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# HEALTHCARE INDUSTRY WORKS TO EXPAND AND ENRICH MENTAL HEALTH TREATMENT

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A severe shortage of psychiatric beds across the country is causing a multitude of issues for patients, communities and healthcare providers. In fact, hospital emergency rooms have become the first point of contact to many of those with an acute behavioral need. This delays effective treatment and can present a burden and safety issue for both hospital staff and patients, as ERs are not designed or equipped to "board" mental health patients.

But there is good news.  Many hospitals and healthcare systems are making bold attempts to not only provide more beds, but also to focus on providing safer healing environments.

## CRITICAL NEED FOR MORE BEDS

Eighteen percent of the American population experience a diagnosable mental disorder annually, according the Mental Health Illness Policy Organization. While figures vary by state, an article by the Pew Trust organization estimates the nationwide psychiatric bed shortage to be more than 120,000.

The bed shortage also takes a heavy toll on those who need treatment. When forced to seek assistance in ERs rather than specially equipped psychiatric facilities, individuals with mental health or behavioral issues may have to endure a stressful hospital environment for days or even weeks as they wait to find space in an appropriate facility.

## DESIGN GUIDELINES ADDRESS SPECIALIZED NEEDS

The healthcare industry, including certifying agencies and healthcare providers, has taken note and is taking action.

In 2017, the Joint Commission, an independent, not-for-profit organization that accredits and certifies healthcare organizations in the United States, updated its guidelines and recommendations. The new recommendations particularly emphasize the importance of anti-ligature and secured fixtures. Anti-ligature design addresses furniture and fixtures to prevent affixing rope-style items that can be used for suicide attempts and barricades, as well as break-away parts than can be used to do harm, or other hazards. "While safety is the top priority, we design mechanical, electrical and plumbing (MEP) systems and select products with long-term maintenance procedures and costs in mind," said Matthew Daves, PE, who oversees MEP engineering services for healthcare facilities at McKim & Creed, Inc.

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Likewise, the independent, not-for-profit Facilities Guidelines Institute (FGI) has updated its **Guidelines for Design and Construction of Hospitals and Outpatient Facilities**. In 2018 the new support-facilities volume was developed specifically to address the changing needs in the residential long-term care of those suffering from behavioral, intellectual and/or developmental disabilities and substance use.

FGI was the first organization to introduce the Safety Risk Assessment (SRA) as part of the planning process for any new or major renovation projects. Developed in 2014, the SRA has become one of the most important planning and design tools for ensuring patient and staff safety. During an SRA, the project design and construction team, in conjunction with hospital staff, physically—or virtually—walks through the facility and discusses staff, patient and visitor activities and behaviors for new designs. This is especially important as a variety of populations will use and inhabit the facility.

For example, the more private an area is for a patient—like a private bathroom—the higher the risk for harm to self and others. Social gathering spaces, on the other hand, require different analyses and solutions. On the staff side, designers strive for maximum observation vision points, a pleasant working environment, strategically located protected areas, and secure fixtures that can't be used as projectiles or to harm oneself or others.

**Research demonstrates that a bright, safe, and nurturing treatment environment plays a significant role in improved mental and physical health outcomes. (Photo courtesy of McMillan Pazdan Smith Architecture)**

FGI also published the **Behavioral Health Design Guide** (formerly "Design Guide for the Built Environment of Behavioral Health Facilities), which includes updated SRA procedures and references for design, materials, and products. This guide includes detailed instructions concerning construction and materials for each level of risk. The five levels of risk identified in the guidelines are:

- Level I: staff and service areas that are generally off limits to patients, requiring few modifications from a typical healthcare setting.
- Level II: areas behind lockable doors where patients are highly supervised and not left alone, such as activity rooms, corridors and interview rooms.
- Level III: areas that are not behind lockable doors where patients may spend time with minimum supervision, such as lounges and dayrooms.
- Level IV: areas where patients are checked on frequently by staff. However, these areas are considered the patient's room, meaning they are left alone at times. Therefore, the need to be ligature-resistant is imperative.
- Level V: areas where staff interact with newly admitted patients who present potential unknown risks or where patients may be in highly agitated conditions. These areas require special considerations for patient (and staff) safety and include seclusion rooms and examination rooms.

**McKim & Creed engineers Matt Daves, PE and Mitch Brown, PE, examine the mechanical room at a healthcare facility.**

The FGI also addresses minimum design standards for freestanding emergency rooms, general hospitals, critical-access, psychiatric, rehabilitation, and children's hospitals. Thanks in part to these guidelines, design for psychiatric care has moved away from the 1950s-era institutional model to a more personal-centered living environment that supports the new variety of care models, adds to quality of life, and maintains safety standards for patients and staff.

## HEALTHCARE PROVIDERS RESPOND

As research continues to demonstrate that a bright, safe, and nurturing treatment environment plays a significant role in improved mental and physical health outcomes, many healthcare providers are doing their part to better serve a vulnerable population. They are upgrading rooms and wards to be more patient-centered, with furnishings and lighting that mimic a home-based setting. And they are building new facilities, adding new wings and renovating current spaces to better meet the demand and new treatment standards.

For instance, in February 2019, Springfield, MA-based Baystate Health and US HealthVest announced plans to build a new behavioral-health hospital to increase the number of beds by 30 percent, replacing and augmenting the current decentralized facilities. Beaumont Health, located in Dearborn, MI, announced plans in November 2018 to build a $45-million 100,000 sq. ft. hospital, providing 632 beds dedicated to mental health services.

Atrium Health in Charlotte is in the process of renovating rooms in both the adult and pediatric behavioral health units to meet the new safety standards. The work focuses on anti-ligature updates for walls, ceilings, doors and windows, lighting and MEP fixtures and included a full SRA exercise with both the facility and design team to ensure that any potential hazards were identified. "Working together as a coordinated team with the facility owner, facility staff and architect to review and identify any areas of concern as part of the SRA is definitely a factor leading to the success of this project," said Jesus Gonzalez, PE, McKim & Creed electrical engineer of record for this project. "Together as a team, we were able to examine the spaces from different angles to not only solve the direct items identified but to also ensure that the process to correct any issues met the owner's budget and the safety needs of the staff and patients who will be using the space."

Piedmont Medical Center Health, Rock Hill, SC, recently completed the renovation of its 4th floor behavioral health suite. Existing lay-in ceiling; ceiling devices for HVAC air distribution, fire protection and lighting; as well as existing fan coil unit housing and access doors were replaced with more secure, anti-ligature fixtures.

After decades of decline, there is an expanding effort to improve the availability and quality of psychiatric treatment options. Certifying and regulating agencies, design and construction firms, and healthcare providers are working independently and together to incorporate new best practices and evidence-based design in the treatment of acute and long-term behavioral health patients. Wisely, these groups understand the benefits to also caring for the caregivers, ensuring a pleasant and safe working environment to support healthcare staff in providing the best care possible.

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