Right-Sizing ED Utilization for Acute Behavioral Health Patients

Key Insights at-a-Glance:

- **Problem Scope:** Approximately one in eight emergency department visits is associated with behavioral health needs and 45% of patients with non-psychiatric complaints have an undiagnosed mental illness, which makes reducing avoidable ED utilization for patients with behavioral health needs a key priority for population health managers.
- **Solutions:** Screen for undiagnosed behavioral health needs across all care settings, including primary care, treat mental health needs surfaced in the ED with specialized support, and provide treated patients with targeted education on post-ED utilization and follow up.
- **Benefits:** Improves overall ED patient throughput (e.g., decreased wait times, length of stay), reduces utilization (e.g., admissions and readmissions), and reduces total cost of care for behavioral health patients.

Top Drivers of Inappropriate ED Use

Provider Shortages

56%

Unmet need of psychiatrists in the workforce as of January 2017

Low Patient Adherence

35%

Proportion of patients with a serious mental illness who did not receive treatment in 2015

Inconsistent Insurance Coverage

29%

Denial rate for mental health care, nearly twice the rate as medical care

Limited Psychiatric Beds

35%

Decrease in number of psychiatric beds between 1998-2013

Business Case

Financial Impact

Patients with a behavioral health diagnosis incur 2-3 times more cost than those patients without a diagnosis. Within the ED, behavioral health patients often require extended specialty care that can result in up to $2K in additional physical health care costs.

▸ $2,265

Additional cost per psychiatric ED stay

Operational Impact

ED staff are often ill-equipped to address patients' behavioral health needs, increasing length of stay and slowing throughput. A patient with a psychiatric emergency waits more than three times longer than a patient with non-psychiatric needs, blocking at least two patients from receiving more timely care.

▸ 3x

Longer ED wait time for patients with a psychiatric emergency than those with non-psychiatric needs

Clinical Impact

Adults suffering from mental health conditions are more likely to have a medical comorbidity, and often experience worse clinical outcomes due to poor self-management. For example, depression is consistently associated with increased risk of poor glycemic control, complications, and care utilization for diabetic patients.

▸ 82%

Higher relative risk of a heart attack in patients with comorbid depression and diabetes than those without

Source: American Psychiatric Association; "Mental Health Care Health Professional Shortage Areas (HPSAs)," Kaiser Family Foundation, http://kff.org; Bastiampillai T, et al., "Increase in US Suicide Rates and the Critical Decline in Psychiatric Beds," *JAMA*, 316, no. 24 (2016): 2591-2592; "Behavioral Health Barometer: United States, Volume 4," SAMHSA, https://www.samhsa.gov/; Nicks BA, Manthey DM, "The Impact of Psychiatric Patient Boarding in Emergency Departments," *Emergency Medical International*, (2012); Goodell S, Druss BG, Walker ER, "Mental Disorders and Medical Comorbidity," Robert Wood Johnson Foundation, http://www.rwjf.org/; Melek SP, et al., "Economic Impact of Integrated Medical-Behavioral Healthcare," Milliman, Inc., (2014); Scherrer, JF, et al., "Increased risk of myocardial infarction in depressed patients with type 2 diabetes," Diabetes Care, 34, no. 8, (2011): 1729-1734; Population Health Advisor interviews and analysis.

Solutions

POINT OF INFLECTION	HEALTH SYSTEM SOLUTION
Early Intervention and Prevention	Conduct universal mental health screening in primary care to surface undiagnosed needs and behaviors to match those at-risk to the appropriate service. Further manage the inevitable episodes of patients in crisis by collaborating with community partners to prevent and/or de-escalate crises while ensuring right site of care.
Point of Care Intervention	When behavioral health patients present in the ED, providers should offer appropriate services in a timely manner to optimize throughput. Peer support, virtual access to specialists, and dedicated psychiatric emergency services/wards help improve emergency care for behavioral health patients without blocking services for others.
Post-Utilization Education and Follow-Up	Discharge planning should include the connection to community support and education. Providers can leverage care transitions support to ensure appropriate follow-up, and/or refer patients to specific community-based organizations for ongoing care (e.g., peer support network).

IN-DEPTH CASE STUDY PROFILES

Patients with high-acuity behavioral health needs present the greatest opportunity to inflect change in avoidable ED utilization. The next four pages highlight two in-depth case studies that focus on how providers are forming partnerships to prevent, right-size utilization, and provide follow-up support for patients with severe behavioral health needs. Given the sizable impact that patients with behavioral health needs have on health care costs and utilization, these provider organizations have collaborated to secure funding and made significant investments in extending access to specialized services for patients with serious and complex needs.

