

Through a glass darkly: patients of the Illinois State Hospital for the Insane at Jacksonville, USA (1854–80)

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Abstract

The State Hospital for the Insane at Jacksonville, Morgan County, Illinois, was the first public hospital of its kind to be established in the State and among the earliest to be built on the 'Kirkbride Plan'. It opened for patients in 1851. We describe the background to the establishment of the hospital and, so far as is possible from publicly available sources, its catchment area, the nature of the patients held there up to 1880, its mechanisms of discharge, and supposed causes of death. We end with a plea that after over 150 years, the release of hospital casebooks and similar records in digital form would be of considerable benefit to historians of psychology, scientific biographers, genealogists and demographers.

Keywords

Dementia, demographics, mania, melancholia, psychiatric hospitals

Introduction

The American physician and statistician, Edward Jarvis (1803–84), graduated from the medical school of the University of Vermont in 1830. He then practised medicine in Northfield, Vermont (VT); Concord, Massachusetts (MS); and Louisville, Kentucky (KY). During this time, he became interested in improving the lot of the mentally ill who, unless fortunate enough to be a member of a family which could afford to care for them, were included in the class of 'paupers'.¹

Four principal methods of caring for paupers existed at the time: (1) provision in their own homes, usually granted when only partial or temporary public support was required; (2) auctioning off the poor to the lowest bidders, that is, to the person or persons willing to undertake their support at the lowest cost to the community; (3) contracting the support of all paupers to a single individual at a fixed price; (4) support in a public almshouse. (Deutsch, 1946: 117)

As a consequence, the mentally ill were often to be found confined in appalling circumstances in homes, county almshouses and even jails² (Wines, 1870: 118–237; Anon., 1879a, 1879b):

Cases of insanity so often were decisively of a moral cast, and connected with fury, madness, and crime that ... these outcasts of timid society, were left to pine away in miserable confinement, with no eye to discern the real nature of their disease; no medicine to relieve the nervous system of its incubus; no soothing to calm its distressing excitement. (Jarvis, 1841: 2)

In 1834, Jarvis established an asylum dedicated to more enlightened care of the insane in Dorchester, MS. He was particularly interested in accumulating data on the mentally ill, their treatment, and the role which ethnicity and social class might have played in their illness. He subsequently published a memoir comparing the nature and efficacy of treatment in a number of the better-run institutions, including: the Vermont Asylum, at Brattleborough, opened in 1816; the Friends Asylum, at Frankford, Pennsylvania (1817); the McLean Asylum, at Charlestown, MS (1818); the Kentucky Lunatic Asylum, at Lexington (1824); the Massachusetts State Lunatic Hospital, at Worcester (1833); and the Ohio Lunatic Asylum at Columbus (1838); he argued that more sympathetic treatment resulted in a significantly larger proportion of patients being discharged in an 'improved' condition (Jarvis 1841: 37-40).

Another person to become interested in this subject was Dorothea Lynde Dix (1802–87), a teacher in Boston, MS. Following a breakdown in her health, probably as the result of stress, in 1836 she undertook a therapeutic trip to England, where she remained for a year. During that time she met the Quaker philanthropists, Elizabeth Fry (1780–1845) the prison reformer, and the physician Samuel Tuke (1784–1857). Tuke had also become interested in the mentally ill and he ran a home for them in York. Following her return to Boston in 1841, Dix provided Sunday School classes for female prisoners in Middlesex House of Correction in Cambridge, MS. As a result of the conditions she found there, and cognisant of Jarvis's work, in 1842 she too began to work tirelessly for reform of prisons (Dix, 1845) and almshouses in the USA and, particularly, for the care of the mentally ill found within them (Brown, 1998; Muckenhaupt, 2003).

I ... call your attention to the *present* state of Insane Persons confined within this Commonwealth [of Massachusetts], in *cages, closets, cellars, stalls, pens! Chained, naked, beaten with rods, and lashed into obedience!* (Dix, 1843: 4, original italics)

In reply to an often proposed question — Whether similar cases of suffering ... can be found in other States beside Massachusetts? — truth and justice oblige me to answer that I *believe* they exist in all the States of the Union. I know, from personal investigation, that similar shocking and revolting spectacles of unalleviated misery are to be found in Virginia, in the District of Columbia, in Maryland, Pennsylvania, New York, Ohio, and in Vermont, New Hampshire, Maine, Connecticut, and Rhode Island. (p. 2, original italics)

She subsequently turned her attention to Illinois, in an:

able and eloquent memorial, setting forth in vivid language the prevalence of insanity, the possibility of its cure, the advantages of hospital treatment, and the wretched condition of many lunatics, as she had found it by personal observation, in the almshouses and private dwellings of Illinois. (Wines 1870: 241; Anon. 1871b: 39).

Presented to the Fifteenth General Assembly of the State of Illinois in January 1847, it prompted its members on 1 March to make provision for the establishment of the first State Hospital for the Insane at Jacksonville, the county seat of Morgan County (Anon. 1847: 52-55).

It was to follow the 'Kirkbride Plan', named after the reforming Quaker physician Thomas Story Kirkbride M.D. (1809–83). Having been resident physician to the Friend's Asylum for the Insane at Frankford, Philadelphia County, Pennsylvania (1832–3), and in charge of the wing of the Pennsylvania Hospital devoted to care of the mentally ill (1833–5), he was appointed physician-in-chief and superintendent of the forthcoming Pennsylvania Hospital for the Insane at Blockley, also in Philadelphia County, in 1840. It opened on 1 January 1841, and he retained his position until retirement in 1883. He also founded the Association of Medical Superintendents of American Institutions for the Insane in 1844. His 'Plan' (Kirkbride, 1854) was first developed in conjunction with the construction of the State Hospital for the Insane at Trenton, Mercer County, New Jersey, which was designed 'under [his] supervision and direction' by a firm of Philadelphia architects (p. 34) and it opened in 1848 (Anon., 1883).

Kirkbride advocated a system of treatment in which the nature of the hospital buildings and their surroundings were believed to play a key role in the therapeutic process. According to the Plan, each hospital was to be easily accessible by road; located away from any nearby urban area; and surrounded by a large landscaped park, which would include separate 'pleasure grounds' for male and female inmates, 'groves or woodland', a farm and gardens. This would provide an orderly and calm setting in which patients could both relax and be gainfully employed, as well as an attractive outlook from within the hospital itself. Each hospital was to contain 16 wards, intended to house a maximum of 250 people (a number small enough for the superintendent, who was always a physician, to know his patients individually). Two wings extended sideways, on either side of a central administrative block (which also housed kitchens, a lecture room and chapel). Each wing consisted of conjoined L-shaped buildings (Figure 1), each with a basement level which carried ducts for forced-air heating throughout the hospital, as well as providing a transport

system for taking food, laundry, etc., to and from the wards above. One wing was for male and the other for female patients, with the more 'excited' being housed on the ground floor, and the noisiest placed at the end of each wing, where they were less likely to disturb the other patients.³

