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WHITE PAPER

Improving Behavioral Health Care in the Emergency Department and Upstream

AN IHI RESOURCE

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Executive Summary

This IHI White Paper provides actionable guidance for hospital emergency departments and their community partners who are committed to creating a compassionate, seamless, and effective system of care that is respectful of and works with patients with mental health conditions and substance use disorders who present to the emergency department. The paper describes current gaps in care for this population, tested improvements to close those gaps, and resources and tools that may provide additional support. The long-term goal of this work is to ultimately build systems of care in every community in the US so that needless pain, suffering, and deaths from untreated mental health conditions and substance use disorders are addressed and eliminated.

The paper includes:

- A framework for a better system of care that comprises four key components: Processes, Provider Culture, Patients, and Partnerships;
- High-leverage changes and specific change ideas;
- Suggested measures; and
- Practical tips and examples.

Introduction

Throughout the United States, individuals with mental health conditions or substance use disorders frequently present to the hospital emergency department (ED) for care, yet many ED teams lack the capacity to adequately support these individuals. This dynamic often results in prolonged periods of "psychiatric boarding," where patients wait in the ED for transfer to another care setting; lack of care coordination and care management; and few alternative options to the ED to prevent and address crises. These issues contribute to poor patient outcomes and experience of care that may have recurring and serious consequences.

In addition to making improvements in the ED to address these issues, it is integral for health systems to also partner with community-based organizations that provide supportive services for individuals *before* a crisis brings them to the emergency department. Mental health and related social needs can often be met in the community, leading to better quality and experience of care and lower costs than care provided within a health care setting. This "upstream" work is essential to ensure that individuals with behavioral health needs receive the right care, in the right place, at the right time and that emergency care is appropriately accessed in emergencies.

Working harder will not address these challenges — system-level changes are needed. To develop solutions, the Institute for Healthcare Improvement (IHI), in partnership with Well Being Trust, convened eight US hospitals in the 18-month Integrating Behavioral Health in the Emergency Department and Upstream (ED & UP) Learning Community from March 2018 to August 2019. The initiative's aim was to improve patient outcomes and experience of care and staff safety while decreasing avoidable repeat ED visits for individuals with mental health and substance use disorder issues who present to the emergency department.

Hospitals participating in the initiative demonstrated that it *is* possible to address these barriers and improve outcomes and experience of care for patients, their families, and ED staff — even in a deeply fragmented health care system and with payment models that do not yet adequately support transformative efforts. The white paper presents the learning from these eight pilot hospitals, including specific changes they tested, suggested measures, practical tips, tools, and resources that other health systems can implement to begin improving care, both within the ED and in the community, for patients with mental health conditions and substance use disorders.

Note: While the term "behavioral health" is commonly used to encompass a wide range of conditions, in this paper we refer specifically to patients with mental health conditions and substance use disorders presenting to the emergency department.

Essential Elements for Improvement

Based on the experience of hospitals participating in the ED & UP Learning Community, four elements emerged that form the critical foundation of effective improvement.

Culture Change Is at the Heart of Real Progress

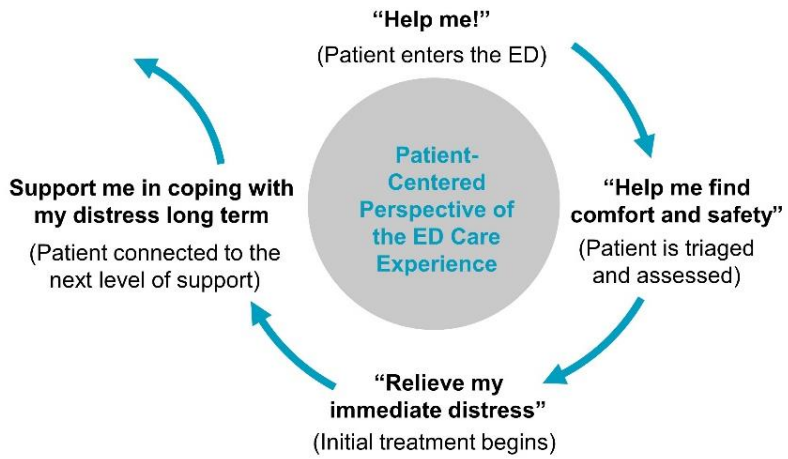
Culture change in the ED is fundamental for improving care for individuals with mental health conditions and substance use disorders, including four key factors: manage patients presenting with an acute event using similar ED processes for triage and care of other medical conditions; equip ED teams to provide trauma-informed care; incorporate the patient perspective into improvements; and seek opportunities to reduce stigma and inequities.

This cultural shift is supported by the Emergency Medical Treatment and Labor Act (EMTALA) guidelines that define psychiatric emergencies presenting to the ED as medical emergencies, thus requiring the same obligations: 1) a medical screening examination by a licensed independent practitioner to determine if an emergency medical condition exists; 2) if an emergency medical condition exists, the ED must attempt to treat/stabilize the condition within its capacity and capability; and 3) if unable to stabilize, the ED must either admit to inpatient or transfer to another facility with the capacity and capability to stabilize the condition.[1]

This is a significant shift in approach from "sedate and wait" (for an admission or transfer) to "triage, assess, and initiate treatment" within the ED whenever possible. Teams in the Learning Community tested this trauma-informed care approach by providing training and ongoing support for ED care teams as they made changes in practice during patient care encounters.

Changing ED culture and care delivery for individuals with mental health conditions and substance use disorders also requires incorporating the patient and family perspective on the ED care experience. Figure 1 illustrates a patient-centered perspective on a traditional ED patient flow process: entry, triage and assessment, initial treatment, and disposition (discharge, admission, or transfer to the next level of support).

Figure 1. Patient-Centered Perspective of the ED Care Experience for Individuals with Mental Health Conditions and Substance Use Disorders



Developed in collaboration with the Providence St. Joseph Health team.

Closely related to building a trauma-informed culture is acknowledging, identifying, and eliminating inequities in the care system for mental health conditions and substance use disorders. For this population, care is often either inaccessible or inadequate to address immediate and long-term needs. However, the challenges for those living with mental health conditions and substance use disorders are often compounded by issues of race, gender, age, sexual orientation, Zip code locations, payer status, and other identifying characteristics.

It is necessary to view the work through an equity lens to fully understand trauma and its effects on individuals and populations. Exposing and addressing issues of stigma associated with behavioral health issues, unequal treatment, bias, and institutional forms of racism and discrimination are central to improving care for this population.

Senior Leadership Actions Support and Promote Improvement

To fully test and implement changes that could really have an impact on patients, families, and ED staff, Learning Community teams recognized the need for support from their hospital and health system leaders. Each team had a designated senior sponsor who met regularly with the team, helped them stay on track, addressed organizational issues that presented challenges, and were especially helpful in making connections with community-based providers and organizations.

It is the responsibility of hospital leaders to ensure adequate resources for ED staff, including consultation, mechanisms for rapid follow-up appointments, physical facilities in the ED, and staff support.

Clinical and administrative leaders played key roles in supporting and guiding the Learning Community ED teams, including the following:

- Showcased and built support for the work (e.g., attended Learning Community kickoff events, invited the ED team to present to senior leaders, discussed the work in system-level meetings);
- Supported the ED improvement team (e.g., engaged in weekly touchpoints, attended team meetings, identified tools and resources, helped prioritize change ideas to test based on what was both strategic and feasible for the hospital and the ED team, ensured operational barriers were removed);
- Connected with external partners (e.g., negotiated with managed care providers, supported meetings with and an open house for community-based partner organizations, explored ways to connect community organizations through electronic data sharing);
- Built sustainability for the work (e.g., negotiated solutions for crisis/linkage services to be reimbursable, supported the addition of psychiatrists to clinical leadership, assisted with obtaining philanthropic funding for trauma-informed care training); and
- Led plans to expand the work, including how to share lessons learned and spread improvements throughout the health system.

An Optimal Care System Spans Hospital and Community Services

Individuals with mental health conditions and substance use disorders and their families need one system of care that provides compassionate, coordinated, and easily accessible assistance seamlessly between community and hospital settings. The framework component focused on strengthening relationships with community partners was a unique aspect of the Learning Community, providing specific improvement ideas to help ED teams build connections and coordinate services for this population. Learning Community ED teams, often with assistance from hospital leaders, worked to reinforce existing partnerships with providers and community agencies in addition to building new partnerships based on patient needs.

