Houses of the Healers:
The Changing Nature of General Hospital Architecture in Hamilton, 1850–1914

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During the last half of the nineteenth century, medical science and technology revolutionized hospital care and contributed to the internal and external reordering of hospital space. However, changes to the design and internal functions of hospitals were not strictly governed by new technological developments. Indeed, the economics of providing hospital services, the variances in support for public charities, and social interaction within the institution were also responsible for making the hospital a place that all would enter for the treatment of disease. Changes to the architecture of general hospitals in Hamilton, Ontario, illustrate these points.

Durant la deuxième moitié du XIXe siècle, la science et la technologie médicales ont révolutionné les soins hospitaliers et contribué au renouvellement de l'espace hospitalier, tant interne qu'externe. Toutefois, les changements apportés à la conception et aux fonctions internes des hôpitaux ne procédaient pas des seuls impératifs de l'évolution technologique. De fait, l'économie de la prestation des services hospitaliers, les écarts de soutien aux organismes publics de bienfaisance et l'interaction sociale au sein des établissements ont également contribué à faire de l'hôpital un lieu de traitement de la maladie accessible à tous. Les modifications apportées à l'architecture des hôpitaux généraux de Hamilton, en Ontario, illustrent ces points.

THE MODERN HOSPITAL occupies a central place in our society as a necessary social institution. While it has become customary for seriously ill people of all social classes to turn to the hospital for medical treatment, this practice is a recent development. Nineteenth-century North American medical institutions were primitive places that generally provided routine charitable care for the indigent. The administration of rudimentary therapies to a largely impoverished clientele strengthened the perception that the hospital was a last resort for the truly desperate. The hospital remained a place for the poor until a series of important technical developments com-

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combined with professionalism, bureaucracy, and an increasingly urbanized society transformed it into a more modern scientific institution during the latter part of the nineteenth century.1

The work of medical historians has been instructive in identifying the complex forces that have shaped the modern hospital. Recent hospital historiography has transcended earlier interpretations that viewed hospital development solely within the context of medical science and progress.2 This new literature has highlighted the limitations of the earlier approach by demonstrating that a multiplicity of social, economic, and scientific mechanisms were responsible for the social transformation of the hospital. Clearly the greatest influence on shaping the modern hospital has been medical theory and discovery. Charles Rosenberg, in his seminal work, The Care of Strangers, remarks that "one can hardly understand the evolution of the hospital without some understanding of the power of ideas, of the allure of innovation, of the promised amelioration of painful and incapacitating symptoms through an increasingly effective hospital-based technology."3 New medical technology, which improved the hospitals' ability to deliver efficacious scientific medicine, contributed to wider demand for patient services. In addition, the physical environment of the hospital was shaped by economic and political considerations. Both Morris Vogel and David Rosner demonstrate that the provision of private wards and services was often prompted by the needs of financially burdened hospitals to finance new capital costs. In addition to attracting affluent patients, these changes enhanced the social role of the hospital by expanding its medical functions.4 Rosemary Stevens succinctly summarizes the complex set of forces that have shaped this institution when she notes that the "hospital has symbolized the wealth and power structures of new and expanding American cities, the order and glamour of science and the happy conjunction between humanitarianism and expertise."5

In addition to examining these variables, the effective study of any institution must take into account the social context of the local community.

Medical historians have examined hospitals for the most part within a scientific context. This presents a significant limitation as institutions cannot be properly understood in isolation from society. Buildings are dependent upon community relationships for sustenance, as institutions, people, and sites are interconnected within a particular locale. Obtaining a sense of place, which includes the development of an awareness of the particular qualities of a town, thus becomes critical in order to generate an understanding of society and its institutions.

Hospitals, like other public institutions, are designed to provide for the systematic distribution of space, and their form and function are shaped by a variety of factors. In the case of nineteenth-century Hamilton, three key variables influenced the evolution of medical institutions. The creation and prolonged longevity of local hospitals were directly affected by the political process and the subsequent variances in public support for medical charities. The evolution of the industrial environment and a steady influx of migrants had pressured a reluctant municipal government to erect rudimentary charitable institutions for the poor. Although benevolence provided the initial motivation for hospital construction, the desire to provide care to an expanding group of clients became increasingly important as the hospital matured as a social institution. Indeed, medical consumerism and the impact of economics upon the provision of medical care in both civic and religious institutions also affected the development of local hospitals. During the early nineteenth century, Hamilton hospitals provided charitable care to an indigent clientele who were either unable or unwilling to care for themselves. This situation persisted until hospitals began to abandon the charitable commitment in favour of catering to paying patients who were attracted to the scientific medicine that was beginning to be practised. Recognizing the potential for new revenue sources, hospital governors constructed private rooms and provided special services to affluent patients paying for medical therapy. Hospitals reinforced existing social relationships by offering different levels of service and by providing the affluent with a sense of place. The internal and external design of local hospitals was also influenced by the larger changes taking place in society. Variations in architectural planning and interior design were not strictly governed by new medical technology. Although the advent of scientific medicine during the last decades of the nineteenth century was the driving force behind the hospitals’ metamorphosis, the social class of patients, as well as the desires of medical staffs and hospital trustees, also had an impact. Consequently, understanding the social interaction within the hospital is essential to comprehending its evolution and function in society. The evolution of hospital architecture

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demonstrates that, although medical science was the causal factor in transforming the Hamilton general hospitals into more effective institutions of healing, other non-medical forces were also responsible for making the hospital a place that all would enter for the treatment of illness.