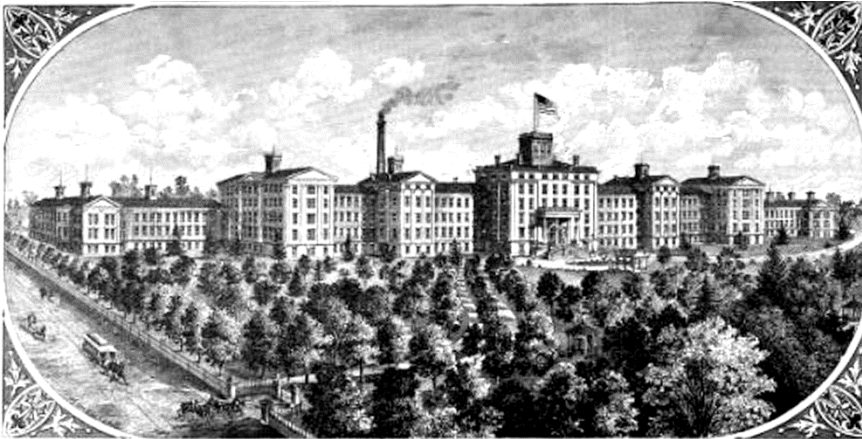


Figure 1. Illinois State Hospital for the Insane, looking south-west from above South Main Street. The 'horse-railroad' can be seen at the lower left (source: Anon., 1894: frontispiece).

Although it is not desirable to have an elaborate or costly style of architecture, it is, nevertheless, really important that the building should be in good taste, and that it should impress favorably not only the patients, but their friends and others who may visit it. A hospital for the insane should have a cheerful and comfortable appearance, everything repulsive and prison-like should be carefully avoided, and even the means of effecting the proper degree of security should be masked, as far as possible, by arrangements of a pleasant and attractive character. (Kirkbride, 1854: 11-12)

The wings should be so arranged as to have eight distinct classes [depending on severity] of each sex; each class should occupy a separate ward, and each ward should have in it a parlor, a dining room, ... single lodging rooms for patients, an associated dormitory for not less than four beds, communicating with an attendant's chamber, one or two rooms of sufficient size for a patient with a special attendant, a clothes room, a bath room, a wash and sink room, and a water closet. There should also be provided for each sex in their appropriate wings, at least one infirmary for patients who are too ill to remain in their own chambers, two work rooms, a museum and reading room, a schoolroom, a series of drying closets, at least one on each story, and various other fixtures. ... The parlors may be dispensed with in the wards for the most excited patients, but not elsewhere, and all the other conveniences suggested will be as necessary for them as any other class. (p. 13)

When planning for the Illinois State Hospital for the Insane began in 1847, Kirkbride's design was already being implemented in the adjacent State of Indiana at the Central State Hospital for the Insane at Indianapolis, Marion County, which received its first patients in 1848. The

Illinois State Hospital was set within a square of 160 acres (0.65 km²) of land on the south side of the city of Jacksonville, just within the city limits and about a mile-and-a-quarter (2 km) from the central Public Square. In due course, it would be reached by ‘horse-railroad’ travelling along South Main Street (Wines, 1870: 166) (Figure 1).

It opened for the reception of patients on 3 November, 1851 (Higgins, 1852). It was renamed the Illinois Central Hospital for the Insane in 1869; the Jacksonville State Hospital in 1909; and, the original buildings having been demolished in 1970, the Jacksonville Mental Health and Developmental Center in 1975. It was eventually closed in 2012.⁴

This paper examines, so far as is possible from information in the public domain, the nature of the patients in this hospital between 1854 and 1880. Grob (1973) discusses at length the development of psychiatry and the progressive growth of mental institutions across America during this period in the context of public policy and social welfare.

Admitting the patient

When this new type of institution was introduced, it was intended that the focus should be on housing patients who were regarded as having a good chance of eventual recovery. A distinction was therefore drawn between ‘lunatics’ and ‘idiots’ (Down, 1892) the latter having long been regarded as those who had:

the want of a natural or harmonious development of the mental, active and moral powers of a human being, and usually dependent upon some defect or infirmity of his [*sic*] nervous organization ... the human attributes of intelligence, sensitivity and will are not absolutely wanting in an idiot, but dormant and undeveloped. (Wilbur, 1852: 5, 6)

Or they were:

originally destitute of mind, or in whom the mental faculties have not been developed. ... [However] those who have once had the use of their mental faculties, but have lost them through the process of disease, are not idiots, but demented, deprived of mind, which has once been enjoyed. (Lincoln, Jarvis and Sumner, 1855: 79)

A census carried out by physicians in Illinois in 1869 found that, even then, of 1067 idiots in the State: 68% were confined at home, 16% in ‘insane or idiot asylums’, 15% in almshouses or poorhouses and 0.2% in jail (figures derived from Anon., 1871a: Appendix C, Table III). As there was no chance of recovery, none were to be received by the Illinois State Hospital,

nor were epileptics, unless their condition was deemed to be ‘complicated with insanity, and these have been admitted for special reasons’ (Anon., 1873a: 174). In Illinois, an Act of 1847 authorized:

county commissioners’ courts to send to the [Hospital] such insane paupers as they may deem proper subjects; courts of the state to send insane criminals; and circuit courts, to send such other insane persons as are, by reason of their insanity, unsafe to be at large, or suffering from unkindness, cruelty, hardship or exposure. (Anon., 1871b: 42)

By February 1853, demand was such that it became necessary to institute a formal procedure for filing applications for admission in advance:

In all cases, some respectable person living in the county in which the person alleged to be insane resides, shall file with the Judge of the County Court a statement, in writing substantially as follows: ... I, the undersigned, hereby state that _____ (naming the person) of the county and State aforesaid is insane, and I believe for his (or her) benefit, (for the safety of the community) he (or she) ought to be committed to the Illinois Hospital for the Insane. The facts in his (or her) case can be proven by _____, (naming at least two persons, one of whom shall be a respectable physician.) ... The Judge of the County Court shall thereupon order the Clerk of said court to issue subpoenas for the persons named as witnesses, and such other persons as he may think proper, commanding them to appear before him at the time and place specified in the subpoenas, to testify concerning the facts in the case of the person alleged to be insane. He shall also order subpoenas for six suitable persons to serve as jurors in the case ... at least one of whom shall be a physician. (Anon., 1873b: Appendix, I; braces as in original)

If it was decided that the person in question should be detained in Jacksonville Hospital, the Superintendent would be notified of the decision and, if the patient ‘be not a pauper’, then any relatives and friends of the patient ‘possessed of means’ were responsible for the expenses of transporting him or her to the hospital and agreeing (by means of making a formal bond) to cover the costs of their board and clothing, otherwise the county covered these costs. Assuming that a place could be found, then the clerk would ‘issue his warrant to the sheriff, or any other suitable person, commanding him to arrest such insane person, and convey him to the hospital’ (Anon., 1873b: Appendix, II). Despite the fact that such formalities existed, and a queuing system for approved admissions operated, friends or relatives would frequently arrive without prior warning, bringing prospective patients to the hospital,

only to learn at its doors that they could only be admitted in violation of good faith towards others, who had filed their applications as the law prescribes, and were patiently waiting their turn. Thus forced to carry back a burden of which they had confidently expected to be relieved, it is not surprising that their disappointment has almost been too great to be overcome by all the explanation afforded. Hardly less trying has been the case of others, who must be denied the benefits of the institution because the case presented was obviously too hopeless to be within the scope of the object of the institution as a 'hospital' for the treatment of the curable, and not an 'asylum' for the shelter of all cases alike without respect to the prospect of alleviation. (McFarland, 1861: 18)

Surprisingly, an Act of 1851 authorized the Superintendent to 'receive and detain married women and infants, *without* the evidence of insanity required in other cases, on the request of the husband of the woman, or parent or guardian of the infants' (Anon., 1871b: 42). This unfortunate state of affairs was only rectified following the case of a sane married woman being interned in the Hospital for three years (1860–3) at the request of her husband, a clergyman with whom she differed in her religious views (Packard, 1868: 14, 37, 43-44). In 1867, the passing of what came to be known as the Personal Liberty Bill, made it illegal 'to receive, detain, or keep in custody, against his [*sic*] own wishes, any person who has not been declared insane or distracted by the verdict of a jury, and the order of a court' (Anon., 1871b: 59).

