

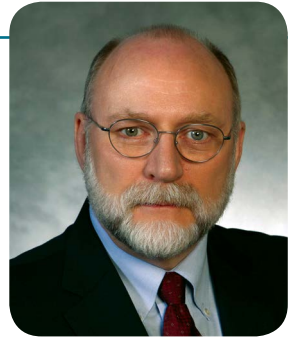


Clarifications and Expectations

WITH THE JOINT COMMISSION'S DIRECTOR OF ENGINEERING: **GEORGE MILLS**

Living Better in the Built Environment

Make sure the environment of care is both safe and comfortable for patients, visitors, and staff



Environment of Care® News publishes the column *Clarifications and Expectations*, authored by George Mills, MBA, FASHE, CEM, CHFM, CHSP, director, Department of Engineering, The Joint Commission, to clarify standards expectations and provide compliance strategies.

Hospitals and health care facilities need to be secure, clean, and well managed to ensure that patients receive and staff provide the best care and treatment possible. But safe and controlled doesn't have to mean cold, harsh, impersonal, or catering predominantly to the caregiver. Particularly in patient recovery rooms and rest areas, the environment needs to be comfortable and look and feel less institutional than it was decades ago.

Current Joint Commission standards are sensitive to this goal, and organizations today are placing a greater priority on making the environment of care feel both safer and more like home. From using esthetically pleasing colors and carpeting in patient care units to checking more carefully for hidden hazards, the modern clinical milieu is more patient friendly than ever before. This month's column examines various standards and elements of performance (EPs) that help ensure a higher standard of living and safety in the built environment.

EC.02.06.01: The hospital establishes and maintains a safe, functional environment.

Features of a health care facility's physical space affect the outcomes, safety, and satisfaction of patients, as well as of families, staff, and others in the organization. These features include the size and configuration of space, noise level, privacy, patient security, and clear access to internal/external doors. When properly designed into and managed as part of the built environment, these elements promote safe and comfortable surroundings that foster patient dignity and enable ease of patient-staff interaction.

To reflect the desire to create a home-like effect and residential feel in a health care setting, the two key EPs to examine here are 1 and 13:

- *Interior spaces meet the needs of the patient population and are safe and suitable to the care, treatment, and services provided.*
- *The hospital maintains ventilation, temperature, and humidity levels suitable for the care, treatment, and services provided.*

A surveyor will score EP 1 if he or she discovers anything unsafe in the patient care environment—which comprises the spaces where the patients live and cohabit and guests visit. Creating a comfortable and protected environment means removing any hazards. As examples, there can't be any rips in the carpeting, which can be a trip hazard; medical gas cylinders need to be properly secured so

they don't roll off a cart or fall over and become potential projectiles, nor can cylinders be placed between a patients' legs on the stretcher; and, in a behavioral health care unit, exposed plumbing, which could be a ligation point where self-harm or harm to others could occur, poses risks.

When a potential risk related to EP 1 is discovered, the organization should consider conducting a risk assessment that indicates whether it's a real risk in the organization's environment. With the exposed plumbing scenario, for instance, the caregiver in the area should know if the organization has completed a risk assessment and what the outcome was. Instead of protecting patients through the built environment, you may be protecting them via staffing. Or you could have a strategy in which, for example, in a unit with 10 beds, a patient escalating through his or her treatment program would advance from a protected environment (no exposed plumbing in room 1) to a less protected environment (exposed plumbing in room 10). The risk assessment process would demonstrate that the patient is, in fact, protected using a strategy that helps the patient adjust to life and environmental conditions outside the building. (For more information on conducting a risk assessment, see *Environment of Care News*, March 2013, Volume 16, Issue 3, pages 6–8.)

EP 13 pertains more to the built environment, where patients are housed on a

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day-to-day basis. If a surveyor notices a lot of blankets on patients in a particular unit, he or she might believe there is a problem with temperature control. If a surveyor observes condensation on the patient room windows, he or she may suspect there is excess humidity in the unit, which could lead to mold growth—a potentially serious patient health hazard.

The surveyor would then ask questions about facilities, utility systems, temperature controls, and humidity levels—the acceptable range for which is between 20% and 60% relative humidity through various patient care environments, according to ANSI/ASHRAE/ASHE Standard 170-2008 that is part of the 2010 edition of the Facility Guidelines Institute's *Guidelines for Design and Construction of Health Care Facilities*. The table (7-1) in the Standard 170-2008 includes many areas in the building with varying temperature and humidity requirements.

The bottom line is that ventilation, temperature, and humidity levels have to be conducive to patient safety and comfort. (Note that 20% relative humidity in anesthetizing locations such as the operating room requires an inventory and checking with the manufacturers and suppliers that their equipment and supplies can accommodate the lower relative humidity.)

LS.02.01.30: The hospital provides and maintains building features to protect individuals from the hazards of fire and smoke.

Smoke and fire are top concerns in health care organizations due to the inability of some patients to evacuate without help from staff. If inadequately safeguarded, the facility can endanger patients, as smoke and fire can spread through openings in the building, particularly into hazardous spaces such as boiler/fuel-fired heater rooms, large laundry areas and soiled linen rooms,

storage and trash collection rooms, flammable liquid storage rooms, laboratories, and piped oxygen tank supply rooms.