Point of Inflection	Strategy	Case Study 1: Dedicated Psychiatric Emergency Services Unit	Case Study 2: Crisis Stabilization with Ongoing Community-Based Support Team
Early Intervention and Prevention	ED diversion	✓	✗
Point of Care Intervention	Episodic stabilization	✓	✗
	Long-term stabilization	✗	✓
	Non-clinical needs assessment	✓	✓
Post-Utilization Education and Follow-Up	Connection to community services	✓	✓
	Clinical support	✗	✓
	Peer support	✓	✗

1) Psychiatric Emergency Services.

Source: Zeller S, Calma N, Stone A, "Effects of a Dedicated Regional Psychiatric Emergency Service on Boarding of Psychiatric Patients in Area Emergency Departments," *West J Emerg Med*, 15, no. 1 (2014): 1-6; Population Health Advisor interviews and analysis.

Redirecting Crisis Cases to Dedicated Services Outside the ED

Case in Brief: Unity Center for Behavioral Health

- 24-hour behavioral health services center established through a collaboration of four major health systems in Portland, Oregon area: Legacy Health, Adventist Health, Oregon Health & Science University (OHSU), and Kaiser Permanente
- To reduce the time behavioral health patients wait for emergency care and increase quality of care, the partnership created the Unity Center, which includes outpatient psychiatric emergency services (PES), several inpatient units, and ongoing support
- Unity receives hourly crisis stabilization reimbursement rates set through Medicaid; Setting a state Medicaid rate aided negotiations with commercial insurers, who saw the benefit of an hourly stabilization rate rather than the cost of an inpatient stay
- Since opening its doors in early 2017, the Unity Center cut the number of hours partner hospital Legacy Good Samaritan Medical Center spent on ED diversion status due to overcrowding by 71%, resulting a contributing profit margin increase of $1.6M; Nearly 80% of patients treated by PES are stabilized and discharged within 24 hours

Program Structure

Major health systems partner to oversee operations and provide funding, staffing, and resources

The Unity Center is operated by Legacy Health and features a governance committee formed by four health systems. Each health system contributed significant staffing and other resources to the two-year planning process. For example, Legacy donated the building and raised the dollars for renovating it, and OHSU provides the recruitment, medical staffing, and residents through their Adult Psychiatry Residency and Child/Adolescent Fellowship programs. All participating health systems share in the profit or losses for Unity.

The Unity Center has capacity for both emergency and inpatient care. The psychiatric emergency services (PES) facility includes 40 recliners, 8 calming rooms, and a living room for low-acuity and pre-discharge patients. Inpatient services include 80 adult beds and 22 child/adolescent beds. The PES's average length of stay is 19 hours. For comparison, local EDs in the area used to have boarding times of 40-60 hours.

Operations

For patients in crisis, Unity provides stabilization in a calming environment, rather than busy ED

Patients can arrive to Unity via ambulance, police transport, or walk-in through the emergency triage area purposely built for people in mental health crisis. Upon entry, staff conduct a clinical assessment to ensure their crisis is behavioral in nature. If deemed medically stable, the patient is brought to the PES unit, and if not, they are triaged to a more appropriate level of support.

PES staff recognize the importance of quick patient stabilization (using both assessments and treatments) in a relaxed environment. Rather than using regular emergency beds, patients receive care in recliners from a multidisciplinary care team that includes a nurse practitioner or physician, crisis intervention specialist, nurses, and behavioral health assistant. Employed peer support specialists provide additional care to patients flagged by staff and open to support.

Prior to discharge, Unity can use any of the following three key tactics to ensure an effective transition:

Engage co-located community care provider
Dedicated space adjacent to PES for community providers to provide education and enroll patients

Notify on-call community partner
Unity notifies partners of their patients' admission who then send staff to determine post-discharge support

Deliver warm hand-off
Coordinated referral to ensure patients have needed resources prior to discharge

80-90%
Patients with scheduled follow-up appointment upon discharge

For high-risk patients who have a history of not following up on their care plan as well as patients experiencing their first psychotic episode, Unity provides ongoing care upon discharge. Peer support specialist bridgers follow-up post-discharge by phone and in-person support meetings to ensure recovery and prevent escalation.

Source: Population Health Advisor interviews and analysis.

Peer Specialists Complement Clinical Staff to Scale Activation

Program Staffing

Core care team permanently staffed within psychiatric emergency services

PES Unit Staff	Principle Responsibilities
Nurse practitioner or physician	Assess patient upon arrival and determine if immediate medication is needed prior to full evaluation; Create care plan and manage medications
Crisis intervention specialist	Offer crisis counseling to assist in stabilization and recovery; Coordinate referrals to community resources
Behavioral health assistant	Support care team by providing milieu management and attend to patient needs in the psychiatric emergency service unit
Peer Support Specialist	Offer peer-to-peer support and comfort to patients by sharing personal experience about behavioral health problems and recovery
Nurses	Monitor patients' mood, behavior, vital signs, and medication dispensing; Preserve patient and milieu safety

