
HMA

HEALTH MANAGEMENT ASSOCIATES

*Tarrant County and JPS Behavioral Health
Assessment*

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Overview of the Behavioral Health Environment

There is little doubt that behavioral health services across Tarrant County and the JPS system, require investment and expansion. Several recently issued studies—including those from the Hogg Foundation,¹ the 2016 Interim Report to the 85th Texas Legislature on Mental Health² and others^{3,4} noted throughout this report—confirm current capacity constraints, workforce shortages and limited access to services for people living with behavioral health issues, particularly those with Medicaid and who are uninsured. Highlighted throughout these studies is the widespread recognition that planning for future needs is critical.

Focus groups and stakeholder interviews confirmed that the need to invest in better and more behavioral health services, including inpatient, outpatient and forensic care, within Tarrant County is a priority and a significant concern among community members, JPS patients and family members, health care leadership within the behavioral health sector, JPS psychiatric providers and staff, government officials and law enforcement.

Agreement was shared on several fronts related to behavioral health concerns across the county including:

- Recognition that the current behavioral health system is fragmented
- There are not enough inpatient beds generally, an issue that is exacerbated for children and adolescents, as well as for adults that are uninsured
- The community needs a better discharge support system, and health information needs to be shared when patients transition to different levels of care or provider systems
- People experiencing homelessness with behavioral health needs struggle to get their needs met within the current service system
- There are few resources for people with substance abuse issues
- There is a need to ensure culturally and linguistically appropriate services
- There is a need to reduce stigma and better promote existing behavioral health services
- More behavioral health and social service resources are needed within the community
- More services are needed specifically for adolescents and transition age youth who are experiencing their first symptoms of severe mental illness

¹ Hogg Foundation for Mental Health. (November 2016). A guide to understanding mental health systems and services in Texas. Retrieved from www.hogg.utexas.edu

² House Select Committee on Mental Health. (2016). Interim Report to the 85th Texas Legislature. http://www.house.state.tx.us/_media/pdf/committees/reports/84interim/Mental-Health-Select-Committee-Interim-Report-2016.pdf

³ Texas Department of State Health Services Regulatory Services, Health Facility Information Report 12/20/16

⁴ Joint Committee on Access & Forensic Services. (2016). Recommendations for the Creations of a Comprehensive Plan for Forensic Services.

- There is a shortage of psychiatrists, many of whom do not take insurance and few who are willing to accept Medicaid
- The volume of people requiring involuntary and forensic psychiatric admissions has resulted in crowding within inpatient units, as well as the inability to admit others in need of this level of care
- The process required to get people brought to the attention of law enforcement to behavioral health treatment remains cumbersome and takes officers away from responding to calls and being on the street
- Transportation issues are a significant barrier for families and patients

Themes specific to JPS shared within the focus groups and interviews included:

- JPS is the “go to” provider for the sickest people with the most complex behavioral health needs in the county
- Recognition that JPS is a valued partner within the community, and strong collaboration between MHMR and JPS exists There is an intentional ongoing effort to build more of a system of care across the two agencies
- The physical facilities are old, and the location of the JPS behavioral health programs creates barriers to care and safety concerns
- The Psychiatric Emergency Center (PEC) needs to be within the same facility as the inpatient units
- It is difficult for family members to navigate parking lots and not be able to drop off family members who are experiencing a psychiatric crisis
- A large number of people utilize the PEC, many of whom are experiencing different types of crisis-related situations Given this, there is a need for a separate space for people who are experiencing a substance use related crisis versus a crisis related to mental health
- It can be too crowded at the PEC, and people end up staying on the floor at times when chairs are full
- People want to be able to receive care where they know the doctors when they are in crisis rather than be transferred to other facilities
- There is interest in more shared-decision making between the psychiatric providers and their patients
- Receiving services at JPS can “feel like a conveyor belt because there are so many people going through the system”
- Stigma within JPS outside of the psychiatry department towards people with behavioral health issues needs to be actively combatted
- More active JPS security involvement is needed so that law enforcement can return to their communities quickly

While there is widespread recognition there are capacity limitations and need for improvement in regards to behavioral health services across the county and within the JPS system, several strengths must also be recognized. Significant investments, including service expansion and quality improvements through DSRIP and other funding sources, have positively impacted

mental health care provided within JPS and most performance metrics that are reported exceed national benchmarks (see JPS Operations section). JPS behavioral health leadership is responsible for coordination of Tarrant County's behavioral health DSRIP projects. Through these initiatives, JPS has prioritized programming that has helped reduce readmission rates by focusing on high need patients, as well as supported improvements in the Behavioral Health delivery system broadly.

The JPS PEC is a significant community asset. Many communities across the country are just beginning to build psychiatric emergency departments, dedicated psychiatric beds in EDs, 23-hour observation units or crisis stabilization units, and community triage centers. The fact that JPS has a long standing, dedicated PEC and started staffing it with psychiatric providers 24 hours per day over ten years ago, speaks to the recognition that people experiencing behavioral health crises require targeted assessment and a variety of solutions, which often do not include an inpatient stay.

JPS behavioral health leaders are recognized as collaborative and critical partners within the community who are willing to work with others to achieve shared goals. Further, leadership is positioned and active within professional organizations, key local and state committees, and other forums able to influence decision making, funding and legislation related to the local behavioral health system of care. The majority of the JPS behavioral health leadership have long tenure within the system. While psychiatric providers are in short supply within the county, state and country, JPS is able to hire behavioral health practitioners more expeditiously than competitors due to its residency program(s).

Specific areas where improvements are needed also must be highlighted, many of which have already been described and recognized by stakeholders. The aging JPS inpatient units and PEC physical spaces impose significant challenges for patients and staff alike. The PEC often becomes crowded, and the limited space and room configuration hampers JPS' ability to fully maximize inpatient admission diversion. On the inpatient units, all rooms are double occupancy. As a result, typically up to 10% of beds cannot be used, as some patients require private space for clinical reasons such as physical agitation or sexually inappropriate behavior.

Further, the Trinity Springs units are small and the physical layout is cramped. In addition, the units have cinderblock walls, limited natural light, and can have heating and cooling challenges. While there is outdoor space available, there is no indoor recreation space for patients. Psychiatric patients are best served when there is ample space for groups of people to meet, people have space to find quiet locations within the shared or common areas where noise and other stimulation can be more tolerable, and room to pace or walk is available. Without this physical environment people experiencing psychiatric crises can become easily overwhelmed and psychiatric symptoms exacerbated.

In addition, the location(s) of both Trinity Springs inpatient facilities and the PEC in relationship to the emergency department (ED) and medical staff are less than desirable. The PEC is on 10th floor of the main hospital, some distance from the ED and easy drop off for families or patients. If medical clearance is required, transfer to the main ED requires transportation and navigation of elevators. If admitted to a JPS inpatient psychiatric bed, staff must transport patients through a long corridor, referred to as “the tunnel,” in between buildings and across parking lots. The tunnel is dark and has several doors along the way that pose elopement risks. If a medical emergency takes place at the Trinity Springs pavilion staff report the quickest they have been able to transport a patient through the tunnel for medical care is eight minutes.

Walking through the JPS facilities, it is clear that care of the physical space—both maintenance upkeep and building improvements that are reasonably feasible—have been priorities. Spaces have been updated to ensure that they are safe and attractive within the confines of the facilities. Staff have done what is possible in terms of minimizing risks. Despite these efforts, the limitations that the aging facilities and physical layout present remain significant clinical impediments and safety issues.

Today, JPS has limited capacity and programming related to the following areas of service:

- services for children and adolescents—JPS only provides inpatient services to children 13 years and older
- targeted services for the geriatric and aging populations
- inpatient beds and longer-term beds, including private rooms
- integration of behavioral health supports into community-based, ambulatory primary care settings have been initiated; however, demand exceeds services offered today
- urgent behavioral health care/ED diversion for behavioral health-related issues outside of the main JPS campus
- a substance abuse strategy and services—currently there are no SUD-treatment services provided
- a behavioral health population health strategy
- behavioral health care management strategy, programming and infrastructure

This report highlights the growing population needs, assesses the JPS behavioral health system of care, and provides an overview of data and background of other behavioral health resources available to the JPS target population across Tarrant County. The following sections provide a recap of behavioral health prevalence data, as well as a summary of priority and detailed recommendations for the JPS behavioral health system, especially related to inpatient beds and developing a Behavioral System of Care.

Behavioral Health Prevalence Data

One in five US citizens has a diagnosable mental disorder⁵ with only 40% receiving *any* treatment for their condition. Of those who do receive care, only a quarter sees a behavioral health specialist,⁶ leaving the rest to be treated in physical health settings by primary and specialty medical care clinicians, alternative medicine settings, or social service agencies. In the primary and specialty medical outpatient setting, patients with behavioral disorders are often not recognized or engaged in effectively delivered treatment, resulting in a mere 13% of patients receiving minimally effective treatment.⁷ The impact of untreated mental illness on total healthcare costs is significant, increasing health care costs two to three times with most of the excess cost related to “facility-based care” (i.e., emergency room and inpatient treatment), and unrecognized, behavioral health conditions can lead to decreased adherence to recommended medical/surgical treatments and lack of follow-up for care.⁸

In Texas, the need to expand access to behavioral health care is also pressing. The Hogg Foundation has documented that many more adults and children need mental health services than are currently served in the public mental health system.⁹ The demand for services is simply over pacing the capacity of the specialty behavioral health system. The increase in demand is related to general population growth—one of the highest in the country at the rate of 9.2%—as well as service gaps and challenges in meeting full capacity.¹⁰ According to the Hogg Foundation analysis, as many as 27.6% of the 240,088 adults in Texas with serious mental illness who meet criteria for 200% of the Federal Poverty Level (FPL) (66,273 adults) did not receive services in community mental health centers.¹¹ Even worse, 62.5% of children with

⁵ Substance Abuse and Mental Health Services Administration, Results from the 2011 National Survey on Drug Use and Health: Mental Health Findings, *NSDUH Series H-45, HHS Publication No. (SMA) 12-4725*. Rockville, MD: Substance Abuse and Mental Health Services Administration, 2012.

⁶ Wang PS, Lane M, Olfson M, Pincus HA, Wells KB, Kessler RC: Twelve-month use of mental health services in the United States: results from the national comorbidity survey replication. *Archives of General Psychiatry*. 2005;62(6):629-640.

⁷ Wang PS, Demler O, Kessler RC: Adequacy of treatment for serious mental illness in the United States.” *American Journal of Public Health*. 2002;92(1):92-98.

⁸ Melek S, Norris D, Paulus J: Economic impact of integrated medical-behavioral health: implications for psychiatry, Milliman *American Psychiatric Association Report*, Feb 2013.

⁹ Hogg Foundation for Mental Health. (November 2016). A guide to understanding mental health systems and services in Texas. Retrieved from www.hogg.utexas.edu

¹⁰ Hogg Foundation for Mental Health. (November 2016). A guide to understanding mental health systems and services in Texas. Retrieved from www.hogg.utexas.edu

¹¹ Hogg Foundation for Mental Health. (November 2016). A guide to understanding mental health systems and services in Texas. Retrieved from www.hogg.utexas.edu

serious emotional disturbances (SED) living below 200% of the FPL (78,763 young people) did not receive these critical services.¹² This is despite the fact that the average number of people (adults and children) served in the community behavioral health system increased from 2013 to 2015.

Certainly, an element of this service gap is related to funding and the fact that Texas did not expand Medicaid, leaving many community behavioral health services struggling to continue to treat many uninsured or underinsured individuals. Based on the analysis completed by the Hogg Foundation, approximately 130,000 uninsured adults in Texas with serious mental illness and 255,000 uninsured adults with severe psychological distress would be covered if there was an expansion of Medicaid.¹³ In the current system, these individuals are required to wait for service availability (with those with Medicaid being prioritized to meet Federal requirements) and providers cannot easily expand care because there is not adequate funding for building capacity or enhancing existing service lines.

Tarrant County, the third-most populous county in Texas, has high poverty and uninsured rates that further impose several implications for the behavioral health services system. Cumulatively, there are approximately 1,191,930 (or 63% – a majority of the total population) who fall below 400% FPL in the County.¹⁴ Its uninsured population stands at 20.33%, which greatly exceeds the national benchmark of 14.10%. The lowest income uninsured population across Texas is concentrated in the urban center of Fort Worth, at the heart of Tarrant County.

JPS Health Network has the highest total Medicaid and uninsured unreimbursed costs in the County (\$172,035,280), which is nearly three times higher than the next highest individual hospital in the state, Texas Health Harris Methodist Fort Worth Hospital at \$60,667,065), followed by Baylor All Saints Medical Center (\$39,013,178).

With high poverty and uninsured population rates also comes a significant need for behavioral health services. Table 1 shows that Tarrant County has 12.8% of adults who self-report major episodes of depression, which is more than twice the national benchmark and significantly higher than the severe benchmark of 7.3%. While the percentage indicators for suicide and substance use disorders fall below the national benchmarks, the hundreds of thousands of individuals suffering from these disorders call for much needed services in the county.

¹² Hogg Foundation for Mental Health. (November 2016). A guide to understanding mental health systems and services in Texas. Retrieved from www.hogg.utexas.edu

¹³ Hogg Foundation for Mental Health. (November 2016). A guide to understanding mental health systems and services in Texas. Retrieved from www.hogg.utexas.edu

¹⁴ US Census for 2015 population, North Central Texas Council of Governments (NCTCOG) for projections.

Table 1: Health Indicators Related to Behavioral Health

Health Indicators Related to Behavioral Health	Tarrant County	Texas	National Benchmark	Severe Benchmark
Percent of adults with at least one major depressive episode in the past year ¹	<u>12.8%</u>	15.5%	6.6%	7.3%
Suicide Rate ²	10.1	11.6	13.5	15.2
Binge alcohol use (Percent among population 12 and over) ³	8.0%	7.4%	24.1%	26.1%
Age-adjusted drug poisoning (i.e. overdose) mortality rate per 100,000 population ⁴	9.0	9.5	12.3	14.8

1 BRFSS, 2012

2 Texas Department of State Health Services, 2009-2013

3 SAMHSA National Survey on Drug Use and Health, 2014

4 CDC WONDER, 2012-2014

JPS Behavioral Health Recommendations Overview

An overview of recommendations for JPS to enhance its existing system to meet the needs of the community follows, with rationale and further description contained throughout this report. JPS should:

1. Lead the development of a county-wide behavioral health system of care.

- a. Convene providers, map the current system of care, clarify eligibility criteria, and referral contacts.
- b. Identify system gaps and opportunities to fill priority areas of need across partners.
- c. Develop a shared population health strategy, risk stratification methodology, assessment, care plan, and care management resources (priority focus providers serving indigent and uninsured populations).
 - i. Build on JPS' future population health strategy (in development), as well as its future care management infrastructure (to be developed).
- d. Explore mechanisms to share pertinent health information across providers.
- e. Develop a shared Mental Health and Substance Abuse Wellness Campaign (identify current prevention and wellness programming and services, promote what is offered, identify opportunities to expand).
- f. Proactively identify possible funding solutions to mitigate the consequences of DSRIP and Medicaid funding changes.
- g. Providers to be included:
 - i. Private and other Psychiatric Hospitals, including Cook Children's
 - ii. MHMR (Tarrant County's Local Mental Health Authority)
 - iii. Other Community Based Organizations (CBOs) and Social Service Organizations
 - iv. Corrections Health leadership (JPS and MHMR)

2. Expand geographical accessibility of needed services for uninsured population (for the full continuum of services).

- a. Expand tele-psychiatry and tele-medicine.
- b. Create new physical locations across the county:
 - i. Ambulatory sites where ongoing outpatient behavioral health services are offered
 - ii. Ambulatory sites where behavioral health is integrated within primary care
 - iii. Urgent care centers and diversion programs outside of the main JPS hospital campus

- 3. Invest in the expansion of evidence based, interventions in the community (outpatient services) that are critical for minimizing the need for inpatient services, ED presentations and criminal justice involvement.**
 - a. Develop a robust Stepped System of Care for people with mental health and substance abuse issues.
 - b. Prioritize the continued development and expansion of the following services:
 - i. Integrated behavioral health supports within primary care
 - ii. Assisted outpatient treatment (AOT)
 - iii. Assertive Community Treatment (ACT), including ACT specifically for forensic populations
 - iv. Dialectical Behavioral Therapy (DBT)
 - v. Outpatient substance abuse services
 - vi. Medication Assisted Treatment (MAT)
 - vii. Peer recovery supports
 - viii. Diversion programming and a comprehensive strategy with law enforcement and the courts
 - ix. Linkage to services that impact the social determinants of health, such as housing and residential services
 - c. Create a plan to develop critical services and functions not currently in place
 - i. Substance abuse services
 - ii. Medication Assisted Treatment
 - iii. Geriatric specific outpatient programs
 - iv. Population health strategy
 - v. Care management supports and infrastructure
 - d. Assess JPS' ability to build priority services versus partner with MHMR or other viable partners within the community.
- 4. At minimum consider JPS behavioral health inpatient bed expansion based on the formula, 35 public beds per 100,000 people with JPS building 50% of the total county needed beds.**
 - a. JPS request of an additional 52 beds with shell space of another 50 beds (JPS 2016-130 Attachment B Proposed Construction Project 2015) is significantly below current literature recommendations for needed bed space (see Table 2).

Table 2: Recommended Inpatient Public Psychiatric Beds

Year	Recommended Tarrant County Inpatient Psychiatric Beds *35 public beds per 100,000 (see previous population estimates)	JPS Recommendations (based on 50% County need)	Estimated JPS Psychiatric Bed Gap Based on Proposed Plan of 234 Planned Psychiatric Beds
2017	707 beds	354 beds	122
2022	784 beds	392 beds	158
2027	861 beds	431 beds	197
2032	945 beds	473 beds	239
2037	1032 beds	516 beds	282

- b. Bed estimates assume JPS will continue to contract with private psychiatric facilities.
 - i. Recommend JPS incorporate pay for performance contracting with private facilities to incentivize improved performance.
- c. Integrate psychiatric beds within the main hospital structure, in proximity to PEC and ED.
- d. Create flexible unit space/structure so that beds can be flexed to serve adult, adolescent, geriatric, and the forensic populations.
- e. Build a combination of private and double occupancy rooms.
- f. Build enhanced physical spaces that will be required to manage the growing geriatric population and develop specialized geriatric inpatient services.
- g. Develop Electroconvulsive Therapy (ECT) services.
- h. Assess the opportunity to expand services for children (12 and younger) in collaboration with Cook Children’s.
- i. Plan for expansion of medical/psychiatric beds (not included in the counts above).
- j. Develop plan to add inpatient medical detox and other dedicated substance abuse treatment beds (not included in above estimates).