Such was the demand for admission to the hospital that, despite continued expansion, the planned capacity was continually being exceeded (Figure 2) and parlours and corridors often had to be used as additional dormitories for patients while new accommodation was being built. Furthermore, it had been found necessary to operate a quota system for admissions from each county, with the result that:

those in the institution from the county have been the paupers from its almshouses or jail, while those seeking in vain for admission were the ones whose means were taxed to support the institution. ... [However,] full as the institution always is, no case affording any just hope of cure or material relief, has ever been denied admission. (McFarland, 1856: 17)

However, one cannot help but feel that since the superintendent and Trustees always had the power 'to decide what cases are idiotic' and therefore not admissible, this commitment may not always have been honoured.

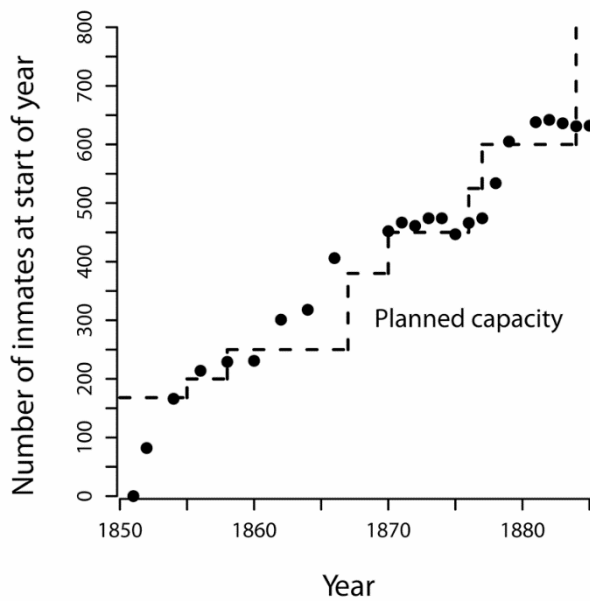


Figure 2. The number of inmates at the start of each year (●) regularly exceeded the planned capacity of the hospital, shown by the broken line (plotted using data from the Biennial Reports of the Trustees, Superintendent and Treasurer of the Illinois Hospital for the Insane at Jacksonville; Anon. 1852, 1854, 1856, 1859, 1861, 1862, 1863, 1865, 1867, 1869, 1870, 1873c, 1874, 1877, 1878, 1880, 1882, 1884, 1886).

Data sources

An unindexed, two-volume Register of Patients (November 3, 1851 - July 19, 1897) is held in the Illinois State Archives. Its entries record for each patient:

register number, name, age, sex, marital status, number of children, birthplace, county of residence, occupation, religion (occasional), date of admission, duration of insanity before admission, number of attacks, supposed cause, and date and reason for discharge. Remarks on religion, prior institutionalization, subsequent admissions and family background [are] occasionally included.⁵

However, today, these and related records are closed and it appears to be virtually impossible to obtain information regarding former patients for biographical, genealogical or other research purposes unless the enquirer is either a close relative of the patient or requires the information for reasons of family-health history. In addition, a court order from an Illinois circuit court may well be necessary to obtain information.⁶

The principal source of data used in this study was originally compiled in 1992, with the permission of the hospital, by genealogist Florence M Hutchison (1911–2004) of Jacksonville, President of the Jacksonville Area Genealogical and Historical Society (1972–

91) and founder of the Morgan County Genealogical Association. She spent many hours at the hospital, and in the county court house going through death records, in an effort to identify those patients who were buried in cemeteries in Jacksonville and in the hospital grounds and farm, so that markers could be put up. The record book for the first few years of the hospital's existence was not located, but one containing the names from 1854 to 1864 was found in the basement of one of the hospital buildings while the hospital was still operating. Hutchison was a friend of one of the authors and gave her the material with written permission to transcribe and publish it in order to assist family history research. The website was established in 2000. For each of 3371 patients admitted from 1854 to 1872, the record consists of: name, sex, age, marital status, in which State of the United States or foreign country they were born, race (white or 'colored'), the State in which they were living at the time of being taken to the hospital, and the dates on which they were admitted and subsequently discharged or died.⁷

These data have been supplemented by: (1) tables contained in issues of the *Biennial Report of the Trustees, Superintendent, and Treasurer of the Illinois State [Central] Hospital for the Insane* published between 1847 and 1886;⁸ (2) the publicly available *1860 U.S. Federal Census* entries for the Jacksonville State Hospital, which provide the names, age, sex, occupation, and the US State or overseas county of birth of patients in the hospital in June of that year; (3) similar information in the *1870 U.S. Federal Census* (Walker 1872), although in this case the occupation for all those except the actual employees of the hospital is simply given as 'Patient';⁹ and (4) 623 individuals listed in the *U.S. Federal Census - 1880 Schedules of Defective, Dependent, and Delinquent Classes* for the county of Morgan.¹⁰ Recorded in June 1880, it seems to have been the only compilation of its kind. For each patient, it lists: the patient's name, race ('color'), sex, age at last birthday, marital status, whether he/she attended school within the year, cannot read or cannot write, their place of birth, whether he/she was a 'pauper'¹¹ or whether the expenses of their residence in the hospital were paid by bond (and, if so, by whom), the nature of their illness, the duration of their present attack, the total number of attacks they had suffered (including the current one), the age at which their present attack occurred, whether he/she is 'required to be usually or often kept in a cell or other apartment under lock and key, either by day or at night', or requires 'to be usually or often restrained by any mechanical appliance, such as a strap, strait-jacket, &c.?' and if yes, ... the character of the appliance used', whether he/she has 'ever been an inmate of any hospital or asylum for the insane?' and, if so, 'the total length of time spent by him (or her) during life in such asylums' and, finally, whether he/she is epileptic, suicidal or homicidal.¹²

An attempt to gather state-wide information of this kind was made by the Illinois Board of Public Charities in 1869, based on 1728 responses received to a questionnaire sent to all 4775 physicians across the State, but because of the large number of non-responses, they concluded that the results were only indicative (Anon. 1871a: 103).

