

# History of Medical Care at Inpatient Facilities in Japan

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## Abstract

The history of Japanese hospitals is seen to have begun on the 8th century, and Japan's first modern hospital—which continues to this day—was built in Nagasaki in 1860 by a Dutch naval surgeon, Pompe van Meerdervoort, as a clinical training hospital. However, at the beginning of the 18th century, there was a Yojosho (medical care facility) built in the nation's capital, Edo, to provide medical care for the poor. This facility was built as the result of one citizen's recommendation to the Bakufu feudal government.

In Japan, with the exception of examples from ancient times when Buddhism was introduced, in the past hospitals were not built for religious reasons. In the second half of the 19th century, the number of hospitals in Japan being used as training grounds for Western medical education gradually grew due to the national government's decision to control the practice of Chinese herbal medicine and focus instead on Western medicine. Initially the people admitted to these hospitals were wealthy townspeople, but as medical education became more organized, charity patients were also admitted and used for medical education and research.

Other hospitals included civic hospitals, which were established in 1868. These hospitals received funding from the Emperor to provide treatment for the poor. In addition, isolation hospitals were established in response to the cholera outbreak that began in 1858. Syphilis hospitals, which conducted syphilis examinations for prostitutes and admitted those who were infected, began to increase in number from the second half of the 1800s.

One characteristic of Japanese hospitals is that there are many private hospitals. Indicators of this trend can be observed in the 1870s.

**Key words** History of medical treatment in Japan, History of inpatient facilities, Charity patients, Isolation hospital, Psychiatric hospitals

The history of hospitals can be traced back to Roman times in Europe, to the Middle Ages in the Muslim world, and to the Tang Dynasty in China. In comparison, the history of hospitals in Japan is somewhat desolate. Records begin in 724, with the establishment of Seyaku-in (a free dispensary) and Hiden-in (an infirmary for the poor and orphaned) within Kohfukuji. Subsequently, free dispensaries were established during the Heian Period (794–1185) and the Kamakura Period regent Hōjō Tokimune (1251–1284) established a free medical care facility at the Kuwagayatsu. Records show that Ryokanbo-

Ninsho, Chief Priest of the Gokurakuji Temple, continued these efforts by establishing a medical care facility within the temple. In the 16th century the “southern barbarians” came to Japan, and records show that in addition to their Christian missionary activities they established facilities for the sick in Kyoto and on Kyushu, especially in Oita Prefecture, but these facilities were also eradication during the prohibition on Christianity.

Entering the Edo Period, during the rule of Shogun Tokugawa Yoshimune (1716–1745), a Yojosho (medical care facility) was established within the Koishikawa Medicinal Herb Garden

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(the current Koishikawa Botanical Gardens) in Edo (now Tokyo). On the recommendation of town physician Ogawa Shosen, the Koishikawa Yojosho opened on December 4, 1722.<sup>1</sup> However, the Yojosho took in only those poor who lived in Edo, especially people who were alone and had no one to nurse them. The Nagaya (long, narrow, and collective housing) for patients included medicine rooms, staffrooms, intermediate rooms, and a kitchen. Admission to the Nagaya was via a very strict screening process. These strict screening criteria were later also used for all patient screening at other facilities for providing free medical care as well.

In Owari (now part of Aichi prefecture) there was a private hospital established in the early Edo Period that became a leading hospital: Myogen-in Temple/Majima Ophthalmology. With the ophthalmology's high reputation, patients with eye problems came from far away for treatment. In 1841, the overhead view of Myogen-in Temple in the *Owari Meisho Zue* (collection of pictures depicting the sights of Owari) showed 5 eye treatment facilities for men and 8 for women.

Incidentally, during the Middle Ages in Europe, there were hospitals for the poor, the sick, and orphans attached to Catholic monasteries and convents. Such facilities were called "hospitals" in England and "Hotel dieu" in France and patients cared for by monks and nuns. These were the archetype of today's hospitals, and many of these facilities have continued to this day, becoming modern hospitals.

Come the 18th century, Dutch physician Herman Boerhaave (1668–1738) revolutionized medical education, and it is around this time that clinical education in hospitals began. Boerhaave insisted that it was vital to medical education that patients be examined at their bedside.

Furthermore, at the beginning of the 19th century, following the French Revolution, in Paris separate hospitals were established for different diseases, and medical education took place in each of these hospitals. Subsequently in England and German-speaking countries, academic hospitals became essential for medical education. At the Vienna University Hospital, a specialist ward was established for each medical department,

creating the basic structure of modern hospitals.

