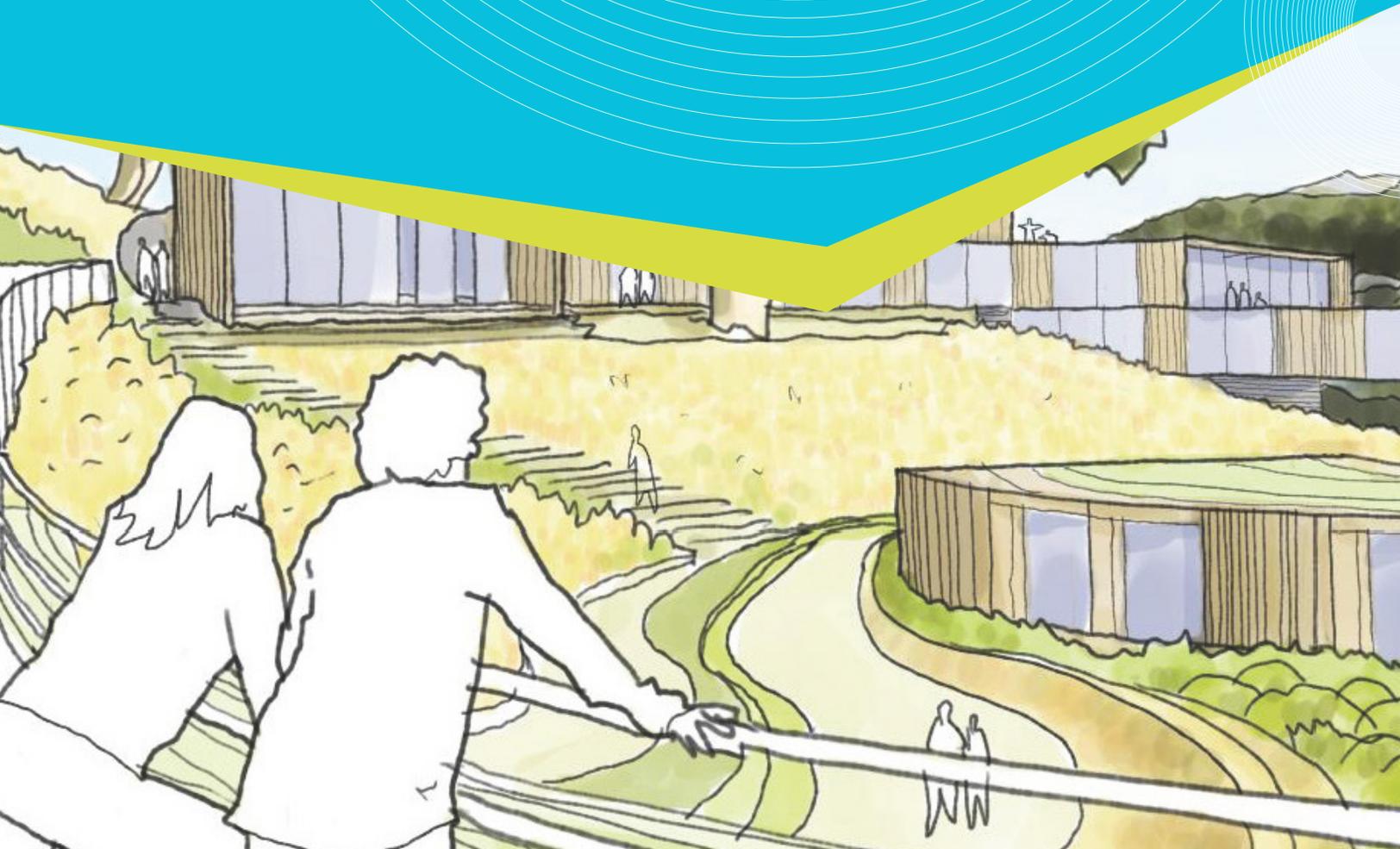


nbbj

Designing Hope

*Design Solutions to Address
the Behavioral Health Crisis*



Hope. It's not a word often associated with behavioral health. But new approaches to the delivery of care and the design of facilities in which treatment occurs show promise in reversing the impact of behavioral health illnesses.