The catchment area

In the course of his work in Massachusetts, Jarvis realized that, despite the State Lunatic Asylum being located centrally, the numbers of patients coming to it from surrounding counties diminished as the distance from the Asylum increased, and that the same was true of asylums elsewhere. He concluded that because of lack of knowledge about how the hospital treated its patients, unwillingness to have a member of the family placed far away from home, and the difficulties and expense of transport:

the advantages of any public lunatic hospital, however freely and equally they may be offered to all the people of any State, are yet, to a certain degree, local in their operation, and are enjoyed by people and communities to an extent in proportion to their nearness to, or distance from it. (Jarvis, 1850: 219)

Consequently, Jarvis thought that, rather than continue to enlarge a single central facility, it may be preferable to site additional asylums:

in the centre of that population from which its patients come, having regard to means of travel to it, such as railroads, public highways, canals, navigable rivers, &c., or, what is still better, ... placed at or near the junction of several ...of these means of communication. (p. 222)

In the case of the Illinois State Hospital, with the exception of two persons, the 4462 patients admitted to the hospital in the years 1851–72 were all white. Figure 3 (left) shows a map of the patient admissions per county, expressed as admissions per 10,000 of its white population. Figure 3 (right) shows these plotted as a function of the distance to Jacksonville by road¹³ from each county seat.

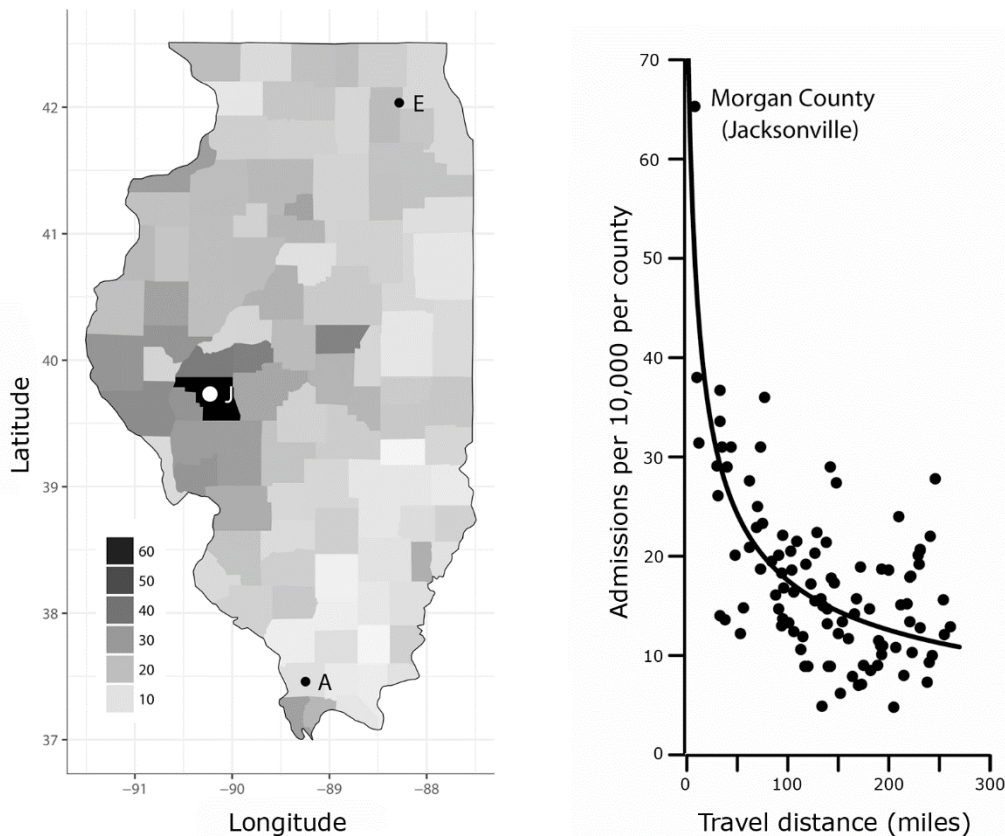


Figure 3. Left: Normalized admissions per 10,000 population per county; locations of Jacksonville (J), Anna (A) and Elgin (E) are also shown. Right: Normalized admissions (n) as a function of distance (miles) from Jacksonville; the best-fitting parametric function (solid line) is $n = 179.988/\sqrt{\text{miles}}$.

In 1869, aware of Jarvis's findings, Carriel simply divided the state into four broadly ring-shaped districts, each surrounding Morgan county at a progressively greater distance (Carriel 1873). The proportion of patients coming from each district was found to decrease with distance. This fact, combined with the ever-growing demand for places at the Illinois State Hospital despite frequent enlargements to its capacity (Figure 2), influenced the decision to construct two additional facilities to hold about 300 inmates each: the Northern Illinois Hospital and Asylum for the Insane at Elgin, Kane County, which opened in 1872; and the Asylum for the Insane (later known as the Southern Hospital) at Anna, Union County, which opened for patients in 1875. Both were built on the Kirkbride Plan, but note that lack of the word 'hospital' in the case of Anna implied that, at least initially, it was to be used simply for warehousing those deemed to be incurable. The locations of these facilities are shown in Figure 3 (left).

The 1880 Census data show that a number of patients had been transferred from Anna and Elgin to what was by then called the Central Hospital. This would have involved

travelling 223 miles (358 km) and 246 miles (396 km) by road, respectively. When the State Hospital was first built, there were only about 110 miles (177 km) of railroad track in the State (linking Jacksonville to Naples and Springfield, and Elgin to Chicago), but by 1860 this had expanded to a network of 2800 miles (4506 km), operated by 12 companies. This meant that by 1860, bringing a patient to Jacksonville from an outlying county, once a significant undertaking involving 4-5 days travel, became a far less daunting prospect.¹⁴

The patients

In the period 1854–72, the majority of the 2906 Illinois State Hospital patients who were born in the US originated from Illinois (29%), Ohio (15%), New York (13%) and Kentucky (9%). Figure 4 shows the numbers of patients born in each State per 10,000 inhabitants, normalized by the total number of persons originating from that State resident in Illinois at the time of the 1870 US Census (Walker 1872). Of the 1463 foreign-born inmates 33% came from Germany,¹⁵ 30% from Ireland, and 15% from the UK and 5% from Scandinavia. Patient ages on admission ranged from 11 years (a low outlier) to 70, with a median of 30. Figure 5 strongly suggests that, in at least some cases, ages must have been rounded to the nearest five years when originally recorded. The median ages of female and male patients were 30 (n = 1604) and 31 years (1672), respectively, but, as might be expected, median age differed depending on a patient's marital status ('civil condition'): single, 25 (1382); married, 35 (1601); divorced, 40 (10); and widowed, 44 (209). The corresponding median lengths of confinement (months) were: female, 8.6; male 7.2; single, 9.0; married, 6.7; divorced, 6.6; and widowed, 7.8. Although there was no significant difference between the median ages of native-born and immigrant patients (30, 31 years), the latter tended to be held for a slightly longer time (6.8, 10.7 months).

Figure 6 shows that while the majority of patients were discharged or, in a few cases, died within a year of admission, a significant number of them were 'of a chronic character, *i.e.* had continued longer than a year' (Higgins, 1852: 123) and some of these patients remained in the hospital for over 10 years. It is interesting that of the 10 groups of patients with median residency times of a year or more, eight came from overseas (Russia, Sweden, Prussia, Bohemia, Austria, France, Norway and Scotland). Despite the fact that the biennial Superintendent's reports placed emphasis on the supposed cure rate which, if successful, would result in a discharge, there was such continuing pressure for the provision of places in the hospital that, as noted above, its population grew steadily.

