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Assessment Report and Case Study

ADAMH Board of Franklin County

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CXNS HEALTH STRATEGIES

SWOT ANALYSIS

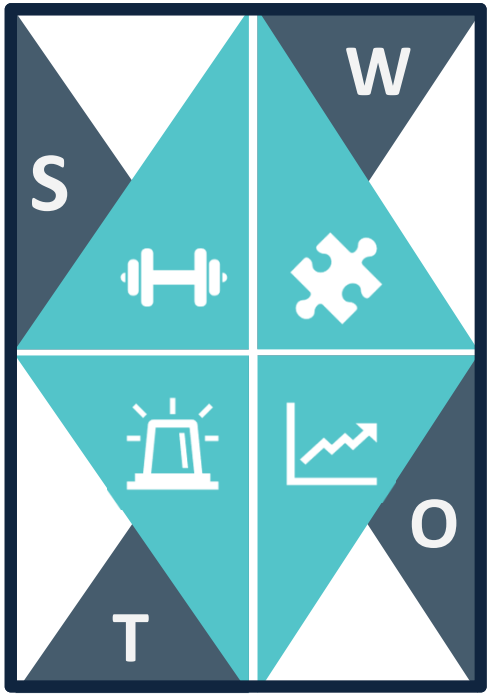
ADAMH Board of Franklin County & Netcare Access

STRENGTHS

- ✓ People
- ✓ Satisfactory existing services
- ✓ Clear mission
- ✓ Self-image as community resource
- ✓ Self-awareness
- ✓ Reputation
- ✓ Relationships with external stakeholders
- ✓ Accept all probate ordered drop offs
- ✓ Financial support from local foundations
- ✓ ADAMH support for Netcare Access (both current operations and the new facility)
  - ✓ Coordinated collaboration and commitment to creating a new facility

THREATS

- ✓ Growing population
- ✓ Homeless population
  - ✓ Growth and inability to discharge to shelters
- ✓ Workforce limitations
- ✓ High recidivism rates
- ✓ EMS inability to transfer patients directly to Netcare facilities



WEAKNESSES

- ✓ System is overwhelmed and overstressed
- ✓ Limited electronic data sharing with community mental health providers, hospitals and first responders
- ✓ Frequently on divert from first responders due to capacity limitations
- ✓ Unlocked facility → frequent elopements
- ✓ Challenges treating highly acute patients due to physical plant and staffing
- ✓ Lacking a centralized flow of behavioral health services
  - ✓ Ineffective patient flow following discharge from Netcare treatment facility into step down services
  - ✓ Approximately 40% of patients are not connected to any community resources at intake
- ✓ Limited physical space for patients to interact and remain engaged
  - ✓ Lack of milieu resulting in patient isolation
- ✓ Netcare's value proposition is unclear to the MCOs

OPPORTUNITIES: "Franklin County Mental Health Crisis Center"

- ✓ Increase access to care and capacity
- ✓ Improve efficacy and efficiency of treatment
- ✓ Become a "one stop shop" for first responders
- ✓ Integrate and coordinate SUD and psychiatric treatment
- ✓ Create a locked unit to address elopement concerns
  - ✓ Ability to accept acute patients without major safety concerns
- ✓ Create functional milieu for patient engagement
- ✓ Share data across system stakeholders
- ✓ Collaborate and contract with all five MCOs

CXNS HEALTH STRATEGIES

Executive Summary

Franklin County, Ohio, has for many years had an innovative crisis continuum of care that includes crisis phones, mobile teams, and facility-based crisis services. Several factors have led to rising demand for mental health and substance use services, including both increased need among the population and increased training for first-responders in recognizing this need. As a result, the current system is no longer meeting the needs of the community, and stakeholders are looking at making investments in the crisis system in order to increase access to care, better service first responders, and improve outcomes for people experiencing a behavioral health crisis.

Franklin County's crisis in behavioral health service delivery is not unlike what is being experienced nationwide. Emergency Departments (EDs), first responders, and behavioral health (BH) systems are overwhelmed. Individuals in need are not always able to receive the proper treatment in the most effective and therapeutic settings. While each individual part of the system is trying to do what is best for the person in crisis, the lack of a coordinated solution makes it difficult to use existing resources to their full potential and impacts outcomes. However, the community has recognized need for an improved crisis response, committed to improving the system, and is comprised of stakeholders with a demonstrated track record of collaborative problem-solving. This creates an exciting opportunity to build a cutting-edge crisis system in Franklin County.