5. Expand and relocate the Psychiatric Emergency Center

- a. Increase capacity by 10. *
- b. Create designated psychiatric observation capacity for 16 patients. *
- c. Locate the PEC in proximity to ED and psychiatric inpatient units. *
- d. Create space for designated substance abuse service assessment and needs, e.g., sobering beds.

6. Strengthen diversion programming currently in place in collaboration with MHMR and law enforcement, and develop a multi-pronged strategy to manage criminal justice involved populations.

- a. Convene and coordinate with Law Enforcement leadership and Corrections Health leadership.
 - i. Develop shared protocols across police and sheriff jurisdictions regarding crisis “drop offs.”
 - ii. Expand coordination with JPS security and officers.
 - iii. Include psychiatric providers and behavioral health leadership to participate so they can better understand law enforcement/corrections concerns.
 1. Promote cross-training and education regarding behavioral health, advocacy with judges.
- b. Expand diversion programs available by type and location across the county.
- c. Dedicate staff and resources focused on diversion programming and coordination with officers and corrections.

7. Expand and invest in behavioral health workforce development strategies.

- a. Secure additional GME slots for psychiatrists.
- b. Build training or fellowship programs for geropsychiatry and child psychiatry.
- c. Expand and build training programs for the following practitioners:
 - i. Psychiatric nurse practitioners
 - ii. Psychologists
 - iii. Social workers and counselors
 - iv. Addiction specialists
 - v. Community health workers
 - vi. Care managers
- d. Develop and train staff for anticipated population change needs and ensure competencies across JPS workforce.
- e. Expand hiring and retention strategies for critical staff positions and staff who will match the estimated population growth trends (Hispanic, African American, older adults).

8. Build a culture of behavioral health diversity

- a. Continue to promote a recovery focus across behavioral health services that promotes shared decision-making and reduces the stigma associated with having mental health and substance abuse issues

- b. Ensure trauma informed practices, and evidence based practices are in place across JPS.
- c. Expand the use of peers and hire people in recovery as community health workers, coaches, and care managers.
- d. Integrate services for people experiencing homelessness in the JPS behavioral health system of care (see recommendation #1 above).
- e. Consider expanding mental health programming for refugees, asylum seekers and torture survivors.
 - i. Hire settled refugees as culture brokers (people who can help describe and explain culture norms).
 - ii. Expand trauma informed practices specifically for this population.

The Need for Psychiatric Beds

The Texas Department of State Health Services (DSHS) is responsible for managing nine state-owned mental health facilities and one state-owned inpatient residential treatment facility for adolescents. The North Texas State Hospitals in Vernon and Wichita are the only two hospitals serving Tarrant County adults with mental illness in need of long term and/or secure psychiatric care. JPS reports only sending two patients to these facilities per year given waits for open beds. The Waco Center for Youth serves adolescents statewide. The primary purpose of the state hospitals is to stabilize patients who cannot be safely treated in existing community services by providing inpatient mental health treatment, including medical, nursing, and social services, as well as therapeutic activities, and psychological services ordered by the treating physician, in a residential setting. The goal is to stabilize patients in order to safely return them to treatment services available in their communities and coordinated through the Local Mental Health Authorities (LMHAs). The total number of state beds provided for Tarrant County is 718.¹⁵

Tarrant County also has five private hospitals that provide a total of 387 inpatient psychiatric beds, as well as a variety of additional behavioral health and substance use treatment services.^{16,17} Private hospitals are limited in their ability to provide services for those who are uninsured or on Medicaid. Of the five hospitals, four are contracted to receive referrals from JPS for inpatient services, including Millwood Hospital, Sundance Behavioral Health, Oceans

¹⁵ http://www.lbb.state.tx.us/Documents/Publications/Primer/3144_State_Hospitals-Mental_Health_Facilities_in_Texas_Diehl.pdf

¹⁶ CEO Interviews

¹⁷ Texas Department of State Health Services Regulatory Services, Health Facility Information Report 12/20/16.

Behavioral Hospital of Fort Worth, and Mesa Springs Hospital. Upon discharge from these facilities, patients are referred back to JPS or MHMR.

Table 3 lists State and private hospitals that serve Tarrant County, the number of beds and services available.

Table 3: Tarrant County State & Private Psychiatric Bed Capacity

Hospital	# of Psychiatric beds		# of Alcohol Drug Dependency Beds	Beds referred by JPS	Capacity level	Serves Adults	Serves Children	Serves Adolescents	Inpatient Psychiatric Services	Intensive Outpatient	Inpatient Detoxification	Partial Hospitalization	Co-Occurring BH/SUD services	Specialty	Restrictions
	Total	Occupied													
Private Hospitals	Millwood	110	12	20%	97%	x	x	x	x	x	x	x	x		
	Sundance Behavioral Healthcare System	100	16	20%	90%	x	x	x	x		x			Contracted to provide services to indigent (5-6% of census)	No contract with JPS for outpatient services
	Mesa Springs	72		5%	78%	x	x	x	x	x	x	x		No psychiatric intensive Care; less acute only	No adults with Medicaid
	Texas Health Arlington Memorial & Hugley Hospital Fort Worth South	57		no contract	n/a	x		x	x		x			Also offers services for eating disorders and neuropsych	
	Oceans Behavioral Hospital of Fort Worth	48		no contract	n/a	x			x	x				Inpatient behavioral health services for adults age 55 and older	Medicare and private insurance only
	Total Private beds in Tarrant	387	28												
State Mental Health Hospitals	North Texas State Hospital Vernon	351		88%		x		x	x					Persons admitted receive specialized forensic care in a secure setting. Adolescent forensic unit is a moderate security program for adolescents ages 13 to 17 who are dually diagnosed with mental disorders and substance abuse. Adolescents	No voluntary admissions for adults are accepted
	North Texas State Hospital Wichita	289				x	x	x	x					Provides general psychiatric services, children's services, and forensic treatment for nonviolent criminal offenders.	
	Waco Center for Youth	78		92%				x						Provides statewide residential psychiatric services for adolescents ages 13 to 17 that have emotionally difficulties and/or behavioral problems.	
	Total State Beds in Tarrant	718													

Sources:

Given that 12.8% of Tarrant County's population (or approximately 253,000 people) need psychiatric services for depression and 9 per 100,000 people experience a drug overdose each year, the total of 1,146 state and private psychiatric beds in the county are insufficient to meet the need. This issue is further compounded by the high rate of uninsured individuals in Tarrant County (20.33%), many of whom need access to these services. Even with JPS as the predominant public inpatient psychiatric provider for the county, its 132 beds do little to mitigate the need.

Based on stakeholder interviews psychiatric hospital providers agree that JPS has been an asset to serving the community and are universally supportive of the need to expand and renovate the JPS facilities. Private psychiatric hospitals report having unoccupied beds on a regular basis. Challenges noted with serving JPS referrals are as follows:

- Private hospital relationships with MHMR and JPS are fragmented, making it difficult to ensure continuity in services, especially for patients who are ready for less intensive care. MHMR is limited in capacity and the population it serves.
- Private hospitals are narrower in their scope and expertise in behavioral health and substance use services, focusing mainly on treatment and less on the range of social determinants of health that typically complicate the uninsured populations with complex needs; JPS is more equipped to serve these populations.
- Private hospitals cannot handle larger volumes of indigent populations, as it will impact their sustainability and ability to maintain quality of care. If they serve more uninsured individuals, a high percentage of their services go unreimbursed.
- Waitlists at State hospitals create a bottleneck that blocks beds for those in need of services that have insurance.

Forensically involved individuals pose additional complications and challenges for the behavioral health service system, as well as the law enforcement officers who struggle with chaperoning detainees into services. In December 2016, the Texas House Select Committee on Mental Health reported that forensic commitments have started to exceed civil commitments, implying the need for more State beds that can handle security needs. Unfortunately, this implication follows an 11-year trend through 2015, which reduced State funding for these services by 424 psychiatric beds.

Stakeholder interviews revealed several themes related to working with people who have behavioral issues who encounter law enforcement, hospitals, and JPS:

- Hospitals expect that officers will stay with patients until they receive medical clearance. This practice drains police departments' resources to respond to higher risk and violent offenders. Some departments have tried to mitigate this challenge by hiring mental health coordinators, who have experience in working with individuals with behavioral health issues and stay with detainees until they are assessed.
- High recidivism rates and volleying between the hospitals and law enforcement indicate a lack of coordination and efficiency between systems. Hospitals are perceived to release detainees quickly, often before officers have the opportunity to file their reports. Officers find that they are cycling the same detainees in and out of the hospitals, suggesting that detainees may require longer assessment and may not be receiving enough of the right care.
- Police departments do not have the opportunity to interact and build relationships with mental health judges that allow for collaborative decision-making around detainee commitment vs. assignment to mental health diversion court. Officers believe that JPS has a stronger relationship with these judges and therefore can advocate for more influence and involvement with judicial decisions that can improve access to needed behavioral health services and reduce the strain on law enforcement.
- The State has an insufficient amount of psychiatric beds to handle the growing number of forensic commitments and unmanaged recidivism rates.

This feedback spotlights a State opportunity for more investment in added diversion programming (criminal justice and emergency department diversion), which would result in reduced ED presentations, inpatient admissions, and incarceration days.

Determining how many inpatient beds a community needs within the private or publicly funded behavioral health system is difficult at best. It is universally agreed across the behavioral health field that the need for inpatient psychiatric beds must be evaluated in the context of the full array of available state and community mental health services. The Treatment Advocacy Center (TAC), considered the experts on this topic, published a white paper in 2008, describing a standard ratio of 50 *public* behavioral health beds for every 100,000 people.¹⁸ The recommendation includes adult, children and forensic beds but did not provide estimates for each group. In March of 2016, TAC updated its recommendations to 60-80 beds per 100,000 including adult, child and forensic beds.¹⁹ Per the American Association of Geriatric Psychiatry and American Academy of Child and Adolescent Psychiatry, experts assert that there is no existing information available to determine number of inpatient beds needed for children and adolescents²⁰ or geriatric populations²¹ specifically.

¹⁸ Torrey F, Entsminger K, Geller J, Stanley J, Jaffe DJ: The Shortage of Public Hospital Beds for the Mentally Ill, Treatment Advocacy Center (TAC) white paper, 2008

¹⁹ Interview with Torrey Fuller MD, Treatment Advocacy Center – 12/16/2016

²⁰ Interview Dan Sewell, MD, President of the American Association of Geriatric Psychiatry – 12/20/2016

²¹ Interview Gregory Fritz, MD, President American Association of Child and Adolescent Psychiatry - 12/22/2016

In the United States, the average number of beds per 100,000 declined 34% between 1998 and 2013, from 34 to 22 beds per 100,000, while suicide rates increased between 1999 and 2014 by 24%.²² In 2016, the ratio of State facility beds to United States residents was a mere 11.7 beds per 100,000 people across the country.²³

In Texas, the Joint Commission on Access and Forensic Services' 2016 Legislative Report Forensic Plan reported an existing 2,463 public psychiatric beds across the state, equating to 10.5 beds per 100,000 Texans, as well as an estimated need to add 1,800 beds over the next eight years—1,400 immediately and 50 more each year to keep up with population growth. The report recommended that beds be added through “a significant initial expansion of state-operated and state-funded inpatient capacity,” to include additional maximum security beds, followed by a gradual increase in beds to meet both the current and future demand.²⁴ According to Cannon Design's 2015 report, the estimated total need for privately and publicly funded inpatient beds in Texas was 5,425 beds in 2014, a number that will increase to 6,032 by 2024, a growth of 607 beds in the next 10 years.²⁵

In 2016 existing bed estimates within Tarrant County for children and adolescents included:

- 11 beds dedicated to children <12 years old (Cook)
 - Millwood serves children (including under age 12), with a fluctuating, flexible total number of dedicated beds
- 16 beds dedicated to adolescents >12 years old (JPS)
- 60 beds dedicated to children and youth ages 5 – 18 years old (Sundance)

JPS inpatient beds represent approximately 24% of the total dedicated psychiatric beds (does not include the med/psych beds) in Tarrant County:

- 132 total psychiatric beds
 - 116 adult beds
 - 16 adolescent beds
- 15 med/psych beds

Due to lack of capacity, fiscal year 2015 JPS transferred 3,100 patients to other hospitals for inpatient admission. JPS paid \$3.1M dollars to private hospitals for these patients who had no resources. Of the patients admitted at JPS, 80% are civil commitment or involuntary admissions. There are no dedicated forensic beds at JPS currently.

²² <http://jamanetwork.com/journals/jama/fullarticle/2580183>

²³ Torrey, E. F., Fuller, D. A., Geller, J., Jacobs, C., & Ragosta, K. (2012). No room at the inn: Trends and consequences of closing public psychiatric hospitals. Arlington, VA: Treatment Advocacy Center.

²⁴ Retrieved from <https://www.dshs.texas.gov/mhsa/SB1507/SB-1507.aspx>

²⁵ <http://www.dshs.texas.gov/legislative/2015/Rider83-state-hospital-long-term-plan.pdf>

For the purpose of estimating future psychiatric bed needs, the following assumptions were used:

- 1) Over time with the development and investment of community-based services, diversion programming and enriched evidence based services, Tarrant County will be able to effectively manage inpatient psychiatric admissions with lower bed numbers. Therefore, estimates used half of the public bed estimate from the current literature, equating to 35 public beds/100,000 people.
- 2) Given JPS' positive performance with the most complex patients, 50% of public bed need in Tarrant County should be located within the JPS facility.
- 3) Given lack of available beds within the state psychiatric facilities and similar growth needs, estimates do not include these beds. If new state beds become available or JPS is able to refer more patients to these facilities bed recommendations should be revised.
- 4) JPS will continue to contract with private facilities and identify opportunities to support improved outcomes for complex patients at these facilities, as well as direct lower need patients to private facilities.
- 5) If any of the above assumption is not correct, revised estimates will be required.

For comparison purposes Table 4 provides bed estimates based on various recommendations (beds/100,000).

Table 4: Recommended Inpatient Public Psychiatric Bed Needs

Year	Recommended Tarrant County Inpatient Psychiatric Beds *35 public beds per 100,000 (see previous population estimates)	JPS Recommendations (based on 50% County need)	Estimated JPS Psychiatric Bed Gap Based on Proposed Plan of 234 Planned Psychiatric Beds
2017	707 beds	354 beds	122
2022	784 beds	392 beds	158
2027	861 beds	431 beds	197
2032	945 beds	473 beds	239
2037	1032 beds	516 beds	282

JPS System of Care & Performance

JPS Health Network (JPS) is Tarrant County’s only Level 1 Trauma Center, serving a vast array of community members each year. In 2015, JPS had over 1.7 million patient encounters, including more than 120,000 emergency room visits and 60,000 Urgent Care visits for the year. They operate 30 primary care and specialty clinics, 20 school-based health centers, and nine residency programs, including the nation’s largest hospital-based family medicine residency. For behavioral health, the JPS Department of Psychiatry offers a robust set of services, including:

Table 5: JPS Behavioral Health Programs

Program	Description
Psychiatric Emergency Center (PEC)	Occupying the 10th floor of John Peter Smith Hospital, the PEC is the only psychiatric emergency center in Tarrant County. Physicians, nurses, social workers and support personnel provide 24-hour-a-day services, both voluntary and involuntary, for people experiencing mental health crisis. JPS also provides 23-hour psychiatric observation care in this setting.
Adult Inpatient Services	Trinity Springs Pavilion and Trinity Springs North provides comprehensive psychiatric evaluation and intervention for stabilization of psychiatric symptoms. Licensed for 116 beds, Trinity Springs provides case management, recreation and therapy activities, and medication management, in addition to psychiatric treatment by medical professionals. Courtyards provide daily opportunity for outdoor activity.
Adolescent Inpatient Services	Trinity Springs includes a 16-bed, short-term crisis stabilization unit providing comprehensive mental health care for patients between the ages of 13 and 17. Academic support is provided in collaboration with the Fort Worth Independent School District.
Partial Hospitalization Program	Partial Hospitalization is an all-day, short-term program for adults, providing a stepdown transition from acute inpatient care or an alternative to inpatient treatment. The group-based program focuses on developing recovery skills and enhancing stability while remaining in the community.
Psychiatric Day Rehabilitation	A Medicaid 1115 Healthcare Transformation initiative, Psychiatric Day Rehab serves individuals in the community marginalized by severe mental illness, chronic health conditions, cognitive decline and homelessness. The program includes cognitive adaptation training, medication management, psychosocial rehabilitation and specialized behavioral therapy
Intensive Outpatient Program (IOP)	JPS provides intensive outpatient treatment for individuals needing mental health treatment, allowing patients to return to work and family life while in recovery. The program may be a transition from hospitalization or the first level of care for patients who need more intensive support than traditional outpatient treatment provides. Counseling is provided three days a week, three hours per day.
Outpatient Behavioral Health	JPS operates behavioral health outpatient clinics in twelve Tarrant County locations, providing treatment for adults, adolescents and children with a wide range of disorders, including depression, bipolar disorder, schizophrenia and anxiety. Services range from counseling and psychological testing to medication management
Virtual Behavioral Health	JPS provides a free resource available to primary care providers by phone or email throughout the region, expanding access to mental health services. This service supports PCPs in managing low-acuity behavioral health conditions in their practices with efficient access to consultation assistance with a psychiatrist.

Program	Description
Integrated Care	Recognizing the interconnectedness of physical and mental health, behavioral health services are integrated throughout JPS Health Network. Behavioral Health Specialists are embedded in seven JPS primary care medical home clinics throughout Tarrant County, providing whole-person care and increasing access to behavioral health services
Behavioral Health Discharge Management	Winner of the Texas Hospital Association’s 2014 Bill Aston Award for Quality, the Behavioral Health Discharge Management initiative uses a readmission risk assessment tool to identify inpatients most at risk for 30-day readmission. Patients are engaged with tailored activities that support longer community tenure. The readmission rate has been reduced by 2 percent, resulting in better patient outcomes.

Source: JPS Health Systems. (2017). Behavioral Health Brochure

Altogether, the department saw the following volume for behavioral health between 2014 and 2016:

Table 6: JPS Behavioral Health Volume

Volume Metric	2014	2015	2016
Psychiatric Emergency Center (PEC) visits	19,532	20,007	19,939
Psychiatric Observation Days	3,064	3,491	2,815
Adult inpatient admissions	3,597	3,419	3,113
Adolescent inpatient admissions	N/A	529	582
Local Commitment Alternative (LCA) Admissions	312	318	564
Inpatient Days	30,839	31,453	38,938
Outpatient Behavioral Health Visits	29,793	24,989	28,526
Psychiatric Partial Hospitalization Days	525	4,195	5,869
Day Rehab	206	1,137	1,184

Source: JPS Health Systems. (2017). Core Service Volume – 2008 to Q1 2017

In addition to the above programs, JPS integrates peer support services throughout the continuum of care. Across the health system, nine Peer Support Specialists draw on lived experience with behavioral healthcare to help patients develop recovery plans, problem-solving strategies and identify the resources they need to live well.