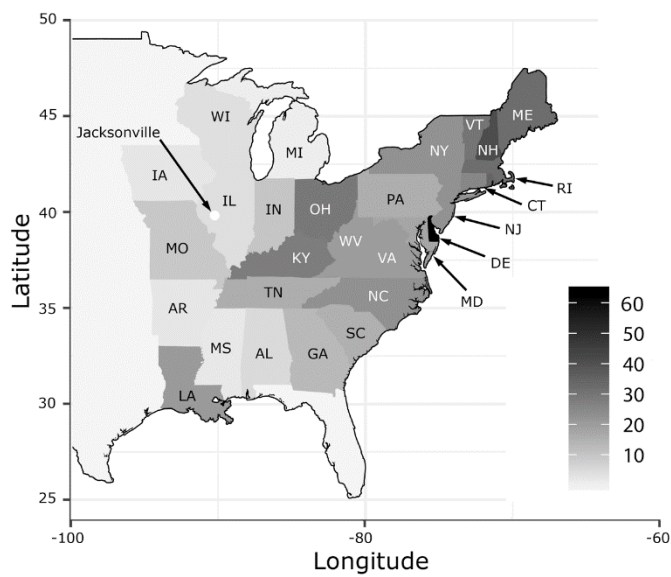


Figure 4. Normalized number of patients at the hospital (1854-72) born in each State per 10,000 persons from that State resident in Illinois.

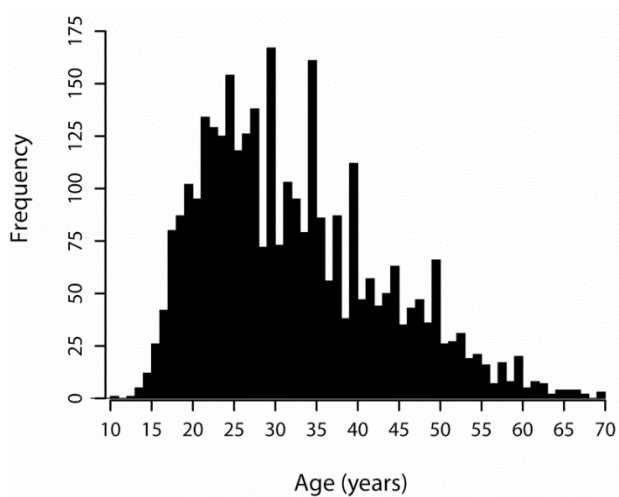


Figure 5. Frequency distribution of age on admission ($n=3286$).

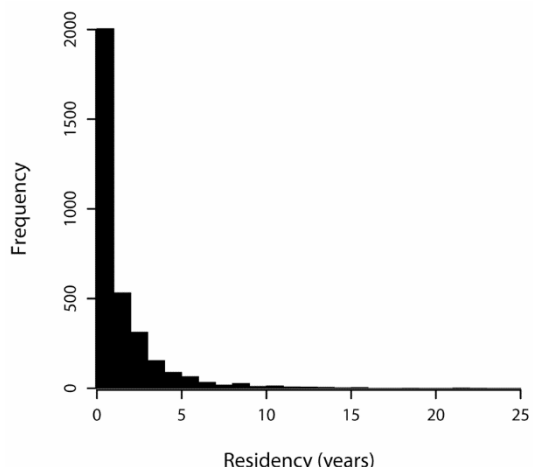


Figure 6. Frequency distribution of residency time ($n=3286$).

In the first two *Biennial Reports*, the tables giving figures for the numbers of patients admitted, discharged, or who died in each two-year period include the subcategories: ‘discharged by order of Trustees or by advice of Superintendent, unrecovered’ and ‘discharged, at the request of friends, unrecovered’ (McFarland, 1854: Table I, 28), but these were subsequently renamed simply ‘discharged by order of Trustees’ and ‘discharged unrecovered’. It may well be that the trustee-initiated discharge took place when a bondholder (or the county in the case of a pauper) was unable to continue payments for a patient’s upkeep, or no longer wished to do so. It cannot have been simply that a patient was deemed to be irrecoverable and automatically discharged, as some remained in the hospital for many years (Figure 6).

Over the period 1852–72, although the maximum number of patients held per annum rose from 138 to 1089, the percentages of patients discharged in each category remained fairly constant, with medians: ‘recovered’ 24.6%, ‘improved’ 7.1%, ‘unimproved’ 5.1%, ‘by Trustees’ 9.2%, and ‘died’ 5.9% (figures derived from Carriel, 1873: Table XIII, 30). However, it is nowhere made clear on what criteria the distinction between the categories of degree of recovery are based. As Figure 7 shows, both admissions and discharges were at their highest on Tuesdays and then gradually declined to a minimum on Sundays. It is possible that this may reflect something in the way the hospital administration worked, or a general minimum travel-time to reach Jacksonville to deliver or collect a patient, if one departed over a weekend. A small number of exclusively male patients also ‘eloped’, i.e. escaped, each year, generally while working on the farm or within the hospital, but McFarland (1865: 16) also records escapes ‘by means of false key’ and ‘by breaking iron window-sash’. In the majority of cases escapees were eventually retrieved.

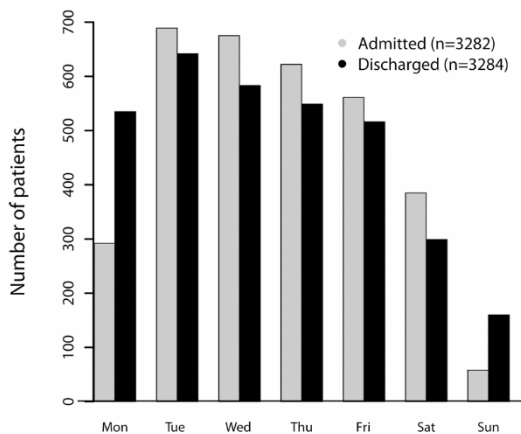


Figure 7. Numbers of discharges and admissions per day of the week over the period 1852-74.

Although occupations are not recorded for individual patients in the 1852–72 data set, summaries for all those admitted in each two-year period are given in the corresponding reports, which together list 138 occupations, ranging from businessmen, physicians and clergymen to artists, prostitutes and gamblers. They have been grouped into broad categories in Table 1. The anomalous appearance of soldiers in an otherwise civilian list is as a result of the Civil War. In 1862–4, the hospital held between 14 and 16 inmates, who had been transferred from camps, hospitals and the Libby Prison for Union Officers in Richmond, Virginia. Related non-combatant cases included two ‘friends made insane from sympathy, anxiety, etc.’ and seven ‘produced from war excitement, generally’ (McFarland, 1862: 27).

Sex/Occupation	Mean
<i>Women</i>	
Domestic duties	205.6
Other	2.2
<i>Men</i>	
Farmers	117.4
Labourers	45.8
Craftsmen	22.9
Professionals	17.3
Students	15.7
Merchants	13.6
Service	9.3
Soldiers	3.1
Businessmen	2.6
Sailors	1.5
Artists/musicians	0.2

Table 1. Mean numbers of patients per two-year period by fields of occupation, based on tables in the *Biennial Reports* for 1852 to 1872.

