

# Top Five Furniture Considerations for Patient Safety in Behavioral Healthcare Facilities

By Norix Group Inc.



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The physical environment in psychiatric hospitals and other Behavioral Healthcare facilities plays a key role in patient safety. Some of those environmental risks are addressed by advancements in facility design, such as creating better sightlines for visual monitoring of patients, and the use of "security" glass in doors and windows. Other elements may be overlooked during the planning or construction phase, or may be inadvertently introduced at some later point where the necessary level of scrutiny may not exist. This is often the case with the selection and installation of furniture, fixtures and equipment (FF&E) in patient-occupied areas of behavioral healthcare facilities.

Elements that are considered appropriate in a general healthcare setting, or for particular patient populations, may not only be *unnecessary* in a behavioral healthcare (BHC) unit, they may be potentially *hazardous* in a psychiatric population. This is particularly true for psychiatric units located within a general healthcare facility. In addition, allocating financial resources for any unneeded apparatus reduces available dollars for the specialized furniture and fixtures that can significantly reduce hazardous situations or contribute to safer environments.



Specialized BHC furnishings reduce hazards and contribute to safer environments.

Experts in the field of BHC standards point to a need for improvements in patient safety measures. Two areas of primary focus directly linked to the physical environment identified by the *Joint Commission* as "2012 National Patient Safety Goals" concern hygiene and suicide risk in mental health facilities. In addition, facilities need to consider the likelihood of patient violence, the potential of accidental injuries, and the concealment of contraband as affirmed risks to patient safety.

Taking a focused look at the furniture and fixtures used in patient-occupied areas can improve awareness of both common and latent patient safety hazards which are still present in many facilities, and provide cost-effective solutions for reducing risk.

#### **DIFFICULTIES ASSESSING HAZARDS**

According to the *Joint Commission*, the physical environment is one of the top 5 factors contributing to patient suicides at in-patient facilities. Measures to reduce patient suicides, such as 15-minute checks, aren't reliable enough, according to James M. Hunt, AIA, NCARB, one of the country's foremost authorities on the design of BHC facilities. Hunt cites information from the *American Psychological Association* which reported that in 2003 there were 1,500 suicides at in-patient facilities, a third of those – approximately 500, were patients on 15-minute checks. Backed by more recent data from the *Joint Commission*, Hunt points out that even as patient assessment measures advance, in-patient suicides actually increased from 2010 to 2011. Hunt contends this indicates the need for a more comprehensive approach that includes a patient-centered design model specifically for BHC facilities in order to better address the spectrum of issues relevant to patient safety and suicide risk.

The issues of hygiene and biological hazards call for additional scrutiny with regard to the FF&E that patients come in contact with on a daily basis. Typical infection control measures in general healthcare settings may not adequately address the conditions that exist in psychiatric units. Very often, psychiatric patients are encouraged to circulate throughout various areas of a facility, such as dining halls, group therapy rooms, or lounge areas where they come in contact with more furnishings and surfaces than would a general healthcare patient that is more room-bound or sedentary. There is also more interaction between patients in a mental health treatment facility.

FF&E choices in the BHC environment also need to be evaluated as to how furnishings could be used to conceal contraband, or if patients could possibly weaponize furniture through tampering.

These risks further point out the significant differences between what is broadly referred to as hospital or healthcare furniture, and the necessarily more specific attributes which are required of behavioral healthcare furnishings.

#### **FLOW OF INFORMATION**

Such potential hazards with some FF&E are difficult to foresee, especially for individuals who are relatively new to the BHC discipline, or to a particular patient community. That is true whether the risk has to do with suicide and other acts of violence, or is more related to health and hygiene. Yet the consequences of those selections can result in major disruptions of services, expensive remediation measures, injury, illness, or loss of life. That is why architects, specifiers, interior designers, purchasing agents, and facility managers should be aware of current best practices and seek expert advice in order to make informed, conscious decisions.

In order to shed light on potential hazards and offer various options, James M. Hunt and David M. Sine have authored a practical manual entitled, the *Design Guide for the Built Environment of Behavioral Health Facilities*. The Guide serves as a "products and practices" resource for BHC design professionals, facility administrators, and patient care staff so that they can identify and address environmental risks to patient safety. It is published by the National Association of Psychiatric Health Systems and is available for free download at <a href="https://www.naphs.org/home">www.naphs.org/home</a>.

The *Guide* presents information that is applicable to most BHC facilities treating adult populations – whether the facility is in the planning stages, is newly built, or is candidate for renovation. The recently updated 101-page report fills a void that exists with regard to published documentation of issues regarding FF&E in psychiatric hospitals.

