of their findings to human health and disease, other physicians capitalized on their results.

Presented before the Bacteriological Revolution when physicians still prescribed exposure to the outdoor environment as an all-purpose cure, studies like Downes and Blunt’s provided doctors with scientific justification for their recommendations.\textsuperscript{586} As

\textsuperscript{583} Tania Woloshyn also discusses this, as well as heliotherapy’s scientific foundations, in her article: Tania Woloshyn, \textit{“Le Pays Du Soleil: The Art of Heliotherapy on the Cote d’Azur,”} \textit{Social History of Medicine} 26, no. 1 (2013): 74-93; Simon Carter, \textit{Rise and Shine: Sunlight, Technology and Health} (Oxford; New York: Berg, 2007).


\textsuperscript{585} Ibid.

\textsuperscript{586} On the relationship between travel/environmental change and health, see: Conevery Bolton Valencius, \textit{The Health of the Country: How American Settlers Understood Themselves and Their Land} (New York: Basic Books, 2002); Rothman, \textit{Living in the Shadow of Death}, especially chapter two; and Cindy Aron,
detailed in chapter two, this new knowledge bolstered, rather than undermined, physicians’ faith in the sun’s ability to heal. After Downes and Blunt’s study, scientists demonstrated that ultraviolet (UV) rays, a small portion of the sun’s spectrum, were responsible for the sun’s bactericidal properties. In 1893, H. Marshall Ward, a botany professor at Royal Indian Engineering College in Cooper’s Hill, England, published an article showing that UV rays killed bacteria. He wrote “no action whatever is perceptible in the infra-red, red, orange, or yellow region, while all [bacteria] are injured or destroyed in the blue and violet regions.” Other scientists examined the sun’s impact on animals. One study demonstrated that sunlight had the ability to penetrate the skin and affect deeper-lying structures in animal bodies, and in 1889, Erik Johan Widmark of Stockholm, Sweden, determined that ultraviolet rays, rather than the sun’s heat rays, were responsible for pigmenting skin.

This distillation of the sun into its therapeutic and non-therapeutic components aligned with reductionist trends in medicine. Such studies also encouraged the use of sun-therapies in mainstream medicine during the early 20th century, when medicine was becoming increasingly laboratory-based. The sun’s bactericidal property was a

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589 Ibid., 919.
particularly promising finding for patients with tuberculosis, then termed “consumption.” Although Robert Koch’s 1882 discovery of the *tubercle bacillus* gave hope that a single, specific cure for tuberculosis would soon follow, no such therapeutic agent was available until the mid-20th century. In the late 19th and early 20th centuries, physicians and patients remained dependent on therapeutics programs like marine medication. Having laboratory proof that UV rays killed bacteria created space for an expansion of sun therapies, including both natural and artificial regimens.

Intriguingly, physicians developed actinotherapy (artificial light therapy) before heliotherapy. Danish physician Niels Finsen invented the UV lamp in the 1890s. Finsen graduated from the University of Copenhagen in 1890 and had long been interested in the relationship between sunlight and health. He conducted a range experiments that solidified his beliefs in the sun’s therapeutic value, including that sun exposure resulted in the skin’s darkening and that pigmentation protected skin from burning. Finsen also studied the sun’s physiologic effects. He investigated the sun’s ability to stimulate life by placing “ripe” salamander eggs beneath different colored glass and counting the embryos’ movements. He calculated that embryos beneath the blue glass moved 46 times, while those under the green glass moved only eight times. No movements occurred beneath the yellow glass, and the embryos under the red glass moved six times. Given the

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591 For a selection of scholarship on tuberculosis, see footnote 11 above.
592 Clemensen, “A Brief Review,” 920-22. Finsen used this knowledge to advocate for treating smallpox by keeping patients in rooms bathed only in red light, similar to a photographer’s room for developing film. This would eliminate the light rays that caused inflammation and lessen patients’ reactions. Although Finsen did not treat smallpox patients, physicians who used this system acknowledged that it lessened both the severity and duration of the disease.
rate of movement under the blue glass, Finsen concluded that the sun’s UV light enhanced animals’ development and movement.\textsuperscript{593}

Finsen was most interested in using sunlight to treat patients. Building on earlier studies, Finsen studied sunlight’s ability to penetrate the skin. Using his wife as a subject, Finsen placed photographic paper behind her ear, and focused a concentrated light source on the other side. In one experiment, he placed the paper behind her ear without further manipulation. After light exposure, he found some blackening of the paper, which he argued indicated that the chemical rays were able to pass through the ear’s tissue. In a second experiment, Finsen removed blood from his wife’s ear by compressing the ear’s skin, and he again applied the concentrated light. In the latter scenario the photographic paper darkened in a fraction of the time, leading Finsen to deduce that blood, not skin, was the primary barrier to sunlight’s penetration of tissue.\textsuperscript{594}

Building on these results, Finsen developed a lamp that reproduced the sun’s health-giving UV rays. Finsen’s initial lamp was a primitive arc lamp that emitted rays similar to the sun’s. It required a large amount of energy to run, and in 1895 he convinced the manager of Copenhagen’s central electric power station to allow him to use the building for patient treatment. One of the manager’s friends, an engineer named Mogensen, had lupus vulgaris (tuberculosis of the skin) for eight years. Finsen treated

\textsuperscript{594} Clemensen, “A Brief Review,” 922; Russell and Russell, \textit{Ultra Violet Radiation}, 16. There are slight differences in the reporting of this experiment. Russell and Russell claim that Finsen found no darkening of the paper in the first experiment but did in the latter. Clemensen writes that Finsen found darkening in both cases, but the anemic ear facilitated a speedier treatment. Regardless of these differences, the authors all agree that this knowledge led to the same conclusion: that the effect of light treatment was enhanced by removing blood from the treatment area.
Mogensen for four months. The artificial light therapy worked, and Mogensen was cured. The subsequent reaction was swift and enthusiastic. Finsen opened the “Finsen Medical Light Institute” in a small building in the garden of Copenhagen’s Municipal Hospital in 1896. By 1901, it had grown in popularity and the Danish government provided Finsen with a grant for a new building in which to house his Institute.  