Japan entered this trend in the middle of the 19th century, as the latter part of the Edo Period ended. In 1857, the Tokugawa Bakufu included medicine in the courses taught at the Kaigun Denshujo (the Naval training institute) in Nagasaki and decided to introduce western medical training. Consequently, the Bakufu asked the Dutch Government to provide a military physician to teach at the Kaigun Denshujo in the second term, and thus it was that Dutch naval surgeon, J. L. C. Pompe van Meerdervoort (1829–1908), came to Japan. He began by teaching basic science in the West Wing of the Nagasaki Magistrate's Office and with each passing year progressed to anatomy, physiology, pathology, and pharmacology, finally beginning clinical training in internal medicine and surgery. At this point, Pompe requested the Nagasaki Magistrate to establish a clinical training hospital. The hospital thus built, the Nagasaki Yojosho, was Japan's first modern hospital. Located in Nishi-Kojima Town (now part of Nagasaki City), the Nagasaki Yojosho opened on August 16, 1861,<sup>\*2</sup> with 8 general rooms and 1 isolation room, an operating room, preparation room combining pharmacy and library, kitchen, administration office, duty room, bathroom, and exercise room.

Since the Nagasaki Yojosho was to be a clinical training hospital, Pompe planned for it to accept charity patients. Despite this, the patients who were admitted were high-class samurai and wealthy townspeople. This forebodes the image of Japanese hospitals as places for high-class public that was to follow. The tendency that can still be observed today of advanced medical facilities such as university hospitals attracting a concentration of middle- and upper-class wealthy patients began around this time.

Incidentally, the Japanese word for hospital, "byoin," came into use during the Meiji Period (1869–1912), but it was first used by medical facilities on the front lines of the Boshin War (1868–1869). The medical facilities on the front lines of the Imperial Army displayed banners bearing the imperial chrysanthemum crest and the word "byoin."

\*2 In Pompe's book, *Vijf jaren in Japan* ("Five Years in Japan") (Volume 10, Shin Ikkoku Soshu), Pompe gives September 21 (August 17, 1861) as the date of the opening of the Nagasaki Yojosho. Japanese documents state that the Nagasaki Yojosho "was to be opened on September 1 (October 4 in the solar calendar), but the Opening Ceremony was held half a month ahead of schedule, on August 16 (September 20 in the solar calendar) and medical care services began on the following day."<sup>2</sup>

In the Boshin War, wounded warriors were sent from the front lines to the Yokohama Military Hospital where they were treated by British Legation physicians William Willis and Joseph Siddall. At the suggestion of Dr. Siddall, this hospital was the first in Japan to employ female nursing staff. Female hospital nurses were therefore first introduced in Japan during the Boshin War.

Furthermore, on entering the Meiji Period the word “byoin” was used ubiquitously, and so at that time Dr. Sato Takanaka, the first president of Daigaku Toko (predecessor of the Faculty of Medicine, The University of Tokyo) petitioned the Japanese Ministry of Education to change the name of the Toko byoin to “i-in.”<sup>\*3</sup> The reason given for this change was that “a ‘byoin’ is a place where put sick people; an ‘i-in’ is a place to which people are admitted to be cured of their illnesses. A university byoin is the pinnacle of medical care, and so I wish for the name of the byoin to be changed to ‘i-in.’” Consequently, prior to World War II the medical faculties of University of Tokyo and other universities were known as “i-in” affiliated to universities. Thus until the Medical Service Act of 1948 limited the term “byoin” to medical facilities with 20 or more beds, “byoin” was widely used in the names of medical facilities, regardless of the number of beds.

In 1868, civic hospitals were established; these were the Goshinpei Hospitals in Kyoto and Osaka. The Military Hospital that had been established in Yokohama at the time of the Boshin War was transferred in the Meiji Period to a Todo-clan residence in Shitaya-Izumicho in Tokyo and its name changed to “Daibyoin” (major hospital). Dr. William Willis continued to provide medical care and teach medicine there. Subsequently, the “Daibyoin” underwent a series of name changes, becoming “Daigaku Toko,” then “Toko,” “Daiichi Daigakku Igakko,” and “Tokyo Igakko,” eventually becoming the University of Tokyo Faculty of Medicine in 1877 with the establishment of the University of Tokyo.