The Evolution of Hospital Design

Hospital design has changed considerably over the last several hundred years. Medieval medical institutions were generally constructed from a Christian desire to nurse the sick. Often attached to monasteries, these rudimentary structures primarily provided spiritual comfort to patients. Inmates were housed in cross-shaped wards that enabled them to observe daily religious rituals from their beds. Hospital design remained elementary until the mid-nineteenth century, when ideas of anti-contagionism, which demonstrated the importance of providing a sterile environment to prevent the spread of disease, revolutionized the layout. The role of architecture in facilitating recovery was quickly recognized as new types of specialized medical buildings were erected. The concern for a sanitary environment spurred hospital planners into creating hospitals with specific design plans.

The hospital design that achieved prominence in both Europe and North America was the pavilion plan. It slowly evolved in direct response to the miasmatic theory of infection, which postulated that disease was transmitted by polluted or bad air. This theory provided the rationale for the construction of large buildings on spacious grounds in order to increase natural ventilation and help reduce hospital contagion. These well-ventilated buildings were designed to allow the escape of the disease-causing miasmas. Although the plan had been adopted for the construction of London Hospital in 1752, its merits were not fully recognized until the heroic exploits of Florence Nightingale during the Crimean War demonstrated the design’s curative advantages. Nightingale’s experiences at the British military barracks in Scutari revealed the positive impact of fresh air, light, and separate buildings on patient recovery. In her subsequent Notes on Hospitals, written upon her return to Britain in 1858, she explained in great detail the importance that the construction and arrangement of buildings played in the prevention of death. Nightingale wrote:

[II]t is at last universally admitted that any open site, simplicity of plan, subdivision of cases under a number of separate pavilions, large cubic space, abundant fresh air, mainly from windows on the opposite sides of the wards,

11 Lestikew, Ten Centuries of European Hospital Architecture, p. 75.
drainage arrangements entirely outside the hospital are essential conditions to the safety of all general hospitals.\(^{12}\)

Nightingale advocated the construction of pavilion-style hospitals with a number of symmetrically separate buildings that facilitated the speedy escape of vitiated air.\(^{13}\)

Although the first pavilion hospitals were erected in Europe, the plan was successfully adopted in North America primarily for two reasons.\(^{14}\) First, the development of professional architectural journals in the 1850s enabled architects to claim expert knowledge in the functional requirements of buildings. Architects were able to utilize their emerging professional status to influence the construction of specific building types.\(^{15}\) Secondly, as advances in surgery enhanced the possibility for clinical success, doctors in search of professional recognition attached increasing importance to clinical work at the hospital. As a result, physicians began to offer advice on hygiene and how it could be improved through the adoption of the pavilion plan.\(^{16}\) Hospital designers became influenced by these developments, and design evolved from the provision of mere shelter for the ill to the rational planning of a suitable healing environment.

Pavilion-plan hospitals tended to be symmetrically designed, U-shaped, two-storey structures. Devised to maximize fresh air and sunlight, they were often constructed in large open spaces on the outskirts of town. The pavilion design showed elements of ideal town planning as hospital courtyards were encircled by fences and entered only by gates.\(^{17}\) Robert Owen’s plans for New Lanark and Harmony, Indiana, highlight the use of enclosed squares in the creation of ideal towns that were intended to foster a spirit of communal unity.\(^{18}\) The


\(^{14}\) The earliest pavilion-plan hospitals were developed on the largest scale in France, largely in response to the horrendous conditions of the Hôtel-Dieu in Paris. Pavilion hospitals were constructed in Bordeaux in 1821 and Brussels in 1848. Between the 1860s and the 1870s this plan spread to North America as hospitals using this style were constructed in New York, Boston, Cincinnati, and Philadelphia. For a complete listing, see Rosenberg, *The Care of Strangers*, p. 137.


\(^{16}\) Forty, "The Modern Hospital", p. 81.


\(^{18}\) Helen Rosenau, *The Ideal City in its Architectural Evolution* (London: Routledge and Kegan Paul,
pavilion plan’s interior featured large open wards that were naturally ventilated by windows. Each ward usually accommodated anywhere from 20 to 32 patients. This range was considered ideal by hospital planners because it afforded sufficient fresh air and space for healing patients.

City Hospital: The Local Pavilion-Plan Hospital

Providing a suitable healing environment for medical patients in Hamilton was initially not a primary concern of local politicians. City Hospital, originally designed and utilized as a hotel, was converted to a charitable institution in 1853 to service the medical needs of the local indigent. However, as the population steadily increased to over 33,000 by the 1870s from approximately 16,000 when the hospital was opened, its task was made increasingly more difficult. Overcrowding became a chronic problem. J. W. Langmuir, Provincial Inspector for Public Charities, concluded during an inspection in 1878 that the hospital was overcrowded and noisy because the hallways opened onto the wards. According to Langmuir, “these defects alone are sufficient to cause the building to be condemned for hospital purposes without speaking of the great inconvenience of having to take patients, some of whom have to be carried up four flights of stairs.”

Given these deficiencies, it is not surprising that Langmuir forcefully encouraged City Council to construct a new hospital. Heeding the inspector’s advice and more importantly his threat to withhold provincial operating funds, city officials invited Langmuir to bring his book of hospital plans to Hamilton and advise them on the selection of a suitable structure. City officials also commissioned Lucien Hills, a local architect, to conduct a study and compose sketches and estimates for the construction of a new hospital. Hospital architects of the era were not always chosen for their expertise; they were selected because they either undercut fellow competitors or were well connected to hospital management. Given City Council’s reluctance to spend extravagantly on public charitable institutions.

20 Nightingale, Notes on Hospitals, pp. 35, 42, 67. Other planners deviated slightly from the Nightingale standard. W. Gill Whylie, for example, proclaimed 12 to 32 patients to be quite acceptable for recovery. See his Hospitals: Their Organization, History and Construction, p. 99.
23 Hamilton Public Library, Special Collections (hereafter HPLSC), RG 1, Hamilton City Council Minutes, April 12, 1880.
24 HPLSC, RG 1, City Council Minutes, May 31, 1880.
the selection of Hills as architect probably reflected his agreement to work for a minimal fee.