True to his faith in the sun’s curative value, Finsen initially included natural sunbathing as part of the treatment. However, he found it too difficult to “rely on sunlight in northern latitudes” and abandoned natural sunlight in favor of concentrated artificial light. The Finsen lamp had four arms that extended at approximately 45-degree angles from a central arc lamp that was attached to the ceiling by iron supports. Each arm consisted of two brass tubes that could be adjusted, with one telescoping into the other. Two plano-convex lenses at the top of the wider tube gathered the arc lamp’s divergent rays, making them parallel and thereby mimicking the sun’s rays. The parallel rays then traveled down the tube to a second set of lenses that concentrated and focused the light. Cooled, distilled water continually moved between the second set of lenses, absorbing the heat rays while allowing the ultra-violet rays to pass through unhindered. At the end of each arm was a plano-convex lens that nurses placed firmly against patients’ skin during treatment.  

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596 Ibid., 16.  
597 Vlademar Bie, “Remarks on Finsen’s Phototherapy,” *The British Medical Journal* 2, no. 2022 (Sept. 30, 1899): 827. The description of Finsen’s lamp comes from two sources: Bie, 826-27, and Clemensen, 923-24. The physicians at Finsen’s institute concluded that even with the distilled water, the heat from the light was harmful to patients. In order to directly cool the skin, they designed a small apparatus made of quartz and a plain convex lens that was fastened within a brass ring. Cold water ran through the two tubes within
During Finsen’s light treatment, patients lay on beds positioned beneath one of the lamp’s arms. One nurse attended each patient. She positioned the UV lamp directly on the 1.5 centimeters of skin that was to receive treatment. Patients lay beneath the lamp for one hour, their heads held still by the nurses. Nurses applied a zinc ointment at the end of the treatment to facilitate the healing process, and patients left the facility until their treatment the following day.

Finsen’s UV lamp earned him international acclaim. In 1903, he won the Nobel Prize in Physiology or Medicine “in recognition of his contribution to the treatment of diseases, especially lupus vulgaris, with concentrated light radiation, whereby he has opened a new avenue for medical science.” Although treatment could take months or even a year to complete, Finsen’s patients recovered from skin tuberculosis, a difficult disease to treat in the 19th century. Reports from his Institute described and depicted patients’ treatment regimen and heralded its curative and cosmetic effects. [Figure 5.4]

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the device – one tube carrying the water and the other removing it from the device. Placed firmly against the patient’s skin, the pressure from the plano-convex lens served the dual purpose of making the treatment area anemic and cooling it during therapy. This allowed the application of “even the strongest of light” to the skin every day.

Despite his success, it seems that many physicians outside of northern Europe were not familiar with his work. As one English source noted, Finsen explained “Inasmuch as this work has been done in a place outside of the great scientific centers of the world, and as the reports have originally been published in Danish, which, of course, is read by only a few outside of the Scandinavian North, it could hardly be expected that the scientific world at large would as yet be thoroughly acquainted with the details of our work and methods.” See: Clemensen, “A Brief Review,” 920.

“*The Nobel Prize in Physiology or Medicine 1903*”. Nobelprize.org. 21 Jan 2013
http://www.nobelprize.org/nobel_prizes/medicine/laureates/1903/

One thirty-year-old patient treated at Finsen’s Institute had facial and nasal skin tuberculosis for fifteen years. When the woman arrived for Finsen’s light therapy, she had an extensive area of red, swollen, diseased skin that stretched across both cheeks, her nose, and her upper lip. She also had numerous nodules and small ulcerations and crusts in the diseased skin. After four months of treatment, the patient’s ulcers were gone, she had fewer nodules, and her facial skin and nose appeared healthy with “good scar tissue” forming. By the end of the fifth month, the patient’s remaining nodules had disappeared and her treatment was complete. One year later, the patient’s doctor reported that she was still healthy, with no relapse. Bie, 829.
Physicians from across the world sent patients to Denmark, with some calling Finsen’s Institute a “mecca” for skin tuberculosis patients.⁶⁰¹

Although Finsen depended on artificial light for patients’ treatment, his lamps did not represent his rejection of the ability of the sun to heal. Rather, they grew out of his belief that sunlight was beneficial to health. Here it is apparent how place mattered. Finsen blamed Denmark’s northern latitude for rendering the sun undependable, being too weak and inconsistently available. His creation of an artificial light that produced a concentrated form of sunlight was a solution to the environmental limitations in which Finsen treated patients.

Physicians in other northern climates shared Finsen’s sense that the outdoor environment was therapeutically undependable.⁶⁰² While some British doctors heralded the sun for its curative potential, the physicians at pediatric seashore hospitals often used both natural and artificial sun therapies in their patients’ treatment.⁶⁰³ Addressing the debate over which therapy produced better results, W. Kerr Russell wrote to the British Medical Journal to express his faith in UV light treatment. He compared patients’ results from Finsen’s institution to heliotherapy founder Auguste Rollier’s Swiss mountain top sanatorium. Russell concluded that patients’ outcomes at the two institutions were

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⁶⁰³ See: Carter, “Leagues of Sunshine,” 99-109. There was also a belief in the ability of sun to heal, as Carter demonstrates in his investigation of the “Sunlight League.” Additionally, some prominent British physicians spoke about and published their investigations that heliotherapy was a productive intervention. See, for instance: Henry Gauvain, “Discussion on the General Principles of Treatment in Tuberculous Disease of the Bones and Joints in Children,” The British Medical Journal 2, no. 3178 (Nov. 26, 1921): 876-84.
“almost identical…In a few cases the Finsen results are even better than those obtained at Leysin.” Russell acknowledged that “natural sun treatment has certain advantages in the prevention and cure of disease,” but maintained that heliotherapy’s advantages were dependent on the environmental and national context. He claimed that it was “impossible to practice heliotherapy satisfactorily in the North of England in the winter; even…by the use of “vita-glass,” my great standby has been ultra-violet lamps.” Russell did not deny heliotherapy’s results, but qualified them as specific to the Alps, writing “it cannot seriously be suggested that it is possible or desirable to send all tuberculous patients to Switzerland.”

