Hospital Records and Record-Keeping, c. 1850-c. 1950

Part 1: The Development of Records in Hospitals

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Archivists who deal with modern records are generally familiar with the changes which took place, between about 1850 and 1950, in the preparation and keeping of records in institutions. Bound volumes of correspondence and financial records prepared in manuscript were replaced by loose files and by post binders of typescript documents and forms. The ubiquitous institutional register experienced successive changes, particularly as printed forms and binders replaced folio sheets in sewn bindings. The flowing hand which gives such distinction to the leather bound volumes of the nineteenth century had all but disappeared by the end of World War Two. The Dickensorian clerk in the counting house with his high desk, record books, ink pots, pens, and bloters was replaced by the modern office worker who, more often than not, was a woman. Records making and record-keeping were fundamentally altered by the application of technology to writing and communications. The typewriter shaped the modern office and the jobs associated with records. The change in records making and in record-keeping in the century after 1850 has not been examined in any detail. Yet the context of records making and keeping would seem to be important areas for investigation because the large bulk of our archive holdings emanates from the modern office. One way of examining the development of records making and record-keeping is to study the development of the archives of an institution over a period of time. The form of the records themselves would be strong evidence of the changes in preparation, while an examination of the substance of certain record series and of contemporary literature must reasonably be expected to provide an insight into the perceptions which people in the past had about records matters.

The Survey of Hospital Records

The author chose to examine the records of hospitals. Between c. 1850 and c. 1950, hospitals grew in number and in social and medical importance. Interest in the historical development of hospitals in the century following 1850 has directed new attention to the history of these institutions and, by association, to their records. Yet, despite a significant literature concerning hospital archives, only selected topics related to the acquisition and management of records have been perused extensively. There has been no examination of the historical development of records and record-
keeping, either in individual institutions or in hospitals generally. Moreover, we have no clear understanding of how records changed, nor do we know precisely what factors affected either them or the development of record-keeping as an institutional function.\(^6\)

London (England) and Ontario (Canada) were chosen as two appropriate and complementary areas in which to conduct the investigation. Both areas are important exemplars of institutional development in their own countries, and have numerous institutions whose archives have not been examined. The study of hospital archives was undertaken in two related stages. A general records survey was conducted in fifty-seven hospitals, twenty-nine in London and twenty-eight in Ontario, in order to identify the nature and extent of the accumulated holdings in hospitals.\(^7\) On the basis of information collected in this general survey, a detailed study was made of the surviving records and of the record-keeping practices in eight institutions, four from each area, which were selected as typical of the hospitals and records in both areas. The perspective achieved by a comparative analysis of the records of hospitals in two distinct areas provided solid evidence for conclusions which have more general applicability than those based on records from institutions in only one area.

In selecting the hospitals for detailed study, due consideration was given to the main types of hospital within both areas and to the extent and completeness of the records in each institution. On the basis of information collected in the general survey of hospital records, the London Hospital, the Royal Marsden Hospital, the Springfield Hospital, and the Brook General Hospital were selected in London, and the Kingston General Hospital, the Queen Elizabeth Hospital (Toronto), the Cornwall General Hospital, and the Kingston Psychiatric Hospital were chosen in Ontario. The London Hospital was selected to represent voluntary hospitals which had associated medical and/or nursing schools. Founded in 1740, the London also represented a modern hospital for medicine and surgery whose origins were in the eighteenth-century movement to provide for the sick poor. The records of the London Hospital are available for study at the Archives of the Tower Hamlets Health Authority, and are cited as LH. The Royal Marsden Hospital, founded in 1851 as a voluntary institution, specialized in the medical and surgical treatment of those suffering from cancer. The Marsden was not a teaching hospital until after 1926, but from the first it had a strong research and investigative aspect to its charitable work. The records of the Marsden are located at the hospital, and are cited as RMH. The Brook General Hospital on Shooters Hill was set up by the Metropolitan Asylums Board as a general hospital for medicine and surgery, but with particular emphasis on the isolated treatment of contagious diseases. The first patients were admitted on 31 August 1896.\(^8\) The Brook was chosen to represent the public authority hospitals for the sick and injured. The records of the Brook are at the hospital, and are cited as BGH. The Springfield Hospital, opened in 1841 as the Surrey County Asylum, provided custody and care for the insane poor and it was chosen to represent public authority psychiatric hospitals. The records of the Springfield are located at the hospital, and are cited as SPH.

The Kingston General Hospital, founded in 1832, was chosen to represent Ontario's hospitals for medicine and surgery. This institution also had a long association with Queen's University as a teaching hospital and it had a school of nursing. The Kingston General Hospital's records were the most complete of the early Ontario hospitals, and they were listed and available for study at the Queen's
University Archives, cited as KGH. The Queen Elizabeth Hospital, founded as the Toronto Home for Incurables in 1874, was chosen for four reasons: it was an early specialist hospital; it was a metropolitan institution based in the largest centre of population in Ontario; it was founded and operated on a different basis from the majority of the province’s general hospitals; and its records were accessible and available for study at the hospital, and are cited as QEH. The Cornwall General Hospital, founded in 1897, was chosen to represent the numerous public general hospitals established throughout Ontario between 1890 and 1930. Although called a public general hospital, it was not a public authority hospital in the strictest sense — such institutions did not exist in Ontario — but was, rather, representative of the publicly supported community hospitals which were important institutions in the province. Although it was founded by community effort, as was the Kingston General Hospital, it had no university associations, although it did have a school of nursing. Its records were available for study at the Archives of Ontario as part of Records Group 66, and are cited as CGH. The Ontario institution chosen as the counterpart to the Springfield Hospital was the Kingston Psychiatric Hospital. It began in 1855 as an asylum for the criminally insane in the United Province of Canada. It became a provincial institution for non-criminal lunatics in 1877, when it was acquired by the Province of Ontario as its third general asylum. It was chosen to represent the twenty public authority asylums established between 1841 and 1930 because its records, located at the Archives of Ontario as part of Record Group 10 and cited as KPH, are more complete and more varied than those of the earlier asylums in Toronto and London.

A standard form was prepared for listing the records located in dormant storage areas identified by the hospital staff. All records generated or received by the hospital in the course of its activities were included in the list. Not included was published secondary material, such as government reports or professional journals, artifacts, paintings, and records incorporated in the current files. Records were listed at either the item or series level by title and/or type, physical format, date, linear extent, and location. A supplementary detailed examination was made of a random sampling of clinical records in the selected hospitals to establish the particulars of change which in loose aggregations of records were not often clearly evident at the series level of arrangement. Although there were examples of administration and employment files, clinical files were more generally represented in the survey group and in the selected hospitals for the period under examination. Unfortunately, there were severe practical difficulties in developing a rigorous sampling method based on the number of cases overall and for any given period of time. However, the purpose of the examination was to describe the arrangement and structure of the records in general and not to make statistically valid inferences. The following number of case records was drawn as a random sample from the extant and available books and files in the selected hospitals:

<table>
<thead>
<tr>
<th>Year Range</th>
<th>SPH</th>
<th>RMH</th>
<th>LH</th>
<th>KPH</th>
<th>KGH</th>
<th>QEH</th>
</tr>
</thead>
<tbody>
<tr>
<td>1881-1890</td>
<td>96</td>
<td>22</td>
<td>41</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1891-1900</td>
<td>6</td>
<td>35</td>
<td>57</td>
<td>39</td>
<td></td>
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<tr>
<td>1901-1910</td>
<td>20</td>
<td>44</td>
<td>16</td>
<td>34</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1911-1920</td>
<td>25</td>
<td>41</td>
<td>36</td>
<td>14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1921-1930</td>
<td>17</td>
<td>28</td>
<td>18</td>
<td>23</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>1931-1940</td>
<td>10</td>
<td>27</td>
<td>21</td>
<td>37</td>
<td>33</td>
<td></td>
</tr>
<tr>
<td>1941-1950</td>
<td>37</td>
<td>24</td>
<td>92</td>
<td>94</td>
<td></td>
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</tr>
</tbody>
</table>
A general classification scheme for all hospitals was chosen to establish a basis for comparing the records. The classes were developed by combining administrative hierarchy with a functional categorization of records. Hospitals shared common features of administration which gave their records a broad and meaningful similarity in purpose, structure, and function. The classification of records into nine groups seemed the most useful way to structure an analysis so as best to draw conclusions about records generally. It allowed types of records to be identified in an overall framework which maintained a functional relationship between records and the structure of administrative management and medical care in hospitals.

The categories are the records of:

1. Corporate authority
2. Policy and management
3. Departmental operations
4. Finance, investments and supplies
5. Employment
6. Patient registration
7. Patient care
8. Teaching and training
9. Associated organizations.