Hills appeared before the hospital committee and suggested that a new facility could be constructed for $25,000.26 City Council, confident that municipal revenue could finance this expenditure, put the hospital contract up for bids. Initial enthusiasm was dampened as tenders proved to be too high and Council was forced to re-open the bidding process.27 City fathers eventually accepted a sealed bid for a pavilion-plan hospital entitled “No Extras No. 1”, a plan which appealed to Council’s sense of thrift. The plan also contained a number of superior options not part of the only other bid submitted. For example, the “No Extras” plan afforded patients more fresh air and sunlight because the position of the main building was at the rear of the lot and away from other buildings. Moreover, the plan provided wards with 15,135 cubic feet of living space lighted by nine windows as compared to the 8,366 cubic feet and four windows proposed by the other plan.28 The provision of ample space and sunlight was considered an essential part of the healing process and underlined the pervasiveness of contemporary European hospital planning theories in North America.

City Council appointed Lucien Hills to oversee the actual construction. His task was to “make the necessary alterations and additions in the plans of the new hospital”.29 The hospital consisted of three buildings. The main administrative building, located in the centre of the complex, was constructed in the Second Empire Style, which became popular in Hamilton during the last quarter of the nineteenth century. This architectural style evolved in France during the reconstruction of Paris commissioned by Napoleon III during the 1850s. Essentially, Napoleon wished to eradicate the city’s social problems through a beautification programme that featured the creation of wide boulevards and elaborate structural façades.30 The style’s rich architectural detail and variety of form became popular in Canada as it came to symbolize the prosperity and wealth of the Victorian city.31 In keeping with the grandeur of this style, the exterior of City Hospital was quite elaborate. The mansard roof, with a wrought-iron palisade coupled with red and white patterned brick, delivered an intimidating impression to those entering the hospital doors. The lavish exterior reflected civic pride, the power of the medical establishment, and a desire to showcase the modern medical services that all progressive urban centres were to possess.

26 HPLSC, RG 1, City Council Minutes, June 28, 1880.
27 Ibid., August 2, 1880.
28 Hamilton Spectator, August 30, 1880.
29 HPLSC, RG 1, City Council Minutes, April 11, 1880.
Two wings, separate from the main building, formed the arms of the U-shape. Each was 140 feet long by 47 feet wide and two storeys high with a basement. Patients were segregated according to gender in each wing. The east wing, located to the right of the central administrative building, housed male surgical patients on the ground floor and medical cases on the second. Women patients were housed in the west wing in a similar manner. The symmetrical design of the plan with its open wards allowed both the segregation and supervision of patients. There were few private or semi-private rooms; large public wards that could accommodate eight to 15 patients each predominated. Many beds were located near the windows in order to secure an abundance of healthy air. Although the provincial inspector questioned the necessity of providing so many windows on the grounds of saving heat, the belief among medical men that a steady flow of fresh air would prevent the creation of miasmas prevailed and the windows were kept.

At its official opening on October 25, 1882, City Hospital possessed a capacity of 150 beds and was equipped with the latest furnishings. The institution featured indoor plumbing, which allowed for a steady and reliable source of fresh water, as well as gas jet mantles that provided excellent illumination on the wards. However, the building was plagued by grave structural defects. The east and west medical wings were firetraps because exits were located only at the north ends. W. T. O’Reilly, the new Provincial Inspector of Public Charities, considered this flaw significant enough to

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32 *Hamilton Spectator*, April 15, 1882.
34 *Hamilton Spectator*, July 23, 1883.
withhold provincial grants until exits were constructed at each end of the wings to allow quick and safe evacuation.\textsuperscript{36}

Like the earlier institution it replaced, City Hospital was funded as a public charity. As a result, individual indigent patients needed signed consent from politicians for admission. Despite the fact that the new hospital possessed modern features, it was regarded, like its predecessor, as a haven for the poor. An editorial in the \textit{Hamilton Spectator} noted that "many people look upon the hospital as a last place of resort for the needy people and think that it is something of a disgrace to seek admission to one."\textsuperscript{37} In addition, the probability of contracting infection was increased in the large open ward setting which further estranged the affluent from the hospital. City Hospital was generally a place that all, including the poor, wished to avoid. Despite these shortcomings, it was truly first-class according to the provincial inspector, as its sanitary arrangements were considered to be superior to any facility in the province.\textsuperscript{38}
Derived-Plan Institutions
Unlike City Hospital, which was designed specifically as a health-care centre according to principles of the pavilion plan, the two other local hospitals, St. Peter’s and St. Joseph’s, were derived-plan institutions. That is, they occupied buildings originally designed for non-hospital purposes.

St. Joseph’s Hospital, a local Catholic institution established in 1890, was a large three-storey structure. The entrance was marked by an elegant stone portico and balcony which led to spacious reception rooms and a chapel elegantly furnished with crystal chandeliers.39 The second and third floors contained a well-ventilated open ward and private rooms for 25 patients. The original design of the home, however, prevented the installation of an adequate operating theatre. Advances in the surgical craft underscored this deficiency and led to an expansion that featured a new operating suite. The St. Ann’s Wing, a 50-by-30-foot brick building, was formally added to the house in December 1894.