In fact, innovative healthcare systems — in big cities and small towns, from Massachusetts General Hospital in Boston to Montage Health in Monterey — are employing a combination of curiosity, compassion and optimism to change the behavioral health landscape.

And with systems constructing more facilities for behavioral health than almost any other specialty, now is the time to combine these unique interventions with design expertise, to transform the spaces in which care is provided from cold and institutional to safe, uplifting and hopeful.



Behavioral health design should strive to connect patients to one another and to the natural world.

Architecture and design firm NBBJ interviewed behavioral health leaders from Massachusetts General Hospital, Nationwide Children's Hospital, Ohana Montage Health and Unity Center for Behavioral Health at a recent panel discussion to learn how different institutions across the country are addressing the crisis.

These experts outline lessons that could be applied to behavioral health providers throughout the country, including unique partnerships between public and private enterprise, and design solutions that support wellbeing.

Dr. Susan Swick

Physician in Chief and Medical Director, Ohana Montage Health

Dr. Gregory Miller

Chief Medical Officer, Unity Center for Behavioral Health

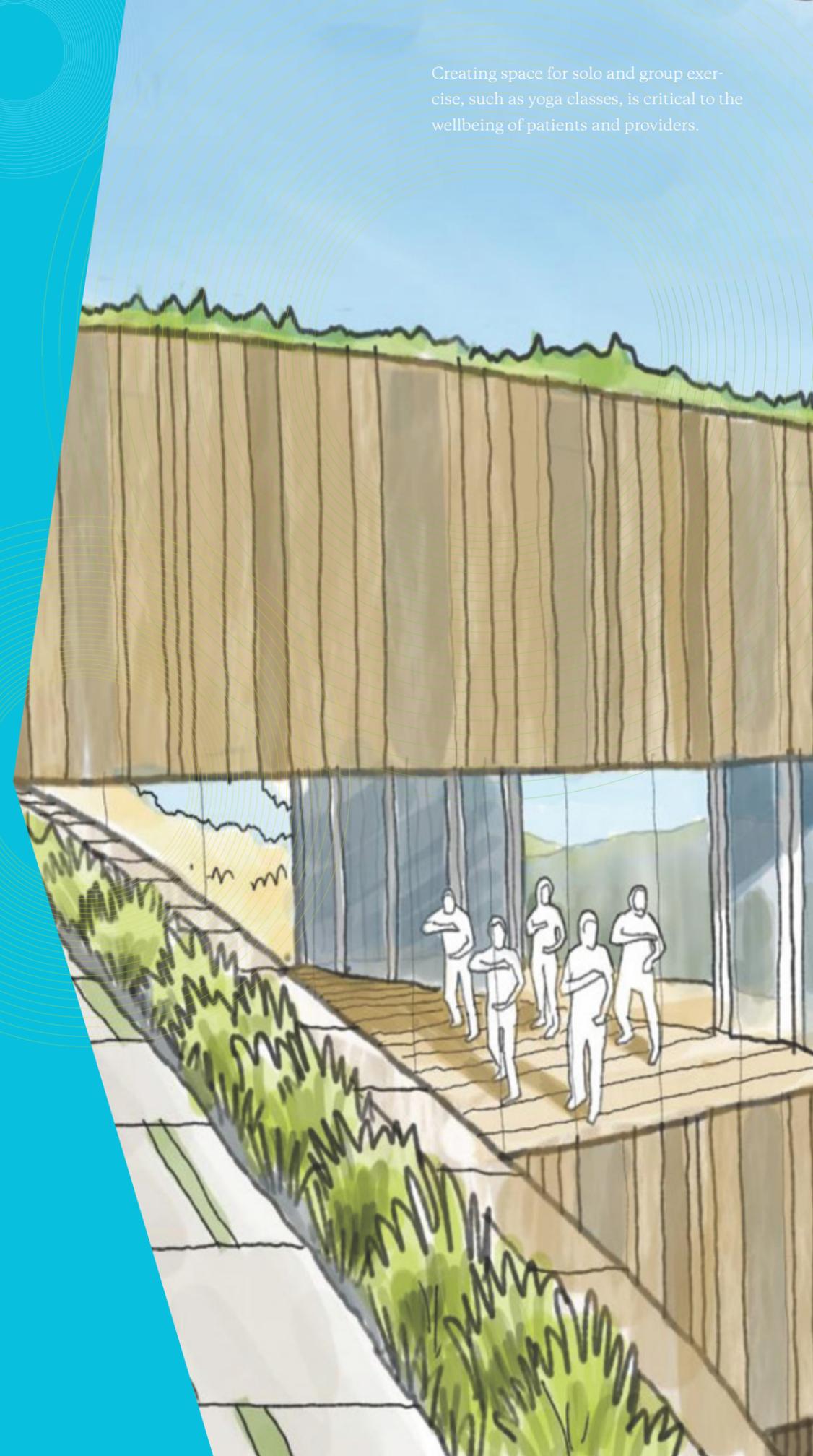
Dr. Curtis Wittmann

Associate Director, Acute Psychiatry, Massachusetts General Hospital

Dr. Delaney Ruston

Filmmaker, speaker and Stanford-trained physician

Creating space for solo and group exercise, such as yoga classes, is critical to the wellbeing of patients and providers.



What is the most impactful change that could be made to how behavioral health is handled in the United States?

Psychiatric illnesses are common and treatable, often curable, but access to effective treatment remains maddeningly difficult in the United States. Yet even with effective treatments, being disease-free is not the same as being healthy. Building mental health can protect against disease and contribute to a life of meaning, with happier relationships, satisfying work and better physical health. Helping people to understand that good mental health is something each individual must develop will not only improve public health, but also diminish the stigma that remains around mental illnesses.

Finally, by helping parents to understand that mental health is something we help our children develop, rather than simply protecting them from mental illness, we contribute greater resilience in children and well-being in families. I have seen the power of these ideas at work in my patients and in my own family and am passionate about contributing to a health care system that builds health.

Dr. Susan Swick

Physician in Chief and Medical Director, Ohana Montage Health

What is an innovative approach/treatment you — or another institution, city, state, country, etc. — are working on when it comes to behavioral health treatment?