The accumulated records of many hospitals arranged according to a common classification provide a large and diverse source for studying the history of records and of the record-keeping function generally. During the survey period, there were important developments in hospital records which were common to institutions in London and in Ontario. New categories of records developed; well-established traditional groups and types of records were represented by a greater variety of series; and new types of records and documents emerged. Functional differentiation led to a growing variety of records in virtually all categories. Hospital and departmental administrative functions were separately documented in unique books of record. Patient registers were joined by new series devoted to specific aspects of the registration function. Financial ledgers, wage and salary books, and casebooks/case files also developed along functional lines. Particularly significant were the fundamental changes in the way all hospital records were prepared and arranged. Between c. 1890 and c. 1945, typescripts replaced manuscripts, printed forms were widely introduced to achieve standardization, and loose files replaced bound volumes in the administrative and medical record offices.

Introduction of typescripts

The most significant and all-pervasive innovation was the introduction of typescript, which became common in the records of “Policy and Management” and “Patient Care” categories, particularly after 1890. Until c. 1890, all types of hospital records in all categories are manuscript. By 1948, minutes, reports, clinical summaries, hospital correspondence, and pupil files are dominated by typescripts. Only financial records continued to be prepared in manuscript.

The details of the change from manuscript to typescript are very clear in the minute books, which are the most complete series in hospitals. The change from hand to machine production was closely associated with the practice of enclosures, which
provide the first examples of typescript material. The earliest extant minutes were prepared by the secretary or clerk of the hospital in manuscript and the hands of successive secretaries are distinct and identifiable. Typescript enclosures become more frequent from c. 1890 to c. 1920. Items which would have been copied into the books are either pinned or pasted in and there are examples of triplicate inserts. The minute books of the selected hospitals provide clear examples of the development of typescript records. Printed and typescript enclosures first appear in the committee minutes of the Marsden Hospital in 1879, in the Kingston General Hospital minutes in 1889, in the Springfield records in 1899, and in the London Hospital’s books in 1898. Typescript enclosures become more common after these dates. By 1948, enclosures and support documents were no longer enclosed in the books but were filed instead in the main office, and the minutes themselves were typed on loose pages which are enclosed in binders.

**Standardization of records**

Printed forms were widely employed to achieve standardization. Prior to c. 1850, it was common for books of record, particularly ledgers and registers, to be individually customized by hand. Sheets of paper or bound books were purchased and then numbered and ruled by hand according to the purpose and style of the record. After c. 1880, record books were routinely purchased as pre-bound blanks. The format of registers, ledgers, and casebooks was defined by printed forms which were also widely employed to structure various other repetitive records such as statistical reports, wage and salary records, and clinical histories. By 1900 the Springfield, Royal Marsden, Kingston Psychiatric and Kingston General Hospitals had all developed unique numeric identifiers for their forms, and these were used to control printing and reordering. Various duplicating processes and commercial printers were used to prepare multiple copies of items of business for meetings and for the distribution of financial statements, reports, tenders, contract price sheets, motions, and agenda. Standardization of entry-making was also achieved by the increasing use of rubber stamps with pre-defined categories which were employed in financial records by 1893, in registers by 1900 and in clinical records by 1925.

The use of printed forms was the most potent documentary sign of a trend towards standardization which was marked even in narrative records. By 1900, the extant minutes of the governing and deputed governing groups at the selected hospitals were constructed to reflect a routine of official business which was regularly repeated. The variety and detail which marked the earlier minutes disappeared under the pressures of an increased amount of business which had to be conducted. The arrangement of the annual reports and the various reports of hospital officers was gradually standardized within each institution and at the Springfield Hospital the Medical Superintendent’s reports were transformed from a narrative summary of hospital affairs to a statistical document which presented a numerical analysis of patient movements. Finally, standardization became a feature of both casebooks and case files. Entries in the casebooks of psychiatric hospitals were made at regular periods, and the types of observations required in all cases were well defined in the by-laws and in the habits of recording. Standardization was also achieved in the narrative histories in voluntary hospitals by regularizing the placement of observations in free-form sheets. Later, standard categories were printed on forms and
separate forms developed partly to ensure that similar entries were made for individual patients under the care of different physicians.24

The standardization of records was intimately associated with the habit of binding. Bound volumes dominate in the accumulated records of hospitals. There are very few extant examples of loose files apart from the clinical case files in London and Ontario hospitals and the employee and pupil files in Ontario.25 Between c. 1900 and c. 1950 there were definite changes in the habits of binding. Firstly, by c. 1900 most hospitals had switched from binding an accumulation of related records to purchasing volumes in advance to be filled up as required. The major exceptions are the minutes of the governing and deputed governing groups in London, which continued to be bound well after the records were prepared.26 Secondly, binders supplanted sewn volumes for minutes, general ledgers, and journals. The binder was introduced for financial records in Ontario as early as 1900 and was consistently employed by 1930. Binders had come into general use for minutes and for financial records by 1948 in both London and Ontario. The binder had all the advantages of sewn bindings while at the same time incorporating the flexibility which was the hallmark of loose files.27 Finally, binding was discontinued for clinical records by 1907 in the selected hospitals in Ontario and by 1948 in London.

Changes in format and structure of records

Particularly significant were the structural changes in the financial statements. Although original financial statements are extant as separate series in only a few institutions, complete runs of printed statements are found either in the minutes of governors and trustees or in the annual reports. Between c. 1880 and c. 1930, hospitals supplemented their annual statements of cash transactions for the year with a balance sheet which presented a year-end profile of the financial position by balancing the assets and liabilities of the institution.28 Between 1890 and 1948, financial statements were gradually supplemented by additional schedules which gave more details of income and expenditures and these were presented in comparable formats. More information and detailed reporting extended beyond the cash transactions to provide an overview of the hospital’s financial position, which included investments and investment income, ordinary costs by department and function, extraordinary costs, and income, and the financial position of building, endowment and reserve accounts. Separate capital and maintenance accounts were introduced. Depreciation, which was calculated on the lower of either cost or market value, was applied to equipment and capital assets. By 1946, there was general uniformity in financial statements among voluntary hospitals.

There were also changes in the hospital financial books of record and patient registers. Double-entry techniques introduced into the London Hospital in 1824, the Springfield Hospital in 1864, and the Kingston General Hospital in 1925, brought a change in the format of ledgers to reflect the new accounting practice.29 The wage ledgers at the Springfield Hospital underwent major changes in 1900, when a new series and new format of records were introduced, and subsequently in 1909 and 1918 when changes in the hours of service, pension regulations, and taxing methods led to alterations in the format of the pay records.30 The common features of the change in format of the patient registers are the separation of registers by sex and function, the generally reduced number of entries per page, the addition of specific columns for new information, and the periodic return of the series volume numbering to 1.31
There are also individual differences in the registers of the hospitals examined. There was no differentiation of registers at small hospitals such as the Cornwall General Hospital, which consistently maintained only one general set.32 Ontario's psychiatric hospitals continued to keep a general register in addition to functional registers until 1925; after that date, the general registers were kept for summary statistical purposes.

Finally, there were fundamental changes in the structure of correspondence, and in employee records, pupil files, and clinical case records. The traditional books and registers were replaced by loose files which contained a high proportion of typescripts. By 1925, chronological letterbooks had been supplanted by loose files arranged by subject. Bound staff service records were gradually replaced by employee files as the arrangement of choice.33 A file of documents arranged by subject or by name became the preferred way to permit administrative documentation to accumulate. Unlike the fixed-format books, files were flexible and could more easily accommodate a mixture of correspondence and forms, each with a particular functional purpose. By 1920, individual dossiers of discrete documents had replaced the registers as the primary record of pupil progress and achievement in Ontario's schools of nursing.

Casebooks underwent significant changes in structure and arrangement in the last quarter of the nineteenth century and most noticeably after 1890. Separate and distinct types of documents were more frequently tipped or pasted in the casebooks. Positive photographs of the patient, temperature charts, and pathology reports were the most common enclosures. Additional documentation was not included with every case but only appeared on occasion.34 After the turn of the century, casebooks were replaced by flexible case files which contained a variety of different forms and types of documents. Separate activities, tests, and procedures were provided with their own forms, and these were collected together with the clinical history and progress notes to form the case file.35 Unlike the casebooks and journals, which contained summary observations and transcriptions of documents, the case files were constructed by arranging documents prepared by many people who participated in treating the patient, so that the case file was integrated into clinical practice. The distinction between a first generation and second generation record, clearly evident in the casebooks, which were in large part prepared from original documents, disappeared in the case file which included a variety of discrete original documents.36 Correspondence and administrative forms were gradually incorporated in the file, so that all documentation pertinent to a patient was included in one place. Printed forms filled up by hand comprised the bulk of the documentation, and several people contributed to the files. The first typescript documents appeared in the selected hospitals in 1907 in Ontario and 1905 in London.37 Case files became a mixture of manuscript and typescript documents and, in some instances, included both original and carbon copies within the file.38 Typescript documents, prepared after the event, were a mixture of summaries and of "mirror" images of the original record. By 1947, the notes of daily care and of nursing had become so voluminous that they were segregated from the main file to form a separate but parallel series.39

