Joint Commission Resources

FGI Guidelines - What's New in 2022

The Facility Guidelines Institute's three volume FGI Guidelines – Hospitals, Residential, and Outpatient – have been updated for 2022. The robust process that takes place every four years results in changes that represent a truly consensus-based evolution of standards and improvements in care. It includes public input, research and debate on contemporary issues around the planning, design, and construction of the built environment of healthcare facilities.

The Healthcare Guidelines Revisions Committee (HGRC) has over 100 stakeholders representing facility planning, design, construction, operations and clinical services. The revision process for the 2022 edition began in spring of 2018 when the steering committee of the FGI HGRC began reviewing new candidates for membership. FGI simultaneously developed a new online proposal/comment platform to facilitate and collect input from stakeholders in the healthcare industry.

Two 60 – 90 day windows of opportunity were provided for public review and comment. The first encouraged users of the Guidelines to submit proposals for changing language in the 2018 edition then in use. The second period began in the summer of 2020, when draft documents for 2022 were made available for review and comments.

Those submitting proposals and comments were required to provide evidence supporting their suggestions, including:

- **Rational understanding/experience:** Practical, common-sense items that are generally universally agreed upon, such as a paved road leading to emergency department entrances.
- **Clinical practice, policy, or guidelines:** Includes features that physical environments require for safe clinical practice and care, such as the CDC guidelines for hand hygiene.
- **Direct evidence:** Clear associations between requirements and outcomes, such as stipulating that Airborne Infection Isolation (AII) rooms be single patient rooms because it is well documented that airborne transmission of pathogens is reduced when patients are isolated.
- **Indirect evidence:** A design requirement's association with an outcome that does not directly affect patient or staff, but an association can nevertheless be inferred. One example is air change rates for exam rooms. The current rate, six air changes per hour, reduces airborne particulates and provides a safer environment, though a direct correlation between this requirement and reduced infection rates is not documented.

Some recommendations and resources do not fully warrant inclusion in the revised Guidelines, but may present best practices or viable items of interest to those who design, build and operate healthcare facilities, and those contributions are collected and made available to relevant stakeholders.

Throughout the process HGRC is fully cognizant that while some changes increase costs, decisions are based entirely on the benefits of those changes. And, while there are equipment manufacturers involved in discussions and deliberations, they do not vote on proposed changes, so decisions are not influenced by vendors.

Much of the above is derived from the FGI website, and you can learn even more there at www.fgiguidelines.org.

Changes for 2022

Access to Emergency Services

The Commonwealth of Massachusetts passed Laura's Law inspired by the tragic outcome suffered by an asthmatic patient. Early one morning, and during an asthma attack, Laura attempted to open several locked doors at a hospital before finally finding an open one, but too late. She collapsed just outside the doors and subsequently died.

The incident brought to light tech issues that can be resolved relatively easily.

One of the last things Laura did before she died was call 911, but the 911 system in that area placed her signal one block away. Hospitals would be well advised to task IT departments with ensuring that search engines like Google maps include accurate directions to the emergency entrance, and not just the front door.

Now, Massachusetts requires that video surveillance systems be in place for every hospital's public entrance, and duress alarm systems installed and active where entrances are locked. The Commonwealth is also considering rules for exterior wayfinding systems, looking very closely at nighttime lighting – and not just from a foot candle perspective, but from a glare and shadow perspective, as well.

Although other states have not passed such laws to date, the topic has been discussed at several regional meetings and conferences of the New England Healthcare Engineers Society and the American Society of Healthcare Engineers. Other hospitals in New England are implementing changes to their physical plants and operational policies, and while the Joint Commission has not developed such standards for emergency department access, 2022 Guidelines now require video surveillance at public entrances to emergency facilities and a duress alarm where entrances may be locked. This requirement was added to ensure that patients in distress can receive necessary care even when entrances are locked.

Behavioral Health Crisis Unit

The Elements of the Safety Risk Assessment (SRA) have been updated to encompass patient safety concerns in areas throughout the facility, in addition to those areas in which behavioral and mental health patients are typically seen, including defining risk levels in various spaces. The risk level identifiers are "high-level," (areas where patient acuity poses increased risk), "moderate high-level" (areas in which patients interact with less direct supervision), "moderate-low level" (areas where patients are supervised and/or under direct observation), and "low level" (e.g. staff support areas where patients are not allowed).