This addition not only provided extra office space, but also increased the number of beds, primarily for private paying patients. The second floor housed three private wards and a public women’s ward. The third floor contained seven private rooms fitted with gas jets and mantles, for which affluent patients paid between $2.50 and $10 per week. These charges helped offset the cost of treating the sick indigent, as neither the city nor the outlying municipalities paid anything towards the operating expenses of this Catholic hospital.40 The key feature of this expansion was the operating theatre, built in an octagonal shape with eight windows and a skylight. The floors, walls, and ceilings consisted of granolithic tiles, which facilitated cleaning and helped to maintain a sterile environment.41 Its construction adhered to principles posited by Nightingale and other contemporary planners who suggested that operating rooms be lighted by a large skylight and ample windows.42

Unlike City Hospital, which catered to an indigent population, the operators of St. Joseph’s hoped for an affluent clientele. Since it was a private facility receiving no municipal support, it relied to a greater extent on patients’ fees to offset operating expenses. Its development plans reflected the compelling interest of the designers and owners to offer superior service to patients able to finance their own health care.

39 Hamilton Evening Times, June 12, 1890.
40 Ontario Sessional Papers, ARAPPC, 1893, 1896.
42 Nightingale, Notes on Hospitals, p. 38. Skylights eventually fell out of favour with the advent of electrical lighting. This alleviated the not uncommon problem of water leaking on both patient and surgeon during rainstorms.
A second derived-plan, chronic-care institution, St. Peter’s Infirmary, was opened on the four-acre Springer estate by the Anglican church in 1890. This three-storey structure, built in the Italianate style, housed 24 patients on the two main floors with additional rooms in the glassed canopy. Although the Infirmary provided badly needed medical supervision for chronic incurables, the home was plagued by certain deficiencies. It lacked proper fire protection and was “not furnished as a charitable institution receiving government aid should be”. Despite the large number of windows, the provincial inspector considered the home gloomy, as patients virtually sat in the dark during meals. Recognizing the discomfort darkness effected upon patients, the inspector suggested the installation of gas jets or electricity to increase the lighting. Improvements to the infirmary interior were soon made. Dark walls were painted in lighter shades to reflect the natural light that entered the windows, and the old coal lamps were replaced.

43 St. Peter’s Hospital Archives, Hamilton, St. Peter’s Board of Management Minutes, October 27, 1892.
44 Copy of Dr. Bruce Smith’s Inspection Report, dated December 14, 1905, in St. Peter’s Board of Management Minutes, May 7, 1906.
by gas jets in 1906. Wood stoves previously used for heat were upgraded to coal.46

From this examination of St. Joseph’s Hospital and St. Peter’s Infirmary, the limitations of adapting buildings for hospital purposes become apparent. Although the lack of detailed architectural drawings prevents physical reconstruction of the interiors, the lack of wide spaces, corridors, proper ventilation, and lighting, as demonstrated by the provincial inspection reports, hindered the ability of these institutions to offer adequate patient care. Since the overt intention of these clinics was to serve the indigent, however, these technical issues mattered to few, other than the government inspector. This was to change as the middle classes discovered the benefits of scientific medicine during the 1890s. Hospital governors, eager to capitalize on the wealth of the affluent who were attracted to the medical services offered by the modern hospital, embarked on grandiose expansion plans that catered to the more refined tastes of these patients. Hospital architecture experienced dramatic change as the hospital environment, particularly patient wards, underwent a significant transformation.

46 St. Peter’s Hospital Archives, Hamilton, St. Peter’s Board of Management Minutes. November 30, 1908.
Patient Impact on Architecture
The development of research and specialized operative techniques in the 1890s contributed to the advancement of diagnostic and surgical skills. As medical procedures became more complex, the well-to-do became increasingly aware of the limitations of home treatment and slowly gravitated toward the hospital. The professionalization of nursing was also an important factor in attracting the affluent, as the hospital began to offer the competitive incentive of continuous care by a trained staff. Nurses were an economical asset because they performed as a reliable, disciplined work force for low wages. Recognizing the value of nurses as an inexpensive source of labour, both City Hospital and St. Joseph's Hospital opened training schools to increase their nursing staff.

Hamilton hospitals began to attract a new clientele in search of advanced treatments and continuous care, and the traditional identification with poverty became blurred. Yet most local hospitals were not adequately equipped to accommodate affluent patients, as only St. Joseph’s possessed desirable semi-private and private rooms. The rigid social hierarchy of late-Victorian Hamilton made the affluent reluctant to share accommodation with the lower social orders, and class relationships became internalized within the hospital setting. The well-to-do were generally unwilling to enter City Hospital’s open wards, which were neither large nor elegant enough to accommodate the paying patient. Local hospital administrators counted on revenue from paying patients to offset the costs associated with modernization. The costs of providing scientific medical care in this community continually increased. The per patient per diem costs, the index used by medical institutions to measure expenditure, rose at City Hospital from $0.94 in 1890 to $2.04 in 1905. At St. Joseph’s Hospital, per diem costs increased less dramatically from $0.68 to $0.78 over the same period. To compound matters for local hospitals, government revenue as a proportion of total hospital revenue steadily decreased. This increasingly bleak economic situation forced hospitals to devise new strategies for raising funds. The tremendous revenue potential of prospective paying patients was recognized, and local hospitals embarked on ambitious renovation and expansion programmes to cater to the requirements of this new clientele.