American physicians were less enthusiastic about sun lamps. Despite the trend toward technological intervention in the early 20th century, American physicians registered numerous complaints about Finsen’s lamp. Among its drawbacks were its size, expense, and the large and highly trained staff it required. The lamp required a large current that could cost upwards of $3000 per year, a sum which American orthopedic surgeon De Forest Willard qualified as a “serious” expenditure. The operating requirements for early UV lamps forced at least one New York physician to wire it

Physicians also struggled to reproduce Finsen’s results. New York physician W. W. Gottheil attempted to use an “American form of the Finsen apparatus” but concluded he could achieve similar results through easier methods. In 1907, American physician Jay Frank Schamberg credited the Finsen Institute’s medical staff’s expertise for their success in treating *lupus vulgaris*. He wrote, “In the light institute of Copenhagen…better results are obtained than elsewhere by reason of the skill of the physicians and the experience of the nurses.”

Another critical barrier to American physicians’ acceptance of UV lamps was their belief that natural therapeutics produced better results than artificial interventions. In 1903, De Forest Willard outlined his belief in the superiority of natural sun-therapy in the treatment of patients with bone and joint tuberculosis. In an article published in *JAMA*, Willard argued:

> The most powerful agents in our possession for the inhibition and destruction of these micro-organisms are sunlight and fresh air and abundant nourishment. The sun’s rays are undoubtedly more helpful than any artificial rays, just as natural waters compounded by the chemistry of the Ruler of the universe differ very decidedly from the waters artificially compounded by the chemistry of man.

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610 Ibid., 543.
Willard’s statement underscores his faith that natural sunlight cured patients better than UV lamps. Unlike physicians in Denmark and England, American practitioners were less constricted by national lines and limited latitudes. They could send urban patients a relatively short distance to the country, seashore, and mountains, where patients could access sunlight in greater abundance. It was this faith in the sun that drove American physicians to send pediatric patients to seashore hospitals that used Rollier’s newly developed, scientifically based program of heliotherapy.

Dr. Sun: Heliotherapy

Auguste Rollier opened his mountaintop sanatorium in Leysin in 1903, the same year that Finsen won his Nobel Prize. As with pediatric seashore hospitals, many of Rollier’s patients were children suffering from non-pulmonary tuberculosis. Also like seashore hospitals, Rollier depended on the outdoor environment for patients’ treatment. Natural sun exposure was the primary mode of intervention. Rollier modified earlier programs by dosing the sun as one might a chemical therapeutic agent. He suggested that heliotherapy begin by exposing a patient’s feet to the sun for five minutes. The following day a patient’s feet would be exposed again, but for three periods of ten minutes each, and on the third day for fifteen minutes, three times. On each subsequent day, an additional body part would be revealed to the sun. On day two, a patient’s calves joined the feet in a sunbath, but only once for five minutes. The thighs, abdomen, and thorax followed, and by day five the average patient would have “three sun-baths of twenty-five
minutes’ duration.” Rollier contended that limiting exposure to “outlying regions” of the body such as the legs and arms ensured that patients were less likely to experience a negative systemic reaction. At this point a patient could sunbathe three hours a day, wearing little more than a white linen hat, glasses, and a loincloth.

Heliotherapy was specific and quantitatively precise, making it a good fit with the rationalized natural therapeutics programs already employed at American pediatric seashore hospitals. Rollier’s program quickly crossed the Atlantic Ocean. By 1910, John Brannan, a physician affiliated with Sea Breeze (SB), became aware of Rollier’s work through American and French colleagues. Both SB and Crawford Allen Hospital (CAH) in Rhode Island implemented heliotherapy in 1912. That summer, physicians at CAH began using “the all-over sun bath in all cases of bone disease.” Attendants wheeled patients in carts onto a platform that was outfitted with windscreens and sunshades to protect the children’s heads. As noted in Chapter two, Roland Hammond, a physician with CAH, compared the weight gain and hemoglobin levels of patients from 1911 and 1912 in order to determine heliotherapy’s impact on patients’ health.

612 Rollier, Heliotherapy, 23. Rollier contended that limiting exposure to “outlying regions” of the body such as the legs and arms ensured that patients were less likely to experience a negative systemic reaction.
613 Ibid., 24.
614 Ibid. At Leysin, patients with cardiac conditions wore an additional white cloth over their chests to protect their thoracic cavities.
618 Ibid.
concluded that children who received heliotherapy experienced a greater increase in weight, hemoglobin, and overall better health when compared to patients who received marine medication alone. Hammond concluded that heliotherapy resulted in a “decided improvement” in patients’ health.

Dr. Whitbeck at Sea Breeze concurred. Physicians at SB modified Rollier’s regimen to accommodate Coney Island’s weather and climate. Rather than full-body exposure, children with tuberculosis remained “in bed on the balcony with the usual extension apparatus…and only the area of the abdomen, hip and thigh adjacent to the diseased joint was exposed to the air and sun.” Other children “who are up and about” sunbathed throughout the morning on the beach or porches, in various states of undress. Despite these alterations, Whitbeck noted that children who sunbathed showed “marked” improvements.

One of heliotherapy’s most noteworthy effects was on the open wounds associated with non-pulmonary tuberculosis. Sinuses, as these wounds were called, were difficult to treat, often remaining open for months or even years. Before using heliotherapy, the medical staff at SB attempted to treat sinuses with injections of bismuth paste, an emulsion that solidified within the wound and was believed to aid new tissue

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619 Ibid., 272-73. See also chapter two.
620 Ibid., 272.
622 Hinsdale, *Atmospheric Air in Relation to Tuberculosis*, vol. 63, no 1, pl. 15.
growth. This method resulted in only moderate success. Whitbeck contended that heliotherapy along with sea-bathing was far more effective, resulting in healing that was “decidedly rapid,” noting “sinuses have become cleaner and the discharge diminished until the sinuses have closed.” In addition, heliotherapy advocates claimed that the sun “stimulated the recalcification of the entire bony skeleton,” thereby strengthening and straightening pediatric patients’ bones. This quality made heliotherapy particularly well-suited for children with orthopedic conditions.