While Franklin County has many of the building blocks for an advanced crisis system, missing from the current continuum of care is a modern "front door" crisis facility that can accept, hold, assess, treat and refer persons in crisis all along the acuity continuum. Investing in such a facility would allow first responders to have a reliable receiver of individuals in crisis, ensure that those with high needs are able to access treatment, lessen ED boarding, and provide effective and less-restrictive treatment options other than inpatient hospitalization.

[Note: In this report, we use the term Behavioral Health (BH) to encompass both Mental Health (MH) and Substance Use (SUD) disorders and services.]

A Crisis Solution for Franklin County

Today

Emergency Departments

Individuals experiencing a behavioral health (BH, mental health or substance use) related crisis are at high risk for a myriad of adverse and sometimes tragic outcomes. These patients frequently end up in Emergency Departments (EDs) instead of receiving behavioral health care

in a specialty setting designed to meet their needs. The American College of Emergency Physicians reports[1] that over 80% of EDs board psychiatric patients – sometimes for days – due to the lack of internal and community resources needed to treat this population. This results in increased cost and risk for the ED and a poor experience for the individual in crisis. Without the ability to provide a comprehensive behavioral health assessment and treatment in a therapeutic environment, the default disposition is often inpatient admission. Patients then wait for a psychiatric bed, in an environment ill-equipped to meet their unique needs. Boarding psychiatric patients without specialized treatment increases risk of harm to the patient and ED staff, as well as increased risk and cost to the institution. One study conservatively estimates the cost of psychiatric boarding at $2,264 per patient per day.[2]

Aside from the costs associated with boarding, the cost in terms of patient outcomes is significant. Psychiatric patients held in medical EDs pending placement receive little in the way of effective care for their BH needs. They are frequently restrained, dressed in identifying clothing, stigmatized, and seen by the non-BH staff responsible for their care as a burden because they lack the tools or expertise to effectively intervene and meet the patient's needs.

In Franklin County, the three largest EDs report a combined total of over 20,595 visits with a primary BH (MH or SUD) diagnosis, nearly half of whom have Medicaid. Their BH patients stay in the ED an average of 12.87 hours, which is 5 times the Ohio average ED length of stay of 2.5 hours[3]. Some of these patients could board for 2-3 days waiting for placement in an inpatient bed, especially if their payer, diagnosis, or level of acuity renders them a challenging patient to inpatient psychiatric hospitals. Although the EDs have, out of necessity, developed some psychiatric treatment capacity, the ability to divert these patients to a crisis center would reduce the burden on local EDs and provide a better experience for the patient.

First Responders

The first responders on the scene of a BH emergency are often law enforcement, which sets the stage for risky encounters. Nationally, it is estimated that a quarter of officer-involved shooting fatalities are behavioral health related[4,5]. Training programs such as Mental Health First Aid (MHFA) and Crisis Intervention Team (CIT) Training equip officers with tools to de-escalate the person in crisis and connect them to treatment in lieu of arrest[6]. However, research shows that even CIT-trained law enforcement personnel bring people to jail when the crisis system is difficult or time-consuming to access[7] . Once incarcerated, most do not receive the treatment they need, are incarcerated longer at higher cost, are more likely to suffer adverse outcomes such as assault and solitary confinement, and after release, they have difficulty with housing and employment due to their criminal record[8,9]. Besides the human cost, this is a poor use of taxpayer dollars.

The Franklin County law enforcement community has been very progressive in implementing best-practice behavioral health programs. Local law enforcement agencies have invested in

CIT training for their officers and deputies, and the Franklin County Sheriff has recently created a co-responder mobile team to focus on individuals with probate orders. Currently, Columbus PD receives 22,880 mental health calls annually and transports about a quarter (5,623), mostly to EDs. Only 652 are brought to Netcare due to the facility frequently being on diversion. If a more robust and higher capacity crisis facility existed, there is no doubt that the law enforcement community in Franklin County would use it.