Further, JPS places patients and family members at the core of the behavioral health system through its Patient Family Advisory Council. As members of the council, people served and family members play an important role in improving the patient experience at JPS. From their unique perspective of lived experience, council members partner with staff to improve communication and develop policies and process improvements to positively impact patients, families and the healthcare team.

JPS also offers Psychiatric Education and Research program that provides training and expansive clinical experience for physicians specializing in psychiatry. The JPS commitment to education also includes partnerships with area colleges and universities to provide clinical

experience for nursing, social work and first-responder students. The department's Mental Sciences Institute supports behavioral health research focused on improving mental health diagnostics, treatment and service delivery.

Across JPS' behavioral health service sites, the Department of Psychiatry is working to continually expand and enhance the health system's integrated system of care for patients with behavioral health conditions. These efforts are taking place across four pillars, under which multiple initiatives fall:²⁶

1. Information Sharing:

- a. The Psychiatry Department has jointly developed a written agreement with primary care physician leaders and medical directors for information sharing. The Agreement has been approved by the Medical Executive Committee.
- b. JPS shares monthly e-resources on a variety of topics related to behavioral health with its entire health system, and the resources are catalogued and housed on JPS' Virtual Behavioral Health Clinical Guidance website.
- c. Behavioral Health Best Practices trainings are also provided to physicians, and the trainings have had significant positive impact on service delivery. For example, after a training on the PHQ-9 depression screening, 89.4% of physicians documented both implementation of the PHQ-9 and a follow up plan for patients with positive screening results (an increase from 46.8% prior to the training).

2. Integrated Planning:

- d. JPS is transitioning to shared care plans as a way to improve coordination and integration of care. These shared care plans will allow all specialties and primary care to see, edit, and document problems, goals, interventions, and outcomes within the same patient record.
- e. Shared patient lists were created to identify patients who are being served by both a behavioral health provider and primary care provider at the same location
- f. For the most complex patients, JPS now holds multidisciplinary case conferences (at the request of the patient and/or providers)

3. Bi-Directional Screening:

- g. In addition to the PHQ-9, JPS began a pilot screening project that includes completing a trauma screening utilizing the PCL-C for individuals who come to JPS' International Health Clinic, which serves a significant number of refugees

²⁶Young, W. JPS Health Network. JPS Integrated Health Care.

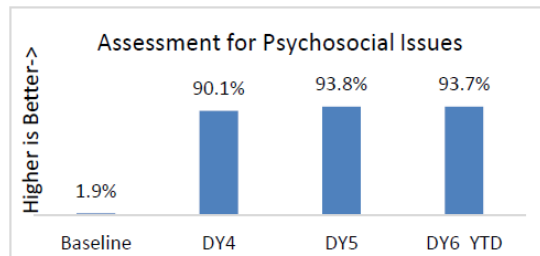
- h. In order to address concerns around antipsychotic medication side effects (i.e., weight gain, increased risk of diabetes), JPS moved to six-month LDL and HbA1C screenings for patients prescribed these medications

4. Integrated Service Delivery:

- i. At several primary care clinics, JPS host quarterly co-facilitated medical groups with the primary care physician and behavioral health embedded specialists
- j. JPS currently has embedded behavioral health expertise in multiple settings, including its primary care clinics, trauma services, Healing Wings (HIV/AIDS and infectious disease medical home), as well as within diabetes and general medical condition groups throughout the network.

As part of Texas’ Medicaid 1115 Healthcare Transformation Waiver (DSRIP), JPS has implemented seven projects, listed below. For most projects, as illustrated by the figures following several of the initiative’s descriptions, JPS continues to improve year after year on measures of their success. For a complete list of each DSRIP project’s metrics and how JPS’ performance aligns with DSRIP Year 6 (DY6) goals, see the following section on JPS Performance data.

1. Comprehensive Behavioral Health Assessment Center, which addresses the critical factors related to reducing the impact of psychological trauma. Through this project, JPS seeks to reduce stigma by creating an anti-stigma campaign, a central information center staffed by behavioral health navigators, and supporting psychological first aid training throughout Tarrant County. Additionally, JPS has created a centralized behavioral health assessment and referral center to create a front door the JPS behavioral health system. This project also allows JPS to conduct Mental Health First Aid Trainings and Mental Health Stigma Campaigns. The Center was designed to increase access to mental health services, decrease overuse of emergency department services, and increase culturally competent care.



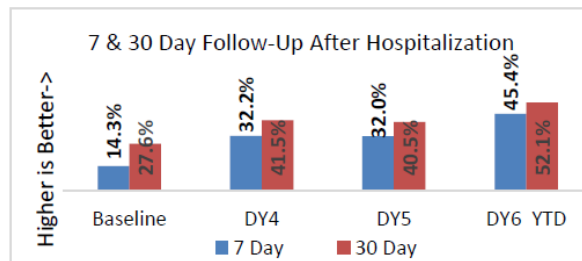
Source: JPS Health Network. (2017). DSRIP Project Snapshot: Central Assessment

2. Discharge Management, which created a comprehensive Behavioral Health Discharge Management Program at JPS. Through this program, psychiatric professionals are responsible for proactive pre- and post-discharge interaction, intervention, and

coordination with patients discharged from Trinity Springs Pavilion as they return to the community. This project is designed to increase access to mental health services, improve integration of mental health care in primary care, reduce inappropriate use of emergency department services, and increase care coordination across Tarrant County. It contributes to the 7- and 30-day follow up rates, illustrated in the diagram below, under the Partial Hospitalization programs.

3. Expanded Behavioral Health—Outpatient Hours and Services, which was a new initiative that builds upon the existing infrastructure of the currently established behavioral health clinics which resulted in expanded operating days, hours and services for the significant number of Medicaid and Uninsured psychiatric patients treated at JPS. This project aims to increase access to mental health services, and contributes to the 7- and 30-day follow up rates, illustrated under the Partial Hospitalization programs.

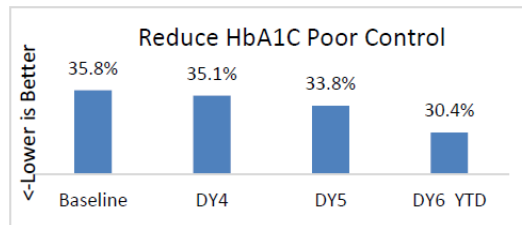
4. Expanded Behavioral Health—Partial Hospitalization Programs, which helps to ensure adequate access to needed services by expanding the number of community-based settings where behavioral health services are delivered. This project establishes a full continuum of care by creating four Partial Hospitalization Programs and Intensive Outpatient Programs to expand treatment availability in JPS’ service region in a way that matches level of care with a patient’s needs and acuity. Within this program, JPS is implementing the evidence based practice of Cognitive Behavioral Therapy. This project is designed to increase access to mental health services for Tarrant County communities.



Source: JPS Health Network. (2017). DSRIP Project Snapshot: behavioral health Expanding Hours

5. Integrated Care, which provides more fully integrated behavioral health services embedded within the primary care medical home so that patients receive whole-person care through their medical home team. Behavioral health care is integrated into the fabric of primary care services by five embedded behavioral health specialists. As part of this project, JPS is implementing a standardized depression screening (PHQ-9) in primary care settings, and increasing the capacity for primary care providers to manage low-acuity behavioral health needs in their practices, while also embedding Behavioral Health Specialists to provide brief, solution focused counseling, care coordination, and follow up.

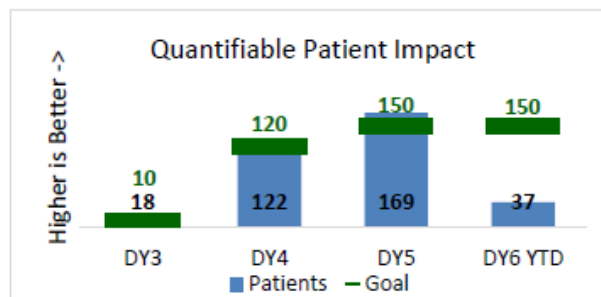
This program is designed to increase access to mental health services, improve integration of mental health in primary care, and increase care coordination.



Source: JPS Health Network. (2017). DSRIP Project Snapshot: Integrated Behavioral Health

6. Virtual Psychiatric and Clinical Guidance, which created a virtual psychiatric and clinical guidance service for up to 1,802 primary care providers in Region 10. The virtual psychiatric and clinical guidance service will allow medical professionals in primary care settings to access professional behavioral health professionals (psychiatrists, psychiatric nurses, psychiatric social workers). Through this program JPS responds to primary care provider requests within 30 minutes, 24 hours a day, by phone, fax, or email. The virtual guidance is designed to increase provider capacity, increase access to mental health services, improve integration of mental health in primary care, compensate for geographic barriers that impede access to care, decrease avoidable use of emergency services, and increase care coordination.

7. Behavioral Health Day Rehab, which delivers community based behavioral health services targeted to individuals with SMI and concomitant circumstances such as chronic physical health conditions, chronic or intermittent homelessness, cognitive issues resulting from severe mental illness, or forensic involvement. The interventions and selected for this project are comprehensive and are combined to form a structured rehabilitation model of care.



Source: JPS Health Network. (2017). DSRIP Project Snapshot: Psychiatric Day Rehab

JPS Performance Data

Within JPS' Department of Psychiatry, JPS consistently exceeds the national averages for most behavioral health measures among public hospital systems, as illustrated by the following table.

Table 7: JPS Performance Outcomes

Measure	National Average	JPS Data
HBIPS-1: Screening	93%	100% ↑
Hours of Physical Restraint Use & Seclusion (rate per 1K patient hours)	.89	.14 ↓
Patients Discharged on Multiple Antipsychotic Medications with Appropriate Justification	61%	91% ↑
Post-Discharge Continuing Care Plan Created	92%	100% ↑
Post-Discharge Continuing Care Plan Transmitted to Next Level of Care at Discharge	87%	100% ↑
Alcohol Use Screening	71.01%	57.37% ↑
Assessment of Patient Experience of Care	72.24%	100% ↑

↓ Lower than national benchmark is better

↑ Higher than national benchmark is better

Source: JPS Department of Psychiatry. (2017). JPS Behavioral Health Quality Overview.

Outside of these national benchmarks, JPS is also moving towards its goal of increasing the percent of behavioral health patients exclusively receiving community based services, indicating lower acuity and greater stability. The goal for this measure is just over 42% of patients, and as of January, 2016, JPS is at 40.7%, a slight increase from 2015 when they had 40.6% of patients falling into this category.

In addition, JPS is meeting or exceeding its targets on the majority of DSRIP metrics for DY6 related to behavioral health, as illustrated by the table below. Metrics with a percent (%) of goal indicated are on track to meet the DY6 goal by the end of the measurement period. Only one of the metrics, Depression Remission at 12 Months in the Virtual Psychiatric and Clinical Guidance project, is not currently on track to meet the DY6 Target.

Table 8: JPS DSRIP Performance

DSRIP Project	Metric	% of Goal	Measurement Period Ends
Behavioral Health Day Rehab	QPI: Patients Served by Project	29%	9/30/2017
	MLIU: Patients Served by Project	39%	9/30/2017
	Vocational Rehab for Schizophrenia	Met DY6 Goal	8/31/2017
	Housing Assessment for Schizophrenia	Pay for Reporting	8/31/2017
	Follow-Up after Hospital - 7 days	Met DY6 Goal	9/30/2017
	Follow-Up after Hospital - 30 days	Met DY6 Goal	9/30/2017
	Independent Living Assess. For Schizophrenia	Pay for Reporting	8/31/2017
	Depression Screen & Treatment Plan	Pay for Reporting	8/31/2017
Comprehensive Behavioral Health Assessment Center	QPI: Patients Served by Project	50%	9/30/2017
	MLIU: Patients Served by Project	59%	9/30/2017
	Assessment of Risk to Self/Others	Met DY6 Goal	8/31/2017
	Assessment for Psychosocial Issues	Met DY6 Goal	8/31/2017
	Assessment for Manic Behaviors	Pay for Reporting	8/31/2017
	Depression Screen & Treatment Plan	Met DY6 Goal	9/30/2017
Discharge Management	QPI: Patients Receive Enhanced Care Trans	31%	9/30/2017
	MLIU: Patients Receive Enhanced Care Trans	41%	9/30/2017
	Follow-Up after Hosp. - 7 days	Met DY6 Goal	6/30/2017
	Follow-Up after Hosp. - 30 days	Met DY6 Goal	6/30/2017
	Behavioral Health 30 Day Readmission Rate	Pay for Reporting	6/30/2017
	Follow-Up after Hosp. - 7 days	Met DY6 Goal	9/30/2017
	Follow-Up after Hosp. - 30 days	Met DY6 Goal	9/30/2017
Expanded Behavioral Health—Outpatient Hours and Services	QPI: Behavioral Health Clinic Visits	56%	9/30/2017
	MLIU: Behavioral Health Clinic Visits	59%	9/30/2017
	Follow-Up After Hosp. - 7 days	Met DY6 Goal	6/30/2017
	Follow-Up After Hosp. - 30 days	Met DY6 Goal	6/30/2017
Expanded Behavioral Health—Partial Hospitalization Programs	QPI: Increase Behavioral Health Clinic Services	Met DY6 Goal	9/30/2017
	MLIU: Increase Behavioral Health Clinic Services	Met DY6 Goal	9/30/2017
	Follow-Up After Hosp. - 7 days	Met DY6 Goal	6/30/2017
	Follow-Up After Hosp. - 30 days	Met DY6 Goal	6/30/2017
Integrated Care	QPI: Patients Receive Behavioral Health and PC	63%	9/30/2017
	MLIU: Patients Receive Behavioral Health and PC	56%	9/30/2017
	Depression Screen & Treatment Plan	Met DY6 Goal	6/30/2017
	Depression Screen & Treatment Plan	Met DY6 Goal	6/30/2017
	DM: HbA1c Poor Control	Met DY6 Goal	6/30/2017
Virtual Psychiatric and Clinical Guidance	QPI: Virtual Services Provided	28%	9/30/2017
	MLIU: Virtual Services Provided	27%	9/30/2017
	Depression Screen & Treatment Plan	Met DY6 Goal	6/30/2017
	Depression Remission at 12 Months	Not meeting DSRIP Target	6/30/2017

Source: JPS Health Network. (2017).JPS DSRIP Monthly Scorecard

MHMR of Tarrant County

My Health My Resources of Tarrant County²⁷ (MHMR) provides mental health and related services to adults, adolescents and children. Operating over 100 sites across Tarrant County and surrounding counties in North Texas, MHMR is an independent local unit of government, funded primarily by the state and county. MHMR is the sole safety net provider that offers community based behavioral health services within Tarrant County, offering services related to mental health, addiction and substance abuse, intellectual and developmental delays, early childhood delays, veterans, transportation, supported employment and homelessness. Addiction services include substance use treatment and detoxification in both outpatient and residential settings.

Sixty-five percent (65%) of the patients served by MHMR are uninsured. MHMR hosts the 24-hour crisis line for JPS patients and other county residents where telephone screening/triage is conducted and medications can be refilled. Individuals can be seen the same day at the Intake Center on Hulen Street, but may not be able to see a provider for treatment the same day; however, MHMR also operates a walk-in clinic where individuals can see a provider every day. Stakeholder interviews report it can take several months to see a provider at MHMR.

Despite the high need for mental health services in Tarrant County, MHMR only offers services to those who meet Tarrant County residential, financial and diagnostic eligibility criteria. Per state mandate, MHMR prioritizes serving populations with serious mental illness, i.e., those with bipolar disorder, major depression and schizophrenia.

MHMR's performance statistics indicate they can exceed their yearly performance targets. However, their service target volume, as listed in their 2017 budget projection reveals the insufficiency of their reach, compared to the volume of need in the county. For example, MHMR projects that it will serve 7,335 individuals in 2017, while approximately 253,000 of the total Tarrant County population with major depression are in need of services in the county. While other organizations serve the insured population MHMR has capacity restraints that limit its ability to meet Medicaid and uninsured community needs.

²⁷ <http://www.mhmrtarrant.org/About-Us/About-Us>

Table 9: Select FY16 Contract Performance Measures

	Adult Mental Health	Substance Abuse Services				
	Service Target	COPSD (Co-occurring Mental Health and Substance Abuse)	Adult Treatment: Intensive Residential	Adult Treatment: Outpatient	Adult Treatment: Ambulatory Detoxification	Adult Treatment: Residential Detoxification
Numbers Served: Percent of Target	119%	152.47%	137.47%	203.16%	44.38%	66.13%

Table 10: FY 2017 Projections from MHMR FY2017 Budget

	Select MHMR Behavioral Health Treatment Services	FY2017 Projections of # of Clients Served	Comparison to Population Need
<i>Mental Health Services</i>	Mobile Crisis Team/Transitional services	841	Approximately 253,000 (12.8%) of Tarrant population with major depression
	Adult Outpatient Clinics/ Community Support Services	7335	
	Assertive Community Treatment	70	
	Early Onset Psychosis	30	
	Integrated Healthcare Services	750	
	Outpatient Competency restoration	25	
	Crisis Residential Unit	1095	
	Crisis Respite Unit	487	
<i>Substance Abuse Services</i>	Harmon Road Addiction Recovery Center	598	Approximately 158,000 (8%) of Tarrant population with binge alcohol use
	Community Addiction treatment services	1336	
	Substance Use Disorder (SUD) Outpatient 1115 Waiver	725	
	Ambulatory Detox	439	
	Co-Occurring Psychiatric Séance Abuse Disorder	425	
	Bill Gregory Detox Program	1440	
	Pine Street Intensive Residential Program	600	
	Liberty House (Transitional Living for homeless veterans with SUD)	30	

MHMR Opportunities for Collaboration with JPS

As the two largest providers serving complex high risk/high need uninsured patients in the county, MHMR and JPS operate as close partners that collaborate to coordinate care. Most MHMR patients are referred from JPS and both organizations strive to minimize care fragmentation and align their services along a common continuum of care. Stakeholder interviews and focus groups demonstrate support for the expansion of inpatient beds and renovation at JPS, acknowledging that JPS cannot keep sending their overflow to private hospitals that are unequipped to serve the complex uninsured. This cycle leads to poor quality of care, thereby exacerbating recidivism through inpatient units and the forensic system. MHMR is the largest publicly funded substance use disorder provider in the State, and has expressed interest in working with JPS to coordinate strategies for SUD treatment, expanding jail diversion programs and better coordination of services for the forensic population in the County. Both JPS and MHMR share significant experience in providing services in the jails; MHMR provides psychiatric and behavioral health services and JPS provides medical care. MHMR also has insight into the management of individuals across the justice system, through its relationship with the probate court. The proposed recommendations in this report have the potential to enhance these relationships and allow the two organizations to capitalize on opportunities for collaboration on shaping the progress of the system of behavioral health and substance abuse care in Tarrant County.

