

ENHANCING MENTAL HEALTH CARE DELIVERY

Changing the image of mental health care through design solutions

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EXECUTIVE SUMMARY

Research and applications have demonstrated that the care environment directly affects the health and healing of patients. Despite advances in the design of health care environments and our understandings of the relationship between mental and physical health, the design of mental health care spaces lags behind that of other medical settings. A careful examination discovers that changing our approach to the design of units and facilities for mental health care can improve outcomes for patients and satisfaction for staff while helping break some of the societal stigmas associated with mental illness.

INTRODUCTION

In 2010, Congress passed the Mental Health Parity Act that requires group health plans and insurers to ensure limitations applicable to mental health and substance use disorder benefits are no more restrictive than the predominant requirements or limitations applied to substantially all medical/surgical benefits. Under the Affordable Care Act, patient-centered medical homes also must provide timely, comprehensive care, including chronic conditions that begin with mental health/substance abuse disorders (U.S. Department of Health and Human Services, 2011). States are instructed to address mental health/substance abuse services regardless of which conditions are selected for focus.

In the past few years, the United States has seen a gradual progress elevating mental health care to align with other medical care in the eyes of payers and the public (Institute of Medicine, 2006, Agency for Healthcare Research and Quality, 2004; Levin, Hennessy, & Petrila, 2010). Greater understanding of the relationship between mental and physical health is helping advance diagnosis and treatment: Quality of life is measured by many factors including a person's genes, lifestyle, and social and physical environments (U.S. Department of Health and Human Services, 2011). These are also factors of individual mental health (AHRQ, 2009).

Despite these advances in legislation and understanding, mental health care delivery in the United States lags in priority and treatment when compared to other medical care. While health care improvement initiatives have been gaining speed and achieving success over the past several decades, mental health treatment has not received equal attention and funding.

Research now informs us about distinctive characteristics of the health care environment that have an influence on the healing process, staff efficiency, and patient safety (Ulrich, et al., 2008; Sadler, DuBose, & Zimring, 2008). However, the research is fragmented and not focused specifically on mental health environments. By reviewing the background of mental health in the U.S. and compiling recent environmental research, in this paper we begin to fill in the gaps to examine strategies that can improve the design of mental health facilities and, ultimately, improve mental health outcomes.

BACKGROUND

“One person in every four will be affected by a mental disorder at some stage of life...The social and economic burden of mental illness is enormous (World Health Organization, 2001).” Over 13% of adults in the U.S. sought services related to mental health in 2008 (National Institute of Mental Health, 2009). Mental health conditions also affect the younger populations with nearly 38% of American youth being diagnosed with depression and only half of those affected receiving treatment in 2008 (NIMH, 2009). Expenditures for the treatment of mental health and substance-use disorders are projected to reach \$239 billion by 2014 (Levit, et al., 2008). This staggering number exists despite the increase in private financing of services, although public financing remains the greatest funding source for mental health and substance-use services (Levin, Hennessy, & Petril, 2010).

Mental health conditions are also straining our emergency services, with one of every eight emergency cases, equal to

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about 12 million of 95 million annual visits, accountable to mental disorders and/or substance abuse. Emergency departments are typically not equipped to handle mental health patients, and these environments are likewise not suitable for this vulnerable population (AHRQ, 2010). The issue, though, isn't simply about emergency rooms accommodating mental health patients. Mental health care has long been an underfunded and underserved segment of our health care delivery system (Levin, Hennessy, & Petril, 2010). From reimbursement disparities to social stigmas, spaces for mental health illness have lagged in comfort and support when compared to the design of other health care spaces.

Stigmas and discriminations still exist for those affected by a mental health or substance abuse condition (IOM, 2006). These stigmas are gradually receding with increased media exposure of celebrities coping with the same issues. The “freedom” to talk about mental health conditions is upon us and evokes change in how these conditions are treated and perceived in the public setting. Treatment methods have radically evolved. Treatment settings have also drastically changed (AHRQ, 2009).