BH Crisis System

The Franklin County ADAMH Board has been a leader in addressing these issues. Its creation of Netcare in the 1990s was an innovative and forward-thinking approach to centralizing crisis services at the time. Currently, Netcare provides crisis services to 7,840 patients annually (approximately 650 visits per month, based on data provided by Netcare for Oct 2017 to Sep 2018). After an average stay of 19 hours, only 38% go on to be admitted to a hospital or ED. Thus, Netcare is providing a valuable service by providing stabilization in the least restrictive setting and avoiding unnecessary and costly inpatient utilization. However, based on the first responder data above, it is not surprising that after more than 20 years, Netcare's crisis facility is often at capacity. Netcare is on divert (i.e. not accepting police drop-offs) an average of 408 hours per month, or 56% of the time. The inability of Netcare to accept people for such a significant amount of time leads to increased ED usage, and the true need for crisis services is likely underestimated due to the lack of capacity. Furthermore, physical plant and process issues hinder Netcare's ability to provide care to the most highly acute patients and have resulted in an average of 32 elopements per month (monthly numbers range from 19-56). Some of these elopements are people who are at risk both to themselves and to others in the community.

Persons in crisis frequently experience both mental health (MH) and substance abuse (SUD) problems. Franklin County and the ADAMH Board have been very aggressive in creating treatment opportunities for those with SUD, especially opiate dependence. New resources have been added to help in this area, but the barriers between SUD treatment and MH treatment remain an obstacle to good outcomes. The "front door" to crisis treatment must have the capability of treating both SUD and MH due to co-morbidities in the majority of crisis situations through MAT opportunities and greater collaboration with other providers. As the crisis resolves, moving into ongoing treatment in specialized milieus is appropriate, but some cross-capabilities are needed for many people.

The Solution

Franklin County has many of the building blocks to create a crisis continuum. Over the past several decades, the ADAMH Board has worked with Netcare to create a centralized crisis hotline, mobile crisis teams, clinician-police co-responders, and the existing crisis facility. Law enforcement has made great strides with its CIT program in collaboration with Netcare and the

ADAMH Board. Stakeholders, especially the hospital systems in Columbus, have a proven history of working cooperatively towards goals that benefit the community. However, Netcare's crisis facility is unable to meet the growing need in its current form. It is at capacity and on divert from law enforcement the majority of the time. It is unable to effectively accept and treat the most medically compromised and violent people and it is unlocked leading to a high number of elopements monthly.

A Facility-Based Solution

Facility-based crisis services are an important part of the robust crisis continuum needed to provide comprehensive solutions for those in crisis[10]. A crisis continuum requires a "front door" facility with the mission of accepting persons in crisis from wherever they appear, to provide a safe environment for their crisis to be resolved while a thoughtful and robust clinical evaluation and treatment plan is developed. The crisis facility has the ability to quickly triage, assess, and initiate treatment in a safe and healing environment. Once the crisis is stabilized and treatment needs are assessed, the crisis facility engages treatment providers in the community to continue the treatment. In doing this, the person's needs, community resources, and safety are all coordinated to maximize outcomes.

The facility must:

1. Be the primary place for first responders to bring persons in a BH (MH/SUD) crisis.
2. Have the capacity to accept the volume without going on diversion.
3. Be multi-faceted so that all levels of need are met in environments appropriate to the need.
4. Have some medical capabilities to reduce the need for medical clearances prior to treatment.
5. Be secure and ensure that everyone involved from staff to the recipient of care are safe.
6. Be able to handle acute MH and SUD needs at the point of crisis.
7. Have secure and reliable referral patterns to community-based hospitals and providers for ongoing care post-crisis.

Key features recommended:

- A culture of law enforcement/first responders as a "preferred customer."
    - In order to incentivize treatment in lieu of arrest, the crisis center makes it quick and easy for law enforcement to bring patients to the facility, with a "no wrong door" philosophy of never turning officers away, and a drop-off time of 10 minutes or less[11].
- Limited behavioral health exclusionary criteria based on behavioral acuity, agitation, dangerousness, co-occurring substance use, or legal status, because these patients receive the best care in a specialized crisis setting.

- A thoughtful clinical assessment, rapid initiation of treatment, and aggressive discharge planning in collaboration with community partners.
- An interdisciplinary team of medical providers, crisis workers, nurses, behavioral health technicians, and recovery support staff (peer supports).
- A specialized therapeutic milieu that allows for continuous visualization to ensure safety and provides the opportunity for interpersonal interaction.
- Time-limited bridging services for patients who need care until they can be connected to ongoing community-based outpatient care.
- Locked and unlocked settings so that those who are less acute, but at risk of deteriorating, can be seen in an unlocked setting.