**Growth of records and changes in the proportional representation of classes of records**

Between ca. 1900 and 1950, there was a substantial expansion in the generation of records in hospitals, which was in large part the result of an increased production
of records in hospital business. There is a similar pattern to the increase of records
in all types of hospitals in both London and Ontario. The actual growth of production
cannot be measured accurately because many series of records have not survived.
However, the increased accumulation implies that there was a corresponding increase
in the production of records. This conclusion is supported by evidence in the survey
lists for individual hospitals. Growth is strongly marked in the categories of “Policy
and Management,” “Departmental Operations,” “Patient Registration,” and “Patient
Care” in all hospitals in London and Ontario. Most important and very clear is the
significant increase in the production of case records. The sample study of casebooks
and files at the selected hospitals shows that, between 1886 and 1950, both the number
of separate types of documents included in the case record and the average size of
each record grew significantly. In addition to the case histories and progress notes,
the following documents and forms are a selection of those frequently located in
the clinical files: laboratory reports, reports of surgical procedures, histo-pathology
reports, temperature charts, treatment sheets, doctors’ orders, diet cards, social ser-
vice reports, x-ray positives, x-ray analyses, photographs, discharge summaries,
death certificates, and correspondence. Chart 1 (London) and Chart 2 (Ontario) are
graphic representations of the average number of types of documents and the aver-
age number of pages in the sampled clinical files. On the basis of this evidence, it is
clear that the number of documents included in each patient record grew. Although
the growth or reduction in the patient population of hospitals had a corresponding
effect on the overall number of clinical records, this in no way affected the internal
growth of each patient file, which was a general phenomenon.

In addition to the growth of records, there are changes in the relative proportion
of each category of record to the whole. The proportional representation of the various
classes of records is not constant throughout the survey period in either London or
Ontario. Charts 3 (London), 4 (Ontario) and 5 (London) and Charts 6 (Ontario),
7 (Ontario) and 8 (Ontario) show, for all hospitals, the percentage of each category
to the whole group of records in 1900, 1925 and 1950. Charts 9 (London),
10 (Ontario) and 11 (London) and Charts 12 (Ontario), 13 (London) and
14 (Ontario) show, for the selected hospitals, the percentage of each category to the
whole group of records in the same time periods. The changes are generally of
the same pattern, so that the definite points of similarity between the charts for the
two areas are important. Between 1900 and 1950, the records of “Policy and
Management” and “Patient Registration” decline, while the representation of
records in the “Departmental” and “Patient Care” categories grows. The predomi-
nance of the records of “Patient Care” is a phenomenon of the second quarter of the
twentieth century.

**Common Influences on Hospital Records**

The distinctive and similar patterns in the growth and diversification of records
in all types of hospitals in both London and Ontario suggest that common factors
affected the development of hospitals and hospital business and *inter alia*, had an
formative impact on the creation and keeping of records. Between c. 1850 and
c. 1950, three major influences had a direct impact on hospitals and their records in
both London and Ontario: the involvement of outside groups with the hospital;
developments in administrative practices; and developments in hospital medicine.
HOSPITAL RECORDS

CHART 1
Average Number of Documents and Pages in Clinical Files in Selected Hospitals
London, England 1881-1950

** Clinical files after 1930 are not available.
++ In 1948, out- and in-patient records were interfiled so that the sample includes a very large number of out-patient files which are generally much smaller than those for in-patients.
xx The case files after c. 1941 have recently been culled to remove all but the legal committal/discharge documents; consequently, these files are not included in the sample and this explains the contrast in the average size of the files between the Springfield and Kingston Psychiatric hospitals.
The extant case files are on microfiche which was prepared in the early 1950s. It appears that the retrospective filming of cases extended back until the deaths of 1945. This means that in the sample there is a proportionately large number of long-stay patients, which accounts for the decline in the number of documents and pages.

The extant case files comprise two feet of records randomly selected by the hospital. All the files are included in the sample; however, in the absence of any explanation of the method used by the hospitals to select these files for retention, it is impossible to explain the apparent drop in the size of the files.
CHART 3
Proportion of Total Surviving Records by Category in London Hospitals, 1900

- Management: 30.9%
- Department: 5.1%
- Finance: 10.7%
- Employment: 1.5%
- Others: 9.8%
- Clinical Registration: 28.0%

CHART 4
Proportion of Total Surviving Records by Category in Ontario Hospitals, 1900

- Management: 28.6%
- Department: 1.1%
- Finance: 8.6%
- Employment: 0.9%
- Others: 10.4%
- Clinical Registration: 37.9%
CHART 5
Proportion of Total Surviving Records by Category in London Hospitals, 1925

- Department: 8.2%
- Finance: 11.9%
- Employment: 2.8%
- Registration: 22.7%
- Management: 22.3%
- Others: 7.8%
- Clinical: 24.2%

CHART 6
Proportion of Total Surviving Records by Category in Ontario Hospitals, 1925

- Department: 3.1%
- Finance: 6.3%
- Employment: 1.5%
- Registration: 22.8%
- Management: 21.8%
- Others: 8.1%
- Clinical: 36.3%
CHART 7
Proportion of Total Surviving Records by Category in London Hospitals, 1950

- Department 8.2%
- Finance 11.9%
- Employment 2.8%
- Registration 22.7%
- Management 22.3%
- Others 7.8%

CHART 8
Proportion of Total Surviving Records by Category in Ontario Hospitals, 1950

- Department 5.7%
- Finance 5.1%
- Employment 4.8%
- Registration 12.7%
- Management 18.8%
- Others 4.8%

52.2% Clinical
CHART 9
Proportion of Total Surviving Records by Category in Selected London Hospitals, 1900

- Department: 5.7%
- Finance: 12.4%
- Employment: 2.8%
- Management: 30.8%
- Clinical: 10.3%
- Others: 3.1%
- Registration: 35.0%

CHART 10
Proportion of Total Surviving Records by Category in Selected Ontario Hospitals, 1900

- Department: 2.1%
- Finance: 7.8%
- Management: 31.8%
- Clinical: 19.1%
- Others: 6.7%
- Registration: 32.5%
CHART 11
Proportion of Total Surviving Records by Category in Selected London Hospitals, 1925

- Department 2.1%
- Finance 7.8%
- Registration 32.5%
- 31.8% Management
- 6.7% Others
- 19.1% Clinical

CHART 12
Proportion of Total Surviving Records by Category in Selected Ontario Hospitals, 1925

- Department 4.2%
- Finance 7.0%
- Employment 8.0%
- Registration 23.4%
- 24.0% Management
- 11.3% Others
- 22.0% Clinical
CHART 13
Proportion of Total Surviving Records by Category in
Selected London Hospitals, 1950

- Finance 9.3%
- Employment 6.0%
- Registration 18.6%
- Department 14.3%
- Management 17.5%
- Others 3.4%
- Clinical 31.0%

CHART 14
Proportion of Total Surviving Records by Category in
Selected Ontario Hospitals, 1950

- Finance 9.5%
- Employment 4.3%
- Registration 18.5%
- Department 5.2%
- Management 20.4%
- Others 9.8%
- Clinical 32.4%
Impact of outside groups

Public authorities and the state became more involved, both directly and indirectly, with hospitals, and this involvement fostered the development of standards for records making and keeping among hospitals. Public authority hospitals were subject to statutes and to rules which prescribed the records to be kept and the returns to be made. In London, the law entitled An Act for the regulation of the care and treatment of lunatics (8-9 Vic. [1845], c. 100, as amended, 16-17 Vic. [1853], c. 96; 25-26 Vic. [1862], c. 111, 53 Vic. [1890], c. 5; and 20 Geo. 5 [1930], c. 23), and orders from the Commissioners in Lunacy, the Board of Control, and the Ministry of Health established the form for warrants, registers and casebooks of psychiatric institutions and established common definitions of terms. Similar requirements were imposed in Ontario by various acts relating to the custody of insane persons and the operation of asylums and psychiatric hospitals, and by the administrative orders of the Inspector, and by the administrative orders of the Inspector of Prisons and Public Charities and, after 1933, by the Department of Health. The many exact parallels in series of records in public authority hospitals were attributable to the impact of official rules. Greater participation of the state in the ordinary lives of its citizens imposed requirements on hospitals to keep records to document their employees' financial obligations under various tax acts, so that the records of employment are marked by changes in forms and format to meet state requirements. The records of public authority hospitals were well integrated into the routines of audit, which required regularity in records and proper authentication of actions. The increasing demand for standardized information and statistical summaries of operations was reflected in the format of registers, which were established by administrative order and prepared by commercial suppliers who specialized in designing record books for hospital use.