The physical environment in which care occurs contributes profoundly to the well-being of patients and caregivers, just as classrooms affect students. Environments create our sense of what is possible, while raising or lowering the volume of what we are hearing in the moment. Environments — including the materials, presence of natural light, fresh air and sounds — have the power to be soothing and quieting or highly stimulating and activating.

In a windowless, crowded psychiatric emergency department in NYC, I experienced the power of music to quiet agitation and comfort the lonely: a cozy office filled with art, books and overstuffed furniture created the personal, warm and reliable setting that allowed effective psychotherapy to take place. In addition, an escalating child was able to go on a walk outside with a trusted adult and was able to naturally re-regulate themselves and not require medications or restraints to do so. The setting never does all the therapeutic work, but the right setting makes it possible for the clinician and patient to do the work together.

Traditional behavioral health facilities are sometimes seen as socially isolating or unpleasant to the senses. How should the design of behavioral health facilities transform to better serve patients (and their families and visitors) and staff?

Behavioral health facilities are still healthcare facilities, and they must ensure safety, including infection control, prevention of suicide and everyone's safety around agitated or aggressive patients. But they must support quality care, also. I think design for highest-quality behavioral health care should create an environment which is soothing — with, for example, lower noise levels, natural materials, neutral colors, predictability and options for retreat or privacy. At the same time, they should be inspiring or support a sense of possibility with higher ceilings, dynamic views, fresh air and ample, diffuse, natural light.

It is critical that these spaces include the potential for agency or choice, more so when patients spend more time in them. We hope that the skills which our patients build in these spaces will remain when they return to their homes, offices and schools. Therapeutic spaces should echo the spaces our patients inhabit. But they can still be special — spaces in which to pass storms and glimpse a new horizon.



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The physical environment in which care occurs contributes profoundly to the well-being of patients and caregivers, just as classrooms affect students.

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What makes you hopeful when it comes to combating the behavioral health crisis?

If design can serve both the passing of a storm and the promise of an open horizon, all while promoting agency, it will be an extraordinary space. When we provide care and offer education about mental fitness in spaces that everyone is delighted to be in, it destigmatizes mental illness in ways that words and statistics cannot. When we provide care in humane spaces that promote autonomy and individualism, alongside nurturing connections between patient and clinician, between family members, among colleagues, between friends, and across a community, we support mental fitness in our patients, ourselves, our colleagues and our guests.