Awareness of the burdens of mental health have been realized for well over a decade, yet the health care industry lags behind with recognizing mental health as part of a comprehensive wellness directive. In 2006, the Institute of Medicine published a Quality Chasm Series for improving the quality of mental health and substance-use conditions. The Chasm volume suggests an agenda for improving organizational and delivery issues and has become a framework for future comprehensive strategies to improve mental health care (IOM, 2006).

New evidence-based guidelines for mental health and substance-use treatment are being developed. Attention to treating compounding conditions (individuals who have a chronic disease and a mental health condition) is partnered with the adoption of recovery-oriented and illness self-management practices that



support patient preferences for treatment plans (IOM, 2006). Facilities designed more than two or three decades ago may not support modern evidence-based treatment guidelines. Just as the clinical side of mental health is adopting evidence-based guidelines to improve outcomes, planners for mental health facilities need to look at evidence-based design guidelines to improve mental health treatment environments.

SOLUTIONS TO IMPROVE THE QUALITY OF MENTAL HEALTH CARE

A revolution of quality reporting in health care is sweeping the nation (IOM, 2000; IOM, 2001). A greater emphasis in safety standards and patient satisfaction builds a platform for quality improvement. At the same time, hospitals are fighting declining reimbursements, staffing shortages, and mounting consumer expectations. Mental health is no exception to this current situation. The Institute of Medicine set out goals for quality aims at the beginning of the 21st Century (see Figure 1). These aims are applicable to frame discussions around how we design for the next generation of healing environments.



Researchers have conducted recent exhaustive reviews of environmental literature relevant to the design of health care environments. Ulrich et al.'s (2008) report found a growing body of research studies to guide design strategies and support improved health outcomes. Strategies range from single-bed rooms, nature distractions and daylight, appropriate lighting and acoustic levels, and improved nursing unit layouts to improve efficiency. However, research for the design of mental health facilities is limited. We look to the framework supplied by other health care environmental research and psychological research to guide new design strategies for mental health facilities.

As one of the six primary aims of high-quality health care, patient-centered care not only drives treatment for patients, it is also the central focus of designing health care environments. Patient-centeredness is defined as “providing care that is respectful of and responsive to individual patient preferences, needs, and values and ensuring that patient values guide all clinical decisions” (IOM, 2001). Design strategies for health care environments can further enhance this directive. Features that support patient privacy, increase safety, foster family involvement, and reduce stress are implemented to benefit the patient experience. These strategies are perfectly aligned with the design for mental health facilities.

DESIGN STRATEGIES FOR MENTAL HEALTH FACILITIES

Research into the effects the environment can have on the health and healing of patients has been definitive: Create an environment that encourages health and wellness and patients will respond. As the Institute of Medicine noted in its Quality Chasm Series, *Improving the Quality of Health Care for Mental and Substance-Use Conditions*, the approach for mental health care design should not be different. Among the ten rules to redesign health care: Care based on continuous healing relationships; customization based on patient needs and values; evidenced-based decision making; safety as a system priority; and anticipation of needs.

While evidence-based design for care spaces has deinstitutionalized the delivery of care in ambulatory centers, obstetrics,

Six Aims of Quality Health Care

SAFE

Avoiding injuries to patients from the care that is intended to help them.

EFFECTIVE

Providing services based on scientific knowledge to all who could benefit and refraining from services to those not likely to benefit.

PATIENT-CENTERED

Providing care that is respectful of and responsive to individual patient preferences, needs, and values and ensuring that patient values guide all clinical decisions.

TIMELY

Reducing waits and sometimes harmful delays for both those receive care and those who give care.

EFFICIENCY

Avoiding waste, including waste of equipment, supplies, ideas, and energy.

EQUITABLE

Providing care that does not vary in quality because of personal characteristics such as gender, ethnicity, geographic location, and socioeconomic status.

Institute of Medicine, 2001

Figure 1



pediatrics, and medical-surgical units, the lack of investment in mental health facilities have maintained that institutional environment. It is a strategy that – when seen in light of the facts that mental health affects physical health – is counterproductive to our efforts to improving costs and outcomes of our overall health care system, much less mental health care outcomes.