The records of voluntary hospitals were also substantially affected by the state. As public interest in hospitals grew, the independence of each voluntary hospital as a separate corporation was gradually subjected to the requirements of public policy, which were reflected in statute and regulation. In London, the National Health Service Act and associated orders transferred the ownership and operational responsibility for voluntary and local public authority hospitals to the state and established common administrative arrangements and forms of records and of reporting for hospitals. In Ontario, several statutes extended provincial control over the founding and the funding of voluntary hospitals and, in the process, established common requirements for registers, financial records, and official returns. By 1956, the province had assumed effective control over hospital operations and services and the public's access to them. Particularly significant was the standardization of accounts, which was encouraged by public requirements and tied financial support of hospitals to the careful documentation of capacity, use, and costs.

Certain statutes and the development of a significant body of precedent in case law highlighted the importance of sound record-keeping in hospitals. While it was difficult to trace the direct impact of legal decisions on records, they must be presumed to have been important considerations for those responsible for the quality and consistency of documentation. Particularly important to voluntary hospitals in London were the Charitable Trusts Act (1853 and 1888) and the Voluntary Hospitals (Paying Patients) Act (1936), which required careful records of financial transactions.
Dangerous Drugs Act (1920) and the Pharmacy and Poisons Act (1933) prompted consistent and separate documentation in the clinical files for prescriptions and orders for patients and were of general importance to all hospitals in London. The Evidence Act of 1938 and a similar statute in Ontario (1945) established a significant rule which made hospital registers sufficient evidence of the facts recorded. In London and Ontario, there was a growing sensitivity among hospitals to their legal liabilities, and several cases highlighted the importance of legal considerations in records.

Third-party requirements had an impact on the financial records of London’s voluntary hospitals and on the clinical records in Ontario’s institutions. Particularly important and influential organizations were the Metropolitan Hospital Saturday Fund (1873), the Metropolitan Hospital Sunday Fund (1872), and the King Edward’s Hospital Fund for London (1897), which distributed annual operating and special capital grants to hospitals. The distribution of money was in large part based on the fund’s assessment of each hospital’s need and on an analysis of its services. Comparison required standardization, and in 1892 the Hospital Sunday Fund issued a uniform form of accounts which had been prepared by the Fund with the assistance of a committee of hospital secretaries. Several British hospitals adopted this form of accounts, including the London Hospital and the Royal Marsden Hospital, and continued to prepare their statements according to the amended versions which were published by the King’s Fund in 1904, 1909, 1926, 1938, and 1945. In Ontario, the campaign of the American College of Surgeons to establish standards in services and performance among hospitals affected clinical records, whose quality and consistency were reviewed as part of the hospital accreditation process. The Kingston and Cornwall hospitals were accredited by the College in 1923 and 1935 respectively, and the medical audit based on clinical records was undertaken by the Ontario government for its psychiatric hospitals. Although there was no equivalent programme in London, certain standard forms were introduced into the clinical records pursuant to the requirements of outside groups.

Hospitals generally became more aware of the importance of public opinion. Paying beds were introduced into hospitals which previously had not provided for a paying clientele, and those hospitals which always had paying beds extended the number available for this class of patient. Hospitals needed paying patients to help meet rising costs, and more people needed the services which could only be found in hospitals. The records of special fund-raising campaigns, films, photographs, and the growth of newspaper cuttings are evidence of the enlarged public relations efforts of hospitals. By 1930, newspaper clippings focus almost exclusively on the hospital as a community institution. Changes in the format of the annual report are clear evidence of the importance to hospitals of positive public relations. The expansion and diversification of the annual report was influenced by the growing awareness among hospital managers and governors that the report had a potentially powerful role to play in interpreting the hospital to a wider public. The annual report was carefully prepared and edited to portray the hospital in a consistently positive light and to ensure that negative features were carefully explained or deleted.

After 1880, hospitals established forms to document consent to surgery and permission to do post-mortems. Although there were strong legal reasons for the former, there were none for the latter. The requests to relatives for consent to do post-mortems were made out of courtesy and prudence. Both were important indications
in documents of the hospital's sensitivity to public opinion. The firm establishment of the principle of confidentiality of information about hospital patients was, in part, the result of the growing awareness in hospitals of their responsibilities to an enlarged clientele.61

**Developments in administrative practices**

The growth of hospitals was accompanied by greater detail and sophistication in administrative arrangements and in the records produced. Many voluntary hospitals replaced their statements of purpose and charitable intent by charters or statutory instruments which conferred a formal and well-defined corporate status. Informal declarations of corporate purpose or trust were not sufficiently powerful instruments to govern the business operations of large corporations which had significant financial and administrative responsibilities and substantial investments and property. The Royal Marsden Hospital and the London Hospital in London, and the Queen Elizabeth Hospital in Toronto, eventually replaced their original articles of association with charters and acts of incorporation which conferred full powers of a body corporate.62

The functional specialization of hospital work prompted a diversification of administrative arrangements and a corresponding development of new series of records. A larger number of official groups participated in hospital management, and separate departments were established to provide a coherent focus for significant hospital functions.63 In voluntary hospitals in London and in the public general hospitals in Ontario, various aspects of hospital management were assigned to separate sub-groups of the deputed governing body. The lists of records prepared during the survey indicate that a wide variety of standing administrative responsibilities devolved to new groups which undertook the detailed management of certain aspects of hospital business which had become too complex to be effectively managed by one board. Increased size, new functions, and the growth of new departments in hospitals, necessitated more formal arrangements between the various functional units; this fostered the proliferation of record series to document formally the conduct of these relationships.

As the hospital became a more complex institution with significant financial responsibilities towards its employees and the larger community which it served, business management techniques which were records-oriented were introduced to bring long-term continuity to institutional planning and management. The business ethic became as important as the charitable impulse in the management of hospital affairs, and records assumed a prominent position as the links between daily transactions, audit, analysis, and planning. In the period under consideration, and particularly after 1890, the majority of hospitals established separate series to manage the financial affairs of the institution, including endowments, the daily flow of cash, investments, salaries, and employees' perquisites. Two particularly important developments were the application of cost accounting and the introduction and enhanced role of independent auditors.

The application of cost-accounting techniques to the management of hospital business was encouraged by the King’s Fund and the Board of Control in London, and by the provincial government in Ontario. Quantity statistics, the administration of hospitals by function and department, and the development of budgeting and
cost analysis, were natural adjuncts to uniform accounting and extended the analytical principles of business into the structure of management. By the end of World War One, the financial operations of hospitals were conceived on a term longer than a calendar or fiscal year. Major building projects and new programmes required long-term financial planning, and once the buildings were completed or new major programmes were in place, they imposed a further responsibility on managers to protect and enhance capital investments by prudent use of insurance and depreciation techniques. Bookkeeping was supplanted by management accounting, which incorporated systematic records with new and innovative ways of structuring the financial systems of the hospital. The aim was to provide an accurate analysis of costs by unit of expenditure and to provide a true picture of short- and long-term assets and liabilities. Double-entry bookkeeping was introduced at the London Hospital in 1824, the Springfield Hospital in 1864, the Royal Marsden Hospital by at least 1935, the Kingston General Hospital in 1925, and at the Cornwall General Hospital in the 1930s. It may be presumed that double entry was a common practice by this date. By 1900, each of the selected hospitals had assigned special clerks to the job of keeping cost controls and financial records, and by 1946 many employed trained accountants. This change in books, procedures, and techniques was introduced by the new superintendent at the Kingston General Hospital in 1925. He was trained in hospital accounting methods and the changes in the books were directly attributable to his influence.

Changes in the annual financial statements of hospitals indicate the increasing sophistication in accountancy as the statements grew to resemble those produced by large businesses. The statements at the selected hospitals reflect the development of maintenance and capital accounts, personal and impersonal accounts, and accrual accounting. Furthermore, a considerable literature was generated by the specific application of business financial practices to hospitals which concentrated on the ways of measuring costs of services and, by implication, the efficiency of management. Particularly controversial were the allocation of continuing repairs to the extraordinary expenditure account to lower the apparent cost per patient which was calculated on ordinary expenditures, and the establishment of reserve funds for repairs, renewals, and general depreciation.

Professional accountants were retained by hospitals to act as independent auditors and to provide advice on the preparation of accounts and on financial procedures generally. The annual audit was extended beyond the financial books of record and authenticated abstracts of the financially relevant portions of business meetings to include unrestricted access to the minutes themselves. The first independently audited financial statement for the Springfield Hospital was published in 1893, and in 1895 the official stamps of outside auditors appear in the records of the “Finance,” “Employment,” and “Management” categories. Thereafter, these marks are a regular indication that an official audit had been conducted. At the Royal Marsden Hospital, professional auditors were employed by 1886. The auditors gradually extended their activities so that by 1895 they had access to all the books of the hospital and by 1905 were making general recommendations about record procedures and forms. By 1946, two-thirds of the auditor’s fee was for accountancy services while one-third was for annual audits. A professional firm of accountants was hired as auditors to the London Hospital in 1881, to the Kingston General Hospital
in 1886, to the Queen Elizabeth Hospital in 1904, and to the Cornwall General Hospital by 1943.\textsuperscript{72}

The professional accountant brought an independent perspective to bear on the financial business of the hospital. His disciplined approach to records not only ensured the prudence of officials with responsibility for money but also revealed potential problems in the forms and methods of record-keeping from the point of view of administration and financial management. Business methods were associated in the public mind, and among administrators, with increased efficiency and greater control over hospital affairs.\textsuperscript{73}

**Developments in hospital medicine**

The administrative and management impetus for the production of more records of greater complexity was enhanced by the impact of expanding medical knowledge on hospital-based practice. The increasingly complex diagnostic and therapeutic environment produced more records and stimulated the development of new series of records and of documents to record the details of procedures, the nature of patient responses, and the administration of departments. The development of hospital medical practice is reflected directly in the clinical case file, which records the participation of new departments, functions, and services in the care of in- and out-patients. Three factors worked in combination to increase the complexity and size of hospital case records: new techniques, the extension of care, and the establishment of standards in the composition of case files.