Pediatric seashore hospitals’ implementation of heliotherapy instead of UV lamps fit within their institutional commitments to using the outdoor marine environment for patients’ treatment. As detailed in chapter two, bacteriology and the germ theory of disease led to a “rationalization of natural therapeutics” in which physicians distilled and dosed nature’s therapeutic elements. American practitioners of marine medication used this knowledge as evidence of the ability of nature to heal. Rollier’s system of heliotherapy fit within this commitment. He justified heliotherapy by citing scientific studies that detailed the sun’s bactericidal properties. And as with seawater bathing

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626 On changes in medical theory and practice during this time period see footnotes 8 and 9, above.
627 In his book *Heliotherapy*, Rollier dedicates one of the chapters to describing the scientific studies that supported sun-therapy as an effective therapeutic treatment. It seems likely that – in contrast to Finsen’s UV Lamp – Rollier’s heliotherapy was less derivative of scientific studies, and Rollier used them more as a justification of an updated version of a long-standing natural therapeutic practice. See: Rollier, *Heliotherapy*, 158-93.
regimens already in place at seashore hospitals, Rollier dosed the sun, a practice that necessitated medical oversight.

Rollier’s use of photographs provided additional “objective” evidence of the sun’s curative ability. Rollier repeatedly published series of photographs that documented patients’ progressions from sick and frail children to fully able-bodied, working adults. This practice aligned with American marine medication practitioners’ use of images to demonstrate the seashore environment’s ability to cure orthopedic conditions. Both Rollier and marine medication practitioners focused their cameras on patients to show patients’ physical transformations that resulted from natural therapeutics. Rollier used X-rays and photographs as evidence of the sun’s curative and rehabilitative effects. He published x-rays of patients taken before and after heliotherapy that showed that bone had regenerated. Likewise, photographs provided visual evidence of patients’ newly

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631 For a good survey of the medical establishment’s use of photography during this period, see: Beth Linker, “Shooting Disabled Soldiers: Medicine and Photography in World War I America,” *Journal of the History of Medicine and Allied Sciences* 66, no. 3 (2010): 313-46. The focus on patients in images produced by these institutions supports Linker’s argument that not all images “intensified the Foucauldian gaze” or highlighted technologies. Furthermore, as with the subjects in Linker’s study, the patients imaged had varying degrees of disability but were shown to be participating in active lives.

632 On the use of x-rays in medical and popular settings, see: Bettyann Kevles, *Naked to the Bone: Medical Imaging in the Twentieth Century* (New Brunswick, NJ: Rutgers University Press, 1997); Howell, *Technology in the Hospital*, especially chapters four and five.
straightened spines, mobile joints, healed sinuses (open wounds), and sturdy bodies. [Figure 5.6 a-d] Rollier used these images as proof of the sun’s ability to heal and reform patients. Photographs from pediatric seashore hospitals also suggested the sun’s health-giving effects. Bed-bound patients were shown sleeping outdoors on hospital porches, while other children, some on crutches or in braces and others device-free, frolicked on the beach in the sun and sea-air. Together, the images provided evidence of children’s progressions from bed-ridden patients to healthy, able-bodied children. The fact that all of the children were pictured outdoors, with little or no medical oversight, suggested to viewers that sun and sea-air exposure were the primary agents of healthcare. 633 [Figure 5.7]

The sun’s ability to transform children’s health was also demonstrated by various scientific measures. Patients’ increases in hemoglobin and red blood cell counts offered laboratory evidence of the sun’s ability to increase the blood’s bactericidal properties, which physicians argued shielded patients against the intrusion of disease. 634 Heliotherapy also resulted in patients’ increases in height and weight. 635 These results fit heliotherapy within the developing field of pediatrics. Although pediatrics did not formally coalesce until the 1930s, by the 1910s doctors began to shift their focus from

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633 In my survey of the CSH annual reports, I only came across one photograph of a patient indoors. Even then, she was the only patient pictured and seemed to be surrounded by empty beds. See: CSH Annual Report for 1905, 30.
treating sick patients to caring for the “well” child. Physicians told parents that even apparently healthy children were at risk. At a time when an estimated 90 percent of the population was infected with the tubercle bacillus, children who might not yet exhibit symptoms could potentially develop the debilitating and fatal disease. Additionally, one study showed that more than 85 percent of urban children showed signs of rickets upon a physical examination. Physicians pointed to x-rays taken of healthy children that showed bone loss as proof of children’s vulnerability to future debilitation.

Medical authorities’ analogies of children as tubers or plants explained why sunlight was necessary for children’s health. The sun helped both children and plants grow sturdy, strong, and straight. Heliotherapy also addressed contemporary concerns about children’s dislocation from the natural environment. As previously discussed, prominent figures like Teddy Roosevelt contended that urban life produced ill health,

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637 As Cynthia Connolly has detailed, many institutions sought to prevent children’s development of disease, and tuberculosis in particular. Preventoriums’ primary mission was to care for children who were exposed to, but had not yet developed, tuberculosis. The physician at the CSH saw this as part of this institution’s mission, particularly among the patients treated during the summer. Cynthia Connolly, Saving Sickly Children: The Tuberculosis Preventorium in American Life, 1909-1970 (New Brunswick, NJ: Rutgers University Press, 2008).


639 Apple, Vitamania, 23.

disease, and a weak body politic. Children were especially vulnerable, given their perceived proximity to nature.641

Sun exposure was an antidote to urban life, and heliotherapy became a hallmark of pediatric seashore hospitals and sanatoriums’ healthcare for tubercular children. While heliotherapy formalized sunbathing, it required limited adjustments to hospitals’ structures or therapeutic practices. In 1925, Dr. John Lloyd, physician at the Monroe County Tuberculosis Sanatorium, wrote that he had successfully used heliotherapy for pediatric patients.642 This was partially due, he claimed, to sun therapy’s rules which were “few in number but important.” Lloyd outlined his program which included the gradual exposure of the patient’s body, protecting a patient’s eyes and head, preventing sunburn, and not allowing patients to sunbathe within an hour of eating, unless already well-tanned.643 At seashore hospitals, patients already spent the majority of their time outside in the sea-air and sunshine. When physicians at CAH added heliotherapy to patients’ medical care, they built a special sunbathing porch, while other institutions like SB simply used their existing balconies and the beach.

At once scientific and natural, heliotherapy fit neatly into existing institutional structures and ideas about children’s connectivity with, and need for, the natural environment. Yet heliotherapy’s primacy was short-lived. By the 1920s, practitioners, patients, and the public viewed UV lights and heliotherapy as interchangeable

641 On the G. Stanley Hall, see footnote 41.
643 Ibid., 745.
interventions. The Boston Floating Hospital is representative of the ascendance of lamps into medical practice.