What is the most impactful change that could be made to how behavioral health is handled in the United States?

The biggest issue currently is a lack of resources. This crosses many domains, ranging from a lack of true parity, which makes recruitment of providers more difficult; a lack of places to refer patients; inadequate inpatient and state hospital beds; and a lack of social resources and programs, which impedes our patients' ability to engage in treatment.

An increased availability of resources, both within the mental health field and as social supports, would allow for meaningful and novel approaches to be implemented. Until then, even in relatively resource rich-environments, we don't have enough to offer our patient populations.

What is an innovative approach/treatment you — or another institution, city, state, country, etc. — are working on when it comes to behavioral health treatment?

At Massachusetts General Hospital we have been redesigning our dedicated emergency psychiatry space and increasing both our capacity and attention to patient comfort. We are moving to minimize the use of inappropriate clinical space and attempting to allow for a more open design to allow more patient interactions and increased programming while patients are boarding in the emergency department.

Concurrently, we are working to initiate treatment from the point at which patients arrive to the ED and are screened by emergency medicine. Both of these initiatives are designed to decrease the amount of boarding that takes place and the length of stay for patients who are boarding.

Traditional behavioral health facilities are sometimes seen as socially isolating or unpleasant to the senses. How should the design of behavioral health facilities transform to better serve patients (and their families and visitors) and staff?

There is always a balance between the need for safety on the one hand, and maximizing patient comfort, freedom and environments on the other. Increasing safe open spaces to allow for connection between patients, between patients and staff, and between patients and their families and visitors is critical.

Ideally these settings would make better use of natural light or, if possible, outdoor spaces — though this is very challenging in city environments. It may be possible to create a more natural space indoors through the use of plants and more creative design.

Finally, there is increasing attention to the role of physical activity and exercise in mental well-being, and even suggestions that exercise may be an effective treatment for several mental health conditions — a creative design would work to implement increased walking space and/or a semi-dedicated space for exercise with associated programming to implement positive habits or continue them while patients are hospitalized.

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Ideally [behavioral health] settings would make better use of natural light or, if possible, outdoor spaces.
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Dr. Curtis W. Wittman

Associate Director, Acute Psychiatry,
Massachusetts General Hospital

What makes you hopeful when it comes to combating the behavioral health crisis?

I'm made hopeful when I see the response to the opioid use disorder epidemic. Although it was delayed, across the country there has been a dramatic increase in the commitment of resources to treatment and to novel programs within hospitals and communities. These resources have been a blend of government resources along with hospital and private resources.

The mental health epidemic does not have the same dramatic statistics regarding increasing death rates, but arguably it extracts an even larger price from a larger number of people. Should we be able to learn from some of the lessons of the opioid crisis — rapid access to treatment, de-stigmatization, increased recovery supports — we could have a similar impact on improving our country's approach to behavioral health.

What is the most impactful change that could be made to how behavioral health is handled in the United States?

The development of a truly integrated system of care — not between behavioral health and physical health, but within behavioral health itself — is one change. Care for episodes of illness has become spread out between disparate providers, such as inpatient, partial hospitalization programs, outpatient, case management, etc. Often one team knows nothing about the real handoff information necessary to change the level of care smoothly. Delivering care from truly integrated systems would make a huge difference. In addition, community services need to be built out and invested in.

What is an innovative approach/treatment you — or another institution, city, state, country, etc. — are working on when it comes to behavioral health treatments?

The concept of Psychiatric Emergency Services, i.e. specialty mental health care that is immediately accessible, is an innovation that mostly benefits the severely mentally ill (SMI), a poorly-resourced population. It helps to rebalance the needs of the SMI population when community services are inadequate or poorly accessible. It should be seen as a temporary approach, providing access during a period of transition to more richly-resourced community services. When the community is adequately resourced, the need for such higher-end services will decrease.

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When the community is adequately resourced, the need for such higher-end [psychiatric emergency] services will decrease.

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Traditional behavioral health facilities are sometimes seen as socially isolating or unpleasant to the senses. How should the design of behavioral health facilities transform to better serve patients (and their families and visitors) and staff?