In the latter part of the Edo Period, many clans carried out medical training at places of learning. Following the Meiji Restoration, clans in Saga, Fukui, Kanazawa, and other domains established hospitals one after the other. Several

of these hospitals were set up by physicians who has trained under Pompe and modeled their hospitals after the Nagasaki Yojosho. As a result, by around 1877 nearly all prefectures in Japan had hospitals. At that time there were 106 hospitals nationwide, of which 7 were national, 64 were public, and 35 were private. Outstanding physicians were invited to act as the directors of these hospitals, and because medical training was undertaken at prefectural medical schools attached to hospitals, like the Nagasaki Yojosho these hospitals were snowed under with caring for wealthy patients, unable to stretch to extend a hand to provide free medical care as well.

Coming to the end of the second decade of the Meiji Period, Japan’s financial situation deteriorated, and from 1888 onwards it was prohibited by imperial edict for prefectural medical schools to be operated using prefectural funding. Consequently medical schools in virtually all the prefectures were abolished, with only their affiliated hospitals remaining as public hospitals. Moreover, before this edict has been decreed, five prefectural medical schools from each university district—District 1 (Chiba), District 2 (Sendai), District 3 (Kyoto), District 4 (Ishikawa), and District 5 (Nagasaki)—were transferred to national control. These medical schools remained thereafter as national medical schools and later became national medical universities.

However, at this time there were also three public medical schools that escaped abolishment: prefectural medical schools in Osaka, Kyoto, and Aichi Prefectures, respectively. Moreover, private medical schools remained as they were already operated using private funds. Due to the implementation of nationwide the “Examinations to Practice Medicine” in 1875, there was an upsurge in the number of private medical schools, but virtually none of these were affiliated with a hospital.

Incidentally, The University of Tokyo hospital first admitted charity patients in 1871, when a German became an instructor at the university. This instructor attempted to select and admit to the hospital patients who were useful for teaching purposes. However, this did not become codified until 1877, when the University of Tokyo was established, and in the context, a maximum

\*3 On January 28, 1872, the Daigaku Toko sent the Japanese Ministry of Education a document entitled “Request Regarding Preparations for Changing the Name of the Byoin to I-in.” The request was approved and the name of the Toko byoin was changed to i-in.<sup>3</sup>

limit of 40 charity patients was prescribed. This number increased from 328 in 1896 and to 508 in 1906. The first criteria for admission were that the patient's condition was essential for academic research and that the patient submitted an autopsy request form at the time of admission. This so-called "patients for academic research" system continued until after World War II.

In addition to the medical training-related hospitals, amongst the first civic hospitals to be born after the Meiji Restoration was the Gosho Hospital, which was established in Kyoto in 1868. In Tokyo, the establishment of a prefectural hospital began in 1873 with a petition submitted to the Imperial Household Agency by Dr. Sato Takanaka of Juntendo (current Juntendo University) calling for the establishment of a hospital. The petition called for the Imperial Household Agency to lend a fund of 10,000 yen to establish within the prefecture a large hospital that could accommodate approximately 300 patients, with branches located in each district providing medical care for sick people in the local area. As a result of the petition, that same year the Imperial Court provided Tokyo Prefecture with 10,000 yen for the construction of a hospital. The prefectural governor had announced at the time that the Tokyo Prefectural Hospital would be built at the residence of the Tokushima Clan in Hacchobori in January, but eventually it was constructed in 2-chome, Shibaatago-cho in September. Construction of the hospital was completed in 1874; Dr. Iwasa Jun, who was Daiten-i (physician to the Emperor), was in charge of the hospital, with Dr. Sasaki Toyo and American physician Dr. Albert Sidney Ashmead as attending staff. The system was that people with free medical care vouchers issued by the prefecture were examined by district physicians, and if the district physician determined that they required inpatient care, they were admitted to the hospital and treated there. As a result of this system, however, operation of the hospital became difficult due to deteriorating prefectural finances in the second decade of the Meiji Period and the hospital closed in July 1881. In 1882, the former Tokyo Prefectural Hospital building was leased by the Yushi Kyoritsu Tokyo Hospital, a free medical care facility established on the recommendation of Dr. Takaki Kanehiro, who had returned from his study in Great Britain. Later, under the auspices of the imperial family, the property was transferred to the Yushi Kyoritsu

Tokyo Hospital and remains today as the Jikei University Hospital.