New medical techniques were documented in the patients’ case records, a development which increased substantially the size of record per individual. The development of records was associated with the proliferation of special medical departments, units, or services in the hospital.\textsuperscript{74} Between 1880 and 1940, the following departments and specialist services were established or extended at the selected hospitals: pathology, dental, photographic, electrical, out-patient, follow-up, x-ray, pharmacy, isolation, dietary, and cardiology.\textsuperscript{75} The records produced by these procedures, along with those produced by other specialties which were unique to a hospital, were represented more or less regularly in the case file. Each novel procedure which was incorporated into hospital routines eventually achieved separate documentary status, and these additional documents swelled the average size of each file. In addition to the increasing number of separate types of documents in a patient’s file, there was a noticeable increase in the number of pages per file as a result of regular and systematic recording of information about each patient in the course of bedside care. Various types of consolidated weight/temperature/respiration charts were added, first as unusual items tipped into the casebooks, and later as significant documentary additions to the case file. Associated with these were diet sheets and orders for medicine. The extension of the concept of patient care to include follow-up, usually through an expanded out-patient department, resulted in the generation of more records for each individual patient. Each hospital also gradually included administrative records, such as social histories, personal information data sheets, and summaries of cases for general reference in the clinical files of its patients.\textsuperscript{76} Finally, the establishment of standards in record-keeping increased the size of files. Standardization was achieved within each hospital through the introduction of common forms of uniform size for each procedure, technique, and function.
Conclusion

From the survey it is clear that no institution has complete or even approximately complete records. From the evidence contained within the records which do exist, we can conclude that many important series of records have not survived. Particularly noteworthy is the absence of documentation from the hospital administrative office, where innovation and change in record practices would be clearly expressed. Similarly, there is not one complete series of records for the various administrative departments established in hospitals after World War One. In addition to the administrative records of the hospital and departmental offices, lost series of significance include the early casebooks and case files from Ontario’s hospitals and from some London institutions, department files, and many financial records, particularly the inventories and stores books, which would show the innovations in management accounting. Minute books and clinical records have the widest representation and provide the most consistent internal evidence about the timing and the rationales for changes in record-keeping. This reinforces the evidence which comes from the form and structure of the records.

The persistence of traditional types of records is a distinct feature of the holdings in the hospitals surveyed, and strong evidence of the continuing importance of customary habits in records. Institutional management thrived on minutes and reports. Decision-making, delegation of authority to deputed groups and officials, and the monitoring of job performance were formally accomplished by these records. Summary registers controlled business activities and patient movements, and by the 1880s casebooks had emerged to supplement the registers by giving substance to the patients’ history and experience in the hospital. Moreover, the development of separate extensive financial series, casebooks, and diversified patient registers indicates the importance of the traditional types of records produced by the conventions of group government and institutional management. Between c. 1850 and c. 1950, the strength of custom constitutes an element of stability in records.

But in addition to the resiliency of tradition, significant qualitative changes in the records of hospitals mark a departure from their documentary habits. The development of records in the categories of “Patient Registration” and “Patient Care” highlights the paradox of strong traditions co-existing with rapid change. The category for “Patient Registration” is dominated by traditional registers, albeit more differentiated along functional lines and, overall, exhibits a consistency in structure and stability in content. The patient clinical file underwent dramatic changes as traditional forms and modes of preparation were eclipsed by a multiplicity of new documents which could no longer be accommodated in traditional casebooks. These books were discontinued in favour of loose files in which a variety of separate documents could accumulate naturally as produced.

By 1920, hospitals operated within a milieu which stimulated cross fertilization of practices among institutions and prompted the standardization of administrative operations and records. The formal and informal sharing of information and the impact of example encouraged parallel lines of development. Innovation created precedents in management which other hospitals studied and used. Even public authority hospitals, which operated in a more rigid administrative structure, responded to the changes in other hospitals.
Common lines of development among hospitals were encouraged by the sharing of information through publication. The literature on various aspects of hospital management developed extensively after 1890, and several new journals devoted exclusively to hospital matters took firm root on both sides of the Atlantic. A flourishing literature was at once the symbol of, and the vehicle for, the emergence of a strong and independent discipline of hospital management. Stipendiary officials especially trained for hospital administration undertook many of the duties previously done by volunteer managers in voluntary hospitals, and career officers emerged in public authority institutions. A cadre of professionals, who were first seen as desirable additions, became necessary to the efficient administration of hospitals. These trained professionals were influential in establishing standardized ways of doing business. The development of formal hospital associations also encouraged a distinct discipline of hospital management, and the conferences and publications of these organizations furthered the development of shared assumptions and common ways of doing business.

Summary

Between c. 1890 and c. 1945, the growth in the extent of accumulated records and their increased variety and complexity were general phenomena in both London and Ontario's hospitals. A marked feature is the differentiation of traditional records on functional lines and the emergence of new categories and new types of documents which were well integrated into the record routines of hospitals. At the same time, standardization was introduced over a wide variety of narrative and summary statistical records. This was accomplished, in part, by the introduction of printed forms for registers, financial ledgers, and patient files. Manuscript records were first supplemented and then replaced by typescripts and a greater number of copies were produced in the course of record-keeping. Between c. 1850 and c. 1950, the proportions of the various categories of records in the accumulated holdings of hospitals changes, reflecting not only incomplete patterns of survival but also a change in the habits of record creation. In both London and Ontario, the medical and surgical treatment of patients produced increasingly more documents, so that the records of the "Patient Care" category dominate in the accumulated holdings by 1925. The growth of records, their increasing variety and standardization, and the change in preparation from manuscript to typescript are particularly pronounced between c. 1890 and c. 1950.

Traditional records and the customs of their keeping in individual institutions were gradually harmonized with common standards for records. Greater uniformity in the way business was conducted and recorded was the product of outside involvement in the affairs of hospitals and the application of business techniques to manage more complex institutions. Public authority hospitals in London and Ontario were particularly affected by statute and regulations. These stipulated the form, content and arrangement of registers, warrants, casebooks and case files, and statistical reports. The development of statute and case law encouraged a greater awareness of the value of documentation. The financial records of voluntary hospitals in both areas were affected by the increased participation of third parties in hospital funding. In Ontario, the registers, financial records, and statistical reports of voluntary hospitals were effectively standardized by the state through the Public Hospitals Acts.
These Acts tied public financial support for indigent patients to regular inspections and to returns in prescribed common forms. In London, the Hospital Saturday and Sunday Funds, and later, the King Edward's Hospital Fund, influenced the form and arrangement of financial reports and other documents by prescribing a uniform system of accounts as a prerequisite to receiving grants. Uniform accounting procedures and ways of keeping books were extended to all hospitals with the introduction of the National Health Service in 1948. In Ontario, the hospital accreditation programme begun by the American College of Surgeons in 1917 was influential in establishing common standards for records and particularly for consistency and completeness in clinical records.

The impact of third-party and state requirements on hospitals reinforced the effect on records of other common developments. Hospital administration itself became substantially more complex. In voluntary hospitals, continuing and special management tasks were gradually differentiated among sub-groups of the deputed governing body, the most pervasive being the house and finance committees. The medical staff and special medical departments were formally involved in hospital management and by necessity had to keep careful records of their transactions. The elaboration of traditional voluntary management was matched by the growth of stipendiary officials, many specially trained for hospital management or professional medical tasks. Business management techniques which were records-oriented, particularly cost accounting and the use of professional accountants and auditors, introduced uniformity into records and record-keeping. The vital element in the environment of records was the growing public importance of hospitals. By 1930, they were no longer strictly concerned with the sick poor, the insane or those afflicted with contagious diseases, but served a wider public which paid for medical and surgical treatment which could only be obtained in the hospital. Between 1890 and 1940, a broadly based hospital community developed which shared experiences and techniques through publication. Records were affected by the growth of common practices, and their role in the hospital became the subject of attention in professional hospital literature on both sides of the Atlantic.
Notes

1 Abbreviations used throughout the notes are as follows:

Brook General Hospital  BGH
Cornwall General Hospital  CGH
Kingston General Hospital  KGH
Kingston Psychiatric Hospital  KPH
London Hospital  LH
Queen Elizabeth Hospital  QEH
Royal Marsden Hospital  RMH
Springfield Hospital  SPH
American Archivist  AA
American Medical Association Journal  AMAJ
Boston Medical and Surgical Journal  BMSJ
British Medical Journal  BMJ
Bulletin of the American College of Surgeons  BACS
Bulletin of the Johns Hopkins Hospital  BJJH
Bulletin of the New York Academy of Medicine  BNYAM
Bulletin Medical Library Association  BMLA
Bulletin of the History of Medicine  BHM
The Hospital  TH
The Canadian Hospital  TCH
The Hospital, Medical and Nursing World  THMNW
Journal of the History of Medicine  MH
Journal of the Society of Archivists  JSA
Medical and Surgical Report of the Presbyterian Hospital of New York  MSRPHNY
The Medical Record  TMR
The Modern Hospital  TMH
Society for the Social History of Medicine Bulletin  SSHMB

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4 An excellent review of hospital historiography and the place of institutional records in these investigations appears in Roy Porter and Andrew Bear, eds., Problems and Methods in the History of Medicine (London: Croom Helm, 1987).