I like the design of progressively expanding “spheres of community.” For example, in an inpatient unit or subacute unit, the most intimate sphere of community is where one sleeps and tends to personal hygiene. Units where patient rooms are clustered internally with progressively expanding bands — such as an area for dining and group treatment, with activities that emerge into a larger sphere for consultation with providers, school service and family and visitation — tend to mimic life in the communities that we live in.

What makes you hopeful when it comes to combating the behavioral health crisis?

I am hopeful regarding the progression of knowledge and treatments. However, I am disappointed that care has become, over the course of my career, progressively more disintegrated and confusing. Systems do not converge to provide cohesive treatment. Patients are confused by the systems they are involved in. Providers, likewise, are confused. Hopefully this will be the next wave of progress.

Dr.
**Gregory
Miller**

Chief Medical Officer,
Unity Center for Behavioral Health

Dr. Delaney Ruston

Filmmaker, speaker and Stanford-trained physician

Could you tell us a bit about your upcoming documentary, Screenagers NEXT CHAPTER, about children with anxiety?

We live in a screen-saturated world, and we're examining how this affects teens' emotions and communication preferences. In our film, we speak with teens about their personal stories, and talk with parents as well as schools — about what they are doing and how they can better support our teens. The film also explores my daughter's experience with depression and my role as a parent.

A key goal of our film is to help all teens develop and build skills to thrive with hard emotions, such as stress, clinical depression and anxiety. We're also motivated to raise awareness, to increase the national discussion surrounding teens and mental health. There are lots of interactive interventions, but it can be complicated and painful for our teens (and parents, too).

We're so excited that this film uncovers lots of different solutions to a troubling situation. It also ramps up the science that shows why the teenage years are such an emotionally complex time. Teens are not just moody — their brains are undergoing rapid physiological changes.

What are the most impactful changes that could be made to how behavioral health is handled in the United States?

The first is that we could revolutionize the system to fully appreciate the magnitude of solutions available, particularly people power — our support teams, teen peer groups, school psychologists, etc. From my personal standpoint, my father with schizophrenia bonded with his case workers in such a profound way. I think we need to further contemplate and build this task force. The power of positive, supportive relationships is fundamental.

The other is integrating medical and behavioral health into one. Behavioral health is complex, and for some conditions, like depression, we need lots of mental health and social services support. To strengthen the link between the two healthcare areas, while training professionals (and paying them a living wage) as well as community members and peers, would go a long way.

“It is critical we create welcoming spaces for behavioral health discussions, programs, training interfaces and more.”



What is an innovative approach/treatment you — or another institution, city, state, country, etc. — are working on when it comes to behavioral health treatments?

As a Fulbright fellow, I made films in India. During my time there, I spoke with and filmed mental health workers across the country and examined their peer-training system. Globally, I think the peer movement needs more funding and resources, particularly targeting college-age groups and above as mentors.

Traditional behavioral health facilities are seen as socially isolating or unpleasant to the senses. How should the design of behavioral health facilities transform to better serve patients (and their families and visitors) and staff?

If the right presentation and program is offered through a medical setting, the community will come. Seattle has a “birds and the bees” program, where parents come with pre-teens to discuss the impacts of puberty. It is critical we create welcoming spaces for behavioral health discussions, programs, training interfaces and more.

What makes you hopeful when it comes to combating the behavioral health crisis?

People are so eager to talk about these issues — and adolescents are overall being raised in environments that are more open to talking about these topics. Thankfully, this cultural mindset of greater acceptance is pulling the cover off the silence around mental health issues. It only hurts the situation by not discussing it. By seeing positive stories and showing that talking more about behavioral health leads to better outcomes, we'll continue to benefit, as a community, in our families, and as individuals.

Ten Principles for Better Behavioral Health Outcomes

Behavioral health facilities have historically elevated the need for safety above the comfort of patients. Yet research shows that a calming, homelike setting with access to nature helps patients regulate emotions and, in some cases, take little or no medication. Here are ten design principles NBBJ uses to balance patient and safety needs when creating more therapeutic environments.

- 1**
Design with nature.
- 2**
Help patients feel at home.
- 3**
Allow a sense of control.
- 4**
Reduce stress with quiet.
- 5**
Make care more accessible.
- 6**
Ensure patient privacy.
- 7**
Provide positive distractions.
- 8**
Offer spaces for respite.
- 9**
Prioritize safety ...
- 10**
... but safe doesn't have to mean institutional.

