Understanding the UNIQUE DESIGN NEEDS of Behavioral Health Facilities

An Interview on Behavioral Health with James M. Hunt, AIA, NCARB

INSIDE YOU WILL LEARN ABOUT:

- Why behavioral health facilities have very different design requirements than general hospitals.
- How different areas of a behavioral health unit have different safety needs that influence design choices.
- Which types of safety measures and products should be incorporated into behavioral health units.

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Understanding the Unique Design Needs of Behavioral Health Facilities

How did you become interested in behavioral healthcare facility design?

About 35 years ago, I was part of the design team that built the replacement hospital for the Menninger Clinic, a psychiatric institution that was originally located in Topeka, Kansas. After the project was completed, the Clinic hired me to be director of facilities management. In this role, I gained important insight into the day-to-day operations of a psychiatric hospital. I came to understand that psychiatric hospitals are almost the exact opposite of general hospitals in how they function and in what patients need. In 2002, the Menninger Clinic moved to Houston, Texas. I am now semi-retired and have my own design consulting company.

In the last 10 years, I have worked on projects in 30 states, applying the concepts I have learned first-hand to help create more effective designs of behavioral health facilities. I believe that behavioral health facilities should strive toward having the comfort of a hotel but function with the security of a prison. While this is of course an exaggeration on both sides, the dichotomy illustrates the difficulty inherent in designing for this setting. Prisons and psychiatric units are the only places I know of where you can lock people in and where there is a concern that people may try to harm themselves. This means that architects and designers need to go to great lengths to make sure behavioral health facilities are comfortable, attractive, and safe.

In 2015, the American Institute of Architects', or AIA's, Academy Journal published an article you wrote entitled, “Behavioral Healthcare Design: Ten Things You Know That Just Ain’t So.” What was the issue or problem you wanted to address about behavioral health design when you wrote this article, and what were you recommending be changed?

I wrote that article because I see that a lot of behavioral health staff sit in meetings with architects, designers, planners, and other experts at the beginning stage of a new design project and they quote common beliefs about behavioral health design that they learned in school or on the job that they think...
The biggest mistake that I see people make time and again is in assuming that the design of psychiatric hospitals and general hospitals is very similar, when in fact, they are not all the same. Yet they seldom stop to consider the validity of these statements or whether there is any data to back them up. When they use these unproven principles to guide their design plans, this can lead to many costly mistakes later since the facility may not meet the needs of the population being served.

This fact prompted me to use a quote by the former baseball great, Satchel Paige, “It’s not what you don’t know that will hurt you; it’s what you ‘know’ that just ain’t so,” to illustrate this point. In this article, I was trying to break down some of the long-held misconceptions that people working in the industry need to overcome. The biggest mistake that I see people make time and again is in assuming that the design of psychiatric hospitals and general hospitals is very similar, when in fact, they are not at all the same. I took on ten things that “just ain’t so” from the perspective of the design team to help staff members explore the validity of some of their long-held preconceived concepts and to encourage them to make more effective choices based on proven facts.

The ten misconceptions I highlighted in this article (note that these are taken directly from the original article, which can be accessed [here](#)) include:

1. “Virtually all behavioral health/psychiatric hospital facilities can be built around a single, state-of-the-art planning model.”
2. “Suicide assessment tools now available are reliable.”
3. “Not all of our patients are suicidal, so we only need a few specially equipped rooms near the Staff Station to monitor suicidal patients.”
4. “15-minute checks provide sufficient observation for patients on suicide watch.”
5. “We put our suicidal patients on one-to-one (with a sitter) to prevent them from committing suicide.”
6. “Building deficiencies can be compensated for by increasing staff.”
7. “Tight fitting doors between patient rooms and corridors pose a risk for ligature attachment, but those doors are a code requirement, so the hazard is unavoidable.”
8. “The blocking or barricading of in-swinging corridor doors is not a problem, so long as furniture is anchored in place (in patient rooms), or staff are present (in activity rooms).”
9. “It is not necessary to protect against ligature attachment for items less than 18 inches above the floor.”
10. “Break-away shower and window curtains provide an adequate measure of safety.”

Can you explain more about why the design of a psychiatric unit is different than a medical unit? What are the variables that must be considered? Is there a “best” layout that fits all hospitals?

In general hospitals, the focus is on treating medical conditions, while in a behavioral healthcare unit, the focus is on treating the psychiatric disorder, keeping the patient safe from self-harm, and protecting the safety of other patients and staff. In the general hospital, treatment occurs mainly in the patient room and often requires space for medical equipment, while in the behavioral health unit, the treatment is more likely to occur outside of the patient room in interview rooms, group rooms, and activity rooms. These different models have significant design implications. In addition, self-harm is not usually a concern in general hospitals, while safety and suicide risk are overwhelming concerns in behavioral health facilities. This means that there isn’t one “best” layout that fits all hospitals, regardless of their use. However, general hospitals often treat people with psychiatric diagnoses. In fact, people on psychiatric medications often have physical diagnoses as well, so having safety design elements in a general hospital (such as some I describe below) can be essential.

What are some of the types of safety measures that you recommend incorporating into behavioral health facilities that are different from the traditional general hospital design?

Behavioral health facilities should incorporate a number of important safety measures into their design and product choices, including enabling constant monitoring of corridors and day rooms, restricted access in and out of the unit, avoiding alcoves and hiding places, and making sure swinging doors can’t enable patients to barricade themselves in their room. In addition, safe design and material choices for psychiatric rooms include shatter-resistant windows and mirrors, beds and other furniture and fixtures secured in place, ligature resistant door hardware and plumbing, heating and cooling systems that resist being vandalized, and concealed plumbing, among many other things.