A promising area for hospitals to further explore is leveraging population health initiatives to strengthen existing partnerships and increase the type and number of community partners. Hospitals can play an important role, together with their community partners, to advocate for changes in local systems of care, including expanding available resources as needed.

Demonstrate Impact with Both Stories and Data

Based on data collected by participating teams over the course of the 18-month Learning Community, some promising early results include reduced ED revisits within seven days, reduced ED length of stay, and a reduction in the number of patient-to-staff assaults and use of restraints. In addition to collecting data, teams also collected stories about the impact the changes they tested had on patients, families, and staff (see the accompanying improvement stories[2]). Stories in combination with data demonstrate the full impact of the work, reflecting both the "head" and the "heart" of the teams themselves.

While process improvements and system-level changes are both needed to organize people and resources, it is the creation of a culture of caring that will drive continued change and improvement. This is perhaps the most important insight from the Learning Community.

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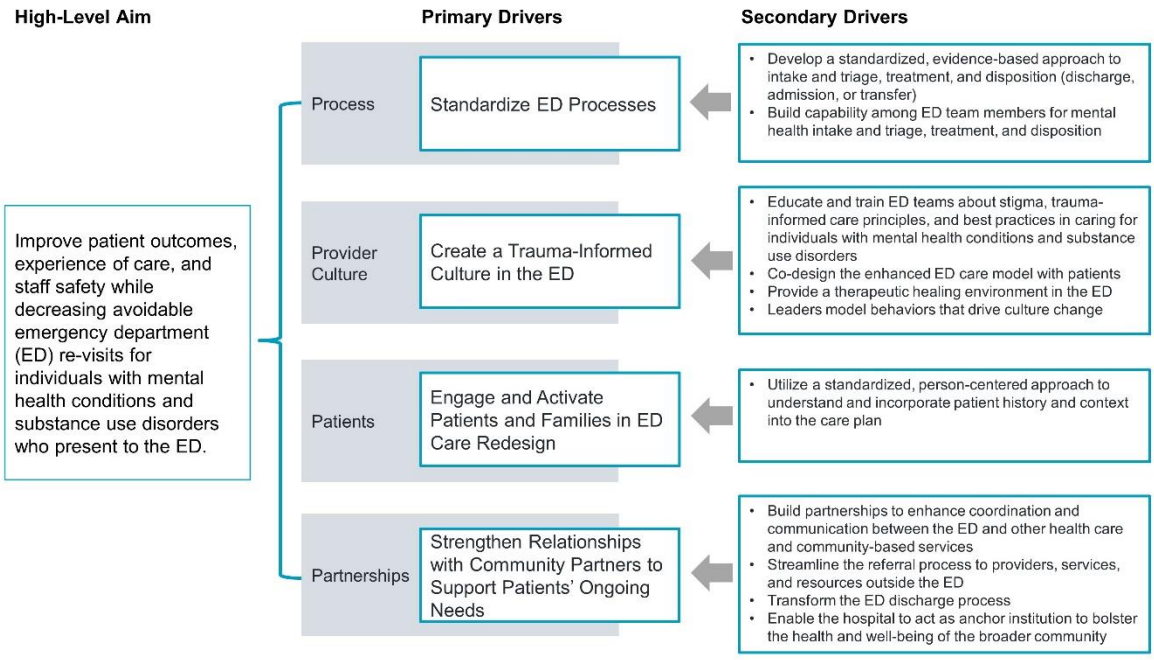
Framework for a Better System of Care

The driver diagram in Figure 2 is a guiding framework for hospital emergency departments and their community partners to implement evidence- and experience-based changes to improve patient outcomes, experience of care, and staff safety while decreasing avoidable ED revisits for individuals with mental health conditions and substance use disorders who present to the emergency department.

The first iteration of the driver diagram was derived from a thorough literature review and expert interviews conducted in 2017–2018,[3] serving as the initial theory underlying the changes tested in the ED & UP Learning Community. The framework was subsequently revised (as shown in Figure 2) based on the learning and experience of organizations participating in the initiative.

Figure 2. Framework for Improving Emergency Department Care for Individuals with Mental Health Conditions and Substance Use Disorders



To accelerate improvement and foster system-level change, ED teams and their community partners need to test changes in all four framework components (Figure 2 primary drivers):

1. **Process:** Standardize ED Processes
2. **Provider Culture:** Create a Trauma-Informed Culture in the ED
3. **Patients:** Engage and Activate Patients and Families in ED Care Redesign
4. **Partnerships:** Strengthen Relationships with Community Partners to Support Patients' Ongoing Needs

While the framework components are numbered for ease of reference, there is not a sequential order for testing or implementing the changes. It is important to note, however, that work in all four components is needed to achieve the high-level aim.

The section that follows is organized by the four framework components (Figure 2 primary drivers and related secondary drivers) and includes:

- High-leverage changes and associated specific change ideas that organizations might test;
- Practical tips; and
- Examples from Learning Community teams.

It is important to establish measures to help determine whether the changes your organization tests are leading to improvement. The "Suggested Measures" section in this paper presents a high-level overview of measures for the four framework components, which can form the foundation of a measurement strategy. See Appendix A for detailed definitions and critical context for each suggested measure. Appendix B provides a list of supporting tools and resources that ED teams may find helpful as they embark on this work. A stand-alone document that includes the driver diagram (Figure 2), the change ideas described in this section of the white paper, and suggested measures is available on IHI's website.[4]

The high-leverage changes are intentionally broad and apply to different types of hospitals with different staffing levels, access to in-house psychiatric specialists, and the availability of community resources. Learning Community teams used these high-leverage changes to generate specific change ideas to test within their own contexts. For example, one of the most effective changes tested is creating a dedicated area within the ED for mental health and substance use disorder patients, to help calm patients and reduce delays in providing appropriate assessment, consultation, and treatment. Because not all EDs have space to do this, hospitals adapted this change by finding a space nearby the ED or designating part of the ED waiting area as a separate space. We encourage hospitals and ED teams to approach the changes described in this paper with a spirit of openness and flexibility, asking: How might we do this? What can we learn that will help us adapt these changes to our own context?

1) Process: Standardize ED Processes

ED teams have standardized processes that support medical crises, yet they are often operating without clear guidance or protocols for a range of mental health conditions and substance use disorders. For example, EDs may have protocols for suicidal patients but they generally lack reliable evidence-based assessments and interventions for suicide.

For mental health and substance use disorder patients, effective, evidence-based guidelines and practices exist that represent significant opportunities for standardizing ED processes and protocols, from intake and triage to treatment and discharge to community-based providers (see Appendix B for some selected tools and resources). The key concept underlying the high-leverage changes for standardizing ED processes is the shift in approach from "sedate and wait" (for an admission or transfer) to "triage, assess, and initiate treatment" within the ED whenever possible.

The SMART Medical Clearance Form and the Behavioral Activity Rating Scale, two resources frequently used by Learning Community teams, expedite appropriate care and treatment for patients and reinforce the ED culture as a place where patients receive treatment rather than being automatically transferred, discharged, or admitted to inpatient units.

Learning Community teams focused on two major areas to accomplish this shift in approach and standardize ED processes for patients with mental health conditions and substance use disorders: develop a standardized, evidence-based approach and build capability among ED team members.