5 For a comprehensive bibliography, see Carl Spadoni, “Medical Archives: An Annotated Bibliography,” Archivaria 28 (Summer 1989), pp. 74-119.


7 London Hospitals: Banstead Hospital; The Brompton Hospital; Brook General Hospital; Chelsea Hospital for Women; Dulwich Hospital; Hampstead Children’s Hospital (at the Royal Free Hospital); Hampstead General Hospital (at the Royal Free Hospital); Hereford Lodge; Lewisham Hospital; The London Hospital; National Temperance Hospital; North Middlesex Hospital; Queen Charlotte Maternity Hospital; Royal Dental Hospital; Royal Free Hospital; Royal London Homoeopathic Hospital; The Royal Marsden Hospital; St. John’s Hospital for Diseases of the Skin; St. Luke’s Woodside Hospital; St. Mary’s Hospital, Praed St.; St. Mary’s Hospital, W9; St. Pancras Hospital;
Memorial Hospital; Collingwood General 
London, England and Ontario, Canada, c.
The Queen Elizabeth Hospital (Toronto); Queen Street Mental Health Centre (Toronto); Pembroke General Hospital; Peterborough Civic Hospital; Public General Hospital (Chatham); The Queen Elizabeth Hospital (Toronto); Queen Street Mental Health Centre (Toronto); St. Catharines General Hospital; St. Thomas-Elgin General Hospital; Toronto General Hospital; Victoria Hospital Corporation (London); Woodstock General Hospital.

8 BGH/MSR/1896, p. 46.
10 There were two types of enclosures: items which were logically part of the structure of the minutes, such as motions, resolutions, and reports, and those which were supportive of business or illustrative in nature, such as letters received or sent. See early examples in R.G.66/CGH/33 1900.12.04; LH/A/5/47 1898.12.01; RMH/CM/1914.02.23 and KGH/B102/1889.11.04 attachments.
11 For example, see RMH/CM/1851 to 1948 for the hands of Mr. Cockerell, Mr. Hughes, Mr. Howell, Mr. Buchanan and Mr. Pinkham. The Marsden’s minutes were always prepared in person by the secretary. See RMH/HCM/1857.06.09, pp. 190-191, for the order forbidding the preparation of letters and minutes by clerks from dictated copy.
12 RMH/CM/1869-1885; KGH/B102/1889.12.04 attachments; SPH/GCM/1897-1899 and LH/A/5/47.
14 For very clear examples, see SPH/PR/1875-1881(Female) and the wage sheets at the Queen Street Mental Health Centre in Toronto, R.G.10 20-B-4. Before September 1865, these forms were drawn by hand.
15 RMH/PMR/1896-1902, note attached to page 258, “taken as specimen for printing”; RMH/CM/ 1886-1896 for printed forms for statistics. Also see examples in RMH/MCM/1907.07.09; SPH/SR/ 1909-1914; RMH/CB/Mr. Snow 1904-1906 and SPH/DTD/1907-1916. In London’s public authority hospitals, many of the registers were comprised of copyrighted forms provided by commercial suppliers, as in SPH/RNS/1918-1927.
16 For an explanation of the numbering system for forms at the Royal Marsden Hospital, see Alfred M. Hooper, “Economy of Labour in Hospital Management,” TH ii (1912), p. 392. (Hooper was the Assistant Secretary at the Royal Marsden Hospital.) Also see KGH/R700 sample clinical forms; RMH/CB/Mr. Horder 1918 and R.G.10 20-F-2.
17 SPH/GCM/1869.01.23, p. 102; SPH/GCM/1888.06.17; SPH/GCM/1895-1897, pp. 186-197; RMH/MRB/ and KGH/B102/1912-1914.
18 For example, see SPH/WKW/1892-1894.
19 For example, see RMH/PMR/1895-1902 entries beginning March 1900.
20 RMH/CB/Mr. Swann 1928. For a general discussion of forms and stamps see “The Value of Printed Forms,” TH ii (1912), 376 and Alfred M. Hooper, “Economy....” pp. 391-392.
21 SPH/MSR/1909-1914. For reference to detailed narrative reports of the Medical Superintendent, see SPH/GCM/1867-1892.
22 For example, see SPH/CB/Female Vol. 20 inside cover.
23 See, for example, RMH/CB/Mr. Jessett and Mr. Ryall after 1900.
24 For a very clear example, see R.G.10 20-F-1, vol. 3 and vol. 5, concerning the weight of patients and urine analysis.
25 The dominance of bound volumes in the accumulated holdings until quite late in the survey period indicates that binding was either confined to records destined to be retained for some time or that binding, undertaken for other reasons, ensured that the records so treated would survive.
26 In the selected Ontario hospitals, all minutes were habitually entered in bound volumes in the first instance, with the exception of the early minutes of the Cornwall General Hospital.
27. Loose leaf binding was introduced in some hospitals for minutes and other records by 1920. For example, see RMH/MCM/1920.03.09, p. 304, concerning the loose leaf binding of water coloured sketches of cases.

28. Balance sheets of assets and liabilities were first published at the London Hospital in 1890, at the Royal Marsden Hospital in 1904, at the Kingston General Hospital in 1900, and at the Cornwall General Hospital in 1928. It is important to note that the assets and liabilities were entered on the right and left sides of the balance sheet in London, whereas the positions were reversed in Ontario, which followed the North American custom. The exception was the Royal Marsden Hospital, which followed the American style until 1904, RMH/AR/1904. The accounts of the Kingston Psychiatric Hospital were presented as part of the Public Accounts of the Province of Ontario.

29. LH/A/5/17; SPH/GCM/1864.02.02, p. 120; KGH/B102/1925-1926, pp. 36-57; R.G.66/CGH/37 1930.03.11, 1930.10.14 and 1947.02.11. Also see LH/F/1, 2, 3 and KGH/B501.

30. For example, see SPH/WBK/1884-1885 and 1894-1897.

31. For example, see the Death Registers (DTH) and the Death and Discharge Registers (DD) of the Springfield Hospital, Appendix pp. 308-310. The Death and Discharge Registers changed from 31 entries to 10 entries per page in 1890, SPH/DD/1880-1892. The sexes were united in one volume of death registrations until 1858 and after that date there were separate registers for males and females, e.g. SPH/DTH/1858-1892. The format changed twice in the 1890s, when the column for “death or discharge” was changed to “date of removal, death or discharge” (1890.04.25), and again when information on post-mortems was added (1895.08.03). Separate registers for deaths and for discharges began in 1892, SPH/DTH/ and SPH/DDC. All registers began at number 1 again in 1907 and in 1930.


33. No personnel files were found in London, but several hospitals in Ontario had complete sets beginning in the 1940s.

34. For example, see R.G.10 20-F-1 vol. 16, case no. 164, p. 20, and no. 670, p. 110. Also see SPH/CB/Female vol. 20, nos. 3301-4000 and vol. 3, no. 2337, pp. 58-59.

35. For example, see KGH/R700/ sample clinical forms; R.G.10 20-F-2 #30 et seq; RMH/CB/1886-1937; RMI/MCM/1934.02.21, p. 7 no. 9 and SPH/CLR/1920.10.15. Also see Archives of Ontario, R.G.8, Office of the Provincial Secretary, 1-1-A-1 Box 48, file “Filing Systems,” for a discussion of the new system introduced into Ontario’s psychiatric hospitals on 15 May 1907.

36. See the clinical files of the Royal Marsden Hospital, the London Hospital, the Queen Elizabeth Hospital, the Kingston General Hospital, and the Kingston Psychiatric Hospital, Appendix p. 318.