The diagnosis

When a patient was accepted by the hospital, the supposed cause of their illness, was recorded. Table 2 gives the mean numbers of patients reported annually in each category, based on tables in the *Biennial Reports* covering the years 1851–80. Some of the original 29 categories have been combined here, and the titles of a few of them expanded slightly to match those used by Jarvis (1856: 7) when he combined similar lists from a number of hospitals.

Cause	Illinois	USA
Unknown	174.6	9782
Ill health of various kinds	62.1	3586
'Female derangements'*	28.4	1415
'Secret vice', 'vicious indulgence'†	27.3	1011
Connected with religion	21.1	1280
Domestic troubles, persecutions, etc.	19.6	665
Intemperance, opium or tobacco abuse	17.1	1898
Grief, anxiety, trials of business or poverty	16.9	2865
Hereditary predisposition	15.9	—
Financial troubles	15	1134
Epilepsy, apoplexy and palsy	11.1	592
Disappointed in love, ambition, etc.	9.1	715
Excess of labour, privation of sleep, etc.	9	522
Injuries and accidents	7.6	338
Exposures to heat, cold, etc.	6.1	226
Political excitement	4.2	—
Excess of study, mental struggles	4.1	472
Spirit rappings and Mesmerism	2.9	182
Bad temper, passion, jealousy, etc.	1.4	161

* For a discussion see Loudon, 1988; † see Note 16

Table 2. Cause of a patient's insanity as reported by relatives: average number of instances recorded per annum at Illinois State Hospital (1851-80), compared with cumulative totals for 16 hospitals in the USA over the periods of their operation up to 1856 (based on a total of 24,723 patients; Jarvis, 1856: 7).

The so-called ‘female derangements’ included childbirth-related problems (mean, 25.4 women per year), the menopause (1.4), miscarriage or abortion (1.0) and menstrual irregularity (0.6) (for discussion, see Hollick, 1847).

For the reasons explained earlier, the available Illinois State Hospital records do not include diagnoses, and the following discussion is based on the 623 inmates in the *1880 Schedules*. They consist of 305 women and 318 men with a median age of 36 years, and a median onset age for their disability of 32 years; of these, 269 were single, 285 married, 11 divorced and 56 widowed. Also, 233 inmates were born outside the USA and 376 were paupers. Although 52.0% of the native Americans were paupers, 75.2% of foreign immigrants fell into this class, mainly those from Ireland, Germany and Sweden. This may reflect both an impoverished background and the difficulty of becoming assimilated in their adopted country.

There were 84 inmates reported as having dementia, 2 with acute dementia, 114 with chronic dementia and 2 with senile dementia; 131 with mania, 53 with acute mania, 129 with chronic mania, and 1 with epileptic mania; 19 with melancholia, 17 with acute melancholia and 19 with chronic melancholia. As understood at the time: *dementia* was regarded as the gradual acquisition of a state of confusion of thought, accompanied by loss of recent memory, of understanding and intellectual power, often resulting in behavioural passivity, whereas *senile dementia* was the loss of memory and intellectual powers in old age, attributable to ‘decay of the mind in advancing years’. *Melancholia* was the gradual or sudden development of a melancholy character, exhibited by emotional depression, leading to a moody, taciturn and cheerless persona with or without delusional characteristics. In contrast, *mania* was a state of ‘mental exaltation and bodily excitement,’ exhibited by a poor attention-span, agitation, incoherent speech, loss of self-control, and on occasion becoming extremely angry or even violent – ‘raving madness’ (see: Bucknill and Tuke, 1874; Mercier, 1892; Norman, 1892; Shaw, 1892). Hill and Laugharne (2003) suggest that in modern terms, mania and melancholia may be roughly equivalent to manic episodes, and dementia ‘at least somewhat related to ... schizophrenia’. Three patients were described as having ‘general paralysis of the insane’, a term often applied to patients with depression who went on to develop dementia, but it could also result from the effects of tertiary syphilis (Berrios, 1985).

In the 1880 Census lists, it can be inferred (by analogy with the majority of the records detailing the basis of the number of previous attacks, duration of the present illness and the number of years the patient had been affected), that in all the cases in which a diagnosis was not qualified by the word ‘chronic’, this descriptor should have been included; it was probably omitted by the original transcriber simply to lessen seemingly unnecessary

repetition when writing out long lists of patients who all fell into the same category. On entry to the hospital, the ages of the 305 women and 318 men who formed the total group of patients ranged from 14 to 83 years, with a median of 36. Reported onset ages ranged from 10 to 74 years, with a median of 32. There were no statistically significant differences between median male and female ages on admission, their ages at onset, nor in the length of their total confinement. The same was true of the fee-paying patients and paupers. Immigrants had a slightly higher median age and onset age than US-born patients (39 and 35; 33 and 30 years, respectively). However, there were significant differences in median age on admission, depending on marital status (single, 31; married, 40; widowed or divorced 47.5 years) and age of onset (26, 35, 40 years). These groups had median lengths of confinement of 2.1, 2.0 and 2.2 years which were not statistically different.

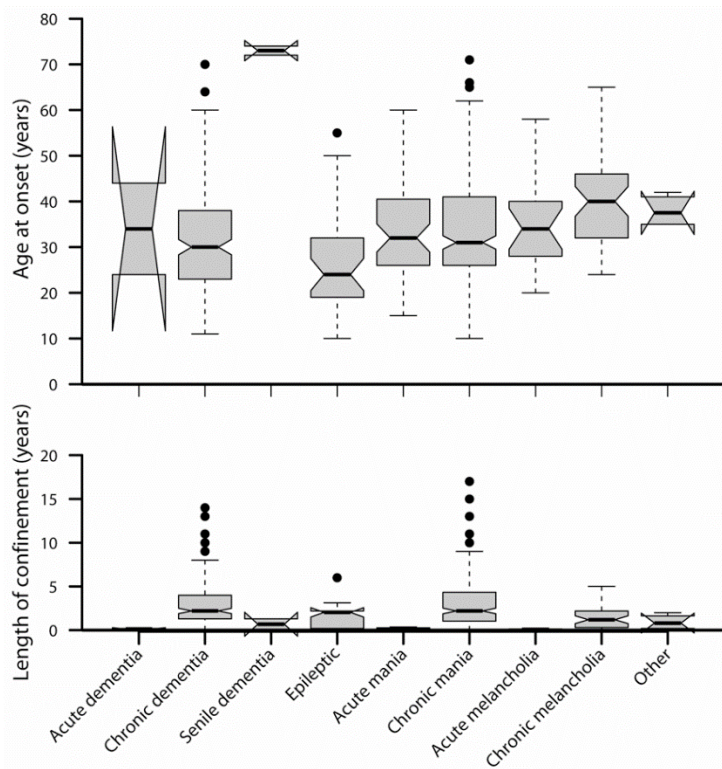


Figure 8. Boxplots of the age at onset of the illness (left) and the length of a patient's stay in hospital (right) as a function of mental illness type. 'Other' corresponds to a small group with either general paralysis of the insane as a consequence of syphilis (Mickle 1892) or hemiplegia (temporary paralysis occurring as the result of an hysterical or epileptic fit; Anon. 1892). (For each group of data, the top and bottom of the box correspond to the first and third quartiles (Q_1 , Q_3) and the dark central line to the median; the whiskers extend out to the smallest and largest data values lying within $Q_1-1.5R$ or $Q_3+1.5R$, where $R = Q_3-Q_1$; the notches give a visual confidence interval (ca. 95%) on the median; and the dots (●) show individual outliers; Tukey, 1977).