1A) Develop a standardized, evidence-based approach to intake and triage, treatment, and disposition (discharge, admission, or transfer)

ED Intake and Triage of Patients with Mental Health Conditions and Substance Use Disorders	
High-Leverage Changes	**Specific Change Ideas**
Connect the patient with the appropriate mental health or substance use disorder consult as early as possible	• Conduct medical and psychiatric evaluation in parallel (e.g., use an evidence-based tool such as the SMART Medical Clearance Form to initiate clinically indicated tests in a timely manner)
Ensure individuals are seen in a comfortable, non-coercive, and non-threatening environment in the ED	• Establish a patient-provider relationship by using, for example, verbal de-escalation and sensory modulation techniques • Create dedicated beds and/or space inside or outside the ED based on acuity (e.g., observation unit, dedicated waiting area, hospital-based crisis stabilization unit or psychiatric emergency unit)
Assess ED patients for mental health conditions or substance use disorders, stratify patients by risk level and acuity, and develop pathways to needed level of care	• Develop a rapid triage assessment process (e.g., use the Australasian Triage Scale) • Use a brief screening tool to conduct an initial assessment of suicide risk and identify patients who require a full assessment; for full assessment, use a validated, standardized scale • Assess level of agitation using a validated, standardized tool (e.g., Behavioral Activity Rating Scale[5])
Gather relevant information from family or support person	• Build an information gathering step into the triage and assessment workflow, specifying how and when this will be done and by whom (may be one or more care team members)

ED Treatment of Patients with Mental Health Conditions and Substance Use Disorders	
High-Leverage Changes	**Specific Change Ideas**
Form a therapeutic alliance with the patient that is compassionate and respectful	• ED staff treat all patients, including those with mental health conditions and substance use disorders, with compassion and respect • Staff collaborate with patients on treatment decisions rather than ordering compliance with provider-only decisions • Engage patients and learn their story in their own words • Review patient history and any additional information provided by a family member or companion who accompanies the patient to the ED
Provide the appropriate level of care to manage symptoms and stabilize the patient	• Regularly re-evaluate the patient for changes in symptoms on disposition and also after stabilization; do not assume patient condition is static from the time of the formal assessment, and if the condition changes disposition options may be different as well • Educate ED staff on safety planning and lethal means restriction following patient discharge from the ED • Provide prescribed medication at ED discharge
Identify relevant clinical guidelines for major disease states (e.g., agitation, anxiety, psychosis)	• Use prompts to initiate treatment decisions
Provide active treatment with medications in the ED as soon as possible; provide brief interventions where appropriate	• Develop protocols for specific populations and conditions such as medication based on assessed level of agitation

ED Disposition of Patients with Mental Health Conditions and Substance Use Disorders	
High-Leverage Changes	**Specific Change Ideas**
Develop a standardized approach to ED discharge and follow-up for mental health and substance use disorder patients	• Schedule follow-up appointments before patients leave the ED • Include a flag in the patient record to identify high-risk patients, to ensure follow up with the patient after ED discharge and appropriate continuation of care and utilization of services and resources • Determine optimal care team member roles for care plan follow-up and outreach to both patients and the next provider or community-based services

1B) Build capability among ED team members for mental health intake and triage, treatment, and disposition

High-Leverage Changes	Specific Change Ideas
Create an ED behavioral health intervention team, including a hospital-based mental health provider (e.g., psychiatrist, psychologist, or licensed clinical social worker [LCSW]; community mental health worker; peer support specialists; patient navigator)* *Note: These are suggested team members, representing roles and resources that may be filled in different ways depending on the specific context of a hospital ED (e.g., by partnering with community agencies to provide peer support specialists, or using telehealth to connect patients in the ED with psychiatrists for a consultation).	• Maximize the training and expertise of all staff • Increase the availability of psychiatric consults in the ED, including psychiatric nurse practitioner shifts, to free up psychiatrists • Provide virtual access to mental health services for triage, consultation, and treatment via dedicated phone access or utilizing telepsychiatry consults/evaluations and virtual mental health providers (e.g., psychiatrists, LCSWs, psychologists) and teams as needed; these can be consultations between clinicians or direct connections between a virtual clinician and patient • Engage the ED behavioral health intervention team in interdisciplinary rounds
Optimize onsite staff expertise and training in caring for patients with mental health conditions and substance use disorders	• Develop "go-to expertise" within the ED (e.g., nurses and LCSWs with special training) to support ED staff who do not have psychiatric expertise • Utilize peer support specialists in the ED (e.g., National Alliance on Mental Illness [NAMI] representatives in the ED)
Make mental health and addiction medicine resources easily accessible to ED staff	• Identify ways to engage local organizations (e.g., NAMI) and peer support specialists to support high-risk patients

Practical Tips

Learning Community teams have several recommendations based on their experience with testing and implementing the changes for Standardize ED Processes described above.

- Don't do anything in a vacuum; involve all parties in planning and testing. This includes all ED staff as well as staff engaged in other efforts within the health care system or hospital related to care for patients with mental health conditions and substance use disorders.
- Assess your team's readiness to begin the work in the ED. Consider a structured event or meeting to build motivation and energy for the work.
- Begin by creating a process flow map of the current state, to create a collective understanding of what happens when patients present to the ED, and then identify potential opportunities for improvement.
- This is complex work — a standard guideline or "bundle" (i.e., a small set of evidence-based care practices) can set expectations, so the team knows what to do.
- Standardizing ED processes is important, but the culture also needs to support the process changes. Identify and address perceived barriers (e.g., the attitude that "these patients are different from medical patients and we can't care for them here").
- Create a unified medical record so that all care team members have the same patient information (i.e., team members performing triage, assessment, evaluation, and treatment) to enable care coordination.

Example

When Abbott Northwestern Hospital in Minnesota joined the Learning Community, the hospital wanted to better meet the needs of patients with mental health issues coming to the ED who didn't really need emergency or inpatient care. What these patients need, the ED team determined, is a quiet space to talk with someone, listen to their concerns, and help evaluate potential next steps for getting care and additional support if needed. The team thus established a new standardized ED process: a six-bed observation unit (called the HOPE unit) with the goal to avoid unnecessary inpatient admissions and alleviate pressure on the ED. The ED team involved patients in designing the unit, established adjacent to the psychiatric inpatient unit and staffed by a social worker, a registered nurse, and a mental health associate. Most HOPE unit patients were discharged home rather than to inpatient care or a longer-term residential mental health treatment facility.

2) Provider Culture: Create a Trauma-Informed Culture in the ED

Patient advocates in the Learning Community emphasized that individuals respond to their environment: a trauma-informed environment makes individuals feel safe, which is vastly different from an environment in which individuals are treated like a security risk. The current culture in many EDs is not conducive to supporting individuals with mental health conditions and substance use disorders for several reasons.

- Some ED staff may not view mental health as part of their scope of work and do not treat presenting issues, which cannot be easily "seen" on scans or tests, as equivalently serious to a physical health crisis. When mental health needs are viewed as "other" and "not my job," the quality and experience of care suffers.
- Some ED providers lack training and education, as well as access to psychiatric consultations, about how to manage mental health issues, causing concern about providing the appropriate care and potential liability should an adverse event occur. ED staff may also fear that a mental health patient may become violent or aggressive, perhaps not treating the patient with compassion as a result. Paradoxically, such behavior by care team members can increase the likelihood of a patient becoming agitated, particularly if there is little to no communication and information given to the patient about what is happening.
- The ED environment is often chaotic, loud, and not conducive to individuals experiencing a mental health crisis. Because both care team behavior and the ED environment may increase agitation and the potential for violent incidents, these factors serve to reinforce preconceptions about this patient population.

Given these considerations, Learning Community teams recognized the critical importance of creating a trauma-informed culture[6] — a strengths-based delivery approach focused on principles that aim to provide safety and empower patients — within the ED to provide better care for individuals with mental health conditions and substance use disorders. While training for ED staff is an important and necessary first step toward establishing a trauma-informed culture, ongoing support and reinforcement is needed to truly change the ED culture.