City Hospital was the first institution to embark on expansion designed to accommodate this new breed of patient. Staff physicians lobbied the hospital Board of Governors for the construction of private ward rooms. By having their wealthy patients housed under one roof, physicians could devote more time to their care and waste less time travelling from patient to patient. On this advice, the hospital Board of Governors, created by

47 Rosenberg, The Care of Strangers, pp. 220–221.
48 Ibid., pp. 220–221.
49 Ontario Sessional Papers, ARAPPC, 1890–1915.
50 HPLSC, RG 13, City Hospital Board of Governor Minutes, August 6, 1896; Asa Bacon, “Efficient Hospitals”, Journal of the American Medical Association (June 10, 1920), p. 123; Hamilton General Hospital Library, City Hospital Medical Staff Minutes, April 12, 1897.
City Council in 1895 to regulate hospital finances, decided to commemorate the Diamond Jubilee of Queen Victoria by constructing private wards.\textsuperscript{51} The governors believed that affluent patients, able to pay for hospital care, were entitled to the same privacy and comfort afforded by the home environment.\textsuperscript{52}

While City Hospital’s large open wards and windows were designed to dispel “bad air” or miasmas, this theory of disease had since been superseded by the bacteriological work of Louis Pasteur and Robert Koch. Their research, which began earnestly in the 1860s, highlighted the fallacy of the miasmatic theory by demonstrating the pathogenic basis of disease. These scientific discoveries led to the acceptance of the germ theory and played an important role in reshaping hospital architecture. Hospital planners, equipped with a new understanding of the etiology of disease, began to criticize openly the design of pavilion hospitals. The large open wards of the pavilion plan had subjected patients to the sounds and smells of the institution. It also provided patients with little privacy while it exposed them to bacteriological cross-infection.\textsuperscript{53} As a result, alternative styles of closed-ward or mono-block construction became increasingly popular.

City Hospital selected another architect, LeChance, to design a plan for a new addition which incorporated this new building philosophy. The main features of the long, rectangular, two-storey Queen Victoria Jubilee Wing, added to the hospital in 1897, were its closed private and semi-private rooms and sky-lit operating theatre.\textsuperscript{54} The skylight, however, failed to produce adequate brightness for the operating room and staff doctors soon demanded the installation of artificial light.\textsuperscript{55} The construction of semi-private and private rooms was expected to lessen the risk of infection that was a feature of the pavilion-style open ward and to offer comforts that would attract patients paying for hospital care.

The ward was a welcome addition to a hospital periodically plagued by erysipelas. Access was from the left end only, for it was believed that this arrangement would reduce the risk of pathogenic bacteria from spreading throughout the corridor. Moreover, the central location of the nursing station enabled the staff to keep a close watch over patients and the flow of visitors. The new wing was also bright and cheerful and was illuminated by electricity.

Patients wishing to experience the luxury of private rooms were charged fixed weekly rates. Fees were collected in order to underwrite the cost of expansion and subsidize indigent patients in the open wards.\textsuperscript{56} Patients in

\textsuperscript{51} HPLSC, RG 13, City Hospital Board of Governor Minutes, March 15, 1897.
\textsuperscript{52} Rosner, A Once Charitable Enterprise, p. 78; Vogel, Invention of the Modern Hospital, pp. 101–104.
\textsuperscript{54} HPLSC, RG 13, City Hospital Board of Governor Minutes, December 17, 1897.
\textsuperscript{55} Campbell, A Mountain and a City, p. 182.
\textsuperscript{56} Hamilton General Hospital Library, City Hospital Medical Staff Minutes, February 1, 1898; Rosner, A Once Charitable Enterprise, p. 172; Vogel, Invention of the Modern Hospital, p. 106.
the private wards were charged eight dollars a week for hospital services in addition to the fees paid privately to their personal physicians. Paying patients were able to elicit changes in the internal setting of the hospital that would not have been granted to indigent patients. Unlike public ward patients, who received treatment from a physician appointed by the hospital, paying patients were able to secure the services of any physician they wished. This freedom was enforced by the hospital committee, which declared that "pay patients in the private wards of City Hospital have the privilege of employing any legally qualified physician in the city." Hospital privileges were thereby granted to city doctors previously excluded from walking the wards of the institution. In contrast to ward patients, private patients received privileges and amenities that supplemented treatment and lessened the burden associated with leaving the home.

Local hospitals were very successful in attracting patients. As technological improvements made effective medicine a reality and both physicians and the local press encouraged citizens to use medical facilities, the local institutions overflowed with new patients. City Hospital, which had treated just over 1,000 patients in 1880, was treating over 3,000 by 1910. Similarly St. Joseph's Hospital registered a five-fold increase in patients between 1890 and 1910. The burgeoning patient population caused serious bed shortages. City Hospital, which by virtue of its size catered to the largest number of patients, was particularly adversely affected. Dr. G. McLaren, Medical Superintendent, remarked that the wards were so full that there was no further room for patients. This dire lack of space was made worse by the fact that hospital authorities could not refuse admission to private patients, a situation that plagued hospital administrators, as many paying patients failed to settle their accounts. This occurred with such frequency that City Hospital was required to enlist professional agencies for assistance in collecting the missing funds. In 1905, the hospital board transferred all patients into public wards unless the hospital accounts were settled in advance.

The problem of non-payment did not deter the construction of additional space to alleviate the overcrowded wards and meet the increased demand from the affluent for hospital services. The Hospital Board accepted the plan of architect Peerce to create additional space, without heating, for 65 patients at a proposed cost of $32,000. The selection reflected the wishes of staff doctors to have an architect who would not repeat mistakes that occurred in the construction of the Jubilee Wing. The hospital underwent
its second expansion for accommodation, and in 1907 the Queen Alexandra Wing was opened to provide care for paying patients.64

This building featured private lodgings, as no additional public ward accommodation was constructed. Each floor contained 11 spacious rooms that offered privacy and comfort for those willing to pay $20 per week for treatment.65 The inclusion of a semi-private ward in this wing reflected the desire of the hospital to provide services to the lower-middle classes. These individuals could pay for superior accommodation but could not usually afford the full cost of a private room. The construction of two-patient rooms offered greater privacy than the large open ward, and patients admitted to these quarters were charged $7 a week.66