People Experiencing Homelessness

JPS has built a strong reputation for serving the homeless population and has positive relationships with the county's homeless providers. In Tarrant County, 23% of homeless individuals report a mental health and/or substance use disorder, and in 2016, the County's annual homeless count was approximately 2,000.²⁸ JPS' Connection Homeless Program provides assistance to patients without health insurance who are experiencing homelessness. True Worth Place offers shelter and social/medical service linkages (including health care, employment, education, mental health and substance abuse treatment and benefits) to those who experience homelessness. Tarrant County Homeless Coalition (TCHC) is a private, non-profit organization that leads, develops, and coordinates strategies and resources to end homelessness in Tarrant and Parker Counties. TCHC serves as the backbone organization of the communitywide effort to end homelessness.

Stakeholder interviews and focus groups revealed concern lies with fulfilling the national "Housing First" model, an approach that prioritizes permanent, affordable housing above other service supports and community connections. Full implementation of Housing First would help

²⁸ MHMR Tarrant Testimony to the Texas House Select Committee on Mental Health, presented on August 16, 2016 by Susan Garnett, Chief Executive Officer

homeless individuals access and keep their stable housing, which would in turn improve their health and wellbeing outcomes and ability to access care. Tarrant County has a paucity of available, affordable housing and few State, City and/or County resources are invested in expanding the supply.

The high prevalence of mental illness and substance use disorders among the homeless population exacerbates the challenges related to finding stable housing, in addition to appropriate psychiatric services. Stakeholders agreed with the idea that JPS should consider expanding in the following areas:

- Inpatient psychiatric beds
- Adolescent psychiatric beds
- Inpatient substance abuse treatment beds
- Behavioral health crisis stabilization beds
- Decreased fragmentation and increased continuity for step-down services
- Better integration of behavioral health into primary care clinics, particularly where homeless individuals receive services.
- Better configuration and additional space for PEC to handle overwhelming volume of patients
- Expand community based services to improve access to care and address social determinants of health

Behavioral Health System of Care

Diversity and Cultural Competence

Cultural competence refers to efforts to reduce the cultural and linguistic barriers between patients and medical personnel that interfere with effective health care delivery.²⁹ The goal of diversity and culturally competent care is health equity, or the attainment of the highest level of health for all people.³⁰

Often, the term cultural competence is applied only to racial and ethnic minority populations, but this narrow application omits other marginalized groups who may be ethnically and racially similar to a provider but nonetheless at risk for stigmatization or discrimination, or who have differences in health care needs that result in health disparities. This broader concept of cultural competence incorporates awareness of the needs of individuals with disabilities, lesbian, gay, bisexual, and transgender (LGBT) populations, as well as those of racial and ethnic minority populations.³¹

There are numerous ethical and practical reasons why providing culturally and linguistically appropriate services in health and health care is necessary, including:³²

- To respond to current and projected demographic changes;
- To eliminate long-standing disparities in the health status of people of diverse racial, ethnic and cultural backgrounds;
- To improve the quality of services and primary care outcomes;
- To meet legislative, regulatory and accreditation mandates;
- To gain a competitive edge in the market place; and
- To decrease the likelihood of liability/malpractice claims.

²⁹ Butler, M., McCreddy, E., Schwer, N., Burgess, D., Call, K., Przedworski, J., Rosser, S., Larson, S., Allen, M., Fu, S., & Kane, R. (2016). Improving Cultural Competence to Reduce Health Disparities. Agency for Healthcare Research and Quality.

³⁰ Department of Health and Human Services Office of Minority Health. (2013). National Standards for Culturally and Linguistically Appropriate Services in Health and Health Care: A Blueprint for Advancing and Sustaining CLAS Policy & Practice. <https://www.thinkculturalhealth.hhs.gov/assets/pdfs/EnhancedCLASStandardsBlueprint.pdf>

³¹ Butler, M., McCreddy, E., Schwer, N., Burgess, D., Call, K., Przedworski, J., Rosser, S., Larson, S., Allen, M., Fu, S., & Kane, R. (2016). Improving Cultural Competence to Reduce Health Disparities. Agency for Healthcare Research and Quality.

³² Department of Health and Human Services Office of Minority Health. (2013). National Standards for Culturally and Linguistically Appropriate Services in Health and Health Care: A Blueprint for Advancing and Sustaining CLAS Policy & Practice. <https://www.thinkculturalhealth.hhs.gov/assets/pdfs/EnhancedCLASStandardsBlueprint.pdf>

County and State Diversity and Disparities

The population living in Tarrant County has consistently become more and more diverse over the last several years, and with this growing diversity comes a number of health disparities, or "differences in the incidence, prevalence, mortality, burden of diseases and other adverse health conditions that exist among specific population groups."³³ Currently, the majority of the County's population is White non-Hispanic (51.8%), followed by Hispanic (26.7%), Black (14.9%), Asian (4.7%) and Other Race/Ethnicity category (.9%).³⁴

Table 11: Tarrant County: Proportion of Race/Ethnicity in 2000 and 2010, and Percent Change

	2000	2010	Percent Change
Total Pop	1,446,219	1,800,034	24.5%
White, non-Hispanic	895,253 (61.9%)	937,135 (51.8%)	4.7%
Black	185,253 (12.8%)	268,205 (14.9%)	45.1%
Hispanic	285,290 (19.7%)	482,977 (26.7%)	69.3%
Asian	52,594 (3.6%)	84,561 (4.7%)	60.7%
Other	11,570 (0.8%)	16,200 (.9%)	40%

Source: US Census. Quick Facts, 2014

A key indicator of percent change in race/ethnicity in the coming decades is the percent change based on the last two census surveys: 2000 and 2010. As illustrated by Table 11 above, there has been significant growth in the number of African American/Black, Hispanic/Latino, and Asian individuals living in Tarrant County between 2000 and 2010, growth that continues today. The highest percent change over these ten years is for Hispanics (a 69% increase, or an increase of 197,687 persons), Black (a 45.1% increase, or an additional 82,952 persons), and White (4.7% increase, or an additional 41,882 persons). Asians and individuals falling into the "Other" racial/ethnicity category have high percent change with smaller, but growing populations.³⁵

This disproportionate growth among racial/ethnic minorities within the County is mirrored by the State's projected growth rates. The population of Texas is expected to increase by 116% from 2010 to 2050, and more than 79% of the net growth in the state's population is projected to be due to in-migrants, as well as immigrants and their descendants.³⁶ Specifically related to race/ethnicity, while the State's population of Caucasian individuals is projected to increase by 4.9% from 2010 to 2050, Texas' Black population is expected to increase by 76.6% and Hispanic population is projected to increase by 215.6% within the same timeframe.³⁷

³³ Tarrant County Texas Center for Health Equity. (2016). About Us. <http://access.tarrantcounty.com/en/public-health/center-for-health-equity.html>

³⁴ U.S. Census Bureau. (2015)

³⁵ Health Management Associates. (2017). Tarrant County Community Health Needs Assessment.

³⁶ Health Management Associates. (2017). Tarrant County Community Health Needs Assessment.

³⁷ Health Management Associates. (2017). Tarrant County Community Health Needs Assessment.

Although 14.5% of the overall population in Tarrant County is poor, the percentage of African Americans (29%) and Hispanics (33%) with income at or below poverty is more than double that of white individuals.³⁸

Disparities also exist related to care access for certain populations. Nationally, while some measures of healthcare access are improving, 80% of disparities in access to care have stayed the same or worsened for Hispanics; 60% for African Americans, Asians, and poor populations; and 40% for American Indians and Alaska Natives.³⁹

The proportion of Tarrant County residents over five years of age who speak a language other than English at home is significantly higher than the national average (28% versus 21%, respectively), resulting in many residents of Tarrant County being linguistically isolated.

Cultural Competence Strategies

Cultural competence has been widely promoted as one approach to reducing health disparities like these. Cultural competence interventions targeting patient/provider relationships are important. Interventions based on theories or frameworks focused on improving communication skills or shared decision-making may change the patient/provider relationships.⁴⁰ The Health and Human Services (HHS) Office of Minority Health's (OMH) National Standards for Culturally and Linguistically Appropriate Services in Health and Health Care (The National CLAS Standards) aim to improve health care quality and advance health equity by establishing a framework for organizations to serve the nation's increasingly diverse communities.⁴¹

OMH's Principal CLAS Standard is to provide effective, equitable, understandable and respectful quality care and services that are responsive to diverse cultural health beliefs and practices, preferred languages, health literacy and other communication needs.⁴² The other standards of CLAS include the following strategies:⁴³

³⁸ United Way of Tarrant County. (2015). 2015 United Way Tarrant County Community Assessment. <http://unitedwaytarrant.org/wp-content/uploads/2015/12/2015-COMMUNITY-ASSESSMENT.pdf>

³⁹ Statewide Health Coordinating Council. (2011). Texas State Health Plan: A Roadmap to a Healthy Texas.

⁴⁰ Butler, M., McCredy, E., Schwer, N., Burgess, D., Call, K., Przedworski, J., Rosser, S., Larson, S., Allen, M., Fu, S., & Kane, R. (2016). Improving Cultural Competence to Reduce Health Disparities. Agency for Healthcare Research and Quality.

⁴¹ Health and Human Services Office of Minority Health. (2016). The National CLAS Standards. <https://minorityhealth.hhs.gov/omh/browse.aspx?lvl=2&lvlid=53>

⁴² Health and Human Services Office of Minority Health. (2016). The National CLAS Standards. <https://minorityhealth.hhs.gov/omh/browse.aspx?lvl=2&lvlid=53>

⁴³ Health and Human Services Office of Minority Health. (2016). The National CLAS Standards. <https://minorityhealth.hhs.gov/omh/browse.aspx?lvl=2&lvlid=53>

Governance, Leadership and Workforce

- Advance and sustain organizational governance and leadership that promotes CLAS and health equity through policy, practices and allocated resources.
- Recruit, promote and support a culturally and linguistically diverse governance, leadership and workforce that are responsive to the population in the service area.
- Educate and train governance, leadership and workforce in culturally and linguistically appropriate policies and practices on an ongoing basis.

Communication and Language Assistance

- Offer language assistance to individuals who have limited English proficiency and/or other communication needs, at no cost to them, to facilitate timely access to all health care and services.
- Inform all individuals of the availability of language assistance services clearly and in their preferred language, verbally and in writing.
- Ensure the competence of individuals providing language assistance, recognizing that the use of untrained individuals and/or minors as interpreters should be avoided.
- Provide easy-to-understand print and multimedia materials and signage in the languages commonly used by the populations in the service area.

Engagement, Continuous Improvement and Accountability

- Establish culturally and linguistically appropriate goals, policies and management accountability, and infuse them throughout the organizations' planning and operations.
- Conduct ongoing assessments of the organization's CLAS-related activities and integrate CLAS-related measures into assessment measurement and continuous quality improvement activities.
- Collect and maintain accurate and reliable demographic data to monitor and evaluate the impact of CLAS on health equity and outcomes and to inform service delivery.
- Conduct regular assessments of community health assets and needs and use the results to plan and implement services that respond to the cultural and linguistic diversity of populations in the service area.
- Partner with the community to design, implement and evaluate policies, practices and services to ensure cultural and linguistic appropriateness.
- Create conflict- and grievance-resolution processes that are culturally and linguistically appropriate to identify, prevent and resolve conflicts or complaints.
- Communicate the organization's progress in implementing and sustaining CLAS to all stakeholders, constituents and the public.

By providing a structure to implement culturally and linguistically appropriate services, the CLAS Standards can improve an organization's ability to address health care disparities. CLAS adherence is only possible when care is truly person-centered and relationship-based, meeting each individual patient/consumer and family's needs, preferences, and priorities. The provision of culturally responsive health care has evolved from specific training about groups to a more universal focus on rapport-building, clear empathic communication, respect and negotiated treatment planning that embrace patient world views and health decisions. One example of this is the *Inequalities Imagination Model*,⁴⁴ which focuses on encouraging the provider to move beyond "politically correct" thinking and develop true empathy by imagining experiences from the perspective of the patient. Through the model, the imagination process is used as a specific learning technique, asking the provider to bring to mind the experiences of others and consider how previous behaviors could be changed. The provider is further challenged to bring to light cognitive processes from the subconscious levels. The Inequalities Imagination model helps practitioners to bridge the gap between the challenges they face in day-to-day practice and what they need to achieve to aspire to provide equality of care to all.

As a state, Texas has been making strides to move towards greater cultural competency across its health care delivery system. In 2011, the Texas Legislature, through SB 501, created the Center for Elimination of Disproportionality and Disparities and designated it as the Texas State Office of Minority Health.⁴⁵ The center's mission is to partner with health and human services agencies, external stakeholders, other systems, and communities to identify and eliminate disproportionality and disparities affecting children, families, and disparately impacted individuals. The Center works to identify the systemic factors and practice improvements that address the disproportionate representation and disparate outcomes for children, families, and disparately impacted individuals in the state's health and human services programs. The Center includes the State Office of Minority Health and Health Equity, the Office of Border Affairs, and Equity and Inclusion, as well as regional equity specialists throughout Texas. The Center grounds its work in the Texas Model, which comprises 5 components: advancing data-driven strategies, collaborating across systems, engaging communities, promoting work defined by race equity principles, and evaluation and transformation.

Trauma Informed Care

According to SAMHSA, individual trauma results from an event, series of events, or set of circumstances that is experienced by an individual as physically or emotionally harmful or life

⁴⁴ Hart, A., Hall, V., & Henwood, F. (2003). Helping health and social care professionals to develop an 'inequalities imagination': a model for use in education and practice.

<https://www.ncbi.nlm.nih.gov/pubmed/12603573>

⁴⁵ Texas Health and Human Services. Center for Elimination of Disproportionality and Disparities.

<https://hhs.texas.gov/about-hhs/process-improvement/center-elimination-disproportionality-disparities>

threatening and that has lasting adverse effects on the individual's functioning and mental, physical, social, emotional, or spiritual wellbeing.⁴⁶ Trauma and violence are widespread, harmful, and costly public health concerns. Although Tarrant County specific data is not available, national data paints a grim picture:⁴⁷

- Experience of sexual abuse among women in childhood or adulthood ranges from 15% to 25% to women living in the United States. The prevalence of domestic violence among women in the United States ranges from 9% to 44%, depending on definitions.
- The cost of intimate partner violence, which disproportionately affects women and girls, was estimated to be \$8.3 billion in 2003. This total includes the costs of medical care, mental health services, and lost productivity.
- In a 2008 study by RAND, 18.5% of returning veterans reported symptoms consistent with post-traumatic stress disorder (PTSD) or depression.
- In the United States, 18.9% of men and 15.2% of women reported a lifetime experience of a natural disaster.

Individuals with experiences of trauma are found across all ages, genders, socioeconomic statuses, and races/ethnicities, and these individuals come in contact with the delivery system within all service sectors. Prevalence rates of interpersonal trauma and trauma-related disorders were significantly higher among individuals living with serious mental illness (SMI) than in the general population.⁴⁸ Studies of people in the juvenile and criminal justice system reveal high rates of mental and substance use disorders and personal histories of trauma. Children and families in the child welfare system similarly experience high rates of trauma and associated behavioral health problems. Young people bring their experiences of trauma into the school systems, often interfering with their school success. And many patients in primary care similarly have significant trauma histories which has an impact on their health and their responsiveness to health interventions.⁴⁹

Research has documented the relationships among exposure to traumatic events, impaired neurodevelopmental and immune systems responses and subsequent health risk behaviors resulting in chronic physical and behavioral health disorders.⁵⁰ The Adverse Childhood

⁴⁶ SAMHSA's Trauma and Justice Strategic Initiative. (2014). SAMHSA's Concept of Trauma and Guidance for a Trauma-Informed Approach. <http://store.samhsa.gov/shin/content/SMA14-4884/SMA14-4884.pdf>

⁴⁷ SAMHSA. (2015). Trauma and Violence. <https://www.samhsa.gov/trauma-violence>

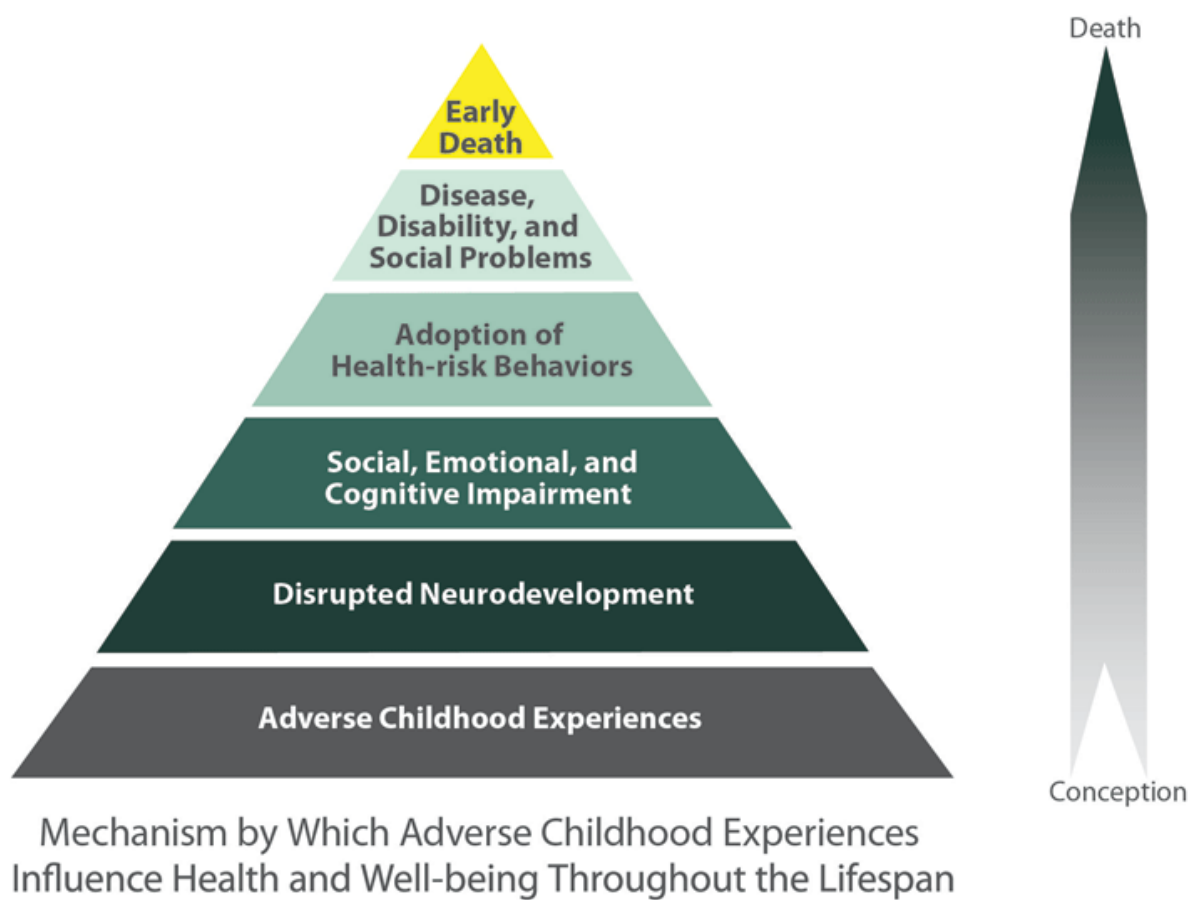
⁴⁸ Mauritz, M.W., Goossens, P.J.J., Draijer, N., & von Achterberg, T. (2013). Prevalence of interpersonal trauma exposure and trauma-related disorders in severe mental illness. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3621904/>