The primary focus here, related to this month's topic, is abiding by EP 2:

- *All hazardous areas are protected by walls and doors in accordance with NFPA 101-2000: 18/19.3.2.1 (see also LS.02.01.10, EP 5; LS.02.01.20, EP 18).*

In the built environment, the goal is to protect patients from hazardous areas

“Smoke and fire are top concerns in health care organizations due to the inability of some patients to evacuate without help from staff.”

by using barriers like doors and walls that segregate the spaces. Case in point: The door to a soiled utility room, where dirty linens and used bedpans are stored, should have a latch and door closure. But if a worker is carrying newly soiled materials down to this utility room and the door is closed, he or she will likely have to use an elbow to try to overcome the latch and open the door. Staff may create a workaround and stick adhesive tape over a latch or disconnect the door closure in order to easily push the door open. This should never be allowed.

Latches, locks, and other door features should never be compromised by staff or patients. Closures and latches are designed to keep the doors closed so that, if there is a fire, it doesn't enter into or leave that room and contact more combustibles. Working closely with infection control, determine if it is safe for patient care to install safe alternatives, such as a magnetic hold-open device that allows the door to remain in an open position during those periods of the day when staff enter the room frequently and which automatically releases if there is a fire. This way, staff won't be tempted to

bypass the latch or disconnect the closure, and the door will remain safe and connected to the fire alarm system.

LS.02.01.35: The hospital provides and maintains systems for extinguishing fires.

While there are several EPs pertaining to this standard that warrant our attention, an important one to concentrate on is EP 6:

- *There are 18 inches or more of open space maintained below the sprinkler deflector to the top of storage (for full text and any exceptions, refer to NFPA 13-1999: 5-8.5.2.1).*

The issue here is that vertical storage within hazardous areas such as a clean utility room can compromise fire safety if stored directly below a sprinkler head/deflector. If a box or other item is stacked closer than 18 inches from the deflector (such as the star wheel at the bottom of the sprinkler head), it can disrupt the sprinkler's spray pattern and limit the ability to extinguish a fire. Clinical, materials management, pharmacy, maintenance, and other personnel may inadvertently violate this rule, which can happen in any storage location. Be sure that storage or other items are kept below the 18-inch plane.

EC.02.01.01: The hospital manages safety and security risks.

This standard also has numerous EPs that are important to recognize; in keeping with this column's theme, however, we want to stress EP 8:

- *The hospital controls access to and from areas it identifies as security sensitive.*

It should be made clear to patients and their family members that some areas are restricted and off limits. This can occur, for example, in the emergency department, where a patient could be in the triage area restricted from visitors; relatives may try to bypass the rules and see their loved one, which can create a safety risk. Your organization has to

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clearly define security-sensitive areas and properly educate staff, patients, and visitors that these areas are restricted.

Consider, for instance, the pediatric or obstetrics department, where infant abduction is a sobering concern. This area should be made secure and off limits to unauthorized individuals by keeping it locked, carefully screened, and monitored. Other security-sensitive areas include isolation rooms, laboratories, pharmacies, infection control rooms, and behavioral health care units. When entering or exiting such an area, staff members need to be particularly careful that the door fully closes without any unauthorized visitors getting through (referred to as tailgating). Hence, proper training and drills that incorporate this issue are important, particularly when it comes to substitute or float staff.

EC.02.01.03: The hospital prohibits smoking except in specific circumstances.

Smoking can seriously jeopardize

comfort and safety within the built environment. That's why it's vital to abide by this standard, particularly EPs 1, 4, and 6, which state, respectively:

- *The hospital develops a written policy prohibiting smoking in all buildings (exceptions for patients in specific circumstances are defined).*
- *If the hospital decides that patients may smoke in specific circumstances, it designates smoking areas that are physically separate from care, treatment, and service areas (see also EC.02.03.01, EP 2).*
- *The hospital takes action to maintain compliance with its smoking policy.*

The value of having a written policy banning smoking in all buildings is that it gives staff an official document to cite, point to, or provide when they have a visitor, patient, or coworker who desires to smoke or vape (see the "Clarifications and Expectations" column in the January 2015 issue for standards related to e-cigarettes). This policy should be included in signage indicating that yours is a smoke-free building.

Certain exceptions can be allowed, such as adults in a behavioral health care unit who want to smoke under the

supervision of their physician. If your organization needs to accommodate this situation, it may need to separate the patients from the main population by allowing smoking in (1) a designated outdoor area (such as a patio); and/or (2) a specially ventilated interior space, using a negative exhaust system, non-combustible ashtrays, and metal containers with self-closing lids where ashes can be discarded.

Your organization should implement and support its no-smoking policy, taking steps to prevent smoking incidents from happening in the first place. Consider providing clinical support for smoking cessation programs while smokers are patients.

Safe, sound, and snug

Thankfully, for patients and staff alike, the health care setting has evolved into a more user-friendly, warm, enriching milieu over the years. Ultimately, our goal is to remove the fear that institutionalized environments can suffer from by nurturing the built environment and creating more comfortable and protected surroundings that support patient care delivery. 