Figure 8 compares the frequency distributions of age at onset (above) and length of total confinement (below) against the various types of illness. The two cases of senile dementia both had a short confinement length, as they ended with death rather than discharge. The overall duration of illness shows a similar distribution pattern to that for total confinement. A small number of the chronic cases are recorded as having had two or more attacks, and as many as seven in one case of chronic mania.

Thirty patients were reported in the census as being restrained in some way, including 13 by a camisole (French *la camisole de force*, also called a strait-jacket, 'a garment of strong cloth [with continuous sleeves] ... applied upon persons in furious delirium'; Cutler, 1838: 87). Others were restrained: by a 'camisole or strap' 1; 'confined in bed' 3; 'hands confined' 1; 'confined with a muff' (a 'leather mitten or muff ... for such as tear clothing or are disposed to injure themselves, or commit suicide'; Ayl, 1843: 79), 11; by 'muff or waist' 1; by the 'waist,' 1; and 'strapped around waist and fastened to restraint-chair' 1. Except for one epileptic, all of these persons suffered from either acute or chronic mania. Although a controversial practice, resorting to mechanical restraint, was in some cases regarded as necessary for the patient's own good, for example:

In all the hospitals with which I have been connected, there have been patients from time to time who would, with more or less persistence, wound themselves, creating ulcers that would never heal unless the hands were confined. In these persons moral influences go for almost nothing, and the only alternatives are perpetual watching, both night and day, while the propensity lasts, or restraint. ... A pretty close seclusion, or a qualified liberty under some mild form of mechanical restraint, is the only safe course in guarding against the dangerous violence to which the epileptic insane are often liable. (Ranney, 1874: 163)

Grob (1973: Ch. 5) pointed out that, although some superintendents had their doubts about the use of restraints (see discussion in Ranney, 1874), as the number of patients housed in mental hospitals grew, so did the problems of their management and, in many of the larger institutions, restraint became an undesirable aid to the control of a minority of patients.

Additional difficulties were apt to arise as a result of problems with the water supply to the hospital. This caused limited outbreaks of typhoid (1862–4), cholera (1866–8) and dysentery (1868–70), which resulted in a number of deaths. Although numerous additional causes of death were also recorded in the *Biennial Reports* for 1856–80, these may be grouped into a few broad categories (Table 3). 'Other causes' included three deaths resulting from accidents of various kinds and the only case of homicide. Figure 9 shows on which day

of the week the 347 deaths recorded between 1854 and 1872 occurred. The marked low on Saturdays might be attributable to less vigilant recording by the patients' 'attendants' on that day.

Cause	Mean
'Exhaustion' from acute or chronic mania, etc.	10.08
Lung infections (tuberculosis, etc.)	6.17
Infections from contaminated water (cholera, dysentery, typhoid, etc.)	2.54
'General paralysis'	2.13
Epilepsy	2.08
Brain dysfunction (stroke, etc.)	2.00
Other bacterial infections (erysipelas, etc.)	1.04
Heart disease	0.63
Cancer	0.17
Other causes	0.58
Suicide	0.79

Table 3. Causes of deaths at Illinois State Hospital (1852-80) and mean number of occurrences per year.

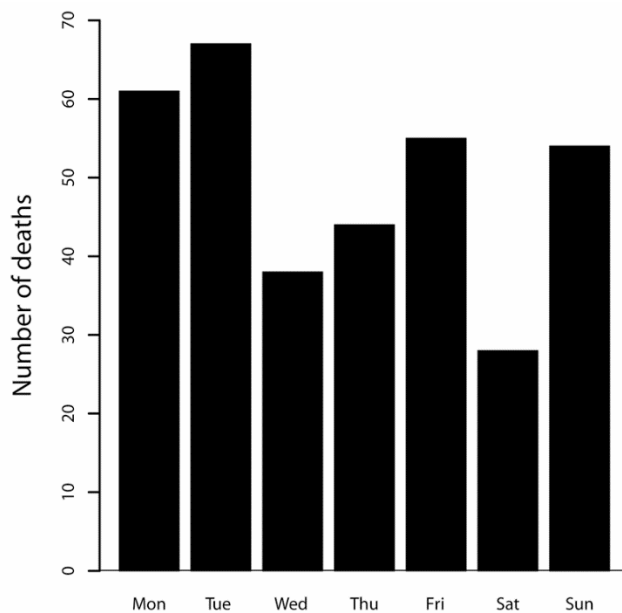


Figure 9. Patient deaths at the hospital 1854-72 (n=347) by day of the week.

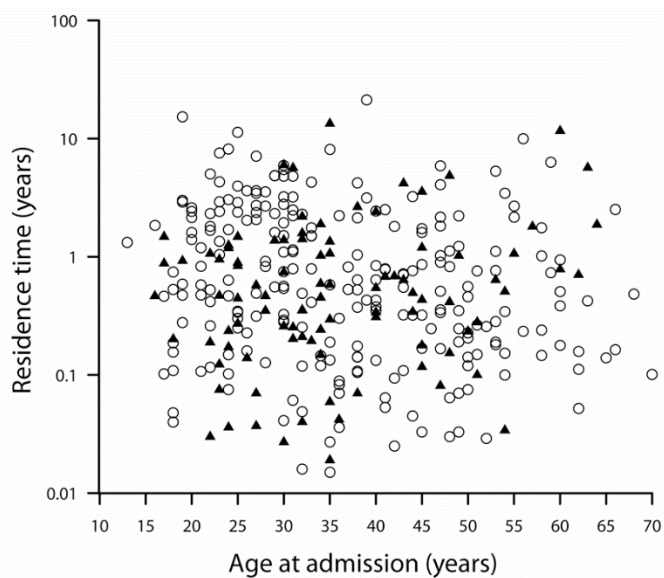


Figure 10. Residence time in the hospital as a function of the age of admission for the 347 US-born (○) and immigrant (▲) patients admitted between 1854 and 1872, whose hospitalization ended in death rather than discharge. 2,939 other patients were discharged.

It might be supposed that since the majority of immigrants were paupers when they arrived at the hospital, they might well have brought pre-existing illnesses with them, or that they might have been more vulnerable to infections as a result of their living conditions prior to admission. Consequently, they might have been more likely to die at an earlier age than their American-born counterparts. Evidence from the 347 deaths of both groups of patients (Figure 10) suggests that this may be true of patients below 40 years of age.

Various attempts to automatically predict the diagnoses for 616 patients in the 1880 Census data set using decision trees (Breiman, Friedman, Olshen and Stone, 1984) gave, as might be expected, poor results. Starting with the set of all possible predictors, the best overall success rate (obtained on the basis of marital status, age and onset age, following algorithmic rejection of other variables) was 50% for chronic dementia and 47% for chronic mania. There were insufficient numbers of the other possible conditions to be predictable.