At the core of the problem is that the feedbackloop is often incomplete – with the designer, specifier, or purchasing agent left out of the information loop regarding how a product performed in an actual BHC treatment setting over all applicable time periods and conditions. The Guide is unique in that it helps to complete the loop, soliciting feedback that actually gets relayed back to the manufacturer in a number of cases.

With more than 50 years combined experience, Hunt and Sine share their abundant first-hand knowledge, as well as information gathered from a multitude of clients and colleagues in the fields of behavioral healthcare design, patient care, and risk assessment.

#### **FIRST STEPS**

Hunt advocates that at some preliminary point – as the construction specifications are being established, but before purchase orders are finalized, someone should be responsible for evaluating each and every piece of FF&E proposed to determine:

- 1) If a product may actually have no purpose in a mental health unit; such as cubicle curtains and their related ceiling-mounted tracks. Specifying or installing those items wastes money that could be better spent on more relevant equipment.
- 2) If a product is deemed necessary, such as a shower curtain, a wardrobe with clothes pole, or a cabinet with drawers, would it require modification or special installation to make it safer?
- If an item may actually pose a danger; such as a hard plastic soap dish, liquid hand-sanitizer, table lamp, or glass vase – which would create a significant risk in a psychiatric facility.

That initial review measure would help to reduce the introduction of potential safety hazards into a BHC unit, while at the same time, possibly freeing-up resources for more needed items, and eliminating costly and time-consuming retro-fitting. As Hunt points out, "It is more cost-effective to review the specs and product list beforehand, than to retro-fit something after it is purchased and installed, but the cost of retro-fitting is less than defending against a legal action."

#### PRODUCT USAGE



Level 4 Patient Room

The Guide by Hunt and Sine is continually updated in response to the growing proliferation of FF&E developed and marketed to the BHC sector. Practitioners and facility managers are pleased that more manufacturers are offering product choices, but conversely point out that there are no defined regulations as to what products are appropriate for a given facility or for a particular patient population.

Because of the design of BHC facilities, and the degree to which patients can utilize various spaces, the *Guide* approaches the evaluation of FF&E according to the risk levels associated with various areas within a given unit or a facility. Level 1 – *Staff and Services Areas* present the lowest risk as they are off limits to patients. At the other end of the continuum, Level 4 – Patient Rooms and Patient Toilets, where patients will be alone for long periods of time, and Levels 5a and 5b – *Admissions and Seclusion Rooms*, where patients are unknown to staff or may get highly agitated, present the greatest risk for suicide and other harmful behaviors. All other patient-occupied areas in a BHC facility fall somewhere in between Levels 1-5. Hunt asserts that it is imperative that any FF&E be both appropriate for the particular level for which it is intended, AND conforms to any additional installation/modification measures recommended for that level.

With the *Guide* as a resource for facility design and the procurement of FF&E, Hunt advises that the person or organization which is responsible for a facility's physical environment devote ample consideration to the following 5 dictates for selecting behavioral healthcare furnishings.



Evaluate and select appropriate products with a demonstrated history of performance in a behavioral healthcare environment

# 1) Consider the product manufacturer

Look to manufacturers whose furnishings have a verifiable history in similar BHC settings, and assess if the company demonstrates a long-term commitment to the BHC sector. Assess if the product rep successfully demonstrates key safety and performance features as described in the Guide (or other authoritative resource). Determine if the manufacturer can substantiate marketing claims (there are no legal standards or certifications as to what "psych-safe" is, so work with a manufacturer you can trust). Ask what other facilities are using their products and visit a facility where products are in use. Consider if the manufacturer will be around down-the-road to offer replacement parts or make product modifications that may be deemed necessary in the future.

# 2) Select furniture according to each particular facility

The risks and conditions present in each facility deride the practice of rubber-stamping a given product list as a one-size-fits-all solution. The patient population, the patient care staff, as well as the type of institution and building design make a difference. What is manageable in one setting may not be in another. Hospitals that serve the self-pay patient generally want furnishings with a luxury feel – offering greater comfort and a stylish appearance, while still providing the same level of patient safety. Other facilities may have greater interest in maximizing durability rather than aesthetics. Visitation practices and settings may make the exchange of contraband more prevalent in a given institution, so tables and chairs in lounge or visitation rooms would need to be extremely tamper-resistant and without seams/gaps.

# 3) Examine actual furniture pieces to assess durability and performance in a given location

A catalog image or written description can't convey a product's construction quality or durability. Even with familiar and trusted products, the manufacturing process or material attributes may change over time, resulting in performance differences. Examine samples to determine if they would likely stand-up to rough use. Consider if the proposed table or chair were to be picked up and thrown, would pieces break off accidently, or could pieces be intentionally broken off creating anchor points or weapons? How much effort would it take for someone to defeat the safety feature/measure? If an item were damaged, could it be easily repaired or reupholstered and still maintain all necessary attributes?

