

Hospital bed

A **hospital bed** is a bed specially designed for hospitalized patients or others in need of some form of health care. These beds have special features both for the comfort and well-being of the patient and for the convenience of health care workers. Common features include adjustable height for the entire bed, the head, and the feet, adjustable side rails, and electronic buttons to operate both the bed and other nearby electronic devices.

Hospital beds and other similar types of beds are used not only in hospitals, but in other health care facilities and settings, such as nursing homes, assisted living facilities, outpatient clinics, and in home health care.



A modern hospital bed

While the term "hospital bed" can refer to the actual bed, the term "bed" is also used to describe the amount of space in a health care facility, as the capacity for the number of patients at the facility is measured in available "beds."

History of the hospital bed

Beds with adjustable side rails first appeared in England some time between 1815 and 1825^[1].

In 1874 the mattress company Andrew Wuest and Son, Cincinnati, Ohio, registered a patent for a type of mattress frame with a hinged head that could be elevated, a predecessor of the modern day hospital bed.^[2]

The modern 3-segment adjustable hospital bed was invented by Willis Dew Gatch, chair of the Department of Surgery at the Indiana University School of Medicine, in the early 20th century. This type of bed is sometimes referred to as the **Gatch Bed**^[3].

The modern push-button hospital bed was invented in 1945, and it originally included a built-in toilet in hopes of eliminating the bedpan^[4].

Features of the modern hospital bed

Wheels

Wheels enable easy movement of the bed, either within parts of the facility they are located, or within the room. Sometimes, movement of the bed a few inches to a few feet may be necessary in patient care.

Wheels are lockable. For safety, wheels can be locked when transferring the patient in or out of the bed^[5].

Elevation

Beds can be raised and lowered at the head, feet, and their entire height. While on older beds, this is done with cranks usually found at the foot of the bed, on modern beds, this feature is electronic.

Today, while a full electric bed has many features that are electronic, a *semi-electric bed* has two motors, one to raise the head, and the other to raise the foot^[6].

Raising the head (known as a Fowler's position) can provide some benefits to the patient, the staff, or both. The Fowler's position is used for sitting the patient upright for feeding or certain other activities, or in some patients, can ease breathing, or may be beneficial to the patient for other reasons^[7].

Raising the feet can help ease movement of the patient toward the headboard and may also be necessary for certain conditions.

Raising and lowering the height of the bed can help bring the bed to a comfortable level for the patient to get in and out of bed, or for caregivers to work with the patient.

Side rails

Beds have side rails that can be raised or lowered. These rails, which serve as protection for the patient and sometimes can make the patient feel more secure, can also include the buttons used for their operation by staff and patients to move the bed, call the nurse, or even control the television^[8].

There are a variety of different types of side rails to serve different purposes. While some are simply to prevent patient falls out of the bed, which can result in injury, others contain equipment that can aid the patient him/herself without physically confining the patient to bed^[9].

Side rails, if not built properly, can be of risk for patient entrapment. In the United States, more than 300 deaths were reported as a result of this between 1985 and 2004^[10]. As a result, the Food and Drug Administration has set guidelines regarding the safety of side rails^[11].

In some cases, use of the rails may require a physician's order (depending on the laws of the place and the policies of the facility where they are used) as rails may be considered a form of medical restraint.

Disadvantages

Cost

Hospital beds, being so complex, can also be costly, thereby increasing the cost of health care. A single bed can cost over \$100,000 USD^[12].

Effect on health of patients

Hospital beds can make a patient's spine more rounded because a patient who sits up a lot, such as when watching television, tends to slip down^[13].

Safety

Patient safety has been a concern with hospital beds.

In 1982, a 3-year-old Milwaukee girl hospitalized for pneumonia was killed when crushed by a mechanical hospital bed^[14].

In 1983, an 11-year-old Illinois boy was strangled to death by a hospital bed^[15]

References

- [1] <http://www.askdeb.com/health/bed/>
- [2] National Association of Bedding Manufacturers, March 1964, Nation's Oldest Family-Held Bedding Firm: Adam Wuest, Inc.
- [3] <http://www.askdeb.com/health/bed/>
- [4] http://books.google.com/books?id=4ksEAAAAMBAJ&pg=PA92&dq=%22hospital+bed%22&hl=en&ei=F5Q8TMCEIsP68AbS-IWnBg&sa=X&oi=book_result&ct=result&resnum=1&ved=0CDcQ6AEwAA#v=onepage&q=%22hospital%20bed%22&f=false
- [5] http://books.google.com/books?id=LDEZyZD36hYC&pg=PA215&dq=%22hospital+bed%22&hl=en&ei=oZk8TMf4E4KC8ga4kuSoBg&sa=X&oi=book_result&ct=result&resnum=9&ved=0CF4Q6AEwCDhG#v=onepage&q=%22hospital%20bed%22&f=false
- [6] http://books.google.com/books?id=h7fsEN7YDZoC&pg=PA125&dq=%22hospital+bed%22&hl=en&ei=fZU8TLfdEIP_8Abj0pimBg&sa=X&oi=book_result&ct=result&resnum=2&ved=0CDgQ6AEwATgU#v=onepage&q=%22hospital%20bed%22&f=false
- [7] http://books.google.com/books?id=h7fsEN7YDZoC&pg=PA125&dq=%22hospital+bed%22&hl=en&ei=fZU8TLfdEIP_8Abj0pimBg&sa=X&oi=book_result&ct=result&resnum=2&ved=0CDgQ6AEwATgU#v=onepage&q=%22hospital%20bed%22&f=false
- [8] http://books.google.com/books?id=B1BobaC-vLAC&pg=PA203&dq=%22hospital+bed%22&hl=en&ei=pZY8TMnoK4L88AbB0NinBg&sa=X&oi=book_result&ct=result&resnum=2&ved=0CDcQ6AEwATg#v=onepage&q=%22hospital%20bed%22&f=false
- [9] <http://www.articlesbase.com/medicine-articles/understanding-different-kinds-of-hospital-bed-rails-1948094.html>
- [10] http://www.consumeraffairs.com/news04/hospital_beds.html
- [11] <http://ute.kendaloutreach.org/learning/HospitalBedSafetyWorkgroupHBSW.aspx>
- [12] http://books.google.com/books?id=Ceuq9P4hLJMC&pg=RA1-PT115&dq=%22hospital+bed%22&hl=en&ei=Spo8TMGHIH78AbAz5ioBg&sa=X&oi=book_result&ct=result&resnum=2&ved=0CDsQ6AEwATha#v=onepage&q=%22hospital%20bed%22&f=false
- [13] http://books.google.com/books?id=0J-wdl5d8EC&pg=PA24&dq=%22hospital+bed%22&hl=en&ei=pZY8TMnoK4L88AbB0NinBg&sa=X&oi=book_result&ct=result&resnum=10&ved=0CF8Q6AEwCTge#v=onepage&q=%22hospital%20bed%22&f=false
- [14] Los Angeles Times, Jan 15, 1982 Girl, 3, Killed by Mechanical Hospital Bed, Her Family Says
- [15] The Sun Baltimore, Md. Apr 19, 1983 Illinois boy, 11, strangled in hospital-bed accident

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