The Queen Alexandra Wing provided much relief to the overcrowding of the Jubilee Wing, but its final cost of $79,000 was more than double the original estimate. Provision of suitable accommodation and shelter for the affluent proved to be exceedingly expensive for the hospital. Private rooms with separate toilet facilities and furnishings cost more to construct.67 In North America, the minimum space allowance for patients in public wards was 800 cubic feet. Private rooms constructed in dimensions of 10 by 15 feet or 11 by 16 feet provided twice the space for patient comfort.68 Although the single, private room with separate washing facilities was accepted as ideal, the practicality of providing it for all patients was questioned. The pre-eminent American hospital planner E. F. Stevens wrote:

The old twenty to thirty bed wards have gone, let us hope forever, but how in the much desired private room hospital are we going to meet the economic conditions of nursing, feeding and general administration which [we] obtain in the open ward.69

Providing services to private rooms was not particularly cost effective, as it required more nursing staff as well as greater maintenance. Private accommodation proved extremely popular with patients until the Great Depression adversely affected middle-class wealth. Private rooms soon emptied, and

64 The hospital constructed the John Billings Wing for out-patients in 1901. The building did not increase ward accommodation but rather provided space to treat dispensary patients. The first floor housed the dispensary, the second contained laboratories, and the third was used for isolation wards.
65 HPLSC, RG 13, City Hospital Board of Governor Minutes, August 27, 1907.
66 Hamilton Herald, November 27, 1912.
68 B. Evan Parry, “Hospitals: Their Planning and Equipment”, The Journal: Royal Architectural Institute of Canada (January 1930), pp. 222-223. Public ward patients of City Hospital had only 700 cubic feet of living space. See Campbell, The Hamilton General Hospital School of Nursing, p. 86.
hospitals were forced to convert them into four-bed wards to lower costs and fill the beds.70

Civic Growth and Hospital Expansion
Outpacing the development of the local hospitals was the growth of the community. Census data indicate that over 14,500 immigrants entered Hamilton between 1911 and 1914, making a sizeable impact on a local population that had been 59,543 in 1906.71 These immigrants were attracted to employment opportunities provided by large industrial employers like the Steel Company of Canada and International Harvester. The combination of large-scale immigration and the rising acceptance of the hospital by the affluent produced a scarcity of accommodation which resulted in a period of frenzied expansion during World War I.

St. Joseph’s Hospital formally opened a new wing in October 1916. Although the ostensible motive for construction was the separation of medical and surgical cases, the desire to generate additional income through private rooms was the primary consideration. Designed by the Toronto office of the American architectural firm Stevens and Lee, the three-storey building of grey brick and limestone trimmings was constructed to harmonize with existing buildings. This new structure catered to the elite, as the second and third floors were reserved for private patients in single rooms and semi-private patients in wards of two or four.72

The plans show that patient accommodation was clustered at the ends of each floor, which facilitated the monitoring of the central ward flow and also kept patients isolated from excessive noise. The rooms were constructed from the finest materials. The private washrooms were floored with Italian terrazzo tiles and the countertops were carved from Vermont marble. The rooms were lit by electricity and heated by steam radiators located three inches from the wall.73 The supervisory architect, Edward Stevens, remarked that the building was designed especially for the comfort of private patients. He stated at the opening ceremony that “we do not consider this building a monument to us or as a monument to your city, it really is a monument to the patients.”74

Private patients were highly valued by all local medical institutions. T. H. Pratt, Chairman of City Hospital Board of Governors, lamented St. Joseph’s expansion to 56 private rooms, “one for each 350 of its own (Catholic) people whereas City Hospital has but 1 private room for 3,000 residents”. He stated that City Hospital should increase its number of private rooms to the ideal ratio of one room per 200 residents and attract more wealthy

The expansion of City Hospital and St. Joseph's Hospital reflected the desire of hospital governors to build suitable accommodation for patients with money to spend on health care. Since these patients preferred not to be mixed with the lower social orders in open wards, new types of hospital ward design evolved.

The acceptance of the germ theory signalled the death of the pavilion hospital that had been specifically designed to prevent the spread of miasma. As a result, the pavilion style gave way to mono-block structures, pioneered by Chicago Hospital planners Albert Ochsner and Meyer Sturm in 1907. This consulting team demonstrated that mono-block hospitals were superior to the pavilion plan, as air moved faster and was less polluted at higher elevations and heating and cleaning repairs were 40 per cent less. Multi-storey hospitals quickly gained acceptance as improved hygiene combined with reduced labour and heating costs, as well as shorter lines of communication, appealed to hospital administrators. Moreover, since the core in many major urban centres in North America was restricted by standard block measurements and could not provide the vast space required for a pavilion hospital, building skywards became the only viable option. This was made possible by advances in structural steel construction.

The expansion of the local Hamilton hospitals conformed to this new style. Although the structures were not originally mono-block designs, their additions reflected the emphasis on multiple-storey construction and closed wards. More importantly, expansion raised the total number of local hospital beds to slightly over 400 by 1916. According to the notable hospital planner Dr. S. Goldwater, however, this was not sufficient. Commenting on the local health scene he stated that in “Hamilton, a city over 100,000, the hospitals should have five or six hundred beds in order to meet all requirements”.