While new investment has been sparse, the investment that has occurred has proven to be anecdotally effective and beneficial, for the patient, for the health care organization, and for the community. The following strategies come from design solutions implemented by health care organizations in the mental health care setting. The ultimate success of these strategies will not be fully understood until comprehensive studies can be completed for numerous facility types. However, these strategies have been developed with multi-disciplinary design teams and utilize available research.

Aesthetic Expression

A well-designed building or department puts forth a statement from the health care organization that they value this patient population and are willing to invest in the environment for mental health patients. Placement of a department or building in the public view helps to destigmatize mental health care and helps to align it with physical health care.

Transitions

Patient rooms designed with a personal entry threshold, a lowered canopy, and a small bench. Space allows for patients to take a moment to mentally ‘transition’ into a more public zone and make choices about moving to different levels of socialization.

Visibility and Control

The elements that create a non-threatening entry to the space can be carried through to the inpatient units, including natural light

and calming colors. Curved nurses’ stations at unit entries that wrap into units give staff complete visibility and control but are not overbearing on patients.

Privacy

Unit designs should protect privacy of patients from public areas. Utilizing a core-model design successfully developed for medical-surgical units, operational traffic and support for patients and staff can be separated from patient corridors. Additionally, the design reduces noise associated with support traffic.

Removal of Barriers

Open versus closed nursing stations can influence how a patient perceives the staff to be approachable and encourages open communication. Likewise, it’s important to balance privacy of both staff and patients.

Private Rooms vs. Semi-private Rooms

While medical-surgical settings are moved to private patient rooms, the debate still exists in mental health settings with a need to balance privacy, safety, and social support for mental health patients.

Natural Daylight

Evidence suggests depression levels can be diminished due to daylight exposure. Some studies have also suggested that daylight has also decreased length of stay in both clinical and mental health patients (Benedetti, Colombo, Barbini, Campori, & Smeraldi, 2001; Beauchemin & Hays, 1996). Ulrich et al. (2006) recommends mental health facilities to be designed with an abundance of natural daylight to help alleviate depression.

Outdoor Spaces

Secure exterior courtyards provide opportunities for patients to enjoy the outdoors and be involved in recreational activities.

Technology and Security

Security should be prevalent but not evident. Motion detectors are being used to detect when a patient has entered a toilet room or left their bed at night. The use of closed-caption television is also prevalent.

Materials, Furnishings, & Artwork

Comfortable furniture helps to reduce the institutional feel of a facility. Calming colors and materials such as wood and carpet create a soothing atmosphere for treatment. Nature-inspired artwork has been linked to reducing stress for patients in health care environments.

The success of the applications of design solutions can only be measured against goals for creating the details. While some of those goals parallel those for any health care unit, the goals also

include outcomes that allow people to successfully function in communal settings. The design solutions outlined previously directly relate to the following outcomes.

Patient Safety

Patient safety remains a top priority, and elements such as high ceilings to eliminate contraband and vandalism, careful consideration of door swings to eliminate potential for barricades, and non-breakable glass partitions are key elements in solutions. However, these can be addressed in a fashion that makes the space feel comfortable and personable, with insulated walls and ceilings to improve sound attenuation and the shared, open floor space allowing for 15-minute, 24-hour patient checks.

Reducing Patient Stress

When a health environment, clinical or mental, evokes stress for a patient, it has adverse outcomes. Conversely, when an environment minimizes stressors and offers restorative features, outcomes can be positively affected (Ulrich, 1991; Ulrich, et al., 2006, Ulrich, et al., 2008). Environmental factors include positive distractions, views of nature, and appropriate lighting and acoustic levels.

Reducing Caregiver Stress

The effect of stress on mental health care workers can impact job satisfaction, performance, and overall well-being. The presence of a staff lounge can improve morale and job satisfaction. Well-designed spaces should encourage professional communication for increased social support. The mental health care workplace should be safe and efficient for all staff.

Fostering Social Interaction

Large, open, daylit dayrooms promote interactions among patients and between patients and staff, and circular rooms for group therapy sessions communicate a sense of parity among patients and providers, reducing the threatening image of author-



ity other arrangements may present. Placement of functions that intentionally moves the patient throughout the unit creates opportunities for more interaction.