> *A trauma-informed culture directly benefits patients and also helps ED staff better understand their own reactions. One Learning Community team's leader commented, "[Trauma-informed care] gives us tools in de-escalation and how to manage our own emotions."*

2A) Educate and train ED teams about stigma, trauma-informed care principles, and best practices in caring for individuals with mental health conditions and substance use disorders

High-Leverage Changes	Specific Change Ideas
Train and educate all relevant ED staff in key issues to improve care for individuals with mental health conditions and substance use disorders, including: • Implicit bias toward individuals with mental health needs, "drug-seeking" behavior, homelessness, and other issues • Inequities related to race, age, gender, insurance coverage, or other populations (identified using quantitative and qualitative data) • Diagnosis-based, evidence-based, standardized care models for psychiatric patients (e.g., dialectical behavior therapy) • How to provide trauma-informed care; de-escalation; care for agitated patients	• Provide ongoing support for ED staff to reinforce training • Train staff "go-to experts" (such as psychiatric-trained ED nurses) who specialize in working with patients with mental health needs • Collaborate with hospital security personnel on safety and trauma-informed care trainings

2B) Co-design the enhanced ED care model with patients

High-Leverage Changes	Specific Change Ideas
Identify what does and does not work in the current care approach by talking with and listening to patients with mental health conditions and substance use disorders	• Conduct an observational exercise in which a dedicated ED care team member follows the care process (note that patient permission is needed for any direct clinical interaction) or by "simulating" ED staff interaction with a patient • Interview patients and staff about their ED care experience and incorporate that qualitative data into the care process redesign • Ensure the viewpoint of different patient populations is represented (e.g., race, age, gender, insurance status)
Engage mental health and substance use disorder patients in designing and testing new ED processes to improve trauma-informed care	• Partner with NAMI to identify patients and/or families to participate in planning and testing new processes • Utilize existing patient advocacy groups

2C) Provide a therapeutic healing environment in the ED

High-Leverage Changes	Specific Change Ideas
Ensure individuals with mental health conditions and substance use disorders are seen in a comfortable, non-coercive, and non-threatening environment in the ED	• Establish a patient-provider relationship by using, for example, verbal de-escalation and sensory modulation techniques • Create dedicated beds and/or space inside or outside the ED based on acuity (e.g., observation unit, dedicated waiting area, behavioral health urgent care)

2D) Leaders model behaviors that drive culture change

High-Leverage Changes	Specific Change Ideas
Ensure productive dialogue and decision making within the ED team to foster engagement and alignment with creating a trauma-informed culture in the ED	• Leaders reframe mental health and substance use disorder needs as analogous to a medical condition, to help shift cultural attitudes • Leaders conduct weekly ED walk-arounds to reinforce the rationale and importance of a trauma-informed culture to better address mental health and substance use disorder issues • Senior sponsor of the ED improvement team regularly attends team meetings and holds monthly review meetings to assess progress and barriers
Build the health system's and ED's values on creating a team-based and patient-centered culture into processes for ED staff hiring and training	• Include trauma-informed care training in ED new hire orientation

Practical Tips

Learning Community teams have several recommendations based on their experience with testing and implementing the changes for Create a Trauma-Informed Culture in the ED.

- Begin working on culture right away. Teams saw the impact of trauma-informed care training for ED staff in two ways: better care for patients as teams learned how to engage with patients to better understand and meet their needs; and a reduction in workplace injuries as ED staff gained skills in calming agitated patients.
- Create accessible ways for staff to get training, for example, offering "Lunch and Learn" sessions, debriefing immediately following difficult situations, and using case consultations to discuss care options.
- Trauma-informed care training is crucial for both compassionate care and to help prevent burnout and promote resilience in providers.
- Align the work to create a trauma-informed care culture in the ED with other initiatives in the organization with similar aims. For example, include de-escalation techniques in regular training curricula for all staff.
- Begin small and recognize that culture change takes time and persistence.

Example

During the Learning Community, the ED team at Hoag Memorial Hospital Presbyterian in California focused on building a trauma-informed culture through staff education, training, and ongoing support. Prior to the training, ED staff were sometimes afraid of interacting with agitated patients. The training, which is now being expanded hospital-wide, has dramatically changed patient experience of care, and staff feel more confident in their ability to provide the best care for all patients. The following story illustrates that change.

A 24-year-old male suffering from an exacerbation of schizophrenia was yelling, threatening ED staff, and spitting on the glass of the treatment room. Before trauma-informed care training this patient would have been forcibly held down and given an injection, perhaps risking injury to the patient and/or staff. As a result of receiving training, a nurse was able to defuse the situation with de-escalation techniques: calmly talking with the patient, acknowledging and then remedying the

patient's fears and frustrations. Because the patient felt he was being taken seriously, he calmed down. After that incident he also accepted his oral medications, which helped keep him calm and recover from his exacerbation of schizophrenia by the time the ED team was able to transfer him to an outside facility.

3) Patients: Engage and Activate Patients and Families in ED Care Redesign

Building on the trauma-informed care culture component described above, this framework component leverages the experience of patients with mental health conditions and substance use disorders and their families to improve ED quality of care. Patients and their families and caregivers are an invaluable resource for the care team. They can inform the ED team's assessment with knowledge of the patient's current mental health or substance use disorder state and history, and are often the ones charged with carrying out a disposition plan following ED discharge. This vital information guides the ED care team as they create tailored treatment plans. In addition, ED teams need to elicit and incorporate patient and family input into care redesign efforts, such as the design of a new ED behavioral health observation unit, to ensure that changes truly are an improvement from the patient and family perspectives.

3A) Utilize a standardized, person-centered approach to understand and incorporate patient history and context into the care plan

High-Leverage Changes	Specific Change Ideas
Map the ED care process from the patient's perspective to understand areas for improvement	• Identify and revise non-evidence-based ED protocols and procedures that adversely affect patient dignity • Collect and act on patient and family feedback on ED experience of care via text survey or electronic form • Engage families and caregivers in the design of ED discharge instructions, care planning, and transition to the next care setting
Train and support ED staff to incorporate patient and family engagement into care processes	• Develop a standardized process to engage families, as desired by the patient, throughout the ED stay, from intake and assessment to initial treatment to disposition (discharge, admission, or transfer)
Provide peer support opportunities both during and after ED visits	• Develop partnerships with the local NAMI chapter to connect patients and families with peer support and ongoing resources

Practical Tips

Learning Community teams have several recommendations based on their experience with testing and implementing the changes for Engage and Activate Patients and Families in ED Care Redesign.

- Elicit and incorporate patient and family input at the start of an improvement effort (e.g., conduct interviews, hold focus groups, designate a staff member to observe the process from a patient perspective).
- Ask families and patients for their stories and feedback. Their answers may pleasantly surprise you. Also approach each complaint as an opportunity to engage and listen to what could have been done better.

- Involve your legal or risk departments as needed in planning how and when to obtain patient feedback to ensure that patient confidentiality is honored.
- Paper or electronic surveys, administered while the patient is in the ED or following discharge, are not always effective. Look for other ways to gather feedback such as during structured focus groups, or by incorporating feedback questions into patient calls following a visit.

Example

Several Learning Community teams worked with local chapters of the National Association of Mental Illness (NAMI), an advocacy group originally founded by family members of people diagnosed with mental illness, to connect patients with NAMI peer representatives who provided resources and support to patients and families seen in the ED. At Cohen Children's Medical Center in New York, NAMI representatives conducted a 12-week course at the hospital for parents of children with a mental health diagnosis. Twenty families met weekly for 2.5 hours during the first course; a second offering is being scheduled. At Hoag Memorial Hospital Presbyterian, where NAMI representatives meet directly with patients and families in the ED and connect them with ongoing support, more than half of the patients with a history of return visits have not returned to the ED after their interaction with NAMI.

4) Partnerships: Strengthen Relationships with Community Partners to Support Patients' Ongoing Needs

To be successful in this work, health systems must collaborate with community partners to support patients in managing their health through ongoing, preventative care and appropriately accessed emergency care during acute crisis. EDs are well-positioned to provide care in times of crisis and emergency, but ongoing preventive care is outside the scope of the ED and squarely within that of community-based providers.

Mental health and substance use disorder needs can often be more appropriately met by community-based services, leading to better quality and experience of care and lower costs than care provided within a health care setting. These "upstream" services and supports are essential to ensuring that individuals with mental health conditions and substance use disorders receive the right care, in the right place, at the right time, rather than seeking care in the ED by default. Some patients are already well-connected to community-based care; asking patients where they receive such support is an ideal starting point for EDs to identify potential community partners.

ED staff and leaders all have a role in building partnerships. ED staff can gather information from patients and families about where they receive support in the community; identify contacts in community agencies and build relationships with community providers by coordinating care for individual patients; troubleshoot challenges together; and ensure that referrals to community-based services occur and patients are able to participate in the intended care and support.

As health systems develop their population health strategies, system leaders need to consider initiating or strengthening partnerships with leaders of community-based organizations and mental health providers and agencies that support individuals with mental health conditions and substance use disorders. Such partnerships require high-level support between hospital and agency leaders. This relationship building lays the groundwork for real collaborative work between leaders and direct care staff at both the agencies and in the ED. Leaders can also cultivate interdepartmental relationships, connecting ED staff to other health system departments with

existing community-provider partnerships that might be leveraged, including those conducting community health needs assessments, community benefit, community outreach, chaplaincy, chronic care initiatives, and population health departments, among others.