Specific Recommendations

Create a new crisis facility that is capable of functioning as the "front door" crisis facility for Franklin County. The facility will be the receiver of all BH crisis referrals from first responder agencies as well as the BH system in general. It will be multi-faceted and capable of effectively treating anyone with a MH or SUD crisis in Franklin County and will be strongly inter-connected with the entire system of care including the acute hospital system and community providers so that when the crisis is stabilized, ongoing treatment in the best setting can be seamlessly continued. It will ensure safety and high-quality treatment outcomes for those in need.

Description of Products and Services

1. The new facility must incorporate the values listed above.
2. The facility should include:
    a. A 23-hour observation unit that is locked, secure, highly structured, safe, and able to accept and treat anyone with a BH (MH/SUD) crisis need. A unit like this must be flexible to handle the variability associated with crisis.
    b. A walk-in unlocked component for those with less acuity who are in crisis. This unlocked component would allow people to access services without engaging with law enforcement or a hospital system. It would also allow for bridging people until their community-based treatment can commence.
    c. A capability of treating some people longer than 24 hours in a structured inpatient-like milieu. This would be a locked crisis stabilization unit with a short average length of stay.
    d. Have at least two entrances; one public and one for first responders.
    e. Be planned for a changing healthcare landscape to be flexible and be able to adapt to changing demands.
    f. Have detox capabilities including initiation of medication-assisted treatments with barrier-free linkage to ongoing care.
    g. Have a workspace for community providers.

h. Have medical-clearance capabilities including lab work and other complex medical services beyond what Netcare currently provides.

Estimating Need

Current Netcare Volume: Netcare reports a volume of 7,840 visits annually. Because Netcare is on police diversion over 50% of the time due to capacity limitations, the majority of patients (80%) arrive via sources other than first-responders.

Police: Columbus PD receives 22,880 mental health service calls annually and transports 5,623 to EDs, hospitals, etc. Excluding those that are already transported to Netcare, Maryhaven, or facilities serving children, and assuming that 5% (a high estimate) require an ED visit for a co-occurring medical issue, the remaining 4,247 could potentially be transported to a crisis center instead.

Sheriff: Franklin County Sheriff estimates 75-85 probate transports per month and this number is anticipated to rise with the addition of the mobile transport team.

EMS: Columbus Fire reported 10,549 mental health calls in 2017, and EMS transported 8,861. Approximately 40% (again, a conservative estimate) of the calls were for conditions that might require an ED transport (excited delirium, altered mental status, drug overdose) leaving 5,317 patients who could potentially receive care in a crisis facility instead of the ED. This is a conservative estimate, as Columbus Fire estimates that their data encompasses only 80% of the actual volume, due to overlap with other EMS agencies at the edges of their jurisdiction.

Projected Crisis Volume: The tables below summarize Netcare volume and first responder transports that could potentially be diverted to a new crisis facility. This analysis is based on current utilization and transport data, and assumptions err on the side of conservatism.

Table 1. Current Netcare Crisis Volume

Referral Source	% total	Current Crisis Visits	
		Per Year	*Per Month*
Police	8%	652	54
Sheriff	12%	960	80
EMS	0%	0	0
Other (e.g. walk-in)	80%	6,228	519
Total		***7,840***	***653***

Data Sources: Netcare utilization report (Oct 2017 – Sep 2018); Columbus Police Department (Nov 2017 – Oct 2018); Stakeholder meetings. Although the Netcare data was not broken out by referral source, Columbus PD reported the number of transports to Netcare annually, and ADAMH Board estimated 80 probates per month.

Table 2. Additional Crisis Volume from First Responders							
	BH Calls	BH Transports	Exclude	Remaining transports	Estimated % needing medical care in an ED	**Additional Crisis Visits** *Per Year*	*Per Month*
Police	22,880	5,623	- Netcare: 652 - Maryhaven: 64 - Children: 436	4,471	-5%	4,247	354
EMS	10,549	8,861	- Children: 402	8,459	-40%	5,075	423
Total						***9,323***	***777***
Data Sources: Columbus Police Department (Nov 2017 – Oct 2018); Columbus Fire Department/EMS (Calendar Year 2017)							

Table 3. Projected Crisis Volume		
	Projected Crisis Visits *Per Year*	*Per Month*
Current Netcare Volume	7,840	653
Additional Police	4,247	354
Additional EMS	5,075	423
Total	***17,163***	***1,430***
Data Sources: Tables 1 and 2 above.		