Designing for Psychosocial Factors and Sensory Integration

Many patients with a mental disorder may have hypo- or hypersensitivity to sensory stimuli (Sachs & Vincenta, 2011). Meeting psychosocial needs through designed spaces can include the provision of meditation rooms, visitation rooms, and quiet spaces.

Support for Family Members

Unit design, especially for younger patients, should incorporate areas to encourage family participation and group activities. These areas could include counseling rooms, classrooms, and family sleep areas. These areas are often located near unit entrances to protect the privacy of other patients and to minimize disruption.

Sense of Control

From personal vanities to entry thresholds through which patients pass between their rooms and community areas gives patients a sense of respect and control in an environment that is safe for them and staff.

Population Appropriate

Mental health affects all ages, genders, and orientations. For geriatric populations, units need to be designed for those who are mobility challenged, incorporating a wandering path, and strategies to reduce falls. For adolescent/child units, it may be appropriate to separate sleeping rooms into smaller pods for gender, age, or milieu management.

Community Connection

Providing spaces and programs with an enhanced connection to the community, through education or work, can help patients transition back into everyday livelihood after treatment.

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CASE STUDY: AVERA BEHAVIORAL HEALTH CENTER

In 2006, Avera McKennan Hospital made a bold statement about mental health services. Avera Behavioral Health Center opened in Sioux Falls, S.D., as the first freestanding behavioral health facility to be built west of the Mississippi River in 15 years. With a lobby featuring skylights, stained glass, stone, and water features that evoke the natural environment of the Upper Midwest, it is a dramatic departure from the institutional look of historic mental health facilities.

Its effect on patients was immediate. On the day Avera moved people into the new center, a male adult patient explored the new unit and his room. His eyes filled with tears. When asked what was wrong, he responded, "Nothing ... I have never been in a place this nice in my life."

Focused on Patients First

The client and design team began by articulating a shared vision for the project, focusing on patients and their families, the community, and a clear alignment with the hospital's mission. Key concepts developed to guide the project were: World Class Care, Safety/Security, Respect/Dignity, Spirituality, and Hope.

The Team's Goals:

- Making a secure, inpatient, mental illness facility safe, open, soothing and comfortable.
- Addressing the broad scope of pediatric, adolescent, adult and geriatric needs with one facility, yet remaining consistent from one unit to the next.
- Addressing the complex nature of behavioral health with a soothing sense of beauty and hope.
- Helping to break the stigma of fear, shame, isolation and hopelessness of mental illness.
- Creating a facility to be flexible for new programs, patient census changes, and growth for tomorrow.
- Creating a viable new operational model for the hospital's behavioral health care services.

Design Innovations:

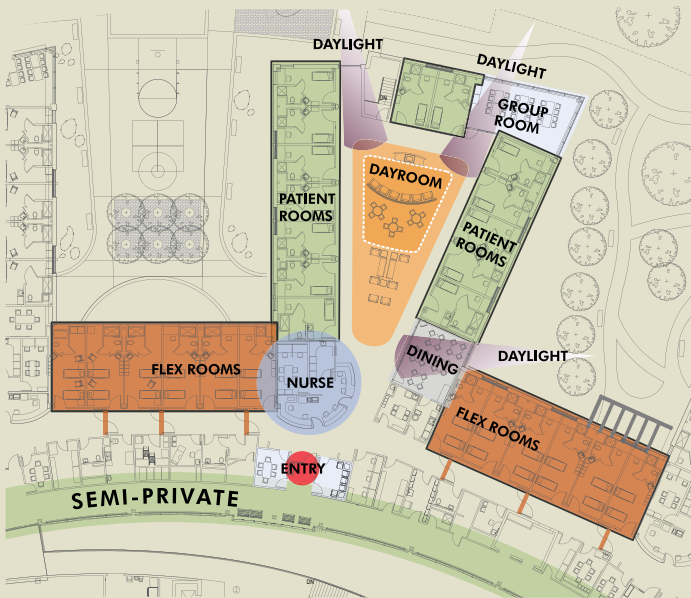
The units are organized along a double corridor system, creating a non-threatening, secure separation of patients from the public and daily support services — increasing patient privacy and decreasing disruptions caused by food, laundry and other deliveries. The dou-

ble-sided rooms establish a new protocol of dignity and confidentiality, especially for family visitation and physician consultation. They also eliminate the negative and often frightening experience of passing through a locked-door system.