Moving Toward the Light

Beginning in 1894, the Boston Floating Hospital (BFH) provided healthcare for indigent children and their families by sailing the harbor during the summer months. One of the ship’s benefits was its sun deck, on which young children would sunbathe fully nude. The BFH continued to sail the bay until it was destroyed in a fire on the eve of its 1927 summer season. Faced with how and where to rebuild, the hospital’s trustees decided to move the facilities to land and into the city of Boston. In October of 1931, the BFH opened as a year-round on-shore hospital complete with the latest medical technologies, laboratory equipment, and plant operations. Notably, the hospital integrated UV lamp therapy into its treatment of patients with rickets before its move to land, as depicted in their 1926 annual report. It is thus not entirely surprising that the trustees decided that it was no longer necessary for patient care to include the outdoor marine environment.

Faced with the necessity of treating urban patients and the limited access to sunlight within cities, American physicians turned to UV lamps as a technology of

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nature. True to their belief in the sun’s healing power, some physicians initially tried to use heliotherapy in cities. Hospitals modified porches and roofs into “solariums,” and a nurse at New Haven Hospital in Connecticut designed a heliotherapy tent to protect patients’ privacy from on-lookers.\textsuperscript{645} Despite their faith in the benefits of natural sun exposure, urban physicians lamented the difficulty of accessing enough sunlight in the city to make heliotherapy effective. As Cincinnati physician Plato Schwartz explained, cloudy days and the varying intensity of the sun made for “less favorable results from the use of heliotherapy when attempted in the modern city hospital.”\textsuperscript{646} Pollution presented another obstacle. Frederick Tisdall, a physician at the Hospital for Sick Children in Toronto, noted that the therapeutic rays of the sun were “readily cut off by the smoke dust and moisture” in the polluted air that characterized large, industrial cities.\textsuperscript{647} Given the lack of statistics for American cities, Tisdall pointed to a comparative study of the strength of UV rays in London, the British countryside, and the Swiss Alps. The authors concluded that London’s pollution lowered the UV rays by 85 percent in contrast the Swiss Alps.\textsuperscript{648} UV lamps provided an important work-around for urban medical practitioners: the devices allowed doctors to give their patients the health-giving

\textsuperscript{645} Margaret Tracy, “A Heliotherapy Tent,” \textit{The American Journal of Nursing} 27 (June 1927): 451-52.
\textsuperscript{646} R. Plato Schwartz, “The Application of Radiation in the Modern Hospital,” \textit{The American Journal of Nursing} 26, no. 9 (Sept. 1926): 693.
\textsuperscript{647} For more on the history of pollution and its relationship to health, see: Peter Thorsheim, \textit{Inventing Pollution: Coal, Smoke, and Culture in Britain from 1800} (Athens, OH: Ohio University Press, 2006); David Stradling, \textit{Smokestacks and Progressives: Environmentalists, Engineers and Air Quality in America, 1881-1951} (Baltimore: Johns Hopkins University Press, 1999).
\textsuperscript{648} Frederick F. Tisdall, “Sunlight and Health,” \textit{The American Journal of Public Health} 16, no. 7 (July 1926): 694-95. Tisdall was not writing in support of UV lamps, but rather advocating for sunbathing in the treatment of rickets. He included this discussion in an article about the treatments for rickets, which included sunbaths and cod liver oil.
properties of the sun without having to contend with unpredictable weather or polluted skies.

Newer models of UV lamps also overcame many of the logistical obstacles physicians associated with earlier designs. In the 1920s, UV lamps were smaller, easier to use, and required less oversight than their predecessors. They also required less energy, making them cheaper to run. Instead of only treating four patients at a time, newer lamps could potentially treat dozens at a time. In the mid-1920s, physician R. Plato Schwartz detailed the Cincinnati General Hospital’s use of an arc light that could treat twenty to thirty patients at once.\footnote{Schwartz, “The Application of Radiation,” 691-97.} Such group treatments were possible even for very young patients. One photograph reproduced in multiple texts shows a group of five infants and toddlers in a playpen, wearing diapers and protective goggles while receiving UV light therapy from multiple lamps. Neither a doctor nor a nurse was pictured overseeing their care.\footnote{This image appears both in Katherine Gamgee, The Artificial Light Treatment of Children in Rickets, Anaemia and Malnutrition (H. K. Lewis & Co. Ltd (1927) and Russell and Russell, Ultra Violet Radiation and Actinotherapy.} From the images and accompanying descriptions of the practice, it is apparent that the corps of nurses required by Finsen’s methods was no longer necessary. The reduction in the medical personnel and the ability to treat a larger number of patients at once addressed two of the primary frustrations that American physicians expressed with Finsen’s system.

Additionally, as medical care became more professionalized, urbanized, and technologically dependent, the relative simplicity that facilitated heliotherapy’s acceptance may also have led to its decline. Although some physicians, including Rollier,
stressed the importance of medical oversight in heliotherapy, others seemed less concerned. By the mid 1920s, the U.S. Children’s Bureau, public health officials, and physicians instructed mothers on how to give their children sunbaths at home. They did not extend the same latitude to sunlamps. Although some UV lamps were marketed to the general public, the US Children’s Bureau advised parents to consult their physicians for more information about using artificial sunlight.651

Furthermore, as historian Margarete Sandelowski has argued, physicians relegated technologies (like thermometers) that they believed did not require medical interpretation to nurses, while retaining control over other devices (like stethoscopes) that they believed “demanded special knowledge.”652 Like thermometers, heliotherapy did not require formal medical training to administer. In 1916, William Bennett, the physician in charge of the CSH, claimed that patients’ care did not require the skills of a formally trained nurse.653 Given this perspective, it seems that heliotherapy could have easily made the transition from hospital to home since it did not require formally trained nurses for its administration.

Despite these changes, UV lamps did not represent a rejection of the sun’s healing power. Beginning with Finsen’s original design, physicians imbued UV lamps with their faith in the sun’s ability to cure disease. They used the latest scientific data about the sun’s bactericidal properties to dictate their machine’s design and its therapeutic applications. Finsen’s insistence on enhancing natural sunlight derived from his clinical

651 Freund, American Sunshine, 116.
652 Margarete Sandelowski, Devices and Desires: Gender, Technology, and American Nursing (Chapel Hill: University of North Carolina, 2000), 81.
experience that Denmark’s northern latitude rendered sunlight too weak and undependable for patient treatment. It did not reflect a broader lack of confidence in the sun’s ability to be therapeutically effective.