There is also a new Behavioral Health Crisis Unit which, though not part of the emergency department, is affiliated with it. Implementation of this new concept in the delivery of care, an Emergency Psychiatric Assessment Treatment and Healing Unit (EmPATH Unit) is not required, but it is highlighted in a new white paper by FGI. Where an EmPath unit exists, behavioral health patients must be in the emergency department or have ready access to it. It is intended to steer patients away from the emergency department's sometimes chaotic environment to a less stressful one for assessment, observation and treatment during a crisis. The goal is to provide a more patient centric approach to integrating these patients into care in a more calming way.

Other changes to the Emergency Department

Subdivision of Trauma Rooms

Trauma or large resuscitation rooms in emergency departments are often underutilized, especially in hospitals in non-urban environments. So, the standard has been adjusted. Now, when those rooms are not being used for those purposes, they can be designed and built to accommodate two emergency department patients. The goal is to make more efficient use of this space so that it can function as a trauma or resuscitation room, as needed, but the physical space and its operations must be capable of quick conversion back to a trauma room, with each care station meeting the requirements for the services provided.

Emergency care facilities

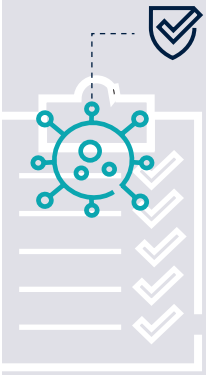
Other changes specific to Emergency Departments include new clinical treatment areas designed to reduce overcrowding in EDs. One is intended for “walking well” patients, 40-square-foot bays for low acuity patients that supplements traditional ED rooms, bays, or cubicles. Ambulatory patients with minor injuries, that do not require waiting for traditional ED spaces, no longer have to wait for those spaces, freeing the space up for other, more urgent needs and making emergency departments more efficient.

Another change is new design requirements for human decontamination areas. Organizations that utilize outdoor structures do not have a prescribed size, but the formalized guidelines specify an increase in the size of those spaces from 80 to 100 square feet for interior decontamination spaces. Additional requirements that enhance patient privacy, lighting, plumbing, access and architectural details are also included in the new guidelines.

Telemedicine

The elevation of telemedicine was already underway, but it was accelerated by COVID. There are new requirements around space definition and a heightened focus on acoustic requirements around privacy, speech intelligibility, sound isolation and background noise. There are new tools to help including acoustic apps available that can be downloaded on phones to monitor sound quality and hopefully help improve acoustic conditions considerably, and telemedicine rooms now need full door seals.

Recognizing that moving a hospice patient to a telemedicine room is often impractical, if not impossible, those services need to be provided via a telemedicine cart and the guidelines now define enough space for a monitor, camera, microphone and related equipment. Depending on the type of equipment used, multiple electrical outlets may be required and must be located in such a way that wires and cables are not strung across floors and hallways.



Infection Control

Infection Control Risk Assessments (ICRAs) are not just for construction projects, so for any facility changes or maintenance projects the requirements now include, in many cases, a full multidisciplinary team that includes nurse leaders, key facility managers and administrators, to make strategic decisions. It is not required that every isolation room have an ante room, and the total number of Airborne Infection Isolation (AII) rooms are based on an organization’s ICRA, including the space needed for donning and removing Personal Protective Equipment (PPE). The goal of these changes is to ensure that organizations have the appropriate resources to treat infectious patients in properly configured spaces that better protect everyone, including staff.

Common Elements

General

The new guidelines allow more flexibility in the placement of handrails. For instance, the challenges of installing handrails around wall-mounted features such as fire extinguisher cabinets or water fountains, or a short wall between two doors, have been eased by permitting 24-inch gaps.

Safety risk assessment

The SRA team shall not only now provide a detailed assessment of potential hazards in each part of the project, the team must document proposed solutions that mitigate these risks. Also, the "Disaster Emergency, and Vulnerability Assessment" (DEVA) has been added. While many healthcare organizations already perform hazard vulnerability assessments, DEVA was driven by the publication of a white paper, "Guidance for Designing Health and Residential Care Facilities that Respond and Adapt to Emergency Conditions" by FGI in 2021.