Learning Community teams tested several changes to develop and strengthen partnerships between the ED and community-based organizations:

- Participate in monthly meetings of community-wide mental health and trauma-informed care coalitions to address challenges to care access and problem-solve ways to coordinate care with patients and families.
- Develop a centralized database of community providers that the ED care team uses to generate a tailored list of potential referrals for each patient.
- Invite key community partners to "shadow" the ED team, observe care processes, and participate in an exercise to simulate ED care delivery for a patient in crisis.
- Partner with local police to embed social workers in their response system, who can then take the lead in developing mental health and substance use disorder care plans.
- Partner with local NAMI chapters to discuss community resources with patients and families, and partner with the ED's community navigators to provide effective referrals to community resources.
- Partner with local networks of community-based organizations to connect patients with a myriad of needed community resources and services.
- Partner with schools, pediatric practices, and community health centers to streamline referrals and facilitate continued support in the community for patients and families following ED discharge.

4A) Build partnerships to enhance coordination and communication between the ED and other health care and community-based services

High-Leverage Changes	Specific Change Ideas
Identify and make direct and ongoing connections with care providers (inpatient and outpatient) and relevant community-based social services that will continue to support mental health and substance use disorder patients following ED discharge	• Collect information from patient intake forms about where patients get support, other than the ED • Collaborate with community crisis response teams and crisis counselors, among other community mental health and substance use disorder care providers, to provide community-based care management • Identify existing partnerships between other hospital departments and community-based organizations • Invite community partners into the ED for care conferences • Organize ED staff visits to community providers to broaden awareness of community-based services and resources • Engage community partners throughout the patient journey: intake and triage, treatment, and discharge (i.e., clearly delineate the roles of each integrated care team member)
Build relationships with community-based organizations, agencies, and providers that refer mental health and substance use disorder patients to the ED	• Conduct an analysis of the community-based agencies and providers that most frequently refer patients to the ED • Partner to coordinate care across the patient journey, including thriving health and wellness to pre-crisis and crisis

4B) Streamline the referral process to providers, services, and resources outside the ED for mental health and substance use disorder patients

High-Leverage Changes	Specific Change Ideas
Co-create a simple referral process with key referring partners	• Develop a one-page referral sheet with key partners for ED staff; consider ways to share referrals electronically • Employ a licensed mental health counselor or social worker in the ED to make referrals to community-based organizations and providers, and to follow up with the patient to improve resource utilization and decrease ED revisits • Collaborate with urgent care centers and mental health crisis clinics to obtain immediate care for low- and medium-acuity patients and provide a bridge to follow-up care • Create secure notifications such as encrypted emails or phone calls (e.g., from case manager or social worker) to other care settings (e.g., ED, hospital, primary care provider, outpatient behavioral health)
Identify existing or develop new patient data and/or information sharing agreements with key referring partners	• Develop a secure data feed to track patients across settings within the health system • Enable secure access to patient medical records across care settings (e.g., ED, hospital, primary care, outpatient)

4C) Transform the ED discharge process for mental health and substance use disorder patients

High-Leverage Changes	Specific Change Ideas
Ensure patients and families understand and are engaged in developing the ED discharge plan of care	• Engage the patient and family, with the patient's consent, in establishing the care plan and in designing the ED discharge process • At discharge, ask the patient and/or family if symptoms were addressed satisfactorily in the ED and if they are equipped to follow through with the care plan following ED discharge • Explore together the ways that family members can support ongoing connection to community providers
Provide active patient follow-up following ED discharge	• Follow up with patients via phone calls (sometimes called "caring contacts"); consider focusing on high-risk patients if staff resources are limited

4D) Enable the hospital to act as anchor institution to bolster the health and well-being of the broader community

High-Leverage Changes	Specific Change Ideas
Identify the ED's current role in the overall community mental health and substance use disorder care system	• Learn about and participate in any existing roundtables, coalitions, or recurrent public health gatherings in the community to build partnerships and strengthen care coordination
Participate in community coalitions committed to improved community health	• Support the development and sustainability of community coalitions (e.g., work together to establish a monthly meeting place and time) • Hold cross-organizational case conferences, in compliance with HIPPA limitations, to offer all partners a way to problem-solve together, coordinate care effectively, and learn about each other's roles • Develop a shared release of patient information document that can be tailored to allow sharing across some or all linked agencies for a specified duration of time

Practical Tips

Learning Community teams have several recommendations based on their experience with testing and implementing the changes for Strengthen Relationships with Community Partners to Support Patients' Ongoing Needs.

- Recognize that community partnerships are essential to support patients and families. The ED cannot provide them with all they need, and the ED should not create services in-house that are being delivered in the community.
- Relationships need to be built through face-to-face engagements, providing an opportunity to communicate, ask questions, obtain clarity, get to know one another, and problem-solve together.
- When establishing partnerships with community agencies, it is most effective to engage senior leaders in those agencies such as executive directors or medical directors.
- Take the first step. Do not be afraid to start the conversation with community agencies in order to understand how the current referral process works and how to bridge the gaps. They will not come to you.
- Make sure to solicit family input in how treatment should work. This will build sustainable partnerships that work for the hospital, the patient and family, and the community partner.

Example

A key focus for Cohen Children's Medical Center in the Learning Community was to build stronger community partnerships — with schools, pediatric practices, and community mental health centers. Since schools are the largest source of referrals for pediatric mental health treatment at the medical center, the physician director of the ED visited schools and hosted visits at the ED with school representatives to equip educators with knowledge about making appropriate referrals to a range of mental health services (thereby reducing unnecessary referrals to the ED). The director participates in a county-wide mental health coalition, which she learned about through the population health arm of the hospital. A few medical center doctors also allocate some of their academic time to visit schools to offer psychoeducation on targeted mental health topics.

The ED team also worked to improve the rates of follow-up care after ED discharge, starting with their own outpatient clinic. To ensure that discharged ED patients promptly get an appointment, the clinic established dedicated open-access hours for patients referred by the ED. With community-based clinics, the ED team is working to establish efficient email communication channels and accelerate the appointment scheduling process. The medical center's social workers and mental health clinicians regularly update a shared list of community resources and visited selected community-based organizations to learn about the services they provide.

Suggested Measures

To assess whether the high-leverage changes and specific change ideas that Learning Community teams tested resulted in improvement, teams collected and tracked data for suggested measures for the four framework components. Informed by the experience of Learning Community teams, the measures are prioritized based on both feasibility of data collection and impact on improving ED processes.

One important way to analyze measures is to stratify data by relevant equity factors (e.g., race, gender, income level, type of payment). Based on feasibility, such as whether or not data is collected for equity factors, organizations are encouraged to start with analyzing equity data for a small set of measures, to learn about the process as well as the value of the data to the team.

Both quantitative and qualitative measures are important. While quantitative measures help inform whether a specific change is leading to improvement, qualitative measures are especially powerful in gauging culture change. From a science of improvement and psychology of change[7] perspective, qualitative data using stories and narratives help build will to drive change — a crucial and necessary component of successful improvement. Even a single quote from a story can become a powerful motivator — the "why" this work is crucial.

This section provides high-level context as well as suggested quantitative and qualitative measures for the four framework components. Appendix A provides more detailed information on each measure's definition and individual context considerations.

Measures: Standardize ED Processes

Quantitative Measures: These measures focus on the effectiveness of ED processes. One important consideration in measuring ED revisits is that we do not want to discourage patients from returning to the ED if they have no other alternative. At the same time, the metric is meant to measure effectiveness both within the ED and in connecting patients to community resources that are expected to have an impact on return visits to the ED.