Additional layer of support extended to 'frequent fliers' and patients experiencing first crisis episode

Peer Support Specialist Bridgers
3.2 FTEs

- Provide support to high-utilizers with history of not following up on care plan (i.e., patients with five or more PES visits in six months) and patients experiencing first psychotic episode
- Follow up with patients via phone or in-person after discharge

Peer Support Bridgers Effectively Reduce Acute Care Utilization in Inpatient Setting (Link)**:**
Optum Pierce County Regional Support Network

- Peer bridgers connect patients to community services and assist patients with accessing medical services
- Program reduced hospitalizations by 79% and saved $550K over first three years after subtracting program costs

Staff Deployment

Peer support counselors serve as sustainable approach to ensure wrap-around services

Unity partners with a non-profit peer support organization, Folk Time, to provide the peer support specialists that staff the ED 11 hours per day. Peer staff participate in a 40-hour training and receive ongoing weekly supervision. High-utilizers and first-time PES users receive additional support post-discharge from the peer support bridgers to prevent future avoidable utilization.

Funding

- Legacy Health donated $10M in real estate, requiring remodeling in large part covered by The Legacy Health Foundation ($40M out of $50M)
- Unity receives a reimbursement of $125 per hour of stabilization from the state; Other payers reimburse at varying rates

Program Impact[1]

71%
Decrease in hours one partner hospital[2] spent on ED diversion status[3] due to ED overcrowding

$1.6M
Estimated increase in contributing profit margin at partner hospital[2] due to reduced time on diversion status

79%
Patients stabilized and discharged from PES unit within 24 hours

1) Within first six months of PES unit opening.
2) Legacy Good Samaritan Medical Center.
3) Temporary status for a health care facility, in which it informs local emergency medical services and ambulances that its beds are full and it cannot take new patients.

Source: Population Health Advisor interviews and analysis.

Partnership Strategy Ensures Needs Met within Communities

Case in Brief: Nexus Montgomery Regional Partnership

- Partnership that invests in community partners' projects to address health care gaps for four populations: seniors, patients with severe mental illness (SMI), ineligible-uninsured populations, and frequent utilizers; Collaboration includes Adventist HealthCare, Holy Cross Health, MedStar Health, and Johns Hopkins Medicine and is funded by a grant of $7.6M from the Maryland Health Services Cost Review Commission
- To expand service capacity for patients with SMI, Nexus Montgomery invested in local behavioral health provider, Cornerstone Montgomery; Nexus funded a crisis house to add to their two existing locations and provided start-up dollars for an Assertive Community Treatment (ACT) team
- Cornerstone Montgomery receives a $1230 monthly rate for ACT services and $280 daily rate for crisis house care[1]
- In the first 10 months of operation, 15 of the ACT team's patients who were homeless now live in stable housing; As the program develops, they expect to see a reduction in acute utilization and improved patient satisfaction compared to standard care, as seen in randomized controlled trials of over 25 ACT teams[2]

Program Structure

Multi-hospital partnership provides start-up funding to local behavioral health organization to expand access of existing service offerings to more patients across the region

Nexus Montgomery Regional Partnership invests in existing community-based programs based on community need, goal alignment, and demonstrated ROI. Increasing access to care for SMI patients is among its top priorities, so Nexus provided over $600K to Cornerstone Montgomery, a local behavioral health provider, to expand their residential crisis services and add a mobile treatment team. Medicaid reimbursement alone is enough to make both programs financially sustainable when operating at full capacity.

As a result of new investments, the community now has three crisis houses (each with eight beds) and three Assertive Community Treatment (ACT) teams that each have the capacity to treat 100 patients at a time. Both intervention services receive referrals from one another as well as local providers (e.g., behavioral health, primary care, inpatient, ED). Patients can also self-refer to the crisis houses.

Operations

Two-part crisis intervention manages patients in the community, preventing ED usage

Crisis House

Community-based crisis stabilization provides short-term housing for those who cannot self-manage

ACT Team

Multi-disciplinary team provides intensive care support for people with severe and chronic mental illness

Crisis houses serve as alternative to ED or inpatient stay, with added patient flexibility

Located in suburban neighborhoods, the crisis houses provide stabilization services to individuals experiencing crisis, at one-third of the cost of an inpatient stay.

During their stay, crisis counselors provide one-on-one therapy to help identify triggers, coping skills, short-term goals for recovery, and prevention strategies for subsequent crises. A psychiatrist rotates through the three houses for medication management. Patients typically stay for 10-14 days and can come and go as they please (e.g., follow employment responsibilities). When patients are discharged, the house continues to offer support. For example, alumni often call the house for advice and additional assistance.

ACT team provides ongoing, wraparound support

Once the patient is enrolled, the ACT team provides intensive community-based care support (e.g., in home, coffee shop) through a multi-disciplinary care team that includes a psychiatrist, nurse care coordinators, and job counselors.