Discussion

Using such records as exist for the Illinois State Hospital during the late nineteenth century has enabled a reasonably coherent quantitative picture to be built up of the nature of the patients held by the hospital over the years 1852–80. This is a similar outcome to studies

elsewhere in which more detailed information obtained from hospital casebooks has enabled more detailed clinical assessment to be undertaken (e.g. Berkenkotter and Hanganu-Bresch, 2011; Turner, 1992).

It is extremely difficult to understand why, after a period of well over 150 years, the State of Illinois should not make the information held in the *Register of Patients* for the Illinois State Hospital, and similar records, available in the public domain in digital form (even if the patient's names have to be redacted, which would seem unnecessary after such a long time has elapsed since their hospitalization). The data would undoubtedly be of great interest to historians of psychology, scientific biographers, genealogists and demographers. There must be many other States which have had similar policies in the past, and we would make a plea that the current practice of retaining these Victorian sources in closed records should be rethought.

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Conflict of interest

Neither of the authors has any links to any company making medications for the treatment of mood disorders nor to any company engaged in treatment.

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Notes

N.B. All websites cited below were checked, and found to be accessible, on 26 Nov 2018.

1. Anon. (1857: 313–14) gives three two-column tabulations of the alleged causes of pauperism for the State of New York in 1855: (1) 'Unavoidable causes': idiocy 408; lunacy, 2449; blindness, 204; lameness 1837; sickness, 16,945 (n = 21,843); and decrepitude, 1020; old age, 2449; deaf and dumb, 61; children having sick and destitute

- parents, 13,678; orphans, 1020 (n = 18,228); (2) ‘avoidable causes’: children having intemperate parents, 11,841; females having intemperate husbands, 4899 (n = 16,740); and debauchery of parents, 1020; indigent and destitute, 116,575 (n = 117,595); and (3) ‘sources of pauperism’: intemperance, 14,291; debauchery, 1837; idleness, 8116 (n = 24,294); and vagrancy, 1633; unascertained, 3828 (n = 5461).
2. Even in 1869, a medical census found that of 1612 ‘insane persons’ known to physicians in the State: 46% were still looked after at home, 28% in an almshouse or poorhouse, 1% in jail and 25% in hospital (Anon., 1871a: Appendix D, Table XIII); the same survey reported that of 1474 paupers, 933 had a disability of some kind: idiot or insane, 66%; sick, 14%; crippled, 12%; blind, 8%; and deaf, 1% (Appendix F, Table XXIII).
 3. History of Pennsylvania Hospital; at: <http://www.uphs.upenn.edu/paharc/timeline/1801/to1851/>; see also: <http://www.kirkbridebuildings.com/>.
 4. Asylum Projects, Jacksonville State Hospital; at: http://www.asylumprojects.org/index.php/Jacksonville_State_Hospital.
 5. Description of Record Series 252.004 in Illinois State Archives Record Group 252.000 - Jacksonville Mental Health and Developmental Center; at: <https://beta.worldcat.org/archivegrid/collection/data/36677709>.
 6. See note by Grace Dumelle of the Chicago Genealogical Society: ‘Help in accessing closed records of Illinois State Mental Hospitals’, posted online July 26, 2012 (with subsequent discussion through 2015); at: <https://www.newberry.org/helpaccessing-closed-records-illinois-state-mentalhospitals#comment-21515>.
 7. Aleguas S (2000) Directory of Jacksonville State Hospital Patients 1854–1870; at: http://www.rootsweb.ancestry.com/~ilmaga/morgan2/stathosp/mc-sh_adm.html.
 8. Anon. (1852, 1854, 1856, 1859, 1861, 1862, 1863, 1865, 1867, 1869, 1870, 1873c, 1874, 1877, 1878, 1880, 1882, 1884, 1886). These biennial reports for the Hospital may be found at <https://catalog.hathitrust.org/Record/008856236> and <https://catalog.hathitrust.org/Record/101837723> (and in: *Reports made to the ... General Assembly of the State of Illinois*: that for 1851-52 is in Series No. 9. Springfield, IL: Lanphier & Walker; for 1853-54, Series 10, *ibid.*; for 1855-56, Series 11, *ibid.*; for 1857-58, Series 12, Springfield, IL: Bailhache & Baker; and for 1859-60, Series 14, *ibid.*; all at <https://catalog.hathitrust.org/Record/010308075>).
 9. 1860 Census of Morgan Co., Illinois, abstracted by Shirley Aleguas from a publication by Eileen Gochanour (1984) and used with her permission; at:

- <http://www.rootsweb.ancestry.com/~ilmaga/census-morg60/205.html> to [/212.html](http://www.rootsweb.ancestry.com/~ilmaga/census-morg60/212.html); 1870 Census of Morgan Co., abstracted by Shirley Aleguas from Gochanour and Allers (1985) and used with Eileen Gochanour's permission; at:
- <http://www.rootsweb.ancestry.com/~ilmaga/census-morg70/423.html> to [/438.html](http://www.rootsweb.ancestry.com/~ilmaga/census-morg70/438.html). These list: last name, first name, age, sex, race, occupation, value of real estate, value of personal estate, birthplace, if married within the year, if attended school within the year, if over 21 and cannot read or write, and whether the inmate is deaf & dumb, blind, insane, idiotic, pauper or a convict.
10. At: https://www.ancestry.com/interactive/1634/31999_217633_00439_1?backurl=https%3a%2f%2fsearch.ancestry.com%2fsearch%2fdb.aspx%3fdbid%3d1634%26path%3d&ssrc=&backlabel=ReturnBrowsing#?imageId=31999_217633-00441.
 11. A 'person whose name you record be at the time, or within the year, so indigent or destitute of the means of support as to require the support of the community, obtained either by alms-begging or public maintenance, by taxation or poor fund' (this column was not recorded for some inmates). 1860 Census Instructions to the Marshals; at: <https://usa.ipums.org/usa/voliii/inst1860.shtml>.
 12. In the early 19th century, epilepsy and insanity were regarded as related 'neurotic' disorders; for discussion, see Berrios (1984).
 13. Calculated using: https://distancecalculator.globefeed.com/US_Distance_Calculator.asp?state=IL.
 14. Based on a variety of contemporary sources, it has been suggested that between 1850 and 1860, travel by stagecoach averaged about 5.5 mph (8.9 km/h) at a cost of 0.06 \$/mile, whereas using the new railroads offered a speed of about 16.5 mph (26.6km/h) at a cost of 0.04 \$/mile, rising to 22.5 mph (36.2 km/h) at a cost of 0.035 \$/mile by the end of the decade (Gorton G (1989) *Ante Bellum Transportation Indices* ; at: <http://faculty.som.yale.edu/garygorton/documents/AnteBellumTransportationIndices.pdf>; Anonymous. *Illinois Railroads, 1850–1860*; at: <http://illinois.outfitters.com/illinois/history/ilrails.html>).
 15. A fact which resulted in the *Illinois Stats Zeitung* and *German Anzeiger* being among the newspapers regularly received by the hospital for the benefit of patients; McFarland (1861:56). 'The Germans are the best, as they are the most numerous of our foreign patients. They possess a healthy and elastic mental constitution; they are docile and affectionate under treatment, and grateful when they recover'; McFarland (1854: 159).
 16. For a discussion, see Loudon (1988).

17. Mason (2008) is informative on why the ‘secret vice’ (male and female masturbation) was thought at this time to be of such importance as a causative agent; see also Yellowlees (1892).

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