⁴⁹ SAMHSA's Trauma and Justice Strategic Initiative. (2014). SAMHSA's Concept of Trauma and Guidance for a Trauma-Informed Approach. <http://store.samhsa.gov/shin/content/SMA14-4884/SMA14-4884.pdf>

⁵⁰ SAMHSA's Trauma and Justice Strategic Initiative. (2014). SAMHSA's Concept of Trauma and Guidance for a Trauma-Informed Approach. <http://store.samhsa.gov/shin/content/SMA14-4884/SMA14-4884.pdf>

Experiences (ACE) study,⁵¹ conducted by the Centers for Disease Control and Prevention and Kaiser Permanente, is one of the largest investigations ever conducted to assess associations between childhood maltreatment and later-life health and well-being. Almost two-thirds of the study participants reported at least one adverse childhood experience of physical or sexual abuse, neglect, or family dysfunction, and more than one of five reported three or more such experiences. The ACE study revealed that an individual’s experience of trauma impacts every area of human functioning. In addition, physical, mental, behavioral, social, spiritual, and the economic costs of untreated trauma-related alcohol and drug abuse alone were estimated to be \$161 billion in 2000.⁵²

Figure 1: The Adverse Childhood Experiences Pyramid



Source: CDC. (2016). The ACE Pyramid. <https://www.cdc.gov/violenceprevention/acestudy/about.html>

⁵¹ Sparrow Consulting, LLC. The Adverse Childhood Experiences Study: A Springboard to Hope. <http://acestudy.org/index.html>

⁵² The National Council for Behavioral Health. (2015). Trauma-Informed Care. <https://www.thenationalcouncil.org/areas-of-expertise/trauma-informed-behavioral-healthcare/>

The good news is that trauma is treatable through a trauma informed model of care. Trauma informed care is grounded in and directed by a thorough understanding of the neurological, biological, psychological, and social effects of trauma and the prevalence of these experiences in persons who seek and receive mental health services. It takes into account knowledge about trauma — its impact, interpersonal dynamic, and paths to recovery — and incorporates this knowledge into all aspects of service delivery. Trauma informed care also recognizes that traditional service approaches can re-traumatize consumers and family members.⁵³

Addressing trauma requires a multi-pronged, multi-agency public health approach inclusive of public education and awareness, prevention and early identification, and effective, trauma-specific assessment and treatment.⁵⁴ According to the Substance Abuse and Mental Health Services Administration (SAMHSA), a trauma-informed approach reflects adherence to six key principles rather than a prescribed set of practices or procedures:⁵⁵

1. Safety: Throughout the organization, staff and the people they serve feel physically and psychologically safe.
2. Trustworthiness and Transparency: Organizational operations and decisions are conducted with transparency and the goal of building and maintaining trust among staff, clients, and family members of those receiving services.
3. Peer support and mutual self-help: These are integral to the organizational and service delivery approach and are understood as a key vehicle for building trust, establishing safety, and empowerment.
4. Collaboration and mutuality: There is true partnering and leveling of power differences between staff and clients and among organizational staff from direct care staff to administrators. There is recognition that healing happens in relationships and in the meaningful sharing of power and decision-making. The organization recognizes that

⁵³ Alameda County Trauma Informed Care. (2013). Trauma Informed Care vs. Trauma Specific Treatment. <https://alamedacountytraumainformedcare.org/trauma-informed-care/trauma-informed-care-vs-trauma-specific-treatment-2/>

⁵⁴ SAMHSA's Trauma and Justice Strategic Initiative. (2014). SAMHSA's Concept of Trauma and Guidance for a Trauma-Informed Approach. <http://store.samhsa.gov/shin/content/SMA14-4884/SMA14-4884.pdf>

⁵⁵ SAMHSA. (2014). Guiding Principles of Trauma-Informed Care. https://www.samhsa.gov/samhsaNewsletter/Volume_22_Number_2/trauma_tip/guiding_principles.html

everyone has a role to play in a trauma-informed approach. One does not have to be a therapist to be therapeutic.

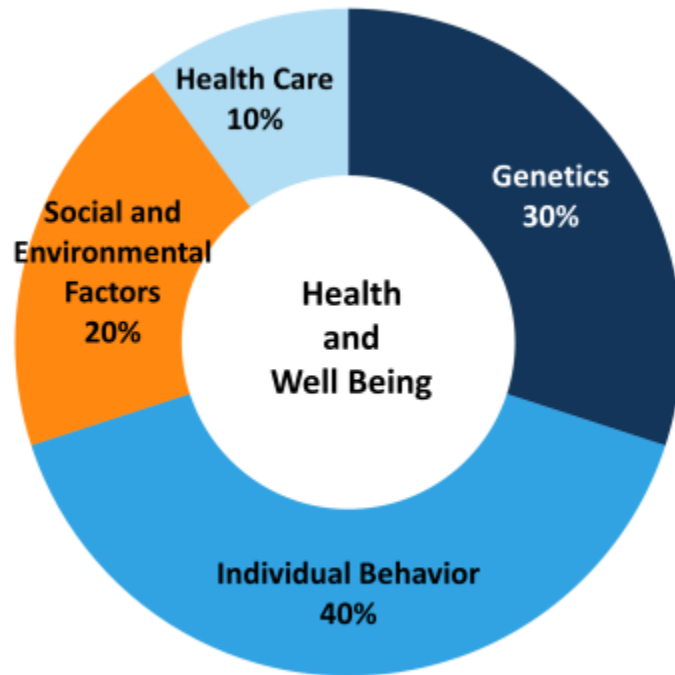
5. *Empowerment, voice and choice*: Throughout the organization and among the clients served, individuals' strengths are recognized, built on, and validated and new skills developed as necessary. The organization aims to strengthen the staff's, clients', and family members' experience of choice and recognize that every person's experience is unique and requires an individualized approach. This includes a belief in resilience and in the ability of individuals, organizations, and communities to heal and promote recovery from trauma. This builds on what clients, staff, and communities have to offer, rather than responding to perceived deficits.
6. *Cultural, Historical, and Gender Issues*: The organization actively moves past cultural stereotypes and biases (e.g., based on race, ethnicity, sexual orientation, age, geography), offers gender responsive services, leverages the healing value of traditional cultural connections, and recognizes and addresses historical trauma.

Social Determinants of Health

Though health care provision is essential to health, research demonstrates that it is actually a relatively weak determinant of health outcomes (as illustrated by Figure 2 below). Health behaviors, such as smoking and diet and exercise, as well as a variety of social and environmental factors, are actually more important determinants of premature death and other maladaptive outcomes. Therefore, while increasing access to health care and transforming the health care delivery system are important, improving population health and achieving health equity also require broader approaches that address social, economic, and environmental factors that influence health.⁵⁶

⁵⁶ Heiman, H.J., & Artiga, S. (2015). Beyond Health Care: The Role of Social Determinants in Promoting Health and Health Equity. <http://kff.org/disparities-policy/issue-brief/beyond-health-care-the-role-of-social-determinants-in-promoting-health-and-health-equity/>

Figure 2: Impact of Different Factors on Risk of Premature Death



Source: Schroeder, S.A. (2007). We Can Do Better—Improving the Health of the American People. NEJM. 357:1221-8. (reprinted: <http://kff.org/disparities-policy/issue-brief/beyond-health-care-the-role-of-social-determinants-in-promoting-health-and-health-equity/>)

The social and environmental factors that impact health outcomes are often called Social Determinants of Health (SDH). SDHs are defined as the structural determinants and conditions in which people are born, grow, live, work, and age. They include a variety of factors, such as socioeconomic status, education, the physical environment, employment, and social support networks, as well as access to health care. Resources that enhance quality of life and impact social determinants, such as safe and affordable housing, access to education, public safety, availability of healthy foods, local emergency/health services, and environments free of life-threatening toxins, can have a significant influence on population health outcomes.⁵⁷ Examples of SDHs across a variety of domains are included below in Figure 3.

⁵⁷ Office of Disease Prevention and Health Promotion. (2017). Social Determinants of Health. <https://www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-of-health>

Figure 3: Social Determinants of Health

Economic Stability	Neighborhood and Physical Environment	Education	Food	Community and Social Context	Health Care System
Employment	Housing	Literacy	Hunger	Social integration	Health coverage
Income	Transportation	Language	Access to healthy options	Support systems	Provider availability
Expenses	Safety	Early childhood education		Community engagement	Provider linguistic and cultural competency
Debt	Parks	Vocational training		Discrimination	Quality of care
Medical bills	Playgrounds	Higher education			
Support	Walkability				

Health Outcomes
Mortality, Morbidity, Life Expectancy, Health Care Expenditures, Health Status, Functional Limitations



Source: Heiman, H.J., & Artiga, S. (2015). Beyond health care: The role of Social Determinants in promoting health and health equity. Kaiser Family Foundation. <http://kff.org/disparities-policy/issue-brief/beyond-health-care-the-role-of-social-determinants-in-promoting-health-and-health-equity/>

Critically, it is important to understand that no one SDH is solely responsible for health and outcomes. Rather, diverse social factors make up a complex network of causes and effects, playing off an individual’s biological factors, which ultimately result in health outcomes (as illustrated by Figure 4 below). For example, dealing with food insecurity may be related to being unemployed and/or homeless, feeling unsupported socially may be related to living in an unsafe or hostile neighborhood, or struggling to find a well-paying job to pay rent may be related to not having completed high school.⁵⁸

⁵⁸ Schrag, J. (2015). Social Determinants of Health: The Ripple Effect. <https://essentialhospitals.org/institute/social-determinants-of-health-the-ripple-effect/>

Figure 4: Social Determinants of Health



Source: Schrag, J. (2015). Social Determinants of Health: The Ripple Effect. <https://essentialhospitals.org/institute/social-determinants-of-health-the-ripple-effect/>

Tarrant County experiences a number of SDH-related conditions that adversely impact the health and wellbeing of communities (as further described in HMA’s Community Health Needs Assessment). For example, Tarrant County ranks 204th of 253 Texas counties in physical environment factors (i.e., air pollution/particulate matter, drinking water violations, severe housing problems, etc.). Although the County improved on this metric from 2014, physical environment factors still disproportionately impact the wellbeing of Tarrant County residents more than those living in surrounding counties, including Travis, Harris, and Bexar.⁵⁹ In addition, the County does not have a public transportation system, which adversely impacts individuals’ access to community resources, job training, employment, and health care.⁶⁰ Further, in Tarrant County, almost half (28.5%) of all renters pay more than 30% of their income for housing, causing them to be “housing cost burdened.”⁶¹

Other SDHs disproportionately impact some Tarrant County groups more than others. For example:

- School districts in the more affluent northeastern suburbs (such as Grapevine-Colleyville and Southlake) had the highest attendance and graduation rates, along with the lowest percentage of economically disadvantaged students. Districts in lower socio-economic municipalities, such as Fort Worth, White Settlement and Lake Worth, had the lowest graduation and attendance rates and lowest number college-ready graduates, respectively.⁶² Poor educational attainment has been linked to poorer health outcomes,

⁵⁹ United Way of Tarrant County. (2015). 2015 United Way Tarrant County Community Assessment. <http://unitedwaytarrant.org/wp-content/uploads/2015/12/2015-COMMUNITY-ASSESSMENT.pdf>

⁶⁰ North Texas Community Foundation. (2010). Fort Worth Community Assessment of the Economically Disadvantaged. http://www.cfntx.org/assets/1402/fort_worth_community_assessment_-_abridged_version.pdf

⁶¹ United Way of Tarrant County. (2015). 2015 United Way Tarrant County Community Assessment. <http://unitedwaytarrant.org/wp-content/uploads/2015/12/2015-COMMUNITY-ASSESSMENT.pdf>

⁶² United Way of Tarrant County. (2015). 2015 United Way Tarrant County Community Assessment. <http://unitedwaytarrant.org/wp-content/uploads/2015/12/2015-COMMUNITY-ASSESSMENT.pdf>

as well as other proximate factors such as lowered ability to navigate the health care system, maladaptive personal health behaviors, and increased exposure to chronic stress.⁶³

- Tarrant County residents who are living in impoverished situations have increased risk of being overweight. While 67% of the general population of Tarrant County is considered overweight or obese, 79% of those earning under \$15,000 per year fall into these categories.⁶⁴
- Between 2000 and 2006, there were a total of 14,764 individuals released from prisons to Tarrant County, a full third of whom returned to only four zip codes within Tarrant County (76107, 76119, 76105, and 76106). Approximately 23% of all annual parolee releases to Tarrant County return to just two of those zip codes: 76107 (Como) and 76119 (SE Fort Worth), contributing to poorer health, behavioral health, and wellness in these communities.⁶⁵

Given these factors, it is critical that the Tarrant County delivery system focus on the impact of social and physical environments (SDHs) on individual and community health and wellbeing outcomes. Over the past several years, heavier emphasis has been placed on social determinants within the health care delivery system nationally, which can offer some guidance on which to build local strategies for addressing these issues. For example, the Office of Disease Prevention and Healthy Promotion's Healthy People 2020, which provides science-based, 10-year national objectives for improving the health of all Americans, includes a goal related to SDH, which strives to "create social and physical environments that promote good health for all."⁶⁶ Healthy People 2020 utilizes a "place based" organizing framework that reflects five key areas of SDH, each of which contains a number of critical components/key issues:⁶⁷

- Economic Stability, including poverty, employment, food security, and housing stability
- Education, including high school graduation, enrollment in higher education, language and literacy, and early childhood education

⁶³ Zimmerman, E.B., Woolf, S.H., & Haley, A. (2015). Population Health: Behavioral and Social Science Insights. Agency for Healthcare Research and Quality. <https://www.ahrq.gov/professionals/education/curriculum-tools/population-health/zimmerman.html>

⁶⁴ Baylor Institute for Rehabilitation at Fort Worth. (2013). Community Health Needs Assessment. http://communityneeds.bswhealth.com/CHNA_Reports/2013_Needs_Assessment/FINAL_CHNA_BIR_FW.pdf

⁶⁵ North Texas Community Foundation. (2010). Fort Worth Community Assessment of the Economically Disadvantaged. http://www.cfntx.org/assets/1402/fort_worth_community_assessment_-_abridged_version.pdf

⁶⁶ Office of Disease Prevention and Health Promotion. (2017). Social Determinants of Health. <https://www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-of-health>

⁶⁷ Office of Disease Prevention and Health Promotion. (2017). Social Determinants of Health. <https://www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-of-health>

- Social and Community Context, including social cohesion, civic participation, discrimination, and incarceration
- Health and Health Care, including access to health care, access to primary care, and health literacy
- Neighborhood and Built Environment, including access to healthy foods, quality of housing, crime and violence, and environmental conditions

In support of these goals, the Health Care Improvement Foundation, an independent nonprofit organization that drives high-value health care through stakeholder collaboration and targeted quality improvement initiatives, has developed four strategies that hospitals can use to proactively develop strategies for addressing SDH:⁶⁸

7. *Build Awareness Internally*: Spreading awareness of SDHs' impact on overall health is vitally important. This means gaining buy-in across the organization and creating champions for the cause to build understanding.
8. *Be Curious*: It's important to systematically assess social circumstances with patients to determine possible areas of need. This should include deliberate planning to determine how to administer the screening, including at which patient visits, by which staff and at what frequency. Within many settings, this may appear to be a paradigm shift for patients, so ensuring the inquiries are made with sensitivity and patients are given context regarding the questions is critical.
9. *Build a Resource Network*: Once areas of patient need have been identified, it's important to have a network of resources in place to which you can refer patients. Building strong partnerships with community enables a more personal touch when it comes to referrals in order to offer warm handoffs and in-person support versus just giving a name and phone number for the patient to call. Strong partnerships also help to facilitate a more thorough system of follow-up and ongoing evaluation of referred patients.
10. *Use Upstream, Preventive Approaches*: In addition to intervening at the patient-level, hospital systems can also support upstream approaches that work to prevent maladaptive SDHs and their impact on communities. This can include investing in or

⁶⁸ Schrag, J. (2015). Social Determinants of Health: The Ripple Effect. <https://essentialhospitals.org/institute/social-determinants-of-health-the-ripple-effect/>

partnering with programs that promote early childhood education, affordable housing or safe spaces for outdoor exercise, among other things.

Shifting to Models of Population Health

Layered onto efforts of system re-design aimed at improving access to behavioral health care is a shift in the philosophy of who the system needs to ultimately serve. As specialty populations are merged with the general population in models of population health, the fundamental nature of a system of care is expanded. Spurred by health care reform and a focus on the Triple Aim,⁶⁹ there is increasing emphasis on quality of services and tying payment to specific health outcomes. Part of this shift is a change in focus from individual outcome to population based metrics and outcomes with accountable health systems being at risk and responsible for quality within an entire population.

Broadly speaking, population health targets health outcomes across the entire population, working to improve health for all individuals rather than sub-groups or sub-populations. Population health is therefore “holistic in that it seeks to reveal *patterns and connections* within and among multiple systems and to develop approaches that respond to the needs of populations.”⁷⁰ Shifting to a population health lens requires changes in policy, funding, clinical models, and the delivery of care as the methods and definition of who is served adapt. Challenging the historical and long-held system assumption that “open” or “current” patient panels are the population served, and models of population health push providers to think more broadly about the entire population at a regional or State level and then tailor programs to meet different levels of need across this spectrum. Leveraging data and examining patterns of both wellness and chronic health conditions, providers have responsibility for matching intervention to the level of need regardless of whether the need is wellness and ongoing health promotion or disease management.

This is a considerable culture change for behavioral health providers who have historically only been funded to address those individuals who meet criteria for specific behavioral health conditions. The cornerstone of community behavioral health is meeting the needs of those identified with mental illness who meet criteria for specialized services (through both Medicaid, as well as Federal and State block grant dollars). Many of these systems of care have been explicitly regulated to ensure that services do not go to individuals with mild to moderate behavioral health needs. Furthermore, funding for prevention or early intervention has been

⁶⁹ Berwick DM, Nolan TW, Whittington J. The triple aim: care, health, and cost. *Health Aff (Millwood)* 2008; 27, 759–69.