One of the primary concerns in designing a behavioral health unit or facility is the safety of both patients and staff. Can you explain more about this safety and its impact on planning and design?
Safety is a huge issue, so we need to take steps in behavioral health facilities to create an environment that will resist patients’ efforts to harm themselves or others.

To help people get better and return to functional life outside of the facility, we need to keep patients and staff safe. We need to take steps in behavioral healthcare facilities to create an environment that will resist patients’ efforts to harm themselves or others. The most frequently used method for inpatient suicides is listed as hanging or strangulation, which has a big impact on design for behavioral healthcare facilities. Forty years ago, we did not worry about anything below waist height as a danger for suicide risk, then later the guidelines changed to not worrying about anything below 18 inches from the floor. Now, we know that suicide can be completed by attaching from any level, even from the leg of a chair.

This requires a different way of thinking about things. But even though the standards have changed and the Joint Commission has said for years that suicide reduction is a national goal, the suicide rates don’t seem to be going down. Therefore, we have to stop and realize that although we are doing a lot, our efforts have not been effective. This is because there is no way to construct a built environment that is 100 percent suicide safe and there is also no way for staff to completely identify who is at risk for committing suicide. Often the victim is not whom staff expect. So, architects and designers need to be diligent to design facilities that are as safe as possible.

The “Design Guide for the Built Environment of Behavioral Health Facilities,” originally published electronically by NAPHS and now published by FGI, proposes that the level of concern for patient safety in behavioral health should be stratified into five levels of risk (with five being the highest level of concern) and that designing for safety is not the same in all parts of a behavioral health unit or facility. As a coauthor of this guide, can you explain the five levels and why the design should not be the same throughout the facility?

Back in 2003, we first put out the Design Guide and it has since been updated regularly because things change so quickly. It was based on my observations of dealing with facilities over time. The Design Guide explains that in an inpatient facility, you don’t need to design all parts the same. There are five levels of risk identified within an inpatient facility. In the guidelines, we provide these definitions of the five levels of risk:
Level I: These are areas where patients are not allowed or are under constant supervision, such as staff and service areas.

Level II: Areas where patients are highly supervised and never left alone for periods of time, such as corridors, counseling rooms, activity rooms, and interview rooms.

Level III: Areas where patients may spend time with minimal supervision, such as lounges and day rooms.

Level IV: Areas where patients spend a great deal of time alone with minimal or no supervision, such as patient rooms (private and semi-private) and patient toilets.

Level V: Areas that require special consideration where staff interacts with newly admitted patients who present unknown risks or where patients may be in a highly agitated condition. Due to the unknowns, these areas fall outside of the risk map and require special considerations for patient safety. Such areas include seclusion rooms, examination rooms, and admission rooms.

While these five levels can be a good starting point, it’s important to understand that some rooms can be used in ways other than those that are anticipated. For instance, in the Design Guide we give the example of a day room that is located within the line of sight of the nurses’ station, which is constantly staffed. At night, though, a patient who can’t sleep may go into the room to watch TV and the nurses on duty may be rounding. This means that a patient may be left alone with potential hazards. Therefore, no matter what the name of the room, any area with a high level of privacy warrants a high level of concern if it will house patients who may be actively suicidal.

How did you and your co-author David M. Sine address this challenge you identified in meeting the five defined risk levels?

We created a Patient Safety Risk Assessment Tool (PSRA) that can be used to gauge a patient’s intent for self-harm and opportunity for harm. The PSRA is a tool to help hospital staff and design professionals discuss and decide on many features and elements of the design. It places those who are actively suicidal at one end of the scale, and those with a low risk of self-harm at the other end. We also use a Cartesian matrix to relate the intent of a patient for self-harm with
the opportunity for the patient to be alone. The greater the likelihood of a patient being alone, the greater the risk for self-harm. This means that in situations where the risk for self-harm is high, it is important to use caution in making design and material choices.

Are there specific products and materials that you recommend as “safer” for behavioral health facilities?

In the Design Guide, we talk about a range of products that are more safe for use in the various areas of psychiatric units for various patient populations. A few of the types of products we discuss include: impact-resistant glass products; round or linear surface-mounted, vandal-resistant LED light fixtures; and alarm systems to detect the presence of a ligature on top of a door. The types of products recommended can vary depending on the area and its risk level in which they will be used.

I also want to mention that in March of 2017, the Joint Commission issued a statement that it was placing, “added emphasis on the assessment of ligature, suicide, and self-harm observations in psychiatric hospitals and inpatient psychiatric patient areas in general hospitals” (The Joint Commission Perspectives, 2017). Now, in September of 2017, we are waiting for clarification on how facilities can best meet the latest requirements.

With so much to consider, what advice can you offer to architects and designers to help them get it “right”?

I am a huge believer in the fact that there is not a one-size-fits-all solution. I get disappointed in fellow architects and designers who talk about how to design a “healing” environment because I don’t think even the most beautifully designed space can heal, or cure, patients. That can only be accomplished by treatment, and by the skilled staff who will be treating the patients.

However, the environment can make patients worse. If the environment is prison-like, it may make patients feel that they are being punished for being ill. This can make them more difficult to treat. The most we can hope for as designers is to create spaces that will help patients to relax, be calm, and be open to receiving the treatment that will be provided by staff. Therefore, it is important to take each project on its own accord and try to understand the needs of the facility and the needs of the people they treat.
For instance, many smaller hospitals may have just one behavioral health unit that takes all types of patients. Therefore, I usually start by asking the staff to tell me where the line is. Who is the patient they would not admit? I try to understand this and design the unit to this level. But the staff still must continually assess patients, since needs and conditions can change over time. We try to understand the type of patients we are dealing with and then decide how that plays out in the physical design of the facility.

**Reference**

“The Joint Commission Perspectives,” November 2017, Volume 37, Number 11