The inpatient units' unique shape creates an open, non-threatening space for patients. The curved nurse stations at the entries are the main point of security, wrapping around into the units to allow for complete visibility and control without being overbearing on patients. The central dayroom is open and flexible, to encourage communication and reduce isolation and stress. Skylights, natural light, color, and softer lighting support the comfortable gathering areas. Patient rooms are on the perimeter, designed with a personal entry threshold, a lowered canopy, and a small bench.

The interior corridor between units provides the ability to flex the units' sizes with a series of lockable doors that accommodate census changes easily and maintain unit security.





Dining, group counseling and private counseling services are all contained within each unit.

Design details for patient and staff safety included:

- Open design for required 15-minute/24-hour patient checks
- Non-breakable glass partitions
- High-impact wall construction
- Highly insulated walls and ceilings for sound attenuation
- High ceilings to eliminate contraband storage and vandalism
- Two-way patient doors for emergency access
- Secure outdoor courtyards including play structures for the children's unit

The two-story Light Court at the facility's entry offers an immediate, positive first impression, designed to reduce the anxiety of entering a behavioral hospital. It is also an area for quiet decompression after a patient leaves the medical office building's outpatient clinics.

A combination of design elements and amenities enhance the experience:

- Skylights, warm materials and colors in the two-story atrium create a non-threatening environment.
- The open, glassed area invites individuals inside, eliminating barriers.
- An open stairway to the second floor, variety of seating areas and a quality coffee/snack area provide places of choice for a sense of control.
- A beautiful fountain, meditation room, prominent artwork and a stained-glass feature wall set a quiet tone of comfort, spirituality and care.
- Artwork throughout the facility was commissioned specifically to inspire a sense of hope and faith, based on Avera Health's foundation of faith.

While stand-alone mental health facilities are rare, design solutions exhibited by a facility such as Avera Behavioral Health are showing how space can transform both the delivery of and attitudes towards mental health care. Even entrances can make a statement both to patients and to the community that mental health care is about healing and optimism, not about shame and embarrassment. That message can be conveyed boldly, from the outside and in with skylights, warm materials, and colors creating a non-threatening environment for patients, families, and staff.



A FUTURE FOR MENTAL HEALTH CARE

Space solutions, by themselves, are not going to transform the attitude about mental health care treatment. However, past practices have made it easy to apply a stigma to mental health illness and treatment. Relegated to less-than-prime space, separated facilities, or behind locked doors in larger facilities, the segregation — even if the strategy is well-meaning to protect patient safety and privacy — reinforces the stigma of mental illness.

The strategies outlined, though, demonstrate that the environment in which organizations provide mental health care can change the conversation about what effective care looks like. Applying many of the tested principles from traditional health care environments, organizations can say that the level of care provide to patients suffering from mental illness will be of the same quality as the care provided for other illnesses. Even entrances can make a statement both to patients and to the community that mental health care matters in a comprehensive health care system.

Focusing on the needs of the general health care population, we have the ability to serve entire communities better, not just people suffering from mental health illnesses. Solutions to deliver more effective mental health care services can change the way the general public views mental health care as part of our integrated health care approaches.

The legal and legislative changes that have occurred in recent years have advanced our conversations about how our nation should treat mental illness. Unfortunately, policy talk only opens the door to better mental health care delivery. It will take more to set a stage where that delivery can occur. As states and the nation reassess the way we deliver care and allocate space to take advantage of economies and efficiencies, that analysis must include an examination of the strategies that can change public perception and outcomes for mental health services. The United States and its families can't afford to continue segregating or eliminating behavioral health care spaces from the nation's health care system.

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