Mechanical, Electrical, and Plumbing

Waterborne pathogens will continue to be a focus in 2022 with revised standards accessible through the FAQ and New Standards pages on the Joint Commission website. Water Infection Control Assessment (WICRA) is now a greater area of focus, organizations are now required to identify an individual who will be responsible for the overall program and that a multidisciplinary team participates in its design, implementation and evaluation.
In addition, waste, anesthesia and gas disposal (WAGD) systems continue to be a focus. Organizations must determine where, exactly, nitrous oxide and inhalation anesthesia (including portable systems is used and that a WAGD system is in place.

Elevators

The minimum door opening has been reduced from 54 inches to 40 inches, giving architects, designers and builders more flexibility in new construction.

Neonatal Intensive Care

More equipment coming into the neonatal space drove the need to increase that space minimums, from 120 square feet to 150 square feet for multi-room occupancy, and 155 square feet to 180 square feet for single occupancy. Creating more space for mother and baby to room together has been addressed, as has noise abatement and outdoor light, which can now be indirect vs. requiring an exterior window in the space.

Lactation rooms

Hospitals are now required to provide lactation rooms for staff and volunteers, and while providing a lactation room for visitors is recommended, it is not required.

Communication systems

The new table for Locations of Nurse Call Devices in Hospitals has been streamlined. Now, only the required locations for nurse call devices are listed. Technological advances that offer hospitals numerous ways to identify staff assistance call stations have made including those in the new table obsolete. Also, cords at call stations designated for treatment of behavioral and mental health patients must be detachable and no longer than 6 inches (15.24 cm).

Electrical receptacles

Revisions have been made to Electrical Receptacles for Patient Care Areas in Hospitals to make patient room design more flexible. While the minimum number of receptacles required at a bed location corresponds with NFPA 101: Life Safety Code, additional receptacles and locations are permitted to support the needs of medical staff and the comfort of patients and visitors.

Trauma intensive care unit (ICU)

New guidelines state that patient rooms in burn trauma ICUs be designated as protective environment rooms due to those patients' high risk of infection. Also, radiant heat panels must be placed directly over the patient's bed to help regulate body temperature, and new construction projects are required to include an operating room readily accessible to the burn unit ICU.

Common Elements

Restricted Zones

Changes to ORs and Class 3 Imaging spaces: Ceilings have always been a challenge, especially in Class 3 imaging spaces. Now, ceilings are required to be seamless, with gasketed access doors, structurally rated assembly, access for ITM and repair, ASHRAE 170 compliant, and UL/ETL labeled devices.

Ceilings in restricted zones, which are restricted to properly gowned staff and are directly outside ORs and Class 3 Imaging, must be monolithic, as are those in Protective Environment (PE) rooms, to ensure cleanliness within these areas.

Now, if organizations possess the data to support the efficiency of doing so, the ratio of pre-and post-procedure bay areas may be reduced from 2 to 1.5 bays for each OR, allowing for more efficient space design for new hospitals and those undergoing major renovations.

Palliative Care

Expanded standards could help organizations acknowledge that patient care extends to considerations beyond the clinical, including support services, signage and wayfinding systems. These environments must be designed to be inclusive to support patients, family, and visitors throughout. The standards also focus on issues around Airborne Infection Isolation (AII) rooms, and Protective Environment (PE) rooms.

Hospice patient care unit and hospice and/or palliative care rooms

New design requirements and recommendations around hospice and palliative care services include requiring both to be located outside of a dedicated unit. This supports the delivery of person-centered care and focuses on enhanced quality of life for patients, their family and friends, and is more considerate of patient privacy and dignity. These rooms must be designed for single occupancy, with exceptions for married couples, partners, siblings, parents, and other close relationships. Space must also be provided to accommodate a family support zone and, in facilities where family and friends are allowed to stay overnight, sleeping accommodations and space for them must be provided.

Infection prevention

Now, the deciding factor in whether an anteroom will be provided for an All room is the infection control risk assessment. The guidance is included for helping designers and facility owners decide where an anteroom is needed. In addition to existing methods and devices for disposing of human waste, more options for bedpan management have been specified by the Infection Prevention Topic Group.