The ACT team assesses patient progress, ensures medication compliance, helps to develop social, educational and professional skills, and discusses any other clinical and non-clinical concerns with patients. The team holds daily "huddles" at their central location to discuss what care they can provide to each patient in the program. Patients remain in the program as long as needed unless they move out of the ACT team's service area.

1) Medicaid and the state provides reimbursement for Medicaid, Medicare, and uninsured patients.
2) University of Oklahoma-Tulsa's ACT team estimated $15K in cost savings per patient per year as well as a 30% decrease in symptom severity and 30% increase in independent living skills.

Source: Phillips SD, et al., "Moving assertive community treatment into standard practice," *Psychiatric Services*, 52, no. 6 (2001): 771–779; Population Health Advisor interviews and analysis.

Crisis House Stabilizes Episode, ACT Manages Chronic Illness

Program Staffing

Crisis House: Counselors provide day-to-day patient care supported by rotating psychiatrist

Psychiatrist
0.3 per house
- Performs medication reconciliation
- Assesses patients within 24 hours of intake and every two days for follow up

Crisis Counselor[1]
7 per house, 2 onsite at all times
- Provides one-on-one counseling, medication monitoring, and discharge planning

Administrative Assistant
1 per team
- Evaluates and manages referrals to the crisis house by screening for appropriateness and urgency
- Performs administrative tasks

ACT Team: Specialized providers, care coordinators, and non-clinical peers flex management

Team Composition	Principle Responsibilities
1 Psychiatrist	Performs medication reconciliation
3 RN care coordinators	Coordinate and attend medical visits; manage prescriptions
2 Social work therapists	Counsel patients; assist with legal system navigation when needed
2 Supportive employment specialists	Facilitate development of job-related skills
2 Alcohol and drug counselors	Provide alcohol and drug therapy for individuals and groups
1 Peer specialist	Motivates and connects with patients based on personal experience
1 Administrative assistant	Tracks team deployment and responsibilities in EMR

Staff Deployment

ACT team's daily huddles consistently foster warm hand-offs and pre-visit planning

Since patients' appointments are set in advance, the ACT team uses huddles for pre-visit planning. The huddles occur daily (four times a week in person, once via conference call) to discuss any interactions with each patient within the last 24 hours. The team also ensures they meet any additional needs (e.g., nurse to accompany a doctor's appointment or supportive employment specialist to assist with skill development). One of the social work therapists on each ACT team serves as the team leader, runs all huddle discussions, and is responsible for new patient intake assessments.

Staff members perform unconventional tasks to guarantee all non-clinical gaps are closed

Since the SMI population has diverse needs, care team members adopt flexible roles not typical for their title or licensure. For instance, some patients have designated Cornerstone Montgomery as their representative payee. As a result, the ACT team's administrative assistant manages finances for patients by paying bills and helping patients with budgeting. Additionally, one of the ACT therapists helps patients navigate the legal system (as needed) by communicating with probation officers, attending court with patients, and helping with legal documentation.

Funding

- The Nexus partnership provided $350K to expand the crisis houses and $330K to initiate the ACT team
- The crisis house reimbursement rate per night is $280
- The monthly reimbursement rate for the ACT team is $1230

Program Impact

15

Formerly homeless behavioral health patients in stable housing within 10 months

1) Crisis counselors have a range of backgrounds. Some are social workers while others have a bachelor's degree in psychology plus years of experience.

Source: Population Health Advisor interviews and analysis.

Advisors to Our Work

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Related Resources

Strategic Planning Guide: Behavioral Health Management Guide (Link)
Provides an overview of the current landscape and future outlook for behavioral health care delivery, nine elements of a patient-centered, sustainable strategy, and case studies of best-in-class behavioral health programs

Research Compendium: Reducing Avoidable Emergency Department Utilization

Outlines strategies for decreasing avoidable utilization of the emergency department by increasing patient access to primary care, educating patients of alternate care points and self-management strategies, and implementing targeted measures for high risk patients

Data and Analytics Tool: Avoidable ED Utilization Assessment (Link)

Applies an algorithm developed by NYU clinical experts to your facility's Medicare inpatient and outpatient data to identify avoidable ED visits

Executive Briefing: Telebehavioral Health Primer (Link)

Highlights telehealth market trends oriented around behavioral health care delivery including definition of key terms, discussion of investment considerations, and a sample case study from a leading health care organization with an established telebehavioral health program

Toolkit: Integrated Behavioral Health Implementation Toolkit (Link)

Provides a compilation of surveys, checklists, and sample templates from leading health care organizations to support behavioral health integration in the primary care setting. Tools address six critical components of the integrated model: market demand, organizational culture, patient identification, patient management, care coordination, and sustainability planning

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