Unmet need and growth: The actual need is likely greater that what is depicted here and should be expected to grow over time. In our experience, crisis utilization increases as services become more robust and easily accessible. For example, in Pima County, which is of comparable population to Franklin County, there was a 35% increase in law enforcement mental health transports over the five years following the opening of the Crisis Response Center. Franklin County's law enforcement community has already invested in mental health best practices such as CIT and the new probate mobile team, and thus law enforcement utilization of crisis services should be expected to increase as more people in need of mental health treatment are identified and service connection becomes easier. In addition, a portion of the 15% of EMS BH calls that do not result in transport may benefit from more readily available crisis services. Walk-in and clinic referrals will likely increase in parallel with improved crisis capability and accessibility as well.

Expected benefits and outcomes

Research has shown that this model works. One study of a center designed by our team in Phoenix resulted in a 40% reduction in ED hold times, and the percent requiring inpatient admission decreased from 75% to less than 50%[12]. A study in California showed comparable results[13].

Impact on Payers*:* Estimated cost savings to payers is depicted below. Table 4 estimates the reduction in ED claims based on the projected numbers of reduced police and EMS transports

(as calculated in Table 2). Furthermore, some inpatient psychiatric admissions could have been prevented if the patient were stabilized in a crisis center with a specialized milieu and treatment program. The percentage of BH patients admitted vs. discharged from the ED varied widely between sites and payer sources, and thus a more detailed analysis is needed to better determine the reasons for the variation and identify the patients who would benefit most from a specialized crisis program. Table 5 depicts the projected savings of a 20% reduction in the overall numbers of admissions.

Table 4. Impact on Payers: Decreased ED Utilization

	Diverted transports	Estimated cost per ED visit	Potential savings to Payers
Police	4,247	$1,300	$5,521,685
EMS	5,075	$1,300	$6,598,020
Total			***$12,119,705***

Diverted transports from data calculation in Table 2. ED cost estimates from stakeholder discussions. (National average ED cost is $1,917[14])

Table 5. Impact on Payers: Decreased Inpatient Psychiatric Admissions

Current # of admissions from EDs	20% reduction	Estimated cost per admission	Potential savings to Payers
4,852	970	$3,000	***$2,911,200***

Admission data provided by OSU, Ohio Health, and Mt Carmel (Jul 2017 – Jun 2018). Inpatient cost estimates from stakeholder discussions. (National average ED cost is $9,368[15])

Impact on EDs*:* BH patients create strains and cost to EDs as well. Franklin County patients with a primary BH diagnosis have a 12.87-hour average length of stay, which is 5 times the Ohio average ED length of stay of 2.5 hours[16], and adds up to 11,044 patient-hours annually. Long waits for BH patients create risk for elopement, self-harm, and injury. Furthermore, ED overcrowding negatively impacts care for all patients, and is associated with increased risk of mortality and poorer performance on quality and throughput measures for conditions such as pneumonia and myocardial infarction. The financial impact of BH boarding is estimated at $2,264 per patient based on lost revenue due to the longer lengths of stay. However, additional costs are incurred security, sitters, overtime, injuries, etc. Tables 6 and 7 depicts the estimated impact of a new crisis center on the number of BH patient days and cost of boarding in the three largest EDs in Franklin County.

Table 6. Impact on EDs: Overcrowding				
	Diverted transports	**Avg. length of stay (hrs)**	**Potential patient-days saved**	**% reduction**
Police	4,247	12.87	2,278	
EMS	5,075	12.87	2,722	
Total			***4,999***	***-55%***
Diverted transports from data calculation in Table 2. ED average length of stay calculated from data provided by OSU, Ohio Health, and Mt. Carmel EDs (Jul 2017 – Jun 2018) for patients with a primary MH or SUD Dx. Percent reduction in patient days was calculated using total patient days (22,595 visits x 12.87 hours per visit = 11,044 patient days).				

Table 7. Impact on EDs: Cost			
	Diverted transports	**Estimated cost of psychiatric boarding**	**Potential savings to EDs**
Police	4,247	$2,264	$9,616,227
EMS	5,075	$2,264	$11,490,706
Total			***$21,106,932***
Estimated cost of ED boarding is $2,264 per patient per day[17]. This estimate is based on lost revenue due to psychiatric patients' longer lengths of stay. It does NOT include other known sources of increased cost such as staffing (e.g. security and sitters), injuries, etc.			