Metrics that show promise in measuring improvement (see Appendix A for measure details):

- Percentage admitted to inpatient: Percentage of individuals in the ED whose primary diagnosis is a mental health (MH) condition or substance use disorder (SUD), who are then admitted to inpatient
- ED revisits within 7 days: Total number of patients who revisited the ED within 7 days with MH/SUD issues after ED discharge for MH/SUD diagnosis
- ED length of stay (LOS): For patients with MH/SUD diagnosis, total time from initial presentation to the ED to departure from the ED; plus, length of stay broken out into three segments:
    - LOS 1: Total time from initial presentation to ED until medical stabilizing process is complete and patient is waiting for mental health evaluation or disposition
    - LOS 2: Total time from when patient is ready and waiting for mental health evaluation until mental health evaluation or disposition plan has been completed
    - LOS 3: Total time from completion of mental health evaluation and disposition plan to departure from ED

- ED boarding time: Total time in minutes when disposition decision has been made to the time of transfer/admission/discharge (does not include patients placed in observation status in emergency settings)

Qualitative Measure: Learning Community teams discovered the importance of stories and qualitative measures in building will and momentum, especially in the early phases of the work when there are competing priorities and it's too early yet to demonstrate improvements with quantitative measures. We encourage facilities to interview and collect patient and staff stories for all four components of the framework.

Measures: Create a Trauma-Informed Culture in the ED

Creating a trauma-informed culture is important for *all* patients in the ED, not only patients with mental health conditions and substance use disorders. Focusing solely on mental health and substance use disorder patients can exacerbate stigma by treating them differently and reinforcing the misperception that they are potentially more injurious to staff than other patient populations. For this reason, use the suggested measures for *all* ED patients, not only patients with mental health conditions and substance use disorders.

It is important to track these measures in facilities where staff fear that decreasing the use of restraints will increase the rate of patient-to-staff assaults. In fact, the converse is overwhelmingly true: as the use of restraints decreases, the number of patient-to-staff assaults also decreases.[8] As an ED tests and implements specific changes for this framework component, the number of patient-to-staff assaults is expected to decrease.

Quantitative Measures: Metrics that show promise in measuring improvement (see Appendix A for measure details):

- Average daily duration (in minutes) of ED patients in restraints
    - Total number of ED patients restrained per day
    - Percentage of agitated patient codes in the ED that result in use of restraints
- Average rating of ED staff confidence in managing disruptive behaviors using de-escalation skills and procedures (using a staff survey with a 1-to-5 rating scale)
- Total number of patient-to-staff assaults in the ED (assaults defined as a physical or verbal attacks)

Qualitative Measure: Stories from frontline ED staff (e.g., after trauma-informed care training), hospital leaders, and patients are powerful. NAMI is a good resource for patient-centered stories and qualitative measures of improvement.

Measures: Engage and Activate Patients and Families in ED Care Redesign

Only two categories of individuals are excluded from providing feedback on the HCAHPS patient experience survey tool: those who are dead and those with a primary psychiatric diagnosis. This results in a negative cycle: the lack of data from mental health patients often makes their experience a lower priority for health care teams. Therefore, the very act of asking patients with mental health conditions and substance use disorders about their care experience is a culture change and paradigm shift.

Learning Community ED teams identified some barriers to obtaining feedback from mental health patients about their care experiences — for instance, one facility needed approval from the hospital's legal department, while others faced cultural barriers (e.g., staff attributing low scores from individuals admitted to inpatient as likely the result of the patient's frustration or anger at being admitted). One way to approach this latter challenge is to focus exclusively on all patients discharged from the ED.

Learning Community teams tested different methods of collecting patient feedback: in person as part of the ED discharge process, using a survey, and as part of a follow-up phone call to patients after ED discharge. Each facility will need to test the particular feedback method and timing within an overall process that works best in their context; start with small tests of change (e.g., test the change with *one* staff member during *one* shift with *one* patient) and then refine the change based on learning before expanding the test.

Quantitative Measures: Metrics that show promise in measuring improvement (see Appendix A for measure details):

- MH/SUD patient experience of ED care (using a 1-to-5 scale, survey responses rating the degree to which ED staff treated patients with mental health [MH] conditions and substance use disorders [SUD] with respect, listened to the patient, and communicated effectively)
- Percentage of families of MH/SUD patients who participate in and receive the post-ED-discharge care plan

Qualitative Measure: Stories from patients and families (both positive and negative) can inform the extent to which they feel confident and/or informed as they transition from the ED. This feedback helps ED teams determine whether or not care processes and communication mechanisms are effective, and identifies patient and family needs that are not being addressed.

Measures: Strengthen Relationships with Community Partners to Support Patients' Ongoing Needs

Measurement data for this framework component are more challenging to capture, particularly if ED teams rely on external partners to report the raw data back to them.

Quantitative Measures: Metrics that show promise in measuring improvement (see Appendix A for measure details):

- Total number of patients with a scheduled follow-up appointment at a community provider
- Percentage of referrals completed

Qualitative Measure: Stories of impact from community partners and patients are strong qualitative measures. In particular, understanding a patient's journey between the ED and community providers (the full ED and upstream journey) is a powerful tool for patient-centered improvement.

Early Lessons on Implementation and Scale-up of Improvements

Once Learning Community teams completed testing the changes discussed in this white paper, they began to implement the most promising changes in their ED pilot sites and worked with leaders to spread the changes to other EDs in their health systems. Implementation involves hard-wiring improvements so that new processes and systems will continue beyond the initial improvement initiative.

Learning Community teams used several implementation strategies, as described below.

- **Institute policies and practices to remove the "old way":** To enhance communication and coordination with community providers, the Providence Regional Medical Center Everett team observed the community-based crisis counselors to better understand how they supported patients. The team also invited community partners to the hospital to participate in a patient flow exercise that mapped the experience of mental health and substance use disorder patients across care settings. This break in old patterns of relating to external partners formed the basis for a stronger working relationship between the ED team and community partners.
- **Use documentation to reduce reliance on human memory:** Using prompts within electronic health records to support clinical algorithms is an example of how documentation can be used to standardize care. Maine Medical Center worked with ED physicians, nurses, and other clinical team members to test, develop, and implement a clinical pathway for patients with psychotic disorders arriving in the ED.
- **Update hiring procedures to support new roles:** To enhance the ability of the ED team to care for mental health and substance use disorder patients, the Providence Regional Medical Center Everett team added nurses with special psychiatric training to their ED teams. These nurses serve as an internal resource of expertise, enhancing the ability of the entire ED team to care for patients with mental health conditions and substance use disorders.
- **Revise job descriptions to fit new roles:** Cohen Children's Medical Center developed a policy that the families of high-risk mental health and substance use disorder patients receive follow-up calls after an ED visit. They tested several different processes to support the new policy, including identifying the higher-risk patients and integrating follow-up calls into social workers' daily workflow, which was more efficient for their work and served to provide renewed value in their role.
- **Institute staff education and training:** Changing culture was a major focus for the Hoag Memorial Hospital Presbyterian ED team. They developed a trauma-informed care training program initially for ED staff, but then rapidly spread the training to all staff and to another hospital to broaden understanding of how to help both patients and themselves as staff.
- **Smooth information flow to create standardization and accountability:** The Memorial Hermann Northeast Hospital team standardized their ED intake and triage process to ensure a reliable care experience for mental health and substance use disorder patients. When a patient arrives, the ED team follows a standard series of steps: assess agitation level; consult a medication algorithm and provide medication, if appropriate; and contact the psychiatrist for a consultation. If necessary, the team can implement de-escalation

techniques. Taken together, these steps reduce both the risk of safety events and ED length of stay.

- **Use resources and equipment to enhance care:** Abbott Northwestern Hospital created a special six-bed observational unit adjacent to the inpatient psychiatric unit to serve as a quiet and supportive area for mental health patients. The team involved patients as they designed the unit, and the ED team was often able to help patients avoid an unnecessary psychiatric admission.

As a result of these implementation strategies, Learning Community teams are in a strong position to sustain their accomplishments to date. They are also well-positioned to expand, or scale-up, the changes beyond the initial ED pilot sites to other EDs within their health systems.

Strategies for scaling up promising changes within an entire health system, an effort that must be led by hospital and system leaders, are described below.