⁷⁰ Fabius, R.J., Pracilio, V.P., Nash, D.B., & Clarke, J.L. (2016). The population health promise (1-18). In D.B. Nash, R.J. Fabius, A. Skoufalos, J.L. Clarke, and M.R. Horowitz (Eds) (2016). *Population Health: Creating a culture of wellness*, 2nd Edition. Burlington MA: Jones & Bartlett Learning.

limited, as have many unique opportunities for specialized sub-populations. One of the byproducts of this history is that services addressing distinct segments of the behavioral health population are disconnected from one another with mild to moderate services occurring primarily through privately funded clinicians and services for the more significant need being addressed in public sector safety net settings. Additionally, services focused on wellness, prevention and early intervention in the general population are separate and distinct (often initiatives in public health rather than behavioral health) from services for individuals with diagnosed or serious mental illness. The funding and regulatory silos have also contributed to the truly separate systems of care for behavioral health, including mental health and addictions treatment, and for physical health needs.

This historical design of the overarching structure of health care forces individuals to move from one sub-system to another as need for more or less behavioral health service changes. The promise of population health and the emerging evidence in clinical and financial outcomes of integrated delivery systems change this design to allow for individuals to move up and down a full continuum of services within the same system in a seamless and coordinated manner. Moreover, the integrated delivery system has the ability to assess and analyze individual need and stratify or target specific levels of service and intervention to meet need—addressing both individual and population health outcomes.

Behavioral Health Integrated Continuum of Care

As behavioral health providers consider their role in population health and the growing movement to accountable systems of care, there is the need to think about how to address the needs of the entire population while maintaining the expertise and specialty services needed for those with the most significant behavioral health conditions. One of the emerging models demonstrating clinical quality and return on investment essentially builds on the strengths of behavioral health and primary care, blending what was previously separate systems. By leveraging improved coordination of care, collaboration between provider organizations, and evidence based models of clinical integration, these two systems can increase their collective impact and improve the experience of care for individuals.

The goal of these models is to create a continuum that begins in the community where care is part of routine primary care and then steps up in intensity to specialty services and even acute care as people's needs evolve. A primary tenet of this framework, however, is that individuals receive care at the lowest point that is appropriate for their needs which increases access to care for both the general population and individuals with higher needs who often face waitlists or delays in care. Through enhanced coordination and collaboration, individuals are able to easily step up or down through the continuum with a seamless care plan.

The table below (Table 12) outlines how behavioral health services can be offered across the full spectrum of population need. Step 1. Initially, providers have a focus on the general population and the need to improve awareness and education about emotional health, wellness, and overall health. This can be done through community based organizations, public health initiatives and primary care. Education efforts may focus on stress management, understanding healthy eating habits and alcohol and other substance use limitations to maintain a healthy body and mind. Step 1-2. When integrated behavioral health providers are incorporated into primary care settings, additional steps can be utilized within the primary care office to enhance or intensify health promotion interventions as risk factors or concerns such as drinking, occasional depression and or anxiety first occur. Step 2-3. As individuals' behavioral health needs intensify some may be initially treated within integrated primary care settings with brief interventions from a behavioral health provider and psychiatric medication prescribed by the primary care provider (with support from a consulting psychiatrist as described below). If this is not sufficient or the individual has higher risk identified, they can be moved up to specialty services. Step 3-4. These specialty services can take place within community behavioral health settings.

Critically, the stepped care model does not imply that an individual *has* to move stepwise (in order) as some individuals may go from the community to inpatient care based on need. Rather the goal is that the full continuum is available and can be utilized in a stepwise manner when this is the best way to treat an individual at the lowest intervention needed. Many of the specific models or interventions offered across this continuum in primary care and specialty behavioral health are described in the following pages of this report.

Table 12: Stepped Care for Behavioral Health

Behavioral Health Population Continuum →

	Prevention: Health Promotion and Wellness for General Population	Treatment: Mild to Moderate	Treatment: Moderate	Treatment: Serious Mental Illness
<i>Residential</i>	↑	↑	↑	↑
<i>Acute Care Crisis & Inpatient</i>				
<i>Specialty Intensive Outpatient</i>				Outpatient psychiatric medication evaluation and monitoring with intensive case management; SMI specific programming such as AOT/ACT; psychiatric rehabilitation
<i>Specialty Outpatient</i>			Outpatient psychiatric medication evaluation and management; individual therapy and groups	
<i>Primary Care</i>	Screening for depression, anxiety, trauma, & substance use. Education on risky behaviors & risk factors	Education, early intervention and treatment of mild to moderate behavioral health need (includes pre-diagnosis and diagnosed conditions) Incorporates psychiatric consultation to enhance psychiatric medications in primary care)	Treatment of stable SMI population with referral back from Specialty Behavioral Health Provider	
<i>Population Education and Awareness</i>	Public awareness on healthy eating, appropriate drinking limits, sleep habits, importance of wellness and emotional health and other impacts of behavioral health for all individuals			

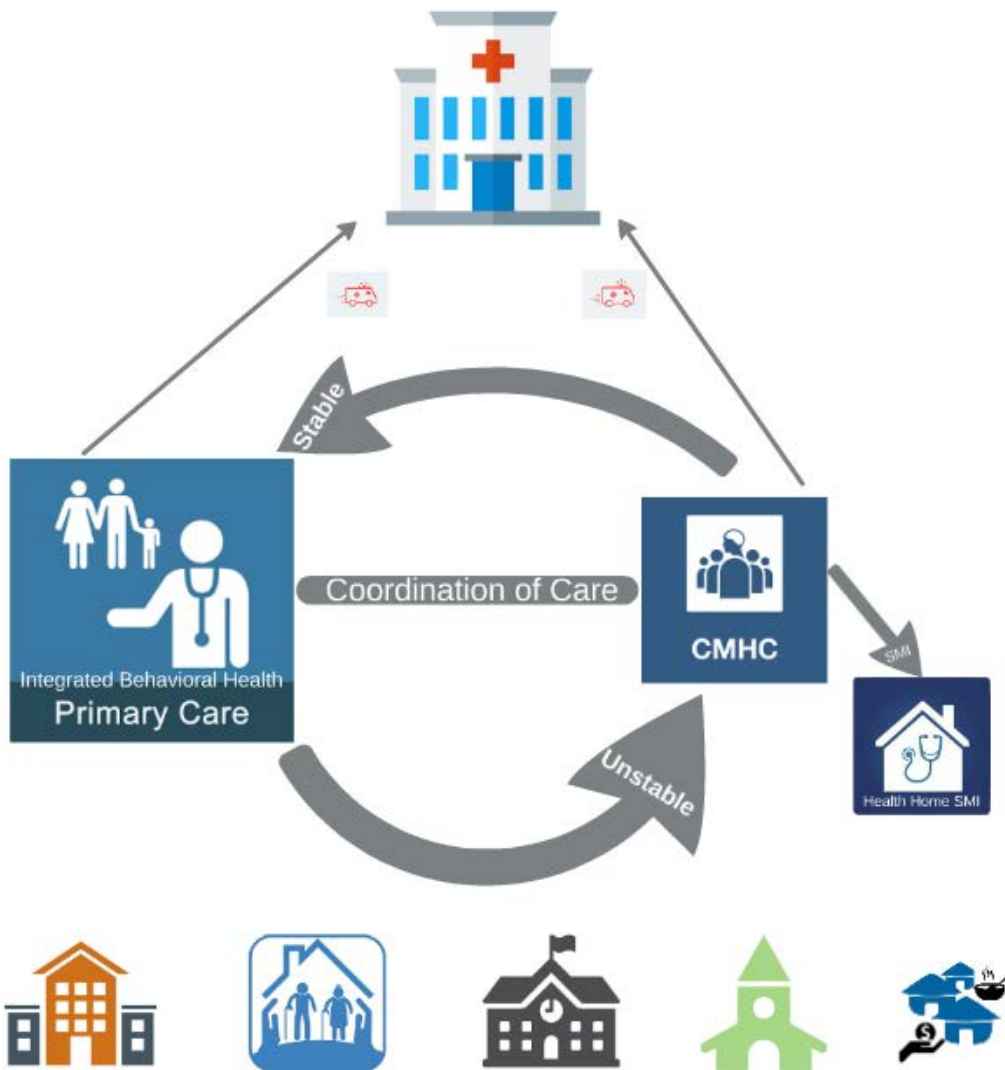
Community Service Continuum ↓

The image (Figure 5) below is designed to further describe the collaboration and coordination across the system as individuals step up and down levels of service. For the general population, mild and moderate behavioral health needs are addressed through evidence based integrated primary care, while moderate to high and serious mental health needs are addressed in specialty care. As illustrated, it is vital that unstable individuals who need more than can be offered in primary care receive access to specialty care, while individuals who are stable and able to return to primary care are referred back. This increases access across populations and in particular enhances capacity to continue to offer services for the higher needs population.

Figure 5 below also provides an example of an additional step in specialty behavioral health. Across the country, there are systems that have determined the best method for treating the most serious populations with mental health and substance needs is to create health homes that bring primary care to the community behavioral health setting to address chronic health while maintaining behavioral health stability. This health home model is described in greater detail below; however it is notable that not all individuals who have serious mental illness need a health home model. Many can be referred back to an integrated primary care setting. The health home is simply another element of the continuum that extends the physical capacity of specialty behavioral health for a specific and small population.

Central to this collaborative and integrated system of care is that primary care and specialty behavioral health providers are coordinating care as they share populations and that strong communication, data sharing, and collaborative treatment planning become routine and institutionalized foundations of the system design. This intensive collaboration also incorporates community based organizations (CBOs) addressing the social determinants of health, human and social services, and other central partners who are working with and impacting the health of the population.

Figure 5: System Collaboration and Connection



Integrated Behavioral Health and Primary Care: Treatment for Mild to Moderate

Across the country, many factors are driving systems to incorporate behavioral health in primary care. First and foremost is the challenge mentioned above of not being able to meet behavioral health need. The clear evidence that only 40% of the population who need it actually receive care from mental health providers, and the subsequent poor outcomes of this lack of access, has highlighted the need to incorporate behavioral health expertise where individuals receive routine care—primary and medical settings in the community. One factor impacting access to needed services is an increasing gap in psychiatric services in the State. According to

estimates, 76% of psychiatrists in Texas are not currently accepting new Medicaid patients, and even if they were, there is not adequate workforce across behavioral health disciplines to meet demand.⁷¹ On the other end of the behavioral health spectrum of need is the evidence that individuals with serious mental illness face drastic health disparities, with a 25 year mortality rate as a result of inadequate access to physical health for their chronic health conditions.⁷² Thus, both ends of the behavioral health population face challenges in access to care and as a result poor outcomes. Finally, the impact of untreated behavioral health conditions on overall health care spending results in a two- to three- fold increase in cost, primarily for facility based services such as emergency room and inpatient visits.⁷³ These consistent findings on poor outcomes coupled with the increase cost in overall health care associated with untreated behavioral illness, have led to the need for better treatment options in primary care and other medical settings. Models of integrated behavioral health and primary care add a crucial component to the continuum of care from primary care to specialty behavioral health for the treatment of behavioral health conditions.

The Collaborative Care model (CoCM) of integrating primary care and behavioral health has a robust evidence base, with over 80 randomized controlled trials showing improved outcomes⁷⁴ and cost savings^{75, 76} across multiple settings (both rural and urban), diagnoses, payer groups, and populations of patients including ethnic minorities. The emergence nationally of CoCM as a premier treatment modality has gained traction as health care delivery systems begin to implement models and payment structures in line with the core components of the Triple Aim. The movement away from traditional fee for service reimbursement focused on quantity of services towards payment structures that reward quality performance outcomes, allows innovation to occur and is at the heart of health care reform. In addition to the immediate benefits in treating behavioral health conditions in the primary care setting, emerging evidence from the recently published COMPASS trial of collaborative care is demonstrating additional

⁷¹ Hogg Foundation for Mental Health. (November 2016). A guide to understanding mental health systems and services in Texas. Retrieved from www.hogg.utexas.edu

⁷² Parks, J., Svendsen, D., Singer, P., Foti, M. E., & Mauer, B. (2006). Morbidity and mortality in people with serious mental illness. *Alexandria, VA: National Association of State Mental Health Program Directors (NASMHPD) Medical Directors Council, 25.*

⁷³ Milliman American Psychiatric Association Report: [Economic Impact of Integrated Medical-Behavioral Healthcare- Implications for Psychiatry](#), 2014.

⁷⁴ Archer et al; Collaborative Care for Depression and Anxiety Problems, *Cochrane Database Syst Rev* 2012, Oct, 17;10:CD006525

⁷⁵ Unutzer et al (2008). Long Term Cost Effects of Collaborative Care for Late Life Depression, *Am J Manag Care*, Feb; 14 (2), 95-100.

⁷⁶ Katon et al. (2012). Cost Effectiveness of Multicondition Collaborative Care Intervention: A Randomized Controlled Trial; *Arch Gen Psychiatry*, 69(5), 506-514.

benefits such as reductions in 30-day readmissions and emergency room visits.⁷⁷ CoCM has been demonstrated to be an important model within emerging integrated delivery systems, particularly as organizations take on more risk and move toward value-based purchasing arrangements.

Collaborative care teams consist of a minimum of primary care providers (PCP), behavioral health providers (BHP) and psychiatric consultants. Part of the success of the model is that CoCM follows the following set of Core Principles of Effectiveness:⁷⁸

Team-based and Patient centered: Primary care and behavioral health providers collaborate effectively on care teams using shared care plans that incorporate patient goals.

Evidence-based care: Patients are offered treatments for which there is credible research evidence to support their efficacy in treating the target condition.

Measurement-based care: Each patient's care plan clearly articulates personal goals and clinical outcomes that are routinely measured. Treatments are adjusted if patients are not improving as expected.

Population-based care: The care team shares a defined group of patients tracked in a registry to make sure no one "falls through the cracks." Practices track and reach out to patients who are not progressing as expected, and psychiatric consultants provide caseload- focused consultation on all patients who are not improving, not just ad hoc advice on select patients.

Health Homes for Serious Mental Illness and Serious Emotional Disturbances

A consideration within the development of a full continuum of care for behavioral health is the use of Health Homes within the specialty behavioral health setting to address both behavioral health and chronic physical health needs. The Affordable Care Act of 2010, Section 2703, created an optional Medicaid State Plan benefit for states to establish Health Homes to coordinate care for people with Medicaid who have chronic conditions by adding Section 1945 of the Social Security Act. The expectation embedded in the programming is that health home providers operate under a "whole-person" philosophy (for adults with SMI and children with SED).⁷⁹

⁷⁷ Rundell, J.R. & Huffman, J.C. (2016). The COMPASS initiative: Implementing a complex integrated care program. *General Hospital Psychiatry*.

⁷⁸ The AIMS Center. (2017). Principles of Collaborative Care. <http://aims.uw.edu/collaborative-care/principles-collaborative-care>

⁷⁹ Moses, K., Kiebonis, J., Simons, D. (2014). Developing Health Homes for Children with Serious Emotional Disturbance: Considerations and Opportunities. *Funded by the Centers for Medicare & Medicaid Services and the*

Health Home providers are expected to integrate and coordinate all primary, acute, behavioral health, and long-term services and supports in the treatment approach. Some states have also considered the model for addressing the needs of individuals with opiate dependency, as they often have complex chronic health and mental health needs combined with substance use addiction. A unique advantage of this program is that for the first time, the location of the Health Home could be in a behavioral health setting. Within some systems, there is a belief that the location of a Health Home in a behavioral health setting is the best place to offer these comprehensive services for a small proportion of the behavioral health population—generally those with the most severe level of need. Because this population is more likely to be seen by behavioral health providers and receive most of their care in that specialty system, it makes sense to design for this to be their “medical home” as well as their specialty provider.

Missouri was the first state to incorporate the use of Health Homes in the Community Mental Health Center (CMHC) system believing that the CMHCs were the “logical place” to serve individuals with more severe mental health conditions (Figure 6). Because CMHCs were already seeing this population several times a month and had the long-term clinical relationships with patients, they had better opportunity and access to enhance the medical and physical health status of the population.⁸⁰ The Missouri model builds on the CMHC expertise with training for providers on chronic health conditions as well as enhancing the use of data and analytic tools. Additionally, all of the CMHCs in the model have a primary care nurse liaison within the CMHC site that provides education and training to individuals and case managers to enhance assessment and treatment of medical conditions. With improved training and tools to screen, assess, and monitor physical health conditions, these case managers provide intensive care coordination across providers (both physical and behavioral health) as well as with community and social service organizations.⁸¹ The model initially focused on adults with serious mental illness who were also dually eligible for Medicare and Medicaid services, but has since expanded to serve individuals enrolled in Medicaid alone.

The Missouri Health Home model has demonstrated both clinical quality improvement and cost savings. Clinically, the state has seen a significant reduction in hospital readmissions (12.8%)

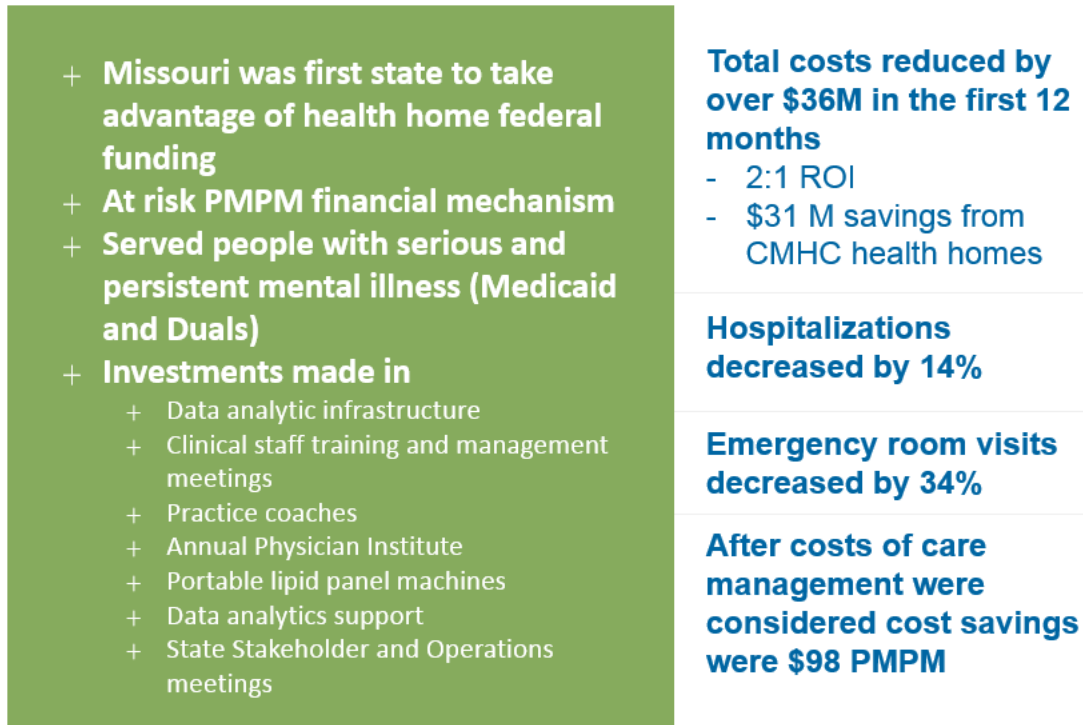
Substance Abuse and Mental Health Services Administration and Published by the Center for Health Care Strategies.

