Overcrowded, Underserved:

Innovative Approaches to Addressing the Behavioral Health Crisis in Emergency Departments

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More than 50 percent of patients with behavioral health conditions don't receive the care they need.[1] This is driven by a number of factors ranging from deeply entrenched stigma to poor reimbursement for most services to a healthcare delivery system that is not structured to deliver accessible behavioral healthcare.

One of many challenges is providing adequate care for patients in behavioral health crisis. Over the past two decades, there has been a steady increase in the number of patients with behavioral health conditions seeking care in the hospital Emergency Department (ED). Prior to the pandemic, at least 1 in 9 patients cared for in the ED had a behavioral health condition.[2] While the pandemic created a transient drop in overall ED visits, since late March 2020, there has been a marked increase in ED visits for all behavioral health conditions, overdoses, and suicide attempts.[3]

In general, the hospital ED is designed and staffed to care for patients with acute medical and surgical conditions, **not** behavioral health conditions. Many ED staff don't have the requisite skills and training for behavioral health evaluation and treatment. Also, the availability of behavioral health specialists is often limited, particularly in smaller community hospitals. This not only results in worse clinical outcomes for patients with behavioral health conditions, but there are fewer resources — particularly available staff — for other patients. The result is longer wait times for all patients, decreased patient and provider satisfaction, and increased costs.[4]

Behavioral health conditions are defined as mental illness and substance use disorders.

Current State of Behavioral Healthcare for Patients in the ED

Insufficient resources lead to extended ED length of stay

ED clinical team without requisite behavioral health skills lead to worse professional experience

Clinical outcomes and patient experience suffer

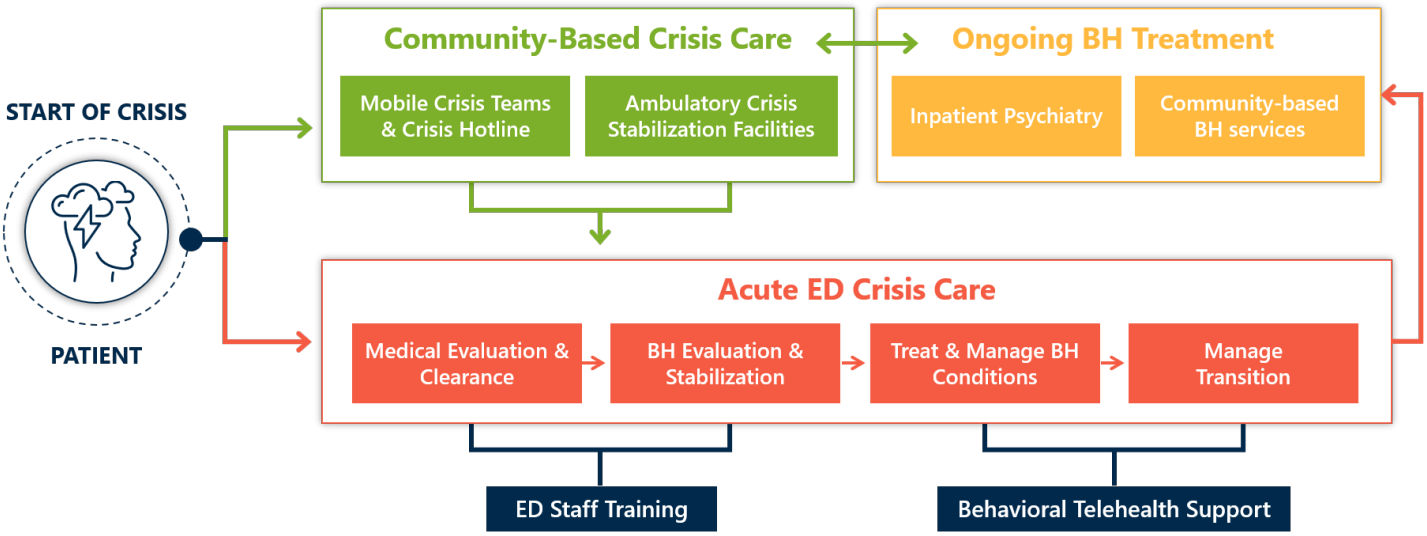
Community-based crisis programs can reduce the need for care in hospital EDs, help to relieve pressure on an already overburdened infrastructure, and reduce the overall cost of care. The Substance Abuse and Mental Health Services Administration (SAMHSA) identifies three core elements of an effective community crisis program: (1) Regional Crisis Call Center; (2) Crisis Mobile Team Response; and (3) Crisis Receiving and Stabilization Facilities.[5] Many of these programs are managed by public agencies (e.g., counties). There are also novel examples of public-private partnerships, including Unity Center for Behavioral Health in Portland, Oregon; the South Jersey Behavioral Health Innovation Collaborative; and for Substance Use Disorder programs, the Doorway program in New Hampshire and The Opioid Community Collaborative in Utah.