- **Create a sense of urgency:** Make the case for change by surfacing current system performance and its impact on patients and families as well as staff.
- **Tell the story:** Use and encourage others to use patient, family, and staff stories to raise awareness and foster commitment to change. Utilize data to show the initial gaps in care and then progress in closing those gaps by implementing the changes.
- **Assign responsibility and accountability:** There should be clear leadership at the system, facility, and departmental levels; establish a team to plan and carry out hospital or system-wide goals for scaling up the changes described in the white paper.
- **Establish the link to strategic goals:** Include goals for improvements in care for mental health and substance use disorder patients in strategic and operational plans, including value-based contracting and population health initiatives.
- **Develop a scale-up plan:** Include a specific aim (i.e., measurable level of improvement), the target hospitals and EDs, and a timeframe for accomplishing intermediate and long-term goals.
- **Seek alignment with existing initiatives:** Link ED improvement efforts to hospital- or system-wide initiatives to redesign the journey of mental health and substance use disorder patients across departments, service lines, and facilities; alignment is also needed across hospitals and communities.
- **Leverage existing structures:** The hospital quality improvement infrastructure or other existing organizational structures (e.g., quality improvement committees, clinical excellence initiatives) can be leveraged to share ideas, support testing and implementation of changes, and track data on system-wide improvement. Hospitals and health systems can also utilize population health management initiatives that seek to partner with community organizations to meet broad health, well-being, and equity goals.
- **Utilize hiring and staff training processes to broaden reach and spread:** Existing training programs for new and current employees can be used as vehicles to continue expanding the number of staff members who learn the skills, behaviors, and attitudes needed to support a cultural and organizational shift in how mental health and substance use disorder patients are treated and cared for within the health system and in the community.

Conclusion

This white paper endeavors to provide a framework, practical ideas, and examples for how hospitals and health systems can improve care in the emergency department and upstream for mental health and substance use disorder patients. As described in the paper, based on the experience of organizations participating in the Learning Community, progress in providing better care for this patient population is possible by linking improvements in internal ED processes with community-based providers and community organizations.

More progress can be made by continuing to deepen our understanding of issues that impact patient and family experience of care. One area that needs more attention is how inequities, specifically racism in society and in health care and community health systems, effect those with mental health and substance use disorder issues. Learning Community teams made some initial efforts to stratify and analyze data for the suggested measures by equity factors, discovering that these data are often difficult to obtain. Additional methods are needed to reveal patient care patterns that may be driven by characteristics such as race, age, gender, income, insurance coverage, or other factors.

Some potential approaches to further explore equity as part of this work include the following:

- Include unconscious bias training as part of trauma-informed care training for ED staff;
- Strengthen the diversity of patient and family advisory groups or other outreach programs or initiatives;
- Leverage existing equity-related initiatives in the hospital, health system, or community (e.g., hospital Diversity Officers); and
- Partner with advocacy groups such as NAMI to invite people from different populations to share their experience (e.g., racial and ethnic groups, LGBTQ, tribal).

We hope that other hospitals and communities will be inspired to work together to implement the changes described in this white paper, with the ultimate goal of creating a national impact on improved care for mental health and substance use disorder patients and their families, as well as ED care teams and their community partners.

Appendix A: Suggested Measures

For the four framework components depicted in Figure 2 and described in detail in the white paper, suggested measures to gauge improvement are offered in this Appendix. Informed by the experience of Learning Community teams, the measures are prioritized based on both feasibility of data collection and impact on improving ED processes.

In testing these measures in your organization, below are important guidelines to keep in mind:

- **Data for Improvement:** In this work, we are focused on data for improvement rather than for blame and shame. Measurement data is a means to understand whether improvement is happening as a result of the changes being tested.
- **Importance of Both Quantitative and Qualitative Measures:** While both kinds of measures help inform whether a particular change is an improvement, qualitative measures in particular are powerful in helping bring about culture change.
- **Equity Lens:** Equity is an important component of this work. Patients with mental health (MH) conditions and substance use disorders (SUD) are often stigmatized. Within this patient population, there is further discrimination based on race, income, gender, and other equity factors. Data is a strong tool to examine equity; data for each measure can be stratified by equity factors (e.g., race, income, gender) to identify potential inequities and opportunities for improvement.
- **Data Collection Frequency:** The recommendation is to collect and analyze data for the suggested measures monthly. By looking at measures monthly (rather than quarterly or annually), it becomes clearer more quickly whether the changes being tested are leading to improvement.

1) Process: Standardize ED Processes

Measure	Numerator	Denominator	Exclusions	Context to Consider
Percentage admitted to inpatient	Total number of patients with mental health/substance use disorder (MH/SUD) issues admitted to inpatient	Total number of patients with MH/SUD issues who present to the ED	None	This metric is important in measuring overall ED culture change, from a widespread assumption that most patients with serious behavioral health issues must be admitted to inpatient (with the ED as simply as pass-through) to the change in belief and culture that treatment can begin in the ED itself. As more treatment happens within the ED itself, a facility should see the percentage admitted to inpatient decrease.
ED revisits within 7 days	Total number of patients who revisited the ED within 7 days with MH/SUD issues after ED discharge for MH/SUD diagnosis	N/A	None	This metric addresses the issue of return visits to the ED that many facilities struggle with. As a facility improves and standardizes ED processes (to include treatment within the ED, referral to community providers at discharge, involving families in the care plan, etc.), the number of ED revisits within 7 days should decrease. While a facility can choose any length of time to measure revisits (e.g., within 3 days, 14 days, 30 days), 7 days is a long enough timeframe to capture return visits for MH/SUD issues, while short enough to acknowledge that an ED revisit may be for a different issue.
ED length of stay (LOS)	Total time in minutes from initial presentation to the ED to departure from the ED for patients with MH/SUD diagnosis	N/A	None	Length of stay is useful to measure standardization of ED processes, as both the median and variance for total LOS should decrease as processes become more standardized. For facilities that follow a general flow of medical stabilization, followed by mental health evaluation, segmenting LOS data (as described below) is a useful way to determine where changes can be most impactful.
ED length of stay by segment	LOS 1: Total time from initial presentation to the ED until medical stabilizing process is complete and patient is waiting for mental health evaluation or disposition LOS 2: Total time from when patient is ready/waiting in the ED for mental health evaluation until mental health evaluation or disposition plan has been completed LOS 3: Total time from completion of mental health evaluation/ disposition plan to departure from the ED	N/A	None	As a balancing measure, looking at data for the various segments helps ensure that an improvement for one segment does not lengthen LOS for another segment. (Note: Some facilities may be running LOS 1 and LOS 2 in parallel, so this segmentation is not as relevant.)

Measure	Numerator	Denominator	Exclusions	Context to Consider
ED boarding time	Total time in minutes when disposition decision has been made to the time of transfer, admission, or discharge	N/A	Patients placed in observation status in emergency settings (as they are in active treatment)	Boarding refers to patients receiving no treatment and who are just waiting for admission or transfer outside of the ED setting.

Qualitative Measure: Learning Community teams discovered the importance of stories and qualitative measures in building will and momentum, especially in the early phases of the work when there are competing priorities and it's too early yet to demonstrate improvements with quantitative measures. We encourage facilities to interview and collect patient and staff stories for all four components of the framework.

Promising Results from Learning Community Teams: Learning Community teams noted two measures, in particular, for tracking improvements in the first framework component:

- Length of stay (LOS) is one of the most important measures, with the ability to drill down further into the three LOS segments to discover the greatest opportunities for improvement. One facility reduced LOS by 4 hours, both shifting down the median as well as reducing variance in the measure.
- ED revisits within 7 days is one of the most useful measures, and easy to measure and track. One team saw decreases in ED revisits through their work in community partnerships, while another team decreased variance in this measure as a result of testing specific changes (e.g., psychiatric patient discharge with 7-day medication, a clinical pathway for the psychotic disorder patient population, and warm handoffs from the ED to a community partner).

2) Provider Culture: Create a Trauma-Informed Culture in the ED

Creating a trauma-informed culture is important for all patients in the ED. Focusing solely on patients with mental health (MH) conditions and substance use disorders (SUD) can exacerbate stigma by treating them differently and reinforcing the misperception that they are potentially more injurious to staff than other patient populations. For this reason, teams should use the suggested measures for all ED patients and not only MH/SUD patients.