37. RMH/CB/Mr. Ryall 1905 nos. 195/96; SPH/CB/Female no. 261 (1905); LH/SCR/1911 no. 300, and R.G.10 20-F-2 no. 30.

38. See RMH/MCM/1947.11.19 and 1948.01.01 concerning typescript notes and the procedures for filing duplicates. By 1930 at the London Hospital, certain records were required to be typescript, LH/A/5/61 1930.03.03, p. 53 attachments.

39. Nursing notes were segregated from the main clinical file in Ontario by 1940, and separate series of nursing notes were also located in London. See, for example, R.G.66/CGH/39 1947.01.14.

40. The most important statutes in Great Britain are: An Act to consolidate certain of the enactments respecting lunatics (53-54 Vic. [1890], c. 5), and An Act to amend the Lunacy Acts, 1890 to 1922, and such of the Mental Deficiency Acts, 1913 to 1927, as relate to the constitution and organization of the work of the Board of Control, the exercise of the powers of the Board and the protection of persons putting those Acts into operation (20 Geo. 5 [1930], c. 23). See also Record Office (PRO) MH 51/238 #’s 231, 274, 288, 342, 356, 402 and MH 51/242 #912a. For examples of administrative orders which affected records, see SPH/GCM/1906.12.18, p. 96, concerning the rules of the Commissioners in Lunacy for books of record, and also orders of the Local Government Board concerning the accounts of clerks in Asylums, SPH/GCM/1889.06.19.

41. The most important statutes in Ontario are: An Act respecting asylums for the insane (34 Vic. [1870-71], c. 18); An Act respecting provincial hospitals for the insane and the custody of insane persons (3-4 Geo. 5 [1913], c. 83; An Act to provide for the inspection of provincial and other hospitals, charities, prisons and court houses (3-4 Geo. 5 [1913], c. 88); An Act respecting mental hospitals and schools (25 Geo. 5 [1935], c. 39), See especially sec. 6(A) (i). See also R.G.10 20-A-1, “Minutes of Meetings of the Superintendents of Ontario Hospitals 1930-1950,” and R.G.10-107.

42. In London, An Act to provide for insurance against loss of health and for the prevention and cure of sickness and for insurance against unemployment, and for purposes incidental thereto (1-2 Geo. 5 [1911], c. 55); An Act to provide for superannuation allowances to officers and servants employed in public asylums for the insane in Great Britain and Ireland; and to make other relative provisions.
(9 Edw. 7 [1909], c. 48). In Ontario, An Act relating to hospitals and charitable institutions (2 Geo. 5 [1912], c. 85), and Statutes of Canada, An Act to authorize the levying of a war tax upon certain incomes (7-8 Geo. 5 [1917], c. 28. For clear examples in the records, see SPH/ROA/1884-1913; BGHSR: R.G.10 20-B-4 Wage Sheets, particularly 1918-1955 and QEH/A/3 #2.  

For examples, see SPH/GCM/1895.03.10, p. 194; SPH/SSC/1927.07.07 p. 54; SPH/GCM/1914.08.24 p. 19. Also see the Annual Reports of the Inspector of Prisons and Public Charities, and particularly his manuscript inspection and audit reports in R.G.8 I-1-D. 

Examples were located in the registers at the Springfield and Brook hospitals, especially the wage ledgers, officers’ and attendants’ registers, and various patients’ registers. Five stationers and printing firms were used to supply the Springfield Hospital with printed forms and registers: David Batten and later Batten and Davies, Clapham Common (c. 1843 – c. 1878); W.J. Waterlow and Sons (c. 1878 – c. 1932); Shaw and Sons (c. 1913 – c. 1930); Chas Knight (c. 1930 – c. 1948) and Hurley’s (c. 1925 – c. 1948). In Ontario, the Library Bureau of Canada supplied the forms, cards, and new vertical filing system for case files which was introduced into the province’s public authority psychiatric hospitals in 1907. See R.G.8 I-1-A-1 Box 48 file “Filing Systems 1905 – 1908” and a list of approved forms, undated but c. 1925, included in R.G.10 20-F-4. 

An Act to provide for the establishment of a comprehensive health service for England and Wales and for purposes connected therewith (9-10 Geo. 6 [1946], c. 81), known as The National Health Service Act, 1946. The appointed day for transfer was 5 July 1948. Certain subsequent orders were particularly important for records and record-keeping; S.I. 1948, No. 1075 “The National Health Service (Emergency Mental Treatment) Regulations 1948”; S.I. 1948, No. 1414 “The National Health Service (Hospital Accounts and Financial Provisions) Regulations, 1948.” See also “Hospital Accounting,” TH, (July 1948), p. 297, concerning the liaison between the Institute of Hospital Administrators and the Inter-Departmental Committee on Hospital Accounts which was established to consider the requirements of section 51 of the National Health Services Act, 1946; G.W. Millin, “Hospital Accounting in the National Health Service,” TH, (Oct. 1948), pp. 437-441; H. Cotton, “Medical Records in the National Health Service,” TH, (April 1949), pp. 195-199; “Hospital Accounts,” TH, (Sept. 1949), pp. 547-548; “Hospital Accounting. Interim Report of the Costing Sub-Committee appointed by the Committee of Regional Hospital Board Treasurers,” TH, (June 1950), pp. 461-466, 478. 

The most important statutes in Ontario are: An Act to regulate public aid to charitable institutions (37 Vic. [1874], c. 33); An Act respecting aid to charitable institutions (58 Vic. [1895], c. 60); An Act relating to hospitals and charitable institutions (2 Geo. 5 [1912], c. 85); An Act to provide for the inspection of provincial and other hospitals, charities, prisons and court houses (3-4 Geo. 5 [1913], c. 88); An Act to amend “The hospitals and charitable institutions act” (16 Geo. 5 [1926], c. 73); An Act to amend “The hospitals and charitable institutions act” (18 Geo. 5 [1928], c. 59; An Act respecting public hospitals and hospitals for incurables (21 Geo. 5 [1931], c. 78); An Act to provide for greater aid to public hospitals (12 Geo. 6 [1948], c. 40); An Act to establish the Hospital Services Commission of Ontario (4-5 Eliz. II [1956], c. 31). 


For a consolidation of orders and regulations affecting financial reporting, see Accounting Manual for Public Hospitals in The Province of Ontario (Toronto, 1948). 

An Act for the better administration of charitable trusts (16-17 Vic. [1853], c. 137); An Act to consolidate and amend the law relating to mortmain and to the disposition of land for charitable uses (51-52 Vic. [1888], c. 42); An Act to empower voluntary hospitals, in pursuance of orders of the Charity Commissioners, to provide accommodation and treatment for paying patients (26 Geo. 5 & 1 Edw. 8 [1936], c. 17). 

An Act to regulate the inspection, exportation, manufacture, sale and use of opium and other dangerous drugs (10-11 Geo. 5 [1920], c. 46); An Act to amend the law relating to pharmacy and poisons and for purposes consequential on such amendments (23-24 Geo. 5 [1933], c. 25). 

In Great Britain, An Act to amend the law of evidence (1-2 Geo. 6 [1938], c. 28); In Ontario, An Act to amend “The evidence act” (9 Geo. 6 [1945], c. 7). 


By 1920, 120 hospitals in London were using the Revised Uniform System of Accounts, GLRO, A/KE/412, July 22, 1920. The first uniform system prepared by the American Hospital Association was issued in 1906, “The Uniform System of Accounts in the United States,” TH, ii (1906), pp. 128-129. Uniform accounting was introduced into Ontario’s public authority psychiatric hospitals in 1915 when all accounts, previously handled by each institution, were centralized in the office of the Inspector of Prisons and Public Charities. See R.G.8 1-1-A-1, File “S.A. Armstrong,” Memorandum, W.W. Dunlop to W.J. Hanna, 26 February 1915.

Clause IV of the Minimum Standard for Hospitals established the importance of medical record-keeping in hospitals for the purposes of accreditation by the College. “That accurate and complete medical records be written for all patients and filed in an accessible manner in the hospital...” Also see “Case Records and their Use,” BACS, V (January 1921), pp. 1-16; Malcolm T. MacEachern, Medical Records in The Hospital, (Chicago, 1937), pp. 7-8. Also see KGH/M202/1919.04.02, 1921.02.05, 1923.06.26; and R.G.66/CGH/42.5, 1932.01 and QEH/B1.


For important examples, see RMH/HCM/1944.04.25 and 1945.01.24 concerning the record cards of the Radium Commission. Also see discussions with the Radium Commission on the problems with follow-up records, RMH/MCM/1937.09.06, p. 28.

RMH/HCM/1932.06.22, pp. 31-33; RMH/HCM/1936.06.20, p. 20; RMH/HCM/1932.11.09, p. 251; KGH/B102/1933, pp. 138-140; QEH/A7/1881, p. 5; QEH/A1/vol. 3, p. 5. See the Voluntary Hospitals (Paying Patients) Act, 1936. The first memorandum attached to the bill states that there are “patients who, in the event of serious illness or operation, can not afford the cost of private treatment, but are able and willing to pay for treatment in a hospital at charges proportionate to their means. There are also many modern methods of diagnosis and treatment which cannot be provided without the aid of the specialized equipment and staff of a hospital except at great expense, if at all,” quoted in Speller, pp. 69-70. This act empowered voluntary hospitals in pursuance of an order of the Charity Commissioners to provide accommodation and treatment for paying patients. Concerning payments at the London Hospital, see “The London Hospital,” TH, lxviii (1920), pp. 599-600. Also see “Hospital Problems in Canada,” TH, iii (1924), p. 80; “Hospital Accounts,” TH, i (1922), p. 167.