This was especially true in the United States, where physicians proclaimed that natural therapeutics were superior to their artificial approximations. Between 1900 and 1920, many American physicians pointed to natural sunlight’s prophylactic effects as one of its chief advantages over artificial UV exposure. Despite the fact that German investigators had achieved “astonishingly favorable results” when using artificial light for treating patients with rickets, New York physicians Alfred Hess and Lester Unger concluded that UV lamps neither prevented nor treated the disease. They insisted “violet ray treatment cannot be considered equivalent to heliotherapy.”

Yet by 1921 Hess and Unger changed their views, claiming that not only did patients’ rickets improve markedly, but “the general condition of the infants also benefitted,” after UV light treatment. The improved “general condition” indicated that UV lamps served a preventive function by improving patients’ overall health. This was confirmed by studies that determined that artificial and natural light produced the same changes in blood chemistry as anti-rachitic substances, like cod liver oil. Such investigations put natural and artificial interventions on equal therapeutic footing. By

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654 Interestingly, one of the benefits that physicians noted for both the seashore and mountains was the reflective surface of the water or snow, which amplified the sun.  
656 Ibid.  
1930, American scientists claimed that it was “well known” that ultra-violet rays from mercury vapor arc lamps could be used in the “prevention and cure of rickets."\textsuperscript{658} UV lamps’ preventive and curative effects put it on equal footing with natural sun therapy.

By the 1920s, UV lamps also more closely replicated natural sunlight. In 1926, Plato Schwartz highlighted his hospital’s lamps’ ability to produce a spectrum of light so similar to the sun’s that patients’ “therapeutic reactions are practically identical to those obtained by exposure to sunlight.”\textsuperscript{659} He continued:

\begin{quote}
…it seems safe to state that it is no longer necessary to depend upon the sun which produces radiant energy of known therapeutic value in the treatment of chronic diseases, and there is some justification for believing that an exact reproduction of sunlight will ultimately be obtained by further improvements in the lamp which is now in operation.\textsuperscript{660}
\end{quote}

Schwartz’s statement shows how one physician melded nature with technology, the natural with the artificial. Schwartz’s equation of “improvement” with an “exact reproduction of sunlight” suggests that he saw perfect mimicry of natural sunlight as the ultimate objective of artificial light therapy. Even as Schwartz promoted UV lamps, he elevated the sun’s ability to heal.

Being able to reproduce sunlight meant that physicians could overcome the limitations of place. Practitioners in urban centers could provide their patients with the benefits of the sun regardless of the weather outside. By the mid-1920s, UV lamps freed sun therapies from the constraint of place. No longer did physicians have to send their

\textsuperscript{659} Schwartz, “The Application of Radiation,” 696.
\textsuperscript{660} Ibid.
patients to the country or seashore to access sunlight; studies had proven that artificial light produced the same curative and preventive outcomes as natural sunlight. This knowledge allowed physicians to keep children in urban centers, knowing that they could receive the benefits of natural sunlight with the simple switch of a UV light. No longer did they have to contend with polluted skies or depend on Mother Nature to provide “Dr. Sun.” UV lamps provided practitioners with a technology of nature, a device that blurred the lines between nature and artifice.

Conclusion

Sunlamps did not unilaterally cause the decline of pediatric seashore hospitals. In the 1920s, seashore hospitals could equally promote their uses of heliotherapy, as the CSH did in 1922, and actinotherapy, as the BFH presented in 1926. UV lamps are, however, representative of a generalized phenomenon that resulted in dampening the perceived necessity for seashore hospitals. As this case study of UV lamps has shown, physicians were able to justify moving their patients from outdoor porches to interior hospital rooms by developing devices that reproduced the sun’s health-giving properties. As scientists and physicians made machines with the capability to harness and reproduce nature’s remedial effects, marine medication was freed from its constraints of place. Although many seashore hospitals and sanatoriums continued to employ heliotherapy and other natural therapeutics until World War II, the seashore was no longer required for

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661 Andress and Mace, Health and Success, 117.
662 In addition to UV Lamps, physicians also developed and/or utilized technologies including ozone generators, saline solution, and swimming pools to replicate the health benefits of the outdoor environment.
urban children to be able to access sunlight. With the flip of a switch, physicians provided their patients with the sun, and projected the belief that nature could cure.

Le Chalet remained open through World War II; the Children’s Seashore House in Atlantic City, NJ, treated patients in Atlantic City until 1990, at which point the hospital transferred its operations to Philadelphia. Likewise, mothers continued to be encouraged to give their babies sunbaths at least until the mid-20th century.

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663 Le Chalet remained open through World War II; the Children’s Seashore House in Atlantic City, NJ, treated patients in Atlantic City until 1990, at which point the hospital transferred its operations to Philadelphia. Likewise, mothers continued to be encouraged to give their babies sunbaths at least until the mid-20th century.
Figure 5.1. “Our Friend the Sun.” Image of the sun as physician, as depicted in the children’s health textbook *Health and Success* (1924). Mace Andress and W. A. Evans. *Health and Success* (Boston: Ginn and Company, 1925), 117.
Figure 5.2. Child undergoing UV lamp treatment for rickets at the Boston Floating Hospital, 1925. Boston Floating Hospital. *Thirty Second Annual Report for 1925*, 32-33.
Figure 5.3. Four patients undergoing UV light therapy at Finsen’s Institute. One nurse attended to each patient and was responsible for adjusting the device and maintaining the patient’s head position during therapy. Valdemar Bie, “Remarks on Finsen’s Phototherapy,” *The British Medical Journal* 2, no 2022 (Sept. 30, 1899): 828.
Figure 5.4. Cosmetic results. Before and after images of a 30-year-old patient who received treatment for lupus vulgaris at Finsen’s Institute. Bie, “Remarks on Finsen’s Phototherapy,” 828-1.

Figure 5.5. Rollier’s chart depicting the graduated sun-exposure required at the beginning of heliotherapy. Auguste Rollier, Heliotherapy (London: Henry Frowde and Hodder & Stoughton, 1923), 23.
Figure 5.6a. “RR” at arrival at Leysin. His gaunt frame is apparent, and some of his 34 lesions have been highlighted.


Figure 5.6b. RR two years after admission. All of his lesions had closed, with visible scars remaining on his hand and leg.