Specialty care facilities included isolation hospitals which were established in each region for outbreaks of infectious diseases, such as the cholera epidemic of 1877. During the cholera epidemic of 1879, a new isolation hospital was constructed in Komagome Village, Toshima County, at the direction of the Ministry of Interior. Subsequently, this hospital was opened during outbreaks of infectious diseases and closed during ordinary times, but with the establishment of the Infectious Diseases Prevention Act in 1897, under which ordinances were issued stipulating that permanent infectious disease hospitals be established in Tokyo Prefecture, the Komagome Hospital came under the operation of Tokyo Prefecture and became a permanent hospital as the Tokyo Komagome Hospital. Tokyo Prefecture also had three other hospitals—in Okubo, Hiroo, and Honjo—that functioned as isolation hospitals; there were funded with county-municipal taxes. Nationwide, in 1911 there were isolation hospitals established in 1,532 locations.

Until around 1877 the main specialty hospitals in Japan were syphilis hospitals. These began with syphilis examinations for prostitutes instigated at the insistence of foreigners who had come to Japan at the end of the Edo Period; in 1870 syphilis hospitals were established in Nagasaki and Kobe, and the number of such hospitals increased in all prefectures. According to statistics, there were 281 syphilis hospitals nationwide in 1881, but after this peak no further statistics were recorded, and so we have no knowledge of subsequent trends. The Koishikawa Yojosho also became a syphilis hospital during the Meiji Period, caring for the poor, but in a few years the facility had disappeared. No doubt this was due to the Koishikawa Medicinal Herb Gardens coming the Botanical Gardens under the operation of School of Science the University of Tokyo.

Psychiatric hospitals are specialty facilities that were first introduced in Japan during the early Meiji Period and have remained to this day. In 1879 the Tokyo Prefectural Tenkyo Hospital was established in Ueno Park as a hospital for homeless people with psychiatric conditions, and this was Japan's first psychiatric hospital. Subsequently, as it expanded the hospital was moved to Sugamo, becoming the Tokyo Sugamo Hospital, and remains today as the Tokyo Metropolitan

Matsuzawa Hospital.

Entering the second decade of the Meiji Period, full-scale private hospitals were born one after the other, but prior to this, in February 1872 Dr. Sato Takanaka of the Daigaku Toko submitted to the Ministry of Education a “Request to Establish a Private Hospital.” However, having received no reply to his request, Dr. Sato submitted another request regarding the establishment of a private hospital. In his request he wrote that there were far too many patients who had been examined but had could not be admitted and were forced to leave the hospital at the convenience of the hospital as the main purpose of hospitals attached to universities is to teach medicine. He therefore wished to establish a private hospital in the form of a branch of the medical school that could accommodate such patients. Subsequently, in October 1872 Dr. Sato resigned from the Tokyo Igakko (Tokyo Medical School) and together with physician colleagues rented the Hatago Josyuya (inn) at Denma-cho in Nihonbashi and established a private hospital that they named “Hakuaisha.” This is the first private hospital established in Japan for which records remain, and it was favorably received. In February 1873 Dr. Sato opened another private hospital, “Juntendo,” in Shitaya-Neribeicho.

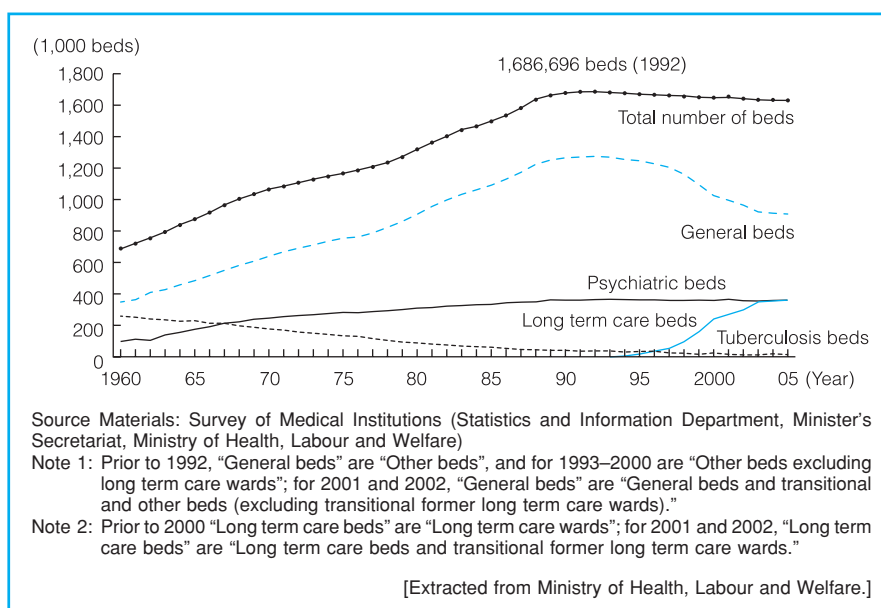
In 1874 the Ministry of Education announced