⁸⁰ Commonwealth Fund. January 20, 2011. Missouri: Pioneering Integrated Mental and Medical Health Care in Community Mental Health Centers. Accessed at: <http://www.commonwealthfund.org/publications/newsletters/states-in-action/2011/jan/december-2010-january-2011/snapshots/missouri>

⁸¹ Commonwealth Fund. January 20, 2011. Missouri: Pioneering Integrated Mental and Medical Health Care in Community Mental Health Centers. Accessed at: <http://www.commonwealthfund.org/publications/newsletters/states-in-action/2011/jan/december-2010-january-2011/snapshots/missouri>

and emergency department utilization (8.2%) within 18 months of implementation.⁸² Additionally, there has been improvement in diabetes control (18% to 53%), improved control of cardiovascular disease and hypertension, and improved rates of necessary screening.⁸³ In terms of return on investment, the program has demonstrated cost savings of \$2.9 million, which is further increased to \$27 million when including those who are dually eligible for Medicare and Medicaid.⁸⁴

Figure 6: Missouri Health Home Return on Investment



In addition to specific 2703 Health Homes, many states have incentivized other health home models through multi-payer initiatives or continued to support after the conclusion of the ACA-funded enhanced match. For example, Oregon did the two years of health home payments available under 2703, then moved to participate in the Comprehensive Primary Care Initiative. For the latter, the state asked the Coordinated Care Organizations (CCOs), Oregon’s version of managed care plans, to pay differently for patient centered homes. To support this transition, Oregon included the number of lives served by a medical home into the CCO’s performance incentive pool as a metric. In addition, the state supported a learning collaborative with several mental health clinics to share best practices to integrate primary care into their model of care. Because Oregon technically ended their health home SPA after eight quarters of enhanced

⁸² Department of Mental Health and MO Health Net Accessed at <http://dss.mo.gov/mhd/cs/health-homes/>
⁸³ Department of Mental Health and MO Health Net Accessed at <http://dss.mo.gov/mhd/cs/health-homes/>
⁸⁴ Department of Mental Health and MO Health Net Accessed at <http://dss.mo.gov/mhd/cs/health-homes/>

payment, they are not counted as a “2703 health home state.” Other states have done similar shifts using their State Innovation Model dollars to continue their efforts started under 2703. As a result, there are more states engaged in primary care homes and value based payment for them where services are similar to health homes (e.g., offering holistic care, trying to reduce overall cost of care and addressing physical and behavioral health chronic care management).⁸⁵

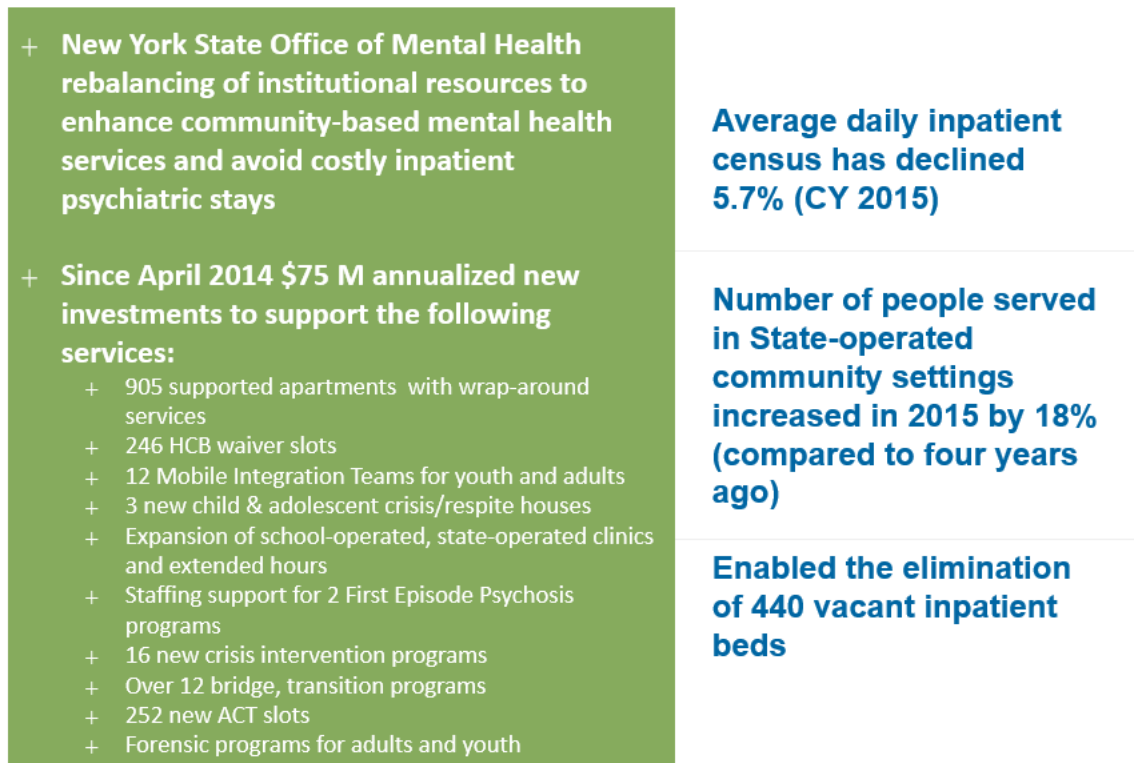
New York’s Health Home program launched in 2012 as a result of the efforts of the State’s Medicaid Redesign Team, established by Governor Andrew Cuomo in 2011 (Figure 7.) Health homes in New York provide care coordination and integrated care management for high-cost, high need Medicaid recipients who are living with eligible chronic medical and behavioral conditions. Initially, New York’s health homes focused solely on adults with chronic conditions, but in December of 2016, Health Homes began to serve children. When New York’s Health Home initiative began, the State designated 32 Health Homes across its 62 counties, and after the expansion to serving children in December, the total number of Health Homes increased to 35. Health Home lead organizations range from hospitals to community based organizations, and all are required to provide a core set of services that includes comprehensive care management; care coordination and health promotion; comprehensive transitional care; individual and family support; referral to community and social support services; and use of health information technology to link services. Each member is assigned a Health Home Care Manager who works with the individual to develop a person-centered plan of care inclusive of behavioral and medical needs, as well as identify community-based resources and actively manage appropriate referrals, access, engagement, follow-up and coordination of services. The Health Home ensures 24 hours/seven days a week access to the assigned care manager to provide information and emergency consultation services. As of March 2016, the State has enrolled 231,543 members into Health Homes.⁸⁶ While not much outcome data has been published to date, New York has shown promising results, with primary care visits increasing by 14% and inpatient admissions and emergency room visits decreasing by 23%.⁸⁷

⁸⁵ <https://www.oregon.gov/oha/OHPR/SIM/docs/Oregon-SIM-Implementation-Period-Annual-Progress-Report-Dec-2013.pdf>

⁸⁶ CMS Health Home Information Resource Center. (2016). Medicaid Health Homes: An Overview. <https://www.medicaid.gov/state-resource-center/medicaid-state-technical-assistance/health-homes-technical-assistance/downloads/hh-overview-fact-sheet-sep-2016.pdf>

⁸⁷ Albright, Brian. Does it Pay to be a Health Home? *Behavioral Healthcare*; Spring 2015; 35, 2; Health Management Database. pg. 34

Figure 7: New York State Health Homes



Crisis Services

Crisis services often serve as the entry point for behavioral health treatment. When provided in a timely and comprehensive fashion, they can assist providers in avoiding unnecessary admissions. Effective crisis intervention also links individuals to appropriate follow-up care, reducing the possibility of escalation of illness. For over a decade, Texas has made significant investments in building and supporting a robust set of crisis services. Primary DSHS-funded crisis services include a full continuum of programs including mobile crisis outreach teams, 24-hour hotlines, crisis respice/residential, crisis stabilization units, extended observation, and residential treatment centers for youth. A summary of these services follows.

Crisis Hotline Services: Hotlines, often referred to as “warm lines,” provide telephonic support to callers and maintain referral sources should individuals need a face to face assessment.

In Texas, all 39 Local Mental Health Authorities (LMHAs) either operate their own crisis line or contract with crisis hotlines that are accredited by the American Association of Suicidology (AAS). In addition to these hotlines, managed care organizations contracted under Texas Medicaid also operate hotlines for program enrollees.

Mobile Crisis Outreach Teams: Mobile Crisis Outreach Teams (MCOTs) provide crisis assessment and treatment in the community for people in mental health crisis, as well as close monitoring

and preventive services to help avoid relapse. MCOTs are designed to operate differently across communities depending on local service infrastructure and consumer needs. The essential functions of the services are immediate access to assessment and treatment and the ability to manage the most severely ill psychiatric patients.

All 39 LMHAs operate an MCOT program in conjunction with their crisis hotlines and respond to crises in the field. In many service areas, MCOT works closely with the EMS department and law enforcement to divert individuals from the emergency room or jail to more therapeutic interventions. If the individual requires emergency care services, as determined by the qualified mental health professional-community service (QMHP-CS), then the provider of crisis services must have a physician, preferably a psychiatrist, perform a face-to-face or telemedicine assessment of the individual as soon as possible, but not later than 12 hours after the assessment, to determine the need for emergency services.

Crisis Stabilization Units (CSU): Also referred to as crisis intervention units, these ambulatory clinics provide immediate access to emergency psychiatric care and intervention for substance use disorders for the resolution of acute symptoms. In some models, including Texas programs, short-term residential treatment is also available in these programs.

Extended Observation Units (EOU): Available in some areas in Texas, EOUs provide 23 to 48 hours of psychiatric observation in a controlled and locked environment, with a goal of short-term stabilization and diversion from more costly and intensive inpatient services if appropriate.

Crisis Residential Services: This service provides between 1-14 days of crisis-level services in a safe clinical, residential setting for individuals who present some immediate risk of harm to self or others. These services may be provided in state operated mental health hospitals or private hospitals.

Crisis Respite Services: Crisis respite provides a brief reprieve from individuals' environmental or other stressors. Length of stay in respite services can vary from eight hours to 30 days of short-term crisis care and are targeted to individuals with low risk of harm to self or others.

Crisis Step-Down Stabilization: Texas defines these services as Hospital based, providing 3 to 10 days of psychiatric stabilization in a local hospital setting with a psychiatrist on staff who works to stabilize an individual's symptoms as well as preparing for maintaining continuity of care while transitioning to community-based services.

Transitional Services (LOC-5): Unique to the Texas system of care, this category of services provides linkage between existing services, ongoing care, and temporary assistance to individuals post-crisis for up to 90 days. Individuals may be homeless, in need of substance use

treatment or primary health care, involved in the criminal justice system, experiencing multiple psychiatric hospitalizations, and/or have a non-priority diagnosis.

Clinical Outcomes & ROI of Crisis Services

Direct and measurable reductions in cost of services with crisis redesign more than covered the cost of Texas' crisis program, even while supporting a 24% increase in crisis episodes from 2007 to 2008.⁸⁸ In addition, implementation of different components of the crisis service system in Texas demonstrated the following:

- An \$81 million investment in CSR over a two-year period generated treatment cost benefits of at least \$12.7 million. As a result, more consumers could be served at a lower cost per crisis episode. Specifically, \$1.16 economic impact was returned on every dollar invested.
- Although crisis service encounters increased almost 24% from 2007 to 2008, the cost per encounter was reduced by almost the same amount. As a result, total program cost decreased by 5.4% despite the increased consumer load.
- Had crisis redesign not been implemented in 2008, program costs for the two fiscal years would have been \$51.8 million higher in 2008 dollars.

The 84th Legislature provided an additional \$13 million per year to expand and enhance crisis services including contracting for additional crisis services such as crisis respite units, rapid crisis stabilization beds, Mental Health Deputies, Veterans Resource Centers, Crisis Intervention Response Teams and crisis peer support services.⁸⁹ According to the Hogg Foundation, the number of persons using crisis intervention services increased as a result of this additional funding and resources, from roughly 5,039 in FY 2013 to 6,767 in FY 2015.⁹⁰

A comprehensive review of DSHS-funded crisis and treatment facilities was due to the legislature on December 31, 2016, but the results of the review were publicly unavailable at the time of this report.













⁸⁸ Evaluation Findings for the Crisis Services Redesign Initiative. Report to the Texas Department of State Health Services. January 1, 2010

⁸⁹ Maples, M. & Lacefield Lewis, L., Texas Department of State Health Services. (June 16, 2016). *Diversion and Forensic Capacity: Presentation to the Senate Committee on Health and Human Services* [PowerPoint Slides]. Retrieved from http://www.senate.state.tx.us/75r/senate/commit/c610/h2016/061616-DSHS_DiversionForensicCapacity-c2.pdf

⁹⁰ Hogg Foundation for Mental Health. (November 2016). A guide to understanding mental health systems and services in Texas. Retrieved from www.hogg.utexas.edu

Evidence Based Community Behavioral Health: Moderate to Serious

Table 13: Selected Evidence Based Practices for Individuals with SMI, SUD, and SED

	Target Population			Intensity/Setting	
	SMI	SUD	SED	Primary Care (Mild-Moderate)	Specialty Intensive (Severe)
<i>Screening, Brief Intervention, and Referral to Treatment</i>		X		Primary Care 	Intensive Specialty Setting
<i>Helping the Non-Compliant Child</i>			X	Primary Care 	Intensive Specialty Setting
<i>Cognitive Behavioral Therapy</i>	X	X	X	Primary Care 	Intensive Specialty Setting
<i>Problem-Solving Skills Training</i>			X	Primary Care 	Intensive Specialty Setting
<i>Trauma Focused Cognitive Behavioral Therapy</i>			X	Primary Care 	Intensive Specialty Setting
<i>Problem Solving Therapy</i>	X			Primary Care 	Intensive Specialty Setting
<i>Modular Approach to Therapy for Children with Anxiety, Depression, Trauma, or Conduct Problems</i>			X	Primary Care 	Intensive Specialty Setting
<i>Parent-Child Interaction Therapy</i>			X	Primary Care 	Intensive Specialty Setting
<i>Adolescent Coping with Depression</i>			X	Primary Care 	Intensive Specialty Setting
<i>Dialectical Behavioral Therapy</i>	X		X	Primary Care 	Intensive Specialty Setting
<i>Psychiatric Rehabilitation</i>	X			Primary Care 	Intensive Specialty Setting
<i>Clubhouse Model</i>	X			Primary Care 	Intensive Specialty Setting

	Target Population			Intensity/Setting	
	SMI	SUD	SED	Primary Care (Mild-Moderate)	Specialty Intensive (Severe)
<i>Outpatient Treatment for SUD</i>		X		Primary Care	Intensive Specialty Setting
<i>The Matrix Model</i>		X		Primary Care	Intensive Specialty Setting
<i>Adolescent Community Reinforcement Approach</i>			X	Primary Care	Intensive Specialty Setting
<i>Integrated Dual Disorder Treatment</i>	X	X		Primary Care	Intensive Specialty Setting
<i>Double Trouble in Recovery</i>	X	X		Primary Care	Intensive Specialty Setting
<i>Multi-Systemic Therapy</i>			X	Primary Care	Intensive Specialty Setting
<i>Assertive Community Treatment</i>	X			Primary Care	Intensive Specialty Setting
<i>Intensive Outpatient Treatment</i>		X		Primary Care	Intensive Specialty Setting
<i>Assisted Outpatient Treatment</i>	X			Primary Care	Intensive Specialty Setting
<i>Medication Assisted Treatment</i>		X		Primary Care	Intensive Specialty Setting
<i>Short Term Acute Residential Treatment</i>	X		X	Primary Care	Intensive Specialty Setting

Adults with Serious Mental Illness (SMI)

Approximately 4.2% (9.8 million) adults aged 18 or older in the United States are diagnosed with a Serious Mental Illness (SMI),⁹¹ and in Texas, the number of adults with SMI is more than

⁹¹ National Institute of Mental Health. (2014). Serious Mental Illness (SMI) Among U.S. Adults. <https://www.nimh.nih.gov/health/statistics/prevalence/serious-mental-illness-smi-among-us-adults.shtml>

half a million.⁹² Nearly half (46%) of all Emergency Department (ED) visits in Texas among Medicaid clients have behavioral health issues as a basic or contributing factor,⁹³ but according to the Texas Department of State Health Services, only a third of adults with SMI (33.6%) received services through the community mental health system.⁹⁴ Texas' community mental health system of care is not as robust as many other states across the country, but the mental health professional shortage is especially acute in North Texas, where 20 out of 27 counties in the region (including Tarrant County) are designated as Mental Health Professions Shortage areas.⁹⁵

A selection of EBPs for treating individuals with SMI are included below. Although many of the EBPs are currently being delivered by JPS and/or MHMR, as delineated in Table 14 below are implementing some of the evidence based practices identified to serve the specialty populations included in this report, there are many others that are not being implemented by these two agencies, either at all or with fidelity, as demonstrated by the table below. HMA's recommendation is that JPS assess whether these EBPs exist within the Tarrant County system of care currently, and if not, consider implementing them in partnership with MHMR.

Table 14: JPS/MHMR Implementation of Select Evidence Based Practices

Evidence Based Practices (EBPs)	Currently Delivered by:	
	JPS	MHMR
<i>EBPs for Individuals with Serious Mental Illness (SMI)</i>		
Assertive Community Treatment		X
Assisted Outpatient Treatment	X	X
Clubhouse Model (Psychosocial Clubs)		X
Cognitive Behavioral Therapy	X	X
Dialectical Behavioral Therapy	A	A
Problem-Solving Therapy	A	A
Psychiatric Rehabilitation	A	X
Short Term Acute Residential Treatment		X
<i>EBPs for Individuals with Substance Use Disorders (SUD)</i>		
Double Trouble in Recovery		
Integrated Dual Disorder Treatment	A	
Intensive Outpatient Treatment	X	
The Matrix Model	A	

⁹² Xaykaothao, D. (2014). Vietnam Veteran helps Tarrant County Adults and Children with Mental Illness.