Many communities do not have crisis programs. And, even in those communities that have made a significant investment in a crisis program infrastructure, **there will continue to be patients who need care in the ED** because of significant co-morbid medical conditions requiring evaluation and management. Thus, a new care model for patients with behavioral health conditions in the ED is essential.

In this paper, we describe two innovative initiatives that are improving ED care for patients in behavioral health crisis:

1. **ED Staff Training:** Behavioral health training programs developed specifically to support non-behavioral health clinicians and staff. Providing training and tools instills greater confidence for ED clinicians and staff to manage the first two stages of the process: (1) medical evaluation and clearance — to assess whether a patient has a medical condition that requires treatment, and (2) behavioral health evaluation and stabilization — to evaluate the cause of the symptoms, and if possible, provide treatment to reduce the severity of those symptoms.
2. **Behavioral Telehealth Support:** Virtual emergency behavioral health services that extend limited behavioral health specialist resources across EDs and support coordination of care post-discharge. For patients who are more complex and/or are awaiting placement to an acute care facility, providing behavioral health expertise via telehealth is important in both the management of these patients (either directly or in consultation with the ED clinician) and facilitating the transition.

Defining the Behavioral Health (BH) Crisis Patient Journey



Patients in behavioral health crisis require immediate access to care. When community-based programs are not available or patients have significant co-morbid medical conditions, they must seek care in the ED. For patients requiring ED care, two important initiatives, ED Staff Training and Behavioral Telehealth Support, have demonstrated effectiveness.

Two case studies highlight these programs in action.

CASE STUDY: ED STAFF TRAINING

A large integrated delivery network (IDN) with 16 acute care hospitals cared for 26,021 adult and 1,775 adolescent patients with behavioral health conditions (mental illness and substance use disorder) in its EDs in 2019. It launched a project to empower ED teams with training, tools, and (at times) direct assistance to manage patients with behavioral health conditions.

Behavioral Health ED Utilization Trends (2012-2019)

- **63%** increase in pediatric mental health ED visits
- **61%** increase in adult mental health ED visits, from **7.6%** to **16.9%** of ED visits
- **30%** increase in average LOS for mental health patients to 11.5 hours
- **414%** increase in suicidal ideation and intentional self-harm treated in the ED

The tools and approaches included:

- **SMART Medical Clearance**, which enables ED clinicians to manage patients more holistically by providing guidance regarding whether a medical condition is present and needs treatment as either a cause of the psychiatric condition or a co-morbid condition. This not only expedites decision-making for the appropriate management and disposition of behavioral health patients, but also eliminates the need for unnecessary laboratory examinations and other testing.
- **Hack's Impairment Index (HII)**, which facilitates a more rapid assessment of clinical sobriety. This can often reduce the time to the next step of the evaluation.
- **Behavioral Activity Rating Scale (BARS)**, which evaluates agitation and violence potential early in the ED stay and identifies patients who could benefit from preemptive management, reducing delays in treatment. ED clinicians receive guidance regarding the approach to reinstituting home medications or starting new medications, understanding their expected benefits and potential side effects/risks, and learning how to communicate with patients about treatment options. This empowers the clinicians to be less dependent upon consultation with behavioral health specialists and has resulted in reductions in the need for physical restraints and the risk of over-sedation.
- **Behavioral Health Condition risk evaluation**, which includes use of Columbia Suicide Scale (C-SSRS), Patient Healthcare Questionnaire 9 (PHQ-9) for depression screening, and General Anxiety Disorder 7 (GAD-7). These screening tools quickly identify which patients have high-risk behavioral health conditions requiring specialty behavioral health referral and which patients can be safely discharged without behavioral health specialist evaluation.

PROGRAM IMPACT

Reduction in ED average LOS (minutes in ED):

- Patients discharged to community: From **470** minutes down to **320** minutes
- Patients transferred to a facility for admission outside of the IDN: From **430** minutes down to **290** minutes
- Patients admitted to same hospital: From **330** minutes down to **210** minutes

Reduction in restraint utilization:

- From **17.3** down to **9.8** patients (average number of patients in restraints across all hospitals in one month)

Improvement in patient and staff satisfaction (% very satisfied):

- Patient satisfaction increased from **51%** to **62%** | Staff satisfaction increased from **48%** to **60%**

CASE STUDY: ATRIUM'S TELEHEALTH SUPPORT AND NAVIGATION MODEL

Atrium Health is an integrated, nonprofit health system with more than 70,000 teammates serving patients at 42 hospitals and more than 1,500 care locations. Its behavioral health service provides virtual support for 23 acute hospital EDs with 11,484 ED encounters for patients with behavioral health conditions in 2020.