# 4) Evaluate actual furniture pieces to assess injury risks

Even if a product is highly durable it can still carry potential risks for injury in a given setting. This is the case with some adjustable metal-framed hospital beds where patients could wedge an appendage between moving parts. Patients on BHC units may habitually work at a fixture or furniture part that could come loose and be ingested, leave a sharp edge, or allow the concealment of harmful contraband. With concerns regarding flammability, confirm that the products are certified to pass State of California, Technical Bulletin No. 133, Flammability Test Procedure for Seating Furniture for Use in Public Occupancies. (Local fire codes and other regulations may also apply.) Determine if furnishings can or should be securely anchored to the walls or floor, be ganged together or ballasted to deter lifting/throwing. Question if a cabinet or other heavy object could topple over and hurt someone or if a patient could climb on top of it to be able to reach something or to jump down on other people. In the Guide, Hunt recommends that patient room furniture be anchored in place with tamper-resistant hardware.

# 5) Consider the cleaning and maintenance requirements and practices



Choose upholstered or non-upholstered options based on the needs of the facility

The cleanability and maintainability of BHC furniture affects patient health and safety with regard to hazards such as contamination from bodily fluids, the spread of air-born infections, and harboring of pests such as bed bugs. The makeup of the maintenance staff and the cleaning practices at a given facility also factor into the proper selection of materials and surfaces. Non-absorbent materials that won't harbor bacteria provide the best protection against germs and diseases. For upholstered furniture, the new high tech fabrics are resistant to stains, liquids, and bacteria, but construction techniques need to be optimal. Consider if cushions can be easily re-covered or replaced. How quickly, how often, and with what products surfaces and materials are cleaned can affect long-term performance. Facilities with bedbug concerns might opt for one-piece molded furniture.

#### CONCLUSION AND ADDITIONAL INFORMATION

Making the right decisions about furnishings and fixtures to use in a mental health facility can have a great impact on patient health and safety. However, those carefully-considered choices can be undermined if the pieces themselves don't last, or the products don't offer the flexibility to contend with future renovations. Quality products that last and maintain a like-new appearance save the time and effort it takes to repeat the selection process over and over because of the need for replacements. Durability, as well as being able to mix-and-match or re-configure groupings can extend replacement cycles, providing greater continuity of standards and saving money.

The information contained in this paper was developed from an interview with James M. Hunt, AIA, President of Behavioral Health Facility Consulting, Topeka, Kansas. Mr. Hunt is a practicing architect and facility management professional with over 40 years of experience in healthcare projects. With his unique expertise, he assists psychiatric hospitals and behavioral health facilities throughout the U.S. Canada improve patient and staff safety, and consults with hospitals and architects on the design, building and remodeling of facilities. In addition to co-authoring the Design Guide for the Built Environment of Behavioral Health Facilities, he regularly publishes articles and speaks at major conferences.

Refer to the *Guide*, as well as the information provided here, for help in planning patient-area furnishings and sourcing products for use in behavioral health environments. To download the latest version of the Guide, visit the *Behavioral Health Facility Consulting* website.

# INDEX OF NORIX PRODUCTS FEATURED IN THE DESIGN GUIDE FOR THE BUILT ENVIRONMENT OF BEHAVIORAL HEALTH FACILITIES

Hilltop Outdoor Furniture - pages 14, 90

DuraVision Quarter Dome Mirror - pages 20, 70

Forte Series Chair, shown with optional upholstered cushion - pages 26, 74

Integra Series Chair, armless - pages 28, 73

UltraMax Chair, armless – pages 28, 33, 73

Safehouse Series Patient Room Furniture – pages 33, 77

Attenda Sleigh Bed – pages 34, 77

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Attenda Four Shelf Storage - pages 35, 78

Ironman Recessed Shelf - pages 41, 45, 67

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Sierra Series mixed materials seating - page 74

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#### **ABOUT NORIX GROUP INC.**

For over 25 years, Norix has offered the most complete line of specialized furniture for behavioral health facilities, developed in consultation with healthcare practitioners. Norix high quality furniture is specially designed for challenging environments - safe, secure and built to last. Norix products go beyond institutional furniture, integrating contemporary design and color with robust structural integrity. The privately held company is headquartered in West Chicago, IL with sales representatives and dealers throughout the U.S. In 2012, Norix launched Safe Environments a news and information blog serving architects, designers, administrators, and facility managers involved in the design, construction, and operation of challenging environments. For more information, call 800-234-4900 or visit: www.norix.com