Measure	Numerator	Denominator	Exclusions	Context to Consider
Average daily duration (in minutes) of ED patients in restraints	Total number of minutes restraints used in ED for all patients	Total number of all patients in ED where restraints used	None	This metric is critical to measure improvement in creating a trauma-informed culture. As staff confidence in their de-escalation abilities increases (see metric below), average daily duration of restraints should also decrease. By testing the changes described in the white paper, staff should begin to feel more confident in other methods before going to restraints (the use of which has been shown to increase staff assaults, as two-thirds of staff assaults happen during hands-on interventions in attempts to restrain patients).[9]
Total number of ED patients restrained	Total number of all ED patients where restraints used	N/A	None	As a complementary metric to daily duration of restraints, facilities may also want to measure number of patients restrained over time. As the denominator of the above measure, this is already being collected and facilities may want to analyze trends in this individually as well.
Percentage of agitated patient codes in the ED that result in the use of restraints	Total number of agitated patient codes in the ED per day that result in the use of restraints	Total number of agitated patient codes in the ED per day	None	When ED staff are alerted of an agitated patient through the designated "code," this alert often automatically results in use of restraints. Staff behavior during such an alert is a good indicator of how well-rooted a trauma-informed culture has become.
Average rating of ED staff confidence in managing disruptive behaviors using de-escalation skills and procedures (using a staff survey with a 1-to-5 rating scale)	Total number of ED staff who rate 4 or 5	Total number of ED staff survey responses	None	This measure can serve as a proactive measure of staff safety. As facilities test more of the changes described in the white paper, staff confidence is expected to improve.
Total number of patient-to-staff assaults in the ED (assaults defined as a physical or verbal attack)	Total number of staff assaults in the ED	N/A	None	This is already a standard metric collected in most EDs. Of note, as an ED tests and implements specific interventions, the number of patient-to-staff assaults is expected to decrease. It is also important to track these measures in facilities where staff fear that decreasing the use of restraints will increase the rate of patient-to-staff assaults. In fact, the converse is overwhelmingly true: as the use of restraints decreases, the number of patient-to-staff assaults also decreases.[10] Note: This is a particularly good measure to analyze data by equity factor (e.g., race, gender, income, or other segment most relevant to your facility).
Qualitative Measure: Stories from frontline ED staff (e.g., after trauma-informed care training), hospital leaders, and patients themselves are powerful. The National Alliance on Mental Illness (NAMI) is a good resource for patient-centered stories and qualitative measures of improvement.				
Promising Results from Learning Community Teams: Two Learning Community facilities had early results in decreasing patient-to-staff assaults by testing changes related to trauma-informed care training and staff learning to interact with patients in a different way.				

3) Patients: Engage and Activate Patients and Families in ED Care Redesign

Learning Community ED teams tested different methods of collecting patient feedback: in person as part of the ED discharge process, as a follow-up phone call to patients after discharge, and using a patient survey. Each facility will need to test the particular feedback method and timing within an overall process that works best in their context; it is recommended to start with small tests of change (e.g., test the change with *one* staff member during *one* shift with *one* patient) and then refine the change based on learning before expanding the test.

Measure	Numerator	Denominator	Exclusions	Context to Consider
MH/SUD patient experience of ED care (using a 1-to-5 scale, survey responses rating the degree to which ED staff treated MH/SUD patient with respect, listened to the patient, and communicated effectively)	Average of all patient survey response ratings using a 5-point scale	N/A	None	This metric captures key elements from the patient-focused perspective. Facilities may find it useful to refer to the National Alliance on Mental Illness patient surveys. An additional component to this survey that measures effectiveness may also be to ask the patient: To what extent did we address the issue you came with today?
Percentage of families of MH/SUD patients who participate in and receive the post-ED-discharge care plan	Total number of families of MH/SUD patients who participate in and receive the care plan	Total number of MH/SUD patients who present to the ED, who desire family involvement	Patients who do not desire family involvement	This metric is useful for facilities testing family engagement as part of the changes being implemented. While this may be more challenging to measure (and likely is not a metric a facility is already measuring), it is useful in helping improve impact and effectiveness of treatment, and can also potentially result in fewer patients returning unnecessarily to the ED.
Qualitative Measure: Stories from patients and families (both positive and negative) can inform the extent to which they feel confident and/or informed as they transition from the ED. This feedback helps ED teams determine whether or not care processes and communication mechanisms are effective, and identifies patient and family needs that are not being addressed.				
Promising Results from Learning Community Teams: At the beginning of the Learning Community, few ED teams were collecting patient and family feedback for patients with mental health conditions and substance use disorders. By the end of the 18-month initiative a majority of teams tested some form of patient feedback, although systematically collecting and reporting this data was challenging for many. One of the more successful tests for obtaining patient experience feedback from discharged ED patients was a follow-up call made by a dedicated care coordinator.				

4) Partnerships: Strengthen Relationships with Community Partners to Support Patients' Ongoing Needs

Measurement data for this framework component are more challenging to capture, particularly if ED teams rely on external partners to report the raw data back to them.

Measure	Numerator	Denominator	Exclusions	Context to Consider
Total number of patients with a scheduled follow-up appointment at a community provider	Total of patients referred to community-based provider for follow-up appointment, as defined by the facility calling the community provider and scheduling the appointment, confirming day/time with the patient	N/A	None	This metric captures what is most in ED staff's scope of control regarding partnerships: referring a patient to a community-based provider for follow-up once discharged from the ED. While this metric in itself does not capture whether the loop closed and linkage happened (e.g., patient ultimately visited and completed the appointment with the community-based provider), it does measure the important first step in the community linkage process. This measure also relates to the measure for ED revisits within 7 days, as greater linkages to community providers should reduce unnecessary returns to the ED as patients become aware of other options that might better meet their needs.
Percentage of referrals completed	Total number of patients who successfully complete first appointment with community-based provider after ED discharge	Total number of patients referred to a community-based provider	None	While more of an "ambitious" metric (in terms of feasibility), this measure helps show the effectiveness of partnerships with community-based providers (i.e., the extent to which patients are indeed going to community-based providers they were referred to at ED discharge). Although this is a more challenging measure because data is collected and reported by external partners, the process of approaching this metric in partnership with a community provider strengthens the partnership itself. As an intermediate measure, simply looking at the numerator itself (number of patients vs. percentage) can help build will and momentum for change.
Qualitative Measures: Stories of impact from community partners and patients are strong qualitative measures. In particular, understanding a patient's journey between the ED and community providers (the full ED and upstream journey) is a powerful tool for patient-centered improvement.				
Promising Results from Learning Community Teams: One Learning Community team began tracking the number of referrals made and completed, anticipating that an increase in completed referrals would result in decreased ED revisits for these patients.				

Appendix B: Tools and Resources

These resources and tools, used by Learning Community participants, may provide additional support to organizations seeking to improve the ED experience of care and outcomes for individuals with mental health conditions and substance use disorders.

- Sierra Sacramento Valley Medical Society: SMART Medical Clearance Form
- Behavioral Activity Rating Scale (BARS)
- Suicide Risk Screening and Assessment Tools
    - Patient Health Questionnaire Screeners: Patient Health Questionnaire-9 (PHQ-9)
    - Substance Abuse and Mental Health Services Administration (SAMHSA): SAFE-T Pocket Card: Suicide Assessment Five-Step Evaluation and Triage for Clinicians
    - The Columbia Lighthouse Project: Suicide Severity Risk Scale
    - Emergency Medicine Network (EMNet): Emergency Department Safety Assessment and Follow-up Evaluation (ED-SAFE)
    - SAMHSA-HRSA Center for Integrated Health Solutions: The Suicide Behaviors Questionnaire-Revised (SBQ-R)
    - Suicide Prevention Resource Center: Caring for Adult Patients with Suicide Risk: A Consensus Guide for Emergency Departments (Quick Guide for Clinicians)
    - Zero Suicide Institute at EDC
- Australian College for Emergency Medicine: Australasian Triage Scale
- Joint Commission Standards: R3 Report Issue 18: National Patient Safety Goal for Suicide Prevention
- Project BETA (Best practices in Evaluation and Treatment of Agitation)
- American College of Emergency Physicians: Critical Issues in the Diagnosis and Management of the Adult Psychiatric Patient in the Emergency Department (2017)
- ED-BRIDGE: Emergency Buprenorphine Treatment
- National Council for Behavioral Health: Recommendations for Trauma-Informed Design
- SAMHSA-HRSA Center for Integrated Health Solutions: Peer Providers
- National Alliance on Mental Illness (NAMI) Resources
- Depression and Bipolar Support Alliance
- National Council for Behavioral Health: Fostering Resilience and Recovery: A Change Package for Advancing Trauma-Informed Primary Care
- WIHI: The Benefits of Behavioral Health in the ED: Hoag Hospital's Trauma-Informed Care Training

Further Reading

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