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75 Hamilton Herald, November 28, 1922.
76 Ochsner and Sturm, The Organization, Construction and Management of Hospitals.
79 Hamilton Times, December 16, 1913.
The problem of overcrowding was exacerbated by government regulations that required hospitals to admit all sick patients or lose operating grants. This stipulation forced City Hospital to admit 65 patients above its usual total of 300. According to Thomas H. Pratt, the hospital chairman, “if we don’t do it we lose our grant [but] I have been keeping out as many as I can though.”80 Dr. Bruce Smith, the provincial inspector, also commented on the overcrowded wards and recommended that the city develop a new hospital on high ground far away from the industrial sector. Commenting on local patronage practices, he also recommended that Council solicit plans from “the world’s best hospital architects [as] local pull should never be recognized in either planning or conducting a hospital”.81

The hospital Board of Governors partially heeded this advice and had Dr. W. E. Braun of Detroit and Dr. Goldwater of Mount Sinai Hospital in New York examine and approve the exceedingly ambitious plans for a new mono-block hospital designed by local architects Stewart and Witton.82 The plans called for the construction of 22 separate towers at an estimated cost of two million dollars. Despite the determined nature of this endeavour, wartime material shortages and municipal austerity resulted in the construction of only one non-surgical building.

The new Mount Hamilton Hospital, finally opened in 1917 in response to a lack of semi-private accommodation in City Hospital,83 was constructed of reinforced concrete with a façade of buff-coloured, rough-textured brick with sandstone trim. The rooms were designed to be as homelike as possible, each containing rugs and chintz curtains over sills of marble. Moreover, each room was connected to a silent nurses’ call system that ensured prompt attention.84 Although the hospital was constructed on a relatively isolated section of Hamilton Mountain, the great majority of medical men were enthusiastic about having another municipal clinic for their paying patients.85 The hospital’s initial clients were female semi-private patients from City Hospital who were removed to allow for the completion of structural repairs on the Jubilee Wing. One patient remarked that, in contrast to the constant noise and shuffling at City Hospital, the new hospital was so quiet she could not rest.86 Despite initial enthusiasm for a hospital that featured only semi-private accommodation, its location resulted in a precipitous decline in its use. Dr. W. Langrill, the Medical Superintendent of City Hospital, remarked that many of the wards were empty (57 per

80 Hamilton Times, March 16, 1916.
81 Hamilton Times, September 23, 1913.
82 HPLSC, RG 13, City Hospital Board of Governor Minutes, January 26, 1915; “First Units of the Mount Hamilton Hospital”, Construction, vol. 10, no. 6 (June 1917), p. 196.
83 Hamilton Spectator, May 19, 1917.
84 Hamilton Herald, April 27, 1916, and May 21, 1917; “First Units of Mount Hamilton Hospital”, p. 198.
85 Hamilton Herald, March 20, 1918.
Because patients had trouble getting there and doctors had difficulty making calls due to heavy incline traffic.\footnote{Hamilton Herald, October 14, 1920.}

Mount Hamilton Hospital represented the latest step in the continuing effort of local hospitals to provide ward accommodation for the affluent. The charitable mission that once powered hospitals gave way to business decisions designed to reduce expenditure and generate capital. The revenues raised from paying patients were considerable and offset the rising per patient per diem costs. At City Hospital, such fees represented 5.18 per cent in proportion to revenues received from government grants. By 1920, this had increased to 74.38 per cent. Similarly, revenue from paying patients in proportion to grant revenue at St. Joseph’s Hospital was 52.11 per cent in 1892.\footnote{Ontario Sessional Papers, ARAPP. 1880–1920.} This skyrocketed to 538 per cent by 1912. Clearly, local hospital budgets were becoming increasingly dependent upon paying patients.

The admission of the well-to-do altered the hospital’s traditional role of providing a basic level of care for an indigent clientele. In contrast to public ward patients, these paying patients were provided with amenities that lessened the burden of leaving the home environment. While ward patients were fed typical hospital fare, private patients at City Hospital were served quality food on china plates. Recognizing the need to alter the practice of delivering food to paying patients through the open wards, Dr. Langrill
remarked, "These meals are superior to those served to the public patients and it must be very humiliating to see the superior food going past them into the semi-private wards."\textsuperscript{89}

The provision of luxurious quarters and fine food combined with the advances in surgery and medical technology to provide a potent inducement for the affluent to seek care outside the home.\textsuperscript{90} Hospital trustees and superintendents, who were themselves members of the elite, were sensitive to the needs of the affluent and approved expenditures to create a comfortable environment for those able to pay for services. Although the construction of private rooms was more expensive, such accommodation delivered a new potential for generating revenue.\textsuperscript{91}

The desire of hospitals to cater to the affluent had a negative effect upon the treatment of the traditional indigent client. The charitable ideal, which had been the guiding motive for founding, gave way as hospitals began catering to paying patients whose fees helped offset the cost of treating the poor. Indigent patients continued to receive treatment in the open wards, but their care generally received low priority. The provincial inspector reflected upon this disturbing province-wide trend:

There is frequently a disposition to set apart altogether too much space for private paying patients, and when this is done, the public patients are very apt to be crowded into badly ventilated wards. It will be unfortunate if the original idea for which hospitals were established — the care of the sick poor — is lost sight of.\textsuperscript{92}

As a result, in Hamilton, comfortable rooms were provided to those who could pay while the poor languished in the dirty, overcrowded public wards.\textsuperscript{93} The provision of special rooms, benefits, and privileges reflected the wishes of local hospitals to provide services commensurate with the expectations of the well-to-do. During the last quarter of the nineteenth century, medical science and technology revolutionized hospital care and contributed to the internal and external reorganization of hospital space. Changes to the architectural structure of hospitals in Hamilton evolved in conjunction with these developments in medical science. However, the internal setting of local hospitals also corresponded to the social needs of the affluent. As more prospective patients recognized the limitations of

\textsuperscript{89} Hamilton Times, June 19, 1913. Probably the best example of a Canadian hospital catering to the affluent was the Hotel Wing of the Toronto General Hospital, which provided private rooms to the relatives and friends of private patients with an elegant dining room, music, and table service. See B. Evan Parry, "Hospitals", Canadian Medical Association Journal (August 1930), p. 302.
\textsuperscript{90} Stevens, In Sickness and In Wealth, pp. 35–36.
\textsuperscript{91} HPLSC, RG 13, City Hospital Board of Governor Minutes, January 26, 1915; "First Units of Mount Hamilton Hospital", p. 196.
\textsuperscript{92} Ontario Sessional Papers, ARAPPC, no. 40, 1905.
\textsuperscript{93} Hamilton Herald, June 10, 1913.
home care and turned toward scientific treatment, hospitals began to provide
different levels of space and comfort according to the patient’s ability to pay
for service. By providing affluent patients with a sense of place, hospitals
began to mirror the social relationships that existed within this stratified
local society.

