

Specifying security in healthcare facilities

In a healthcare facility, design has a direct impact on the very metrics that determine an institution's success. Research shows that patient outcomes, building security and operational efficiency are all aided—or hampered—by building design, down to the smallest hardware elements.

Inefficient design—and the dissatisfaction that results—can also have financial implications on healthcare organizations. Patient satisfaction scores influence government reimbursements, which can comprise nearly half of an organizations' revenue. Lower patient satisfaction scores could equate to lower reimbursements, which can be detrimental in the already difficult healthcare funding environment.

There are a number of specialty door hardware solutions available that create a safer and more efficient environment.



So, whether you're designing a new facility or working to improve an existing one, consider the following design elements:

- **Quiet openings:** Today, more healthcare facilities are incorporating a patient-centered design that provides for a better experience and higher satisfaction. Spaces are constructed to minimize noise and distractions and maximize patient comfort and convenience. Studies have shown that noise—such as clanking and banging associated with exit devices and slamming doors—inhibits healing time and increases patient frustration and dissatisfaction. Doors with electric latches can also produce a lot of noise, especially at night when patients are trying to sleep. By incorporating exit devices with innovative dampers that decelerate the push pads' motion and motor-driven electronic latches, most of the noise is eliminated. Also, using a concealed vertical cable system eliminates the rattles and clanking of rods in the door on the frame.

- **Infection prevention:** Infection control is another hot healthcare topic. Touch surfaces play a big role. Not surprisingly, door hardware is one of the most touched surfaces in any facility. The use of door hardware that incorporates antimicrobial materials reduces the spread of infectious bacteria and assists in lowering the risk of infection. Additionally, automatic openings operated by touchless actuators (signaled by the wave of a hand) not only minimize the spread of hand-to-hand infection but they also allow workers to be more efficient as they move with equipment through a facility.



- **Secure environments:** Hospitals have a greater need for emergency preparedness. More stringent security measures are now required. A comprehensive access control system improves security, minimizes risk and provides a more complete and efficient way to track movement throughout the facility. Plus, with more caregivers relying on technology, the ability to eventually migrate to a smart card or mobile access credential will attract the attention of a more tech-savvy workforce.
- **Anti-ligature precautions:** In hospitals, and particularly behavioral health facilities, protecting patients from harming themselves is a real concern, even when regular patient monitoring checks are in place. Openings in these areas have special requirements and must minimize the risk of self-harm while maintaining a balance of patient security and safety. Specially designed anti-ligature devices help create a safer space for behavioral health patients. With unique sloped and recessed surfaces, these locks and hinges cannot be used as a ligature point for those intending to do harm to themselves. *Health Facilities Management* magazine reports that behavior health centers/psychiatric hospitals comprise 21% of new specialty hospital construction projects.
- **Standardization:** Designing, installing and maintaining the openings in a healthcare facility are not simple tasks, but standardizing solutions provide more control. It allows for more efficient installations and maintenance activities, better management of key systems and smoother performance of electronic access control and electrified door hardware.

Design consideration by opening type

Patient rooms

Patient room doors need to provide privacy and safety for a patient during a hospital stay. They must also be easily accessible for hospital staff as they carry medical supplies, push gurneys or carts, or quickly move across the room.

Solutions:

- The use of push/pull hospital latches makes it easier for patients and staff members to operate doors when their hands are full, and they are ADA-compliant. [Glynn-Johnson® push/pull locks](#) are available in both mortise and cylindrical options and a variety of finishes, configurations and functions.

Avoiding the institutional look

Just because you're designing an institution doesn't mean it has to look like one. The [M Collection](#), featuring both Schlage® and Von Duprin®, provides options that are both strong and stylish... durable and decorative... well built and well designed. Everything you need to withstand the use and abuse of a healthcare environment... with everything you need to make patients and visitors feel at ease and focus on recovery.

- Because patient rooms turn over frequently, cleanliness is also critical to patient and staff well being. [Antimicrobial coatings](#)—effective against bacteria, mold, fungus, mildew and algae—can be added on a wide variety of hardware, including levers, locks, exit devices and pull handles.
- Openings should be wide enough for equipment to pass to avoid damage to frame, hardware and door.

For patient rooms in behavioral units or facilities

- [Schlage® L Series anti-ligature mortise locks](#) (available in levers, knobs, thumbturns and cylinder rings) are designed with sloped surfaces and recessed trim to decrease potential attachment points.
- [Ives® hospital tip door hinges](#) are also designed with a ligature-resistant sloped tip to improve patient safety.

Security sensitive areas

Pharmacies, patient records, medical supplies, electrical or building controls, and other areas with restricted access require a higher level of security and a record of when and by whom the area was accessed. Confidentiality of the information contained in these areas is vital because of HIPAA regulations.

Solutions:

- It's important to design an access control system that allows seamless deployment and use, including electronic locks and card readers, access credentials and other hardware. Multi-technology readers, such as those manufactured by [aptiQ™](#), allow more than one type of credential to be used, ultimately simplifying technology migrations.
- Wireless locks, like the [Schlage® AD Series](#) or [NDE Series](#) electronic locks, make it easy for staff members to use their access credentials throughout the facility, eliminating the need to share keys or codes, or prop the door open.



Cross corridor openings

It's well known that doctors and other hospital personnel need easy movement throughout the facility and don't like to open doors or wait for them to open. Doors that don't open as needed can sustain repeated damage from carts and other equipment banging into them. In fact, cross-corridor openings are subject to more use and abuse than almost any other openings in a medical facility. Although this opening's main purpose is to control the spread of fire and/or smoke while keeping patients and staff safe in emergencies, these openings also need to withstand high levels of traffic, resist damage caused by equipment, and control access to secure areas of the building. A smart solution is to automate the hospital's cross-corridor openings.

Solutions:

- To automate cross corridor doors with enough time for easy flow of traffic, locate a push button, touchless actuator or card reader farther from the door opening. A longer distance lets the user trigger the actuator sooner so that the door is open by the time the user gets to it, minimizing damage from pushing. [LCN® auto operators](#) allow staff to open doors with the wave of a hand or access credential in front of a sensor. Doors open at the appropriate speed allowing free, easy passage without waiting.
- [Von Duprin® QEL \(Quiet Electric Latch\) exit devices](#) are an energy-efficient way to provide electronic control of an exit device. Using specially designed dampeners and motor-driven latch retraction, they significantly reduce the noise generated by opening and closing the door.

Learn more about Allegion solutions

[Healthcare solutions overview brochure](#)

[Healthcare solutions by opening](#)

[Healthcare case studies](#)

For more information, call 877-929-4350 or [contact an Allegion spec writer](#).

About Allegion

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