Atrium has developed a robust behavioral health virtual program to support its EDs. The program is staffed with a multidisciplinary team comprised of a telepsychiatry clinician (LCSW/LCMHC or Psych RN), telepsychiatry provider/prescriber (adult psychiatrist, child/adolescent psychiatrist, psychiatric nurse practitioner, and physician assistant), patient placement nurse (RN), and patient placement admission transfer coordinator (bachelor's level with psychiatry-related experience).

They provide the following support:

- **Initial behavioral health evaluation and management**. A master's-level clinician meets virtually with the patient and family member(s) to complete a risk assessment, determine baseline and current functioning, ascertain the nature of the acute crisis, and notify the provider/prescriber through a tracking board. The psychiatric provider reviews clinical information and completes the evaluation of the patient by live video connection to determine the diagnosis and treatment, including recommendation for medication and disposition.
- **Behavioral health management of patients who have extended ED stays**. Patients requiring continued stabilization or who are awaiting placement receive continued clinical management support virtually. Many of these patients also improve to the point of being able to go home without needing to transfer to an inpatient care setting.
- **Centralized bed placement program.** A small centralized team of nurses and bachelor's-level coordinators triages patients based upon clinical acuity and resource availability, facilitating transfer to appropriate treatment and optimizing system psychiatric bed utilization.
- **Navigation Program**.[6] All patients who are discharged from the ED and have access to a phone (landline, mobile, etc.) are eligible for Navigation Services, which provides phone follow-up with the patient within 72 hours of discharge. For patients who elect to use these services at minimum, there is a weekly contact with patients, which includes assistance with identifying and addressing barriers to health, facilitating appointments, and encouraging medication adherence. Navigator functions also include C-SSRS suicide risk reassessment, crisis planning, PHQ-9 depression screening, referrals, and access to additional resources. This program enables providers to have a higher threshold for deciding to admit the patient: they are more comfortable discharging patients to the community knowing that patients will have the needed resources.

PROGRAM IMPACT

- A **55%** reduction in ED length of stay, despite **145%** increased volume from 2014-2020.
- A **62%** reduction in readmission rates for patients discharged from the ED and enrolled in the Navigation Program.
- A 30-day all cause readmission rate of **16.8%**, compared with the CMS average of **20%**.
- After initial assessment, **40%** of patients can be discharged home. The remaining patients who aren't immediately admitted are either awaiting bed placement or (a small number) are in observation. More than **60%** of those patients are discharged home.
- **35%** of patients have a reduction of at least **50%** in their PHQ-9 depression scores.

INNOVATIONS LEAD TO IMPROVEMENTS ACROSS THE BOARD

Given the breadth of the interventions described in these two case studies, these programs can yield a broad range of benefits. First, clinical care improves with better patient and provider experience, reduced depression scores, and improvement in other measures of behavioral health severity. Second, care is provided more efficiently with reduced delays in treatment and fewer subsequent ED visits and readmissions. Finally, there is a financial return on investment with decreased costs (e.g., fewer sitters and clinical staff) and increased revenue as capacity is increased so more patients can receive care. This is particularly important for organizations with value-based contracts.

CLINICAL OUTCOMES	HEALTHCARE UTILIZATION	FINANCIAL OUTCOMES
^ Patient Experience of Care	^ Bed Occupancy	v Sitter Expense
^ Timeliness to appropriate care including decreased LWBS	v ED LOS	v Salary Expense
^ Teammate/Provider Satisfaction (e.g., feel safer)	v ED Visits and Admissions	^ ED Capacity
^ Clinical Outcomes (e.g., PHQ-9 scores)	v ED Readmission	^ Increased Contribution Margin
v Use of restraints (e.g., improved anti-psychotic management)	^ Access to Timely Treatment	

PURSUING EFFECTIVE INNOVATIONS

As the incidence of behavioral health conditions continues to increase, health systems will need to identify innovative approaches that can alleviate some of the burden on ED clinicians and staff, improve clinical care, and reduce costs. Fortunately, there are steps that healthcare leaders can take to address this challenge.

Healthcare leaders should explore how to partner with community-based resources to expand the range of options available to patients and potentially mitigate the need to seek care in the ED. However, there will continue to be patients with behavioral health conditions requiring care in the ED regardless of how robust the community crisis program. For these patients and the staff taking care of them, training and virtual specialty support, including navigation services, are effective innovations that can also help build capability to address broader behavioral health needs.

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