APPENDIX A
A Note on Primary Sources

Despite the scholarly interest that the hospital has generated in America and
Europe, studies that examine Canadian hospitals within an interpretive
framework have only recently begun to emerge. This relative dearth of
research is partially attributed to the general lack of primary evidence that
exists for most institutions. Late nineteenth-century medical institutions
generally kept detailed records on finances, patients, staffs, and decisions
that affected the physical infrastructure. These quantitative and qualitative
sources provide a critical starting point for any examination of the hospital
and can be used to trace the relationship between ethnicity, occupation,
gender, and hospital care. Unfortunately, as the institutions expanded and
continuously generated additional records, much of the earlier evidence was
often either destroyed or put into boxes only to be forgotten. Even when
original documents have somehow survived this housecleaning, researchers
still face difficulties in securing access to them. Most remain the property
of hospitals, which are determined to preserve the anonymity of patients and
generally wish to prevent the disclosure of anything that could put the
institution in a negative light. While the problem of securing relevant
primary evidence obstructs detailed research on certain aspects of the
hospital, it need not prove insurmountable, particularly if the institution is
examined within the larger context of the community and the evidence is
supplemented by relevant non-institutional sources.

Recent historiography has stressed the importance of exposing the experi­
ences of hospital patients. While this line of enquiry provides a necessary
balance to a literature that emphasizes the exploits of doctors and more
recently nurses, the lack of relevant sources creates some difficulty in
pursuing it in any great depth. In the case of Hamilton, most patient records
have not survived. Those that have remain incomplete. The records for

1 Barbara Craig, "The Canadian Hospital History and Archives", Archivaria, vol. 21 (Winter
of Care: A History of the Victorian General Hospital in Halifax 1887–1987 (Halifax: The Victoria
General Hospital, 1988); David Gagan, A Necessity Among Us: The Owen Sound General and
Marine Hospital (Toronto: University of Toronto Press, 1990).

2 Barbara Craig, "Hospital Records and Record Keeping, c.1850–1950. Part 1. The Development of

3 Wendy Mitchinson, "Medical Historiography in English Canada", Health and Canadian Society,
vol. 1, no.1 (Fall 1993), pp. 205–207.
patients at City Hospital, part of the William Ready Archives at McMaster University, exist only for the years from 1892 to 1894. These contain valuable sources of information about individuals who sought treatment and detail, among other variables, name, age, religion, occupation, physical ailment, treatment, prognosis, and discharge. Unfortunately they are not extant and it is difficult to determine the representativeness of this sample group of 142 patients, constituting approximately only 10 per cent of all patients treated by City Hospital during this period. This qualitative information on patients, however, is made more meaningful when contrasted with the incomplete admission digests for St. Peter’s Infirmary housed at the St. Peter’s Hospital Archives and the less detailed St. Joseph Hospital book of operations from 1907 to 1909, stored at the mother house archives of the Sisters of St. Joseph in Hamilton. The data contained in these three registers offer at least a glimpse into the nature of disease and treatment and help to personalize the patients’ experiences.

The absence of complete hospital records prevents the detailed analysis of other potentially important areas of study. The lack of primary evidence makes the task of assessing medical therapeutics difficult, for example. The Medical Staff Minutes of City Hospital exist for 1904 to 1918 and can be supplemented by the records of the St. Joseph’s Medical Advisory Committee from 1922 to 1956, which are housed in a small archives at the hospital. These provide insight on the twentieth-century movement toward hospital standardization and the impact of medical technology on therapy. These issues can be more fully explored using the Hamilton Hospital Board of Governor Minutes from 1896 to 1952, which provide considerable insight on general operation. These records, which are held in the Special Collections of the Hamilton Public Library, are extant and provide detailed accounts on hospital finances, medical staffs, and decisions regarding expansion and technical upgrading. Records for the pre-1896 period are found in the Hospital and Refuge Committee Minutes of 1861 to 1896, which are stored at the same repository.

The financial aspect of providing hospital care is the one area in which detailed records exist, as institutions that received provincial operating grants were required to provide accounting statements to the Department of Asylums, Prisons and Public Charities. These, along with the valuable biannual hospital inspection reports, can be found in the Ontario Sessional Papers for the relevant years. This source provides critical quantitative data on the total number and gender distribution of patients, length of stay, and a breakdown of revenue and expenses, allowing comparative study of provincial institutions in terms of per diem costs and the average length of treatment. More importantly, the data can be combined with other non-institutional qualitative sources to produce a more detailed assessment of the hospital’s physical evolution. Clearly, the most useful sources for tracing the evolution of medical institutions in Hamilton are the newspapers, particularly the reform-minded Hamilton Herald that exposed with regularity the inadequacies of
the political elite and the public charitable institutions they managed. Scandals involving patient care, conflicts among hospital staffs, and the structural limitations of aging facilities were all brought to the attention of the local populace. When the three major local papers are examined systematically, they provide relevant qualitative data that can be analyzed within the context of the institutional sources to provide a clearer understanding of the decisions and activities that shaped the hospitals over the long term.