Figure 5.6c. “RR” skiing, 2.5 years after admission.
Rollier, *Heliotherapy*, 133.

Figure 5.6d. Follow-up image of “RR” after having been discharged. Taken 13 years after admission to Le Chalet.
Rollier, *Heliotherapy*, 133.
Figure 5.7. Pediatric patients undergoing heliotherapy at Sea Breeze Hospital in Coney Island, NY. Guy Hinsdale, *Atmospheric Air in Relations to Tuberculosis* (Washington DC: Smithsonian Institution, 1914), 54.
Epilogue

On January 19, 2006, the *New England Journal of Medicine (NEJM)* published two studies that examined the effects of inhaling saline solution in patients with cystic fibrosis (CF). CF is a chronic and lethal genetic disorder that causes mucus to clog patients’ lungs and results in life-threatening infections for tens of thousands of children and young adults in the United States.\(^{664}\) There is no cure. One of the studies published in *NEJM* in 2006 was a randomized, double-blind, placebo-controlled study of hypertonic (7 percent) saline solution, compared to a 0.9 percent saline solution. Investigators divided 164 cystic fibrosis patients into two groups, with half receiving placebo and half receiving the intervention. The patients inhaled their respective solutions twice a day for 48 weeks. The intervention group had better lung function overall, with patients experiencing significantly fewer “lung exacerbations” (episodes of worsening of lung disease) and far fewer hospitalizations.\(^{665}\)

Scott Donaldson, a physician, and William D. Bennett, professor of medicine at University of North Carolina, Chapel Hill, conducted the second study that investigated the therapeutic effects of hypertonic saline treatment combined with amiloride, a drug that enhances the hydration effect of saltwater.\(^{666}\) The authors hypothesized that amiloride would improve lung function above the saline-only treatment. They found the

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\(^{666}\) As far as I can tell, William D. Bennett of this study is not related to William H. Bennett, the first physician in charge of the CSH.
opposite. Patients who only received saline had an increase in lung function and an improved ability to clear mucus, whereas patients who took amiloride showed no improvement. The authors from both studies concluded that inhaling hypertonic saline solution was “an inexpensive, safe, and effective additional therapy for patients” with cystic fibrosis.667

At first read, there are few, if any, connections between these studies and the marine medication that physicians used at seashore hospitals in the late 19th and early 20th centuries. Yet the same day these articles appeared in the *NEJM*, CNN.com published “Studies Look to Sea for Cystic Fibrosis,” an article that described these studies’ findings.668 The author, Peggy Peck, wrote, “An effective treatment has long been elusive,” for CF patients, but “now it seems that one was hiding in plain sight: in the world's oceans.”669 She quoted Donaldson, the lead author of the UNC study, describing his observation that "surfers with cystic fibrosis had fewer lung exacerbations."670 This led Donaldson to hypothesize “that there might be something about saltwater that could explain improved lung function in the surfers.” Donaldson admitted that he was surprised by his study’s results. He had doubted that saltwater, or hypertonic saline solution, would be enough to produce positive results. This led him to supplement saline with amiloride in an attempt to improve patients’ responses. Donaldson recalled being “blown away”

670 Peck, “Studies Look to Sea.”
when patients who received saline alone “got all the benefit,” while those who were given amiloride showed no improvement. The result sent Donaldson and his colleagues “scurrying back to the lab,” for further investigations.\textsuperscript{671}

Despite the fact that Donaldson’s experiment derived from his observations that the sea-air and saltwater benefitted CF patients’ health, the environment is entirely absent from the medical publications and suggested therapeutic interventions. According to the journal articles, the experimental designs were based on the “isotonic volume-depletion hypothesis,”\textsuperscript{672} which posits that cystic fibrosis results in “a lack of regulation of sodium absorption and chloride secretion [that] causes depletion of airway surface liquid” and makes it difficult for patients to clear mucus from their lungs.\textsuperscript{673} The authors made no mention of their observations about surfers. Nor did they recommend that patients head to the shore or take up surfing. Instead, physicians and scientists promoted laboratory-based interventions, such as developing a seven percent saline solution or a powder that could produce the same results but could be delivered more rapidly.\textsuperscript{674}

\textsuperscript{671} Donaldson and his colleagues found that amiloride blocked water transport from patients’ blood. Physicians who treated patients with cystic fibrosis held great hope for the saline therapy’s potential to improve young patients’ lives. One pulmonologist noted that, “It is not very often that you can find a cheap substance that offers the potential to make a difference in the outcome of a disease that begins early in life and carries a very high morbidity and mortality,” and he characterized the studies’ rates of reduction in hospitalizations due to lung exacerbations as “very, very significant.”

\textsuperscript{672} Elkins, et al., “A Controlled Trial of Long-Term Inhaled Hypertonic Saline,” 230.


\textsuperscript{674} Peck, “Studies Look to Sea.” The fact that physicians promoted technology interventions is striking, given their drawbacks, which included patient incompliance and having to convince drug companies to develop the saline solution, an inexpensive and therefore financially unattractive venture for businesses. Generally, saline solution has a concentration of 3 percent. Obviously saline solution would provide therapy for patients who do not have access to the ocean, so it makes sense in that regard to promote alternatives to surfing.
The unwillingness, or inability, of the medical profession to acknowledge the environment’s role in producing health is a major shift from the early 20th century. As detailed in this dissertation, in the early 1900s, elite physicians continued to promote the idea that the seashore’s environment could cure pediatric patients suffering from a range of diseases and disorders. Prominent medical journals published articles that detailed the salubrious effects of the sea on children’s bodies and health, including its ability to improve lung function, increase metabolism, and reform bent and broken bodies. In the 1910s, physicians were still expanding their natural therapeutic regimens, incorporating the recently developed practice of heliotherapy in lieu of technological interventions. However, as medicine became increasingly laboratory-based, reductionist in thought, and technologically oriented over the course of the 20th century, marine medication became uncoupled from the seashore. With these changes, technologies that mimicked nature, such as UV lamps and saline solution, rendered environmental therapeutics unnecessary and unworthy of medical attention.