1

*Design with
nature.*

Access to nature — via views or courtyards, walking paths and outdoor gardens — provides patients with positive distractions, which have been shown to reduce stress and improve outcomes. Daylight and fresh air also promote recovery from depression and bipolar disorders. Circadian lighting, such as tunable LEDs that mimic sunlight, may also be used to synchronize sleep and wake patterns.



The Meridian Center for Health seamlessly integrates behavioral health with clinical and social services — even space for community groups — all within a therapeutic landscape setting, to support healthy living in an underserved Seattle neighborhood.



2

*Help patients feel
at home.*

In order to ease patients' transitions into and out of a facility, a homelike setting with flexible common spaces and familiar materials should be provided. This can include wood, carpeted bedrooms, community kitchens, lounge furniture and other elements.



3

Allow a sense of control.

Giving patients more control over their environment has a calming effect. A diversity of safe spaces, controllable lighting and semi-operable windows help give patients more personal autonomy.



The Southcentral Foundation's Nuka model of care for Native Alaskans integrates behavioral health with dental care, wellness, physical therapy and education, all within one building.

4

Reduce stress with quiet.

Care should be taken to minimize ambient noise, as doing so has been shown to decrease stress levels. This can be accomplished through material and layout considerations, such as placing seclusion rooms or other potentially noisy spaces outside the main corridors, day-rooms and therapy areas.

5

Make care more accessible.

Integrating outpatient behavioral health services into primary care or other convenient health locations can be an effective way of making care more accessible. This can also support a multidisciplinary approach that addresses the interrelationship between behavioral and physical health issues.



6

Ensure patient privacy.

Patient privacy is a key concern, particularly in busy outpatient settings. Sound-absorbing doors, sound masking and other features can be used to prevent conversations in therapy rooms from being overheard. Entrances and waiting areas can also be designed to provide direct, secluded access to offices, safeguarding privacy.



7

Provide positive distractions.

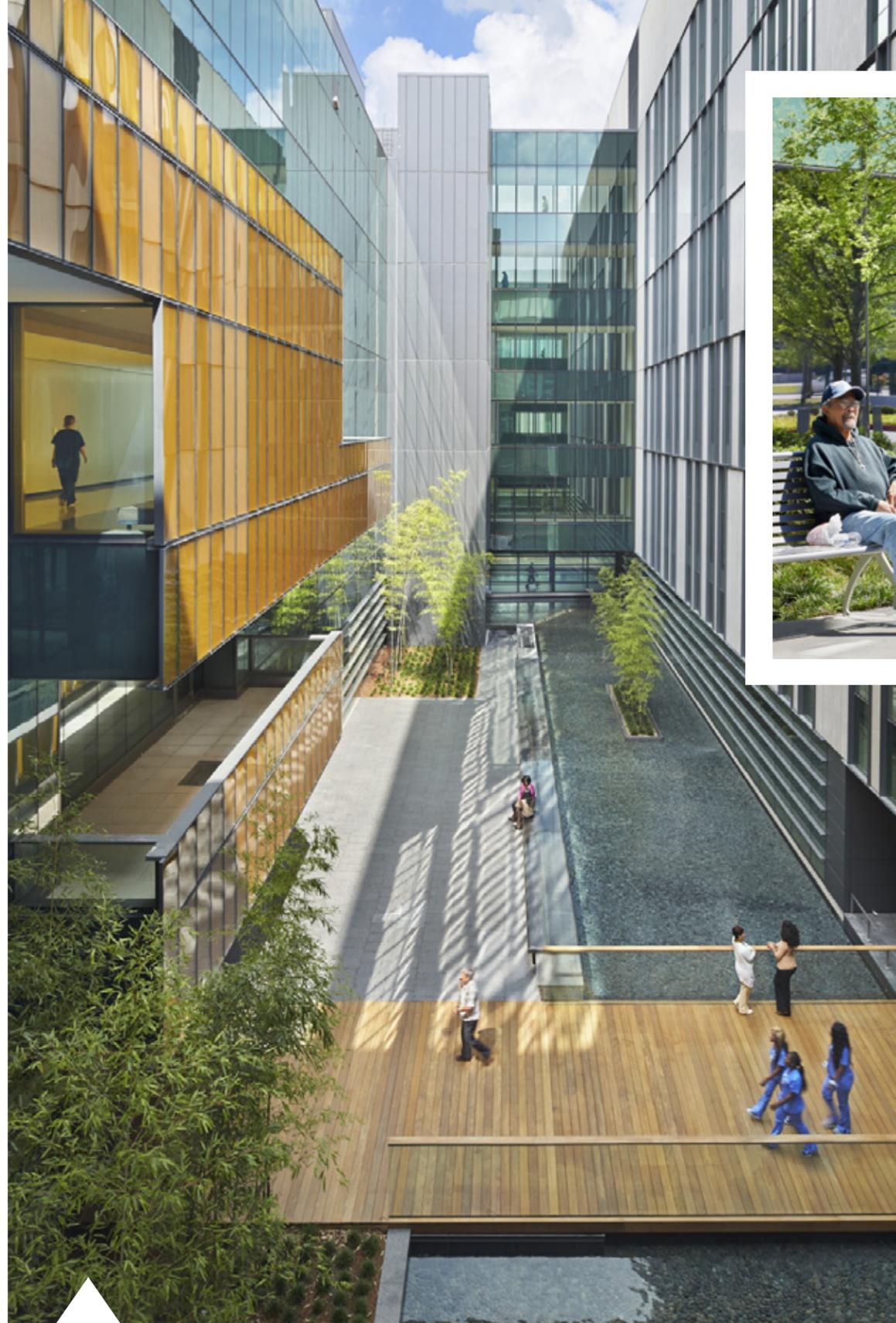
Positive distractions which support mental wellbeing can include fitness rooms and gyms, game rooms, workshops and theaters and outdoor grounds for physical activity. These distractions may be even more important for children.