Beyond Fundamentals

The FGI website includes a section that addresses fundamentals, but keep in mind that these guidelines are minimums. There is guidance available for designing health and residential care facilities that respond and adapt to emergency conditions. Content was driven by lessons learned from COVID and a 130-person team that co-authored a new white paper that's available through www.fgiguidelines.org. Other topics include, but are not limited to, topical subjects such as virtual care/telemedicine, patient handling and mobility assessments, hybrid operating and geriatric treatment rooms, and more.

Diversity and Inclusive environments

Healthcare organizations serve diverse populations and accommodating those populations is promoted through an inclusive approach to design of the built environment. Diversity considerations include age, body size, mobility, cultural background, gender identity, visual acuity, and more, and they apply to not only patients, but staff and visitors. The new guidelines include universal design concepts to guide owners and designers as they create environments that are as accessible and usable as possible by all people using those new spaces.

Acoustic design

Changes in acoustic requirements include new performance values for telemedicine rooms (Minimum Design Room-Average Sound Absorption Coefficients), and new adjacencies (Design Criteria for Minimum Sounds Isolation Performance Between Rooms).

Surgical services

Beds and gurneys used to transport patients to and from operating rooms must be stored in adjacent, semi-restricted areas. New language clarifies the design of clean equipment and clean and sterile supply storage rooms, or areas directly accessible to the operating rooms arranged around them, often called "the clean core." Also, clean and sterile supply storage must be the larger part of a 300 square-foot room, or 100 square feet per operating room.

Imaging services

Imaging requirements in the Hospital and Outpatient Guidelines are virtually identical, while clarifying language has been added around requirements of Class 2 single- and multiple-modality imaging systems. Class 1 and Class 2 imaging rooms have additional clearances, which do not apply to rooms in which small mobile ultrasound or similar imaging devices are used. Anesthesia work zones in imaging rooms of any class in which an anesthesia machine will be used have received additional clearances, too.

A control room door is not required in Class 2 and Class 3 imaging rooms that are served by a single control room with architectural details and environmental controls identical to the imaging room. The control room does not require laminar flow diffusers or low returns, and Class 3 imaging rooms must now meet the requirements of a hybrid operating room, or those of an applicable imaging modality with most of the operating room requirements.

Requirements for magnetic resonance imaging (MRI) facilities have been revised for equipment that is affixed to the building (i.e., not portable). New MRI suite requirements differentiate between those with equipment with a static magnetic field of 5 gauss (0.5 millitesla) contained within the MRI scanner and those with equipment with a static magnetic field extending beyond the scanner itself. Hot patient sub- waiting areas, to isolate patients whose scan preparation results in low levels of radiation, are now required.

Hemodialysis treatment area

A dialysis task team updated dialysis sections and made revisions. New requirements address dedicated spaces for patient scales, food disposal sinks in treatment areas and, for patients with special precaution needs, a dedicated room to prevent contact transmission of infectious microorganisms.

Mobile/transportable medical units

Additional language has been included to define "temporary basis" regarding mobile/transportable medical units. There are no state or local standards, so temporary basis has been defined as "a period of time not exceeding six months during any twelve-month period from the time procedures commence inside the mobile/transportable units until the time seizures cease and it is transported off the host facility's site." The guidelines do not apply to mobile/transportable units that remain on-site for less than 96 hours.

Several revisions address increased design flexibility for Class 1 mobile/transportable units. For example, a Class 1 mobile unit that is not connected to a host facility may have self-contained site utilities, and a hand sanitation dispenser instead of a handwashing station. Also, a cabinet or closet may meet clean work room or clean supply room requirements, or those for a soiled workroom.

As mobile/transportable medical units have size limitations, a new provision has been made for Class 1 units that do not meet the core door width and/or height requirements specified in the common elements chapter. In these instances, a Class 1 mobile unit is permitted with a minimum clear width of 2 feet 8 inches and a minimum clear ceiling height of 6 feet 8 inches.

To learn about JCR Environment of Care and Life Safety Advisory Services, including how our experts can help you address the FGI Guidelines, please visit https://www.jcrinc.com/products-and-services/advisory-services/environment-of-care/