The conversion from natural therapeutics to technological interventions was so complete that physicians are now surprised to find a connection between the seashore and health, even when they witness the environment’s therapeutic benefits on their patients’ health. The fact that the Australian investigators went through the trouble and expense of evaluating saline therapies in a randomized control trial – the “gold standard” of rigorous medical research – indicates investigators’ recognition that their conclusions would be
met with skepticism. Moreover, they admitted to being baffled when they failed to enhance saline’s effects with supplementary interventions. Physicians’ dependence and belief in the power of science and technology sent Scott Donaldson “scurrying back to the lab” rather than to the sea to understand why saline performed better alone.

This surprise at the ocean’s therapeutic potential is not limited to medical and scientific professionals. The healthscape of the seashore has deteriorated so that parents of cystic fibrosis patients, like their physicians, expressed amazement that the ocean could improve their children’s health. Lindsay Ross, the mother of Taylor, a young CF patient, recalled the night she found her daughter not breathing. Lindsay sat Taylor up and slapped her back, causing Taylor to cough up the mucus that was plugging her lungs. After that episode, Taylor began to surf and her lung functioning improved. Although it’s unclear how Lindsay and Taylor learned about surfing’s benefits, Lindsay announced her astonishment at the results, saying, “Something as simple as putting her out in the ocean – in nature – to breathe. It’s pretty amazing.”

Patients with CF are far from the only children who make the pilgrimage to the shore. Much like the mothers who went to the cottages at the CSH, parents have continued to bring healthy children to the beach for vacations. Most, however, no longer

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675 For more on the history of the randomized control trial in medicine, see: Harry M Marks, The Progress of Experiment: Science and Therapeutic Reform in the United States, 1900-1990 (Cambridge: Cambridge University Press, 1997).

676 Laylan Connelly, “Pro Surfers Help Kids With Cystic Fibrosis Catch Waves,” “http://beach.blog.ocregister.com/2010/06/26/pro-surfers-help-kids-with-cystic-fibrosis-catch-waves/24783/”. Accessed June 4, 2013. There are a number of popular websites devoted to surf therapy, and there is a large fundraising benefit called Pipeline for a Cure, which brings together surfers and patients to raise money for CF research. So while it is possible that Lindsay and Taylor learned about surfing through their physician, it is equally (if not more) plausible that they discovered the programs through the CF community’s online resources.
go with the intention of improving their families’ health. As this dissertation has shown, by the 1920s the pendulum had already swung from health to leisure as working-class mothers’ primary motivations for bringing their children to the shore. Around the same time, tourists’ associations of the beach with healthcare began to fade as the therapeutic practices of sea and sunbathing moved into the realm of accepted social practice and out of medical oversight. By the mid-20th century, technologies had harnessed the seashore’s salubrious effects and new drugs had been developed that quickly and effectively treated diseases like tuberculosis. With these developments, the seashore was no longer necessary for providing pediatric patients with the salubrious sun, sea-air, or saltwater.

Yet there is a sense within contemporary popular and medical thought that as pediatric patients have moved inside and into urban hospitals, something important has been lost. In 1990, the Children’s Seashore House (CSH) moved from their beachfront property in Atlantic City, NJ, to the city of Philadelphia after merging with the Children’s Hospital of Philadelphia (CHOP). When the new CSH opened, it provided care for patients in units that were “sparkling, diverse, and directed,” and that could better meet the need for the “acute medical” attention required by patients. A “magnificent therapeutic state-of-the-art swimming pool” took the place of the Atlantic Ocean. Although the medical advantages seemed clear, many people mourned the CSH’s departure from the shore. The CSH had been the fourth oldest pediatric hospital in the United States and a landmark in Atlantic City for over 115 years. As one pediatrician who trained at CHOP and then worked at the CSH in Atlantic City wrote, “It is a sad and

sentimental time with the closure recalling eras long since gone before the growth of hospitals as businesses and technological repositories.”

In 2012, 22 years after its move from the seashore, the managers at Children’s Seashore House shared this sentiment. In response they decided to open the “Sea Garden,” a rooftop garden located on the third floor of the urban hospital to “help patients heal and rehabilitate,” “encourage healthful nutrition and activity,” and “bring the outdoors to children who must spend a lot of time inside.” The hospital hired the Groundswell Design Group who developed a garden that was “inspired by the charms of the original Seashore House,” and was meant “to return the calm of the sand and sea to patients and families.” The outdoor space provides patients and their families with the opportunity to plant and dig in garden beds, play basketball, or enjoy a game of hopscotch, all while listening to the sounds of the seashore piped in through an outdoor sound system. One mother commented that she believed that Sea Garden would help her son, a patient at the hospital, noting, “Some children are not allowed outside the building, so it gives them an opportunity to go outside, get a breath of fresh air, explore new things.”

Vestiges of the original CSH appear in the Sea Garden. In 2012, as in 1872, parents and hospital administrators expressed a sense that sick children benefitted from

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678 Ibid., 289.
680 Ibid.
682 Ibid.
being outdoors. The fresh air, change of environment, and ability to play and explore in the Sea Garden is understood to promote children’s health and well-being, much like physicians and parents believed that a trip to the seashore would be beneficial in the late 19th and early 20th centuries. Health, leisure, and the outdoor environment are intertwined now just as they were then. Groundswell built the garden to provide hospitalized children and their parents a place that would be simultaneously calming and reinvigorating, a place where children could play, relax, and heal. The hospital celebrated the garden as “a colorful, fragrant, living extension of our mission, helping children with different challenges bloom and grow to the best of their abilities.” Being outdoors among plants, children become rooted in the environment and they “bloom” with health, like the flowers they tend and the potatoes that grow in the sunlight.

While the rhetoric of parents, patients, and physicians about Sea Garden is similar to that of the physicians and founders of the CSH, today people seem to be grasping for something beyond their reach. Sentiments about the importance of nature and the outdoor environment to children’s health are felt and even practiced, but they are no longer grounded in medical and scientific knowledge as they were at the turn of the 20th century. This loss of the medical knowledge that helped build the healthscape of the seashore is captured by Timmy Reyes, a pro-surfer who worked with cystic fibrosis patients. After spending a day with Taylor Ross, the young girl with CF, Reyes exclaimed, “The salt water helping the children is so cool. Who knew that would actually do that?”

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684 Connelly, “Pro Surfers Help Kids with Cystic Fibrosis.”
surfers and physicians, parents and patients, are beginning to uncover what people knew
over one hundred years ago: that the seashore can help heal bodies and restore children’s
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