KGH/B503; QEH/A8 and RMH/PC. Publicity campaigns are documented in the minutes of appeal committees and in the newspaper cuttings. Also see references to a series of pamphlets to educate the public about cancer, RMH/MCM/1907.08.27, p. 388.

For example, the Royal Marsden Hospital reshaped its annual financial statement to delete specific references to the money spent on food and supplies for animals used in research because of the public’s sensitivity to vivisection. RMH/HCM/1936.04.28, p. 154 and RMH/MCM/1915.02.02.

See, for example, RMH/HCM/1904.04.03 concerning newspaper reporters in the hospital and KGH/B106/1904.01.16 concerning the confidentiality of information in patient records. SPH/GCM/1886.10.16, p. 319; SPH/AR/1906 was the first report in which the initials of patients were not used. LH/A/5/40 1880.10.19, concerning permissions for post mortems. Also see E.F. Whitmore, “Post Mortem Examinations,” TCH, (June 1936), pp. 9-12.

The Brook General Hospital, the Springfield Hospital, and the Kingston Psychiatric Hospital were public authority institutions. The Kingston General Hospital was incorporated by statute, 2 Will. IV Cap. xxvii, altered by 12 Vic. Cap. ciii, “An Act to Incorporate the Trustees of the Kingston Hospital,” 30 May 1849. The Cornwall General Hospital was incorporated in 1897 under the provisions of the Benevolent Societies Act R.S.O. Cap. 72.


65 LH/F/3, 2 and 3.
66 SPH/GCM/1864.02.02, p. 120.
67 RMH/HCM/1935.03.13, p. 235; KGH/B102/1925-1926, pp. 36-57; R.G.66/CGH/37 1930.03.11 and 1930.10.14.
68 RMH/HCM/1944.03.08. Also see R.G.66/CGH/38 1939.02.30; R.G.66/CGH/39 1946.01.08 and 1946.02.35; KGH/B103/Annual Report 1949.
69 KGH/B102/1924.05.06, p. 301 and 1924.12.29 Attachments. A system of standard accounts was introduced into Ontario's psychiatric hospitals in 1906 and accounts were made uniform and centralized in 1915.

70 See RMH/HCM/1909.05.26, p. 55 et. seq., and RMH/HCM/1910.01.12, p. 152 concerning the allocation of legacies in the account statement to the capital account and not to the income and expenditure account as required by the King's Fund. Further references to investment matters and the construction of the annual financial statement are RMH/HCM/1939.04.12, p. 39-42, re the placement of the value of lands and buildings in the balance sheet and RMH/HCM/1941.03.26, p. 234, re market value of assets, and RMH/HCM/1936.12.09, p. 97, re the percentage which should be written off for depreciation.

At the Kingston General Hospital, there were changes in the method of reporting the financial picture of the hospital between 1912 and 1940. These changes were related to the establishment of endowments, the application of depreciation, the calculation of income from public and private sources, and the methods of calculating public financial responsibilities to the hospital. These changes are outlined in the hospital's annual reports, KGH/B103.


RMH/HCM/1893.02.08, pp. 26-27; 1893.02.22, p. 28-29; 1901.02.27, pp. 60-61; 1901.03.13, p. 65 and 1946.02.27. Very few of the auditors' reports survive at the Marsden.

72 LH/A/5/40 1881.02.08, pp. 136-137, 206; KGH/B102/1886.03.01, p. 54; QEH/A/7/1904 and QEH/E/2 1916.10.26; R.G.66/CGH/88.10, Annual Report 1943.

73 See SPH/GCM/1927.05.05, p. 17 and 1927.07.07 p. 54 for auditors' reports on record-keeping; Joseph E. Stone, “Accounting...,” p. 183.

74 The development of the Pathologist’s Registers at the Royal Marsden Hospital shows the differentiation of services provided by the laboratory from gross and micro pathology in 1885 to include histology, blood examination (counts, cultures and Wassermann tests) urine examinations, and bacteriological examinations. RMH/PRG/1885-1942. Also see LH/A/5/41 1883.03.10, pp. 155-156, concerning the establishment of clinical research laboratories and the establishment of ward laboratories for routine urine examinations. Also see Joel D. Howell, “Early Use of X-Ray Machines and Electrocardiographs at the Pennsylvania Hospital, 1897 through 1927,” AMAJ, (May 2, 1986), pp. 2320-2323; Idem., “Machines and Medicine: Technology Transforms the American Hospital,” unpublished typescript 1987 and “The Use of Medical Technology in English Hospitals: 1890-1920,” unpublished typescript 1986. The author is indebted to Mr. Howell for access to these papers.

75 RMH/AR/1904-1945; LH/A/5/47 1894.01.25, p. 356; 1894.06.04, p. 413; 1897.10.15; LH/A/5/48 1902.12.01, p. 511; 1903.01.19; 1905.07.10; LH/A/5/50 1907.10.04; 1908.02.11; KGH/B102/1940.11.01, pp. 92-99; R.G.66/CGH/34 1906.03.20; R.G.66/CGH/36 1915.10.05; R.G.66/CGH/38 1934.12.11. Also see “The Making of a Modern Hospital: iv — The Departments of The Modern Hospital,” TH, ii (1911), pp. 105-106.
An example of a particularly important loss is the clinical records of the Research and Pathology Department of the Royal Marsden Hospital. See the first report of the Research and Pathology Department, RMH/HCM/1909.09.22, pp. 3, 93 attachments.

For example, see RMH/AR/1888, p. 16; RMH/CM/1888.10.10, p. 131, concerning the establishment of a house committee to follow the example of another institution and RMH/MCM/1901.04.17, p. 28, concerning the pressures which led to the development of a separate Pathology and Research Department. Also see LH/A/5/45 1894.01.15, p. 359; LH/A/5/47, pp. 356-367; LH/A/5/49 1903.12.14, p. 181, concerning the London’s investigation of the post-mortem arrangements at other hospitals; 1904.10.24, p. 352, concerning the practice of allocating beds at other hospitals; 1905.01.16, p. 404, concerning the fact finding visit of the Secretary, Steward and Matron to Scottish hospitals.

Also see R.G.6/1-1-A-1 Box 39, file “Dr. Harvey Clare” concerning the visit of Ontario physicians to European institutions, letter Dr. H. Clare to W.J. Hanna 10 Oct. 1912; and R.G.66/CGH/33 1898.12.06, p. 51, 1898.10.14, p. 47; R.G.66/CGH/34 1903.01.19, p. 4; R.G.66/CGH/36 1915.10.05, pp. 114-115, and R.G.66/CGH/38 1939.06.12, concerning the examination of practices in other hospitals.

For example, see the development of pathology at the Springfield Hospital, SPH/AR/1896, p. 40; SPH/CLR/1922.12.12, 1927.04.11, and 1930.10.21. Concerning the establishment of a training school for nurses in Ontario’s psychiatric hospitals, see R.G.63, A-1, no. 5879.

The most important pioneering texts are Donald J. Mackintosh, Construction, Equipment and Management of a General Hospital, (Edinburgh, 1909); Joseph E. Stone, Hospital Organization and Management, (London, 1927), and Malcolm T. MacEachern, Hospital Organization and Management, (Chicago, 1935). In the records of the selected hospitals, see references to the purchase of subscriptions to management journals, KGH/B601/1910.02.28, p. 205; R.G.66/CGH/35 1917.08.07, p. 171.

See references to the careers of officers at the Springfield hospital in SPH/AR/1862, 1875, 1889, 1895, 1900, 1910, and 1912; SPH/RO/A. Also see BGH/MSR/1901 and BGH/SR.


The British Hospital Association was established in 1884 and incorporated in 1929. The Association of Hospital and Asylum Superintendents in North America was established in 1897 and included a strong representation from Ontario. In 1909, a separate Ontario Hospital Association formed. The American and Canadian hospital associations held annual meetings. There were international representatives at the annual conferences of the American Hospital Association after 1920. For example, the Secretary of the Royal Marsden Hospital was sent to the American Hospital Association conference in Buffalo, New York, in 1924. RMH/HCM/1924.09.05, p. 75. The Incorporated Association of Hospital Administrators was formed in 1902, and the Incorporated Association of Clerks and Stewards of Mental Hospitals in 1904. In 1928, the American Association of Medical Records Librarians was formed. The Association of Medical Records Officers was established in Britain in 1948, and in 1952 the first World Congress on Medical Records was held in London.