Criminal Justice Impacts*:* It should be noted that positive impacts are expected in other areas, although the data was not available to perform a quantitative analysis. These include:

- Law Enforcement Time Saved: The time spent transporting patients and waiting at EDs can be substantial. One of our clients was able to secure funding for a crisis center by translating the hours saved into the equivalent number of increased officers back on the street.
- Costs of Incarceration: Diversion to crisis treatment instead of jail results in cost savings from booking fees, jail per-diems, jail medical care, and court costs.

Outcome Measures*:* While there is not currently a national standard for measuring crisis facility outcomes, the CXNS team has pioneered the development of crisis outcome measures[18,19] that are both clinically meaningful and show value to payers and other stakeholders. Other communities have begun adopting these measures, and the new facility should be designed to incorporate measurement of key outcomes such as the following:

Metric	**Relevance**
Urgent Care/Bridge Clinic: Door-to-Door **Length of Stay**	Patients get their needs met quickly instead of going to an ED or allowing symptoms to worsen.
23-Hour Obs Unit: **Door-to-Doctor Time**	Treatment is started early, which results in higher likelihood of stabilization and less likelihood of assaults, injuries and restraints.
23-Hour Obs Unit: **Community Disposition Rate**	Most patients are able to be discharged to less restrictive and less costly community-based care instead of inpatient admission.

Law Enforcement Drop-Off **Police Turnaround Time**	If jail diversion is a goal, then police are a customer too and the crisis facility must be quicker and easier to access than jail.
Patient Satisfaction: **Likelihood to Recommend**	Services are be designed such that most would recommend the facility to friends or family, even when brought by law enforcement.
Return Visits within 72h of discharge from 23h obs	People get their needs met and are connected to effective aftercare.

Conclusion

Franklin County has the building blocks of a strong crisis continuum of care and a proven history of creating collaborative solutions to complex problems. Its creation of Netcare in the 1990s was innovative for the time. However, the current Netcare facility is now outdated and unable to perform the role of the "front door" crisis facility. A new facility is needed to meet the needs of 21st Century Franklin County. This new facility should

- Be able to accept persons in BH crisis from first responders, EDs and the community without frequently being on law enforcement diversion
- Provide thorough assessment and treatment/stabilization of the crisis in a safe, secure, and recovery-oriented environment.
- Be a point of access to care for persons who are not engaged in the BH system.
- Have some medical capabilities that allow it to accept persons with medical conditions to reduce barriers to care and lessen the burden on EDs to provide medical clearance.
- Be interwoven with the other providers in the system so that aftercare, whether inpatient or outpatient, is easily, reliably, and seamlessly available.

Next Steps for Franklin County

1. **Staffing:**
   The current staff and leadership of the crisis facility are very strong and are an asset in this transformation. A detailed plan on how to properly staff, manage, and operate a transformed unit will have to be developed to include training and staffing levels based on the actual facility that is built.
2. **Licensure and accreditation:**
   a. Ohio licensure and accreditation issues will have to be studied and built into any plan.
3. **Building:**
   a. The building plan, floor plan, outfitting and use will require significant thought and effort to ensure flexibility, safety, capability, and longevity.
   b. Appropriate business personal property including desks, tables and chairs.

4. **Technology:**
    a. EMR: The current state of the EMR poses a challenge and should be considered in the planning.
        i. EMR should align with hospitals.
        ii. Currently behind the curve with technology (e.g. Pyxis).
    b. Security: observation and safety in the building is a consideration.
        i. Security cameras.
5. **Community:**
    a. Extensive work to seamlessly integrate the facility into existing resources such as the SUD facilities, hospitals and community will be needed.
6. **MCO/Health Plans:**
    a. It is vital that the payers be involved in all aspects of the planning so that they recognize the value and medically necessary services are reimbursed. We recommend engaging them throughout the process.

In summary, a new crisis facility will ensure that individuals experiencing a behavioral health crisis are quickly evaluated, stabilized, and connected to ongoing treatment with the right provider in the least-restrictive setting that can safely and effectively meet their needs. This will improve the safety and experience of not only the person in crisis, but also the community, caregivers, and first-responders. In addition, reductions in ED boarding and inpatient psychiatric admissions reduces results in more efficient use of limited resources, creating capacity for those who truly need higher levels of care. These outcomes result in both better clinical care and stewardship of taxpayer dollars.

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