the “Regulations on Medical Practice” for the three prefectures of Tokyo, Kyoto, and Osaka. Articles 19 to 26 of this document pertain to “Regulations regarding hospitals attached to medical schools and private hospitals,” with Article 25 stipulating that when a hospital is established, the number of founders, personal histories of physicians and staff, hospital operational policies, hospital education, number of beds, and pharmacy rules were to be submitted to the local authori-

**Table 1 Trends on the number of hospitals**

Year	Total number of hospitals	Total number of hospital beds
1930	3,716	121,945
1940	4,732	188,655
1950	3,408	275,804
1960	6,094	686,743
1970	7,974	1,062,553
1980	9,055	1,319,406
1990	10,096	1,676,803
2000	9,266	1,647,253
2009	8,739	1,601,476

[Prepared by Ministry of Health medical office (1976)<sup>4</sup>/Ministry of Health, Labour and Welfare.<sup>5</sup>]



**Fig. 1 Annual trends in the number of hospital beds**

ties, which would submit these to the Ministry of Education.

In 1876, a “Request and Application for the Establishment of Private Hospital” was issued to prefectures by the Ministry of Interior, and a system for licensing the establishment of hospitals by the Ministry of Interior was introduced. However, this system was abolished in 1887, with the licensing of hospitals left entirely to the discretion of local authorities. Tokyo Prefecture established “Regulations for the Establishment of Private Hospitals and Maternity Hospitals” (1891), stipulating that facilities admitting 10 or more patients/pregnant women be licensed, that notification be given when construction of the facility is completed, and that the facility should undergo inspection.

The number of private hospitals rapidly increased from around 1878, with 1888 statistics indicating there were 225 national/public hospitals and 339 private hospitals—already showing a characteristic of medical care in Japan of more private hospitals than national/public.

A hospital established from the start for the purpose of providing free medical care was the Onshizaidan Saiseikai Hospital, which was established in response to an edict issued by the Emperor Meiji in 1911. Behind the establishment of this hospital was the importance of suppressing widening social unease due to rise in social movements caused by the disparity between rich and poor in the wake of the Japanese-Russo War.

In the latter half of the Meiji Period, sanatoriums for so-called “national afflictions” as tuberculosis, mental illness, and Hansen’s disease (lepra) began. At this time, facilities for Hansen’s disease patients were established by missionaries from Western countries and others, and a spirit of

volunteerism spread. Because of the importance of isolation in preventing the spread of infectious diseases, the government enacted the Tuberculosis Prevention Act and Hansen’s Disease Prevention Act; Hansen’s disease patients were forcibly relocated to sanatoriums, a system that was not abolished until 1945. The Hansen’s disease has left many other issues, such as the issues of infectious diseases and human rights as well as treatment and preventative isolation.

In the late Meiji Period, the Mining Act (1905) and the Officers’, Workers’, and Laborers’ Compensation Act (1907) were enacted, creating laws to compensate national railway workmen and miners for injuries incurred while working. This later led to the establishment of hospitals for workers such as national railway and large monopoly company workers as well as national government employees. Especially after entering the Showa Period (1926–1989), when the health insurance system was established, the number of hospitals established by health insurance societies increased.

Amidst all this, general medical practitioners were also establishing hospitals with inpatient facilities. Following the enactment of the Medical Service Act in 1948, facilities with up to 19 beds were classified as “clinics” and those with 20 beds or more were classified as “hospitals.”

During World War II, hospitals in Japan’s major cities sustained devastating damage, but by 1950 the number of hospitals had surpassed pre-war figures (**Table 1**). Until the 1990s, the total number of hospital beds had continued to increase. In recent years, there has been an increase in the number of long term care beds in response to the growing population of elderly people in Japan (**Fig. 1**).

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