8

Offer spaces for respite.

Quiet, convenient areas for relaxation, like gardens and meditation rooms, can help patients relax and de-escalate aggression. Single-patient rooms with private bathrooms can reduce stress by giving patients privacy and respite.



As part of its mission to elevate care for all, University Medical Center provides behavioral health care alongside inpatient and outpatient services. Organized around cooling, calming courtyards, the facility uplifts the senses, builds community and moves a city from disaster to health.



New Orleans' VA hospital treats the unique interrelationship between physical and mental health in veteran patients. It integrates a continuum of behavioral health services, from an acute inpatient unit to outpatient clinics and community recovery programs.

9

Prioritize safety ...

Basic safety measures aim to ensure visibility and the physical security of patients and staff. Central nursing stations with safe, yet non-intrusive barriers, halls and rooms designed for high visibility, rooms with enhanced security and supervision, and furniture and finishes which are tamper-, impact- and ligature-resistant are all key security elements.

10

... but safe doesn't have to mean institutional.

Passive security strategies aim to hide or minimize security features, creating a far less institutional feel. For example, nursing station barriers may be disguised as design features, and landscape elements can be used as perimeter barriers.



Tammy Felker

Registered nurse
and architect, NBBJ

“Our spaces and places convey meaning, and it is crucial that we send the message that behavioral health patients are valued.”

As one of the few nurse-architects in the country, NBBJ's Tammy Felker plans the next generation of behavioral health facilities. Having recently completed several projects, Tammy shares the lessons she has learned about how to rethink the design of behavioral health environments.

You plan spaces across specialties, but you are especially focused on behavioral health facilities. Given your expertise, how should these spaces evolve?

In the past, behavioral health spaces were designed like jails and featured prison-grade materials, such as tamper-proof lighting fixtures and plumbing. As a result, these environments feel institutional and cold.

Thankfully a shift in mindset is starting to transform the industry, creating a normalized care experience so patients feel safe, but also valued. Fixtures are becoming less institutional-like, and there's a holistic emphasis on providing warm and therapeutic spaces.

One specific area we're investigating is the integration of circadian lighting. Regulating sleep-wake cycles is especially important to the behavioral health population for healing, and it is ripe for further study and analysis.

What are the most impactful changes that could be made to how behavioral health spaces are designed?

The first change is to rethink spatial density. Studies show that too many people in a small space can increase aggression. In behavioral health centers, giving enough square footage beyond the code minimum, so everyone has their own space, can make a difference in creating a normalized environment.

Another is to provide room for physical activity, from yoga to treadmills. Research demonstrates the positive benefits of exercise on anxiety and depression. Current building codes for inpatient behavioral health units don't require exercise areas, but as a result, they are missing a great way to support the link between lifestyle choices and behavioral health.

A third element to consider is nature integration, ideally with access to the outdoors. Design that addresses our primal connection to nature can help decrease blood pressure and the use of pain meds. Even an area for horticultural therapy and opportunities to take care of plants can help.

Why should investments in treatment and design go hand-in-hand?

Our spaces and places convey meaning, and it is crucial that we send the message that behavioral health patients are valued. In fact, it may be more important to have a well-designed behavioral health facility than a typical healthcare space. That's because behavioral health patients typically spend very little time in their bedroom and are constantly interacting with staff and other patients. Meals are usually in a group setting, and there are different therapy sessions, from art to group to individual sessions. Design needs to be supportive of this treatment model.

What makes you hopeful when it comes to addressing the behavioral health crisis?

The first is the Affordable Care Act and healthcare parity laws that require treatment of mental illnesses just like physical illnesses — and that people can get insurance that covers behavioral healthcare. Funding to train more doctors, nurses and other staff that specialize in behavioral health is another. In Washington State, Governor Jay Inslee is proposing an initiative that puts funding in place for a new 150-bed behavioral health teaching hospital in Seattle, along with community behavioral health centers across the state.

NBBJ designs communities and environments that enhance people's lives and foster healthy lifestyles.

BEHAVIORAL HEALTH EXPERIENCE

Chase Brexton Behavioral Health Services / 15,000 sf of behavioral health treatment space within a primary care clinic / Baltimore, MD

Coney Island Hospital / 42,200 sf, 60-bed inpatient and outpatient behavioral health services within a hospital / Brooklyn, NY

Harborview Medical Center Inpatient Expansion / 22,000 sf, 22-bed psychiatric intensive care unit / Seattle, WA

Legacy Health, Unity Center for Behavioral Health / Lean Services / 105,500 sf, 107-bed behavioral health center / Portland, OR

Nationwide Children's Hospital, Big Lots Behavioral Health Pavilion / 200,000 sf, 120-bed behavioral health hospital / Columbus, OH

NeighborCare Health, Meridian Center for Health / 18-room behavioral health treatment space within a primary care clinic / Seattle, WA

Overlake Hospital Medical Center, Project FutureCare / 11,000 sf to 16,000 sf, 14- to 22-bed inpatient behavioral health unit currently in design / Bellevue, WA

PeaceHealth St. Joseph Hospital / 35,000 sf behavioral health addition as part of a greater behavioral health master plan / Bellingham, WA

Seattle Children's Hospital, Odessa Brown Clinic / 43,000 sf, eight-room behavioral health treatment space within a children's clinic / Seattle, WA

Southcentral Foundation, Primary Care Center / 9,000 sf, 48-room behavioral health treatment space within a primary care clinic / Anchorage, AK

Southcentral Foundation, Valley Native Primary Care Center, Behavioral Health Services / 5,200 sf, 21-room dedicated behavioral health treatment space within a primary care clinic / Anchorage, AK

Swedish Medical Center, Ambulatory Care Center / 2,000 sf, four-room dedicated behavioral health unit within an emergency department / Edmonds, WA

Tacoma General Hospital, Inpatient Adolescent Psych, Facility Predesign / 19,900 sf, 28-bed unit build-out to serve adolescent patients / Tacoma, WA

University Medical Center New Orleans, Inpatient Behavioral Health / Two 24,000 sf, 30-bed (10 private rooms, 10 double rooms) inpatient behavioral health units and dedicated 11,000 sf (six assessment rooms, 20 private observation rooms) behavioral health emergency department / New Orleans, LA

University of Washington Medical Center, Montlake Tower Expansion, 7NN Inpatient Bed Unit Remodel / 4,000 sf remodel of inpatient bed space within a larger inpatient unit / Seattle, WA

Yellowhawk Tribal Health Center / 4,600 sf, 18-room behavioral health treatment space within a clinic / Pendleton, OR