<http://keranews.org/post/vietnam-veteran-helps-tarrant-county-adults-and-children-mental-illness>

⁹³ Lakey, D.L., (2008). Senate Health and Human Services Committee.

⁹⁴ NAMI Texas. (2014). Information for your Needs Statement. <http://namitexas.org/wp-content/uploads/sites/12/2014/11/GWW-Needs-Statement-Handout.pdf>

⁹⁵ NAMI Texas. (2014). Information for your Needs Statement. <http://namitexas.org/wp-content/uploads/sites/12/2014/11/GWW-Needs-Statement-Handout.pdf>

Evidence Based Practices (EBPs)	Currently Delivered by:	
	JPS	MHMR
Medication Assisted Treatment (MAT)		X
Outpatient SUD Treatment		X
Screening, Brief Intervention, and Referral to Treatment	X	
<i>EBPs for Children & Youth with Serious Emotional Disturbances (SED)</i>		
Adolescent Community Reinforcement Approach		A
Adolescent Coping with Depression		
Cognitive Behavioral Therapy for Youth	A	X
Dialectical Behavioral Therapy for Youth	A	X
Helping the Non-Compliant Child		
Modular Approach to Therapy for Children with Anxiety, Depression, Trauma, or Conduct Problems		
Multi-Systemic Therapy		No longer offer
Parent-Child Interaction Therapy		X
Problem Solving Skills Training	A	
Trauma Focused Cognitive Behavioral Therapy	A	X
<i>Trauma-Informed Care Best Practices</i>		
Addiction and Trauma Recovery Integration Model		
Attachment, Regulation, and Competency		X
Child-Parent Psychotherapy	A	X
Essence of Being Real		X
Risking Connection		
Sanctuary Model		
Seeking Safety	A	X
Trauma, Addiction, Mental Health, and Recovery		
Trauma Affect Regulation: Guide for Education and Therapy		
Trauma Recovery and Empowerment Models		
<i>EBPs & Services for Geriatric Populations (over 65)</i>		
Cognitive Behavioral Therapy for Late-Life Depression		X
Cognitive Bibliotherapy		
Functional Adaptation Skills Training		
Geriatric Resources for Assessment and Care of Elders		
Healthy IDEAS (Identifying Depression, Empowering Activities for Seniors)		
Improving Mood—Promoting Access to Collaborative Treatment		
Interpersonal Psychotherapy	X	X
Prevention of Suicide in Primary Care Elderly: Collaborative Trial		
Program to Encourage Active and Rewarding Lives for Seniors		
Progressively Lowered Stress Threshold Model		

Evidence Based Practices (EBPs)	Currently Delivered by:	
	JPS	MHMR
Reminiscence Therapy (RT)		

X = currently delivering EBP with fidelity. A = currently delivering a service that approximates the EBP, but does not meet fidelity

Cognitive Behavioral Therapy

Cognitive Behavioral Therapy (CBT) focuses on identifying, understanding, and changing thinking and behavior patterns. CBT is usually a short-term treatment (often between 6-20 sessions) that is different from many other therapy approaches in that the model focuses on the ways that a person's cognitions (i.e., thoughts), emotions, and behaviors are connected and affect one another. The cornerstone of CBT is that thoughts can influence feelings, and that an individual's emotional response to a situation comes from one's interpretation of that situation. In CBT, clients learn the following:⁹⁶

- Distinguish between thoughts and feelings;
- Become aware of the ways in which thoughts can influence feelings in ways that sometimes are not helpful;
- Identify and explore thoughts that seem to occur automatically, without even realizing how they may affect emotions;
- Evaluate critically whether these "automatic" thoughts and assumptions are accurate, or perhaps biased; and
- Develop the skills to notice, interrupt, and correct these biased thoughts independently.

During CBT, the patient is actively involved in his or her own recovery, has a sense of control, and learns skills that are useful throughout life. CBT typically also involves work outside of the therapy sessions, including reading about the problem, keeping records between appointments, and completing homework assignments in which the treatment procedures are practiced.⁹⁷

Studies of CBT have shown it to be an effective treatment for a wide variety of mental illnesses, including depression, anxiety disorders, bipolar disorder, eating disorders, and schizophrenia.⁹⁸ Individuals who undergo CBT show changes in brain activity, suggesting that participation in this model improves brain functioning. Overall, CBT has demonstrated effectiveness in: reducing substance abuse; supporting smoking cessation; reducing problem gambling; reducing the impact of chronic pain; mitigating the symptoms of schizophrenia, bipolar disorder, PTSD, OCD, bulimia, insomnia, depression, anxiety and general stress; and reducing anger and aggression.

⁹⁶ Association for Behavioral and Cognitive Therapies. (2017). About Psychological Treatment.

<http://www.abct.org/Help/?m=mFindHelp&fa=WhatIsCBTpublic>

⁹⁷ Anxiety and Depression Association of America. Therapy. (2017). <https://www.adaa.org/finding-help/treatment/therapy>

⁹⁸ NAMI. (2017). Learn More. <http://www.nami.org/Learn-More/>

In addition, CBT for individuals involved in the criminal justice system reliably reduces re-offending.⁹⁹

CBT's positive effects go above and beyond other treatment modalities. In fact, a multi-site effectiveness trial of CBT was recently conducted within the Texas public mental health system, during which 83 adults with major depression received CBT, and their outcomes were compared to a matched sample of individuals receiving pharmacotherapy. The study demonstrated that individuals receiving CBT showed greater improvements in depression symptoms than those in the comparison group.¹⁰⁰ Finally, a Washington State Institute for Public Policy (WSIPP) review found that for every dollar invested in a CBT program, the model can result in cost savings of over \$100.¹⁰¹ In Tarrant County, CBT is provided at both JPS and MHMR, as well as by the Lena Pope Home and The Women's Center of Tarrant County.¹⁰²

Problem-Solving Therapy

Problem Solving Therapy (PST) is a brief, psychosocial, skills-based treatment for patients experiencing depression and distress related to inefficient problem-solving skills. It is based on the assumption that problems of daily life cause and maintain depressive symptoms, and that by systematically identifying and addressing these problems, people can reduce the number and severity of depressive symptoms they experience.¹⁰³ PST is divided into three phases: Introduction/Education, Training, and Prevention:¹⁰⁴

In the first phase (Introduction/Education), one or two sessions are spent getting to know the patient, the problems they are experiencing, how their symptoms interfere with daily activities, and if they need remedial, problem-orientation work. Additionally, in this phase, the therapist helps patients become familiar with the PST process.

In the second phase (Training), several sessions are spent encouraging the use of PST skills, which are centered around empowering patients to learn to solve problems on their own. The role of the clinician during this phase is to help the patient implement a patient-identified solution through the structured, sequential stages of PST process. These seven stages are 1) selecting and defining the problem, 2) establishing realistic and achievable goals for problem

⁹⁹ New Zealand. (2016). Cognitive-Behavioral Therapy.

<https://www.justice.govt.nz/assets/Documents/Publications/investment-brief-CBT.pdf>

¹⁰⁰ Lopez, M.A., & Basco, M.A. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4183730/>

¹⁰¹ Casey Family Programs. (2015). Levels of Research Evidence and Benefit-Cost Data for Title IV-E Waiver Interventions. http://www.casey.org/media/Title-IV_E-Waiver-Interventions-Research-Brief.pdf

¹⁰² Mental Health Connection of Tarrant County. Tarrant County Services.

<http://www.recognizetrauma.org/tarrant-local-services.php>.

¹⁰³ PEARLS. (2016). Problem Solving Treatment. [http://www.pearlsprogram.org/Conducting-PEARLS/Problem-Solving-Treatment-\(PST\).aspx](http://www.pearlsprogram.org/Conducting-PEARLS/Problem-Solving-Treatment-(PST).aspx)

¹⁰⁴ SAMHSA NREPP. Problem Solving Therapy. <http://nrepp.samhsa.gov/AdvancedSearch.aspx>

resolution, 3) generating alternative solutions, 4) implementing decision-making guidelines, 5) evaluation and choosing solutions, 6) implementing the preferred solutions, and 7) evaluating the outcome.

In the final phase (Prevention), one or two sessions are spent helping patients develop a relapse-prevention plan based on the PST format.

By teaching a specific, structured problem solving procedure based on clearly defining problems and setting concrete and realistic goals, PST helps individuals gain a sense of control over their lives and become empowered to make lasting life changes. Behavioral activation, a key element of PST, helps individuals re-establish healthy routines, increase positive experiences, and overcome avoidance patterns. This activation leads to improved mood and better functioning.¹⁰⁵ Among individuals with mental health conditions, the PST model is proven effective for reducing depression and depressive symptoms, as well as for improving personal resilience/self-concept and reducing suicidality.¹⁰⁶

Both JPS and MHMR are delivering interventions similar to PST across their programs.

Dialectical Behavioral Therapy

Dialectical Behavioral Therapy (DBT) is a manualized, cognitive-behavioral treatment approach with two key characteristics: a behavioral, problem-solving focus blended with acceptance-based strategies, and an emphasis on dialectical processes involved in treating patients with multiple disorders. DBT is heavily based on CBT with one primary exception: it emphasizes validation, or accepting uncomfortable thoughts, feelings and behaviors instead of struggling with them. By having an individual come to terms with the troubling thoughts, emotions or behaviors that they struggle with, change no longer appears impossible and they can work with their therapist to create a gradual plan for recovery.¹⁰⁷

DBT has five components¹⁰⁸:

1. Capability enhancement (skills training);
2. Motivational enhancement (individual behavioral treatment plans);
3. Generalization (access to therapist outside clinical setting, homework, and inclusion of family in treatment);
4. Structuring of the environment (programmatic emphasis on reinforcement of adaptive behaviors); and

¹⁰⁵ PEARLS. (2016). Problem Solving Treatment. [http://www.pearlsprogram.org/Conducting-PEARLS/Problem-Solving-Treatment-\(PST\).aspx](http://www.pearlsprogram.org/Conducting-PEARLS/Problem-Solving-Treatment-(PST).aspx)

¹⁰⁶ SAMHSA NREPP. Problem Solving Therapy. <http://nrepp.samhsa.gov/AdvancedSearch.aspx>

¹⁰⁷ NAMI. (2016). Psychotherapy. <http://www.nami.org/Learn-More/Treatment/Psychotherapy>

¹⁰⁸ National Resource Center for Permanency and Family Connections. (2013). Dialectical Behavioral Therapy. [http://nrcpfc.org/ebp/downloads/AdditionalEBPs/Dialectical_Behavior_Therapy\(DBT\)_6.13.13.pdf](http://nrcpfc.org/ebp/downloads/AdditionalEBPs/Dialectical_Behavior_Therapy(DBT)_6.13.13.pdf)

5. Capability and motivational enhancement of therapists (therapist team consultation group).

The therapist's role in DBT is to help the person find a balance between acceptance and change, while also helping the person develop new skills, like coping methods and mindfulness practices, so that the person has the power to improve unhealthy thoughts and behaviors. Similar to CBT, individuals undergoing DBT are usually instructed to practice these new methods of thinking and behaving as homework between sessions.¹⁰⁹

Studies have shown DBT is effective at producing significant improvement for people experiencing a mental illness, helping decrease the frequency and severity of dangerous behaviors (i.e., suicidal ideation and self-harm) and supporting clients to translate the things learned in therapy to the person's everyday life.¹¹⁰ In addition, the treatment's positive impacts are often sustained long term, with several evaluations finding that effects were sustained 16 and 18 months beyond treatment.¹¹¹

Moreover, per patient treatment costs in the year a patient receives DBT are significantly less than that same patient's costs in the year pre-treatment (an average savings of \$26,000 when the two years are compared), with average reductions of 77% in hospitalization days, 76% in partial hospitalization days, 56% in crisis bed stays, and 80% in emergency room contacts.¹¹² Factoring in other service costs (e.g., police, crime reduction, ambulances, social services, housing) and lost income productivity are expected to further increase DBT's cost-effectiveness analysis.

Although DBT is not being delivered with fidelity at either MHMR or JPS, both agencies are implementing services and programs similar to DBT.

Psychiatric Rehabilitation

Psychiatric Rehabilitation is designed for individuals with severe and persistent mental illness who have moderate to severe functional deficits. The goal of Psychiatric Rehabilitation is to promote independent and community living skills and facilitates the individual's rehabilitation and recovery.¹¹³ The overall philosophy of psychiatric rehabilitation comprises two intervention strategies: the first strategy is individual-centered and aims at developing the patient's skills in interacting with a stressful environment, while the second strategy is ecological and directed

¹⁰⁹ NAMI. (2016). Psychotherapy. <http://www.nami.org/Learn-More/Treatment/Psychotherapy>

¹¹⁰ NAMI. (2016). Psychotherapy. <http://www.nami.org/Learn-More/Treatment/Psychotherapy>

¹¹¹ SAMHSA NREPP. Dialectical Behavioral Therapy. <http://nrepp.samhsa.gov/AdvancedSearch.aspx>

¹¹² Casey Family Programs. (2015). Levels of Research Evidence and Benefit-Cost Data for Title IV-E Waiver Interventions. http://www.casey.org/media/Title-IV_E-Waiver-Interventions-Research-Brief.pdf

¹¹³ Johns Hopkins Bayview Medical Center. (2017). Adult Psychiatric Rehabilitation Program. http://www.hopkinsmedicine.org/psychiatry/bayview/medical_services/adult/rehabilitation.html

towards developing environmental resources to reduce potential stressors.¹¹⁴ Psychiatric Rehabilitation services involve support with behavioral and medication management, improved social and daily living skills, and employment integration, as well as rehabilitation activities.¹¹⁵

The Model is a client-centered, strengths-based intervention designed to build clients' positive social relationships, encourage self-determination of goals, connect clients to needed human service supports, and provide direct skills training to maximize independence.¹¹⁶

Psychiatric Rehabilitation interventions have a positive impact on skill development, employment, and the amount of time spent in the community, as well as improvements in an individual's level of independent living.¹¹⁷

MHMR has a Psychiatric Rehabilitation program, while JPS uses principles related to Psychiatric Rehabilitation in its service array.

Clubhouse Model (Psychosocial Clubs)

The Clubhouse Model (also known as a Psychosocial Club) is a day treatment program for rehabilitating adults diagnosed with SMI. The goal of the program is to contribute to the recovery of individuals through use of a therapeutic environment that includes responsibilities within the Clubhouse (e.g., clerical duties, reception, food service, transportation, financial services), as well as through outside employment, education, meaningful relationships, housing, and an overall improved quality of life.¹¹⁸ Fundamental elements of members' participation in a Clubhouse include openness and choice in type of work activities, choice in staff, and a lifetime right of reentry and access to all Clubhouse services.

A core component of the program is the "work-ordered day," the structure around which daily activity is organized. Each individual served by a Clubhouse is welcomed, wanted, needed, and expected each day and is considered a critical part of a community engaged in important work. The day-to-day operation of the Clubhouse is the responsibility of members and staff, who work side by side in a rehabilitative environment.¹¹⁹ Other core components include transitional, supported, and independent employment through which members can secure jobs at prevailing wages in the wider community; access to community support, such as housing and

¹¹⁴ Rossler, W. (2006). Psychiatric Rehabilitation Today: An Overview.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1636112/>

¹¹⁵ American Center for Intellectual and Diverse Disorders. (2017). Psychiatric Rehabilitation.

<http://www.aciddmaryland.com/home-care-programs-and-services/programs-services/home-care-psychiatric-rehabilitation-program/>

¹¹⁶ SAMHSA NREPP. Psychiatric Rehabilitation. <http://nrepp.samhsa.gov/AdvancedSearch.aspx>

¹¹⁷ Chowdur, R., Dharitri, R., Kalyanasundaram, S., & Suryanarayana, R.N. (2011). Efficacy of Psychosocial Rehabilitation Program: The RFS Experience. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3056188/>

¹¹⁸ SAMHSA NREPP. Psychosocial Clubhouse. <http://nrepp.samhsa.gov/AdvancedSearch.aspx>

¹¹⁹ Clubhouse International. (2017). How Clubhouses Function. <http://www.iccd.org/function.html>

medical services; assistance in accessing educational resources; "reach-out" to maintain contact with all active members; participation in program decision making and governance; and evening, weekend, and holiday social programs.¹²⁰

Currently in Texas, there are six Clubhouse International-certified Clubhouses for adults with SMI,¹²¹ none of which are located near Tarrant County.

For individuals living with SMI, participation in a Clubhouse has been demonstrated to result in improved outcomes, functioning, and wellbeing. Membership in a Clubhouse program results in significantly decreased number of hospitalizations, as well as enhanced employment outcomes (more work days, higher wages). In addition, when compared to individuals participating in consumer run drop in centers, Clubhouse members are more likely to report a higher quality of life and being in recovery.¹²²

MHMR has a psychosocial clubhouse that they offer for individuals living with SMI.

Assertive Community Treatment

Assertive Community Treatment (ACT) is one of the oldest and most widely researched evidence-based practices in behavioral healthcare for people with SMI.¹²³ ACT is a team-based treatment model that provides multidisciplinary, flexible treatment and support to people with mental illness 24/7. ACT is based around the idea that people receive better care when their mental health and other care providers work together; therefore, ACT team members help the person address every aspect of their life, whether it be medication, therapy, social support, employment or housing.¹²⁴

ACT is characterized by the following components¹²⁵:

- a team approach — Practitioners with various professional training and general life skills work closely together to blend their knowledge and skills.
- in vivo services — Services are delivered in the places and contexts where they are needed.
- a small caseload — An ACT team consists of 10 to 12 staff members who serve about

¹²⁰ SAMHSA NREPP. Psychosocial Clubhouse. <http://nrepp.samhsa.gov/AdvancedSearch.aspx>

¹²¹ Clubhouse International. (2009). Clubhouse Directory. <http://www.iccd.org/clubhouseDirectory.php?lt=state&state=Texas&country=USA>

¹²² Clubhouse International. (2017). ICCD Clubhouses and Clubhouse Research Outcomes. http://www.iccd.org/images/iccd_clubhouse_research_outcomes.pdf

¹²³ Case Western Reserve University. (2011). Assertive Community Treatment. <https://www.centerforebp.case.edu/practices/act>

¹²⁴ NAMI. (2016). Psychosocial Treatments. <http://www.nami.org/Learn-More/Treatment/Psychosocial-Treatments>

¹²⁵ SAMHSA. (2008). Building Your Program: Assertive Community Treatment. <http://store.samhsa.gov/shin/content//SMA08-4345/BuildingYourProgram-ACT.pdf>

100 consumers, resulting in a staff-to-consumer ratio of approximately 1 to 10.

- time-unlimited services — Services are provided as long as needed.
- a shared caseload — Practitioners do not have individual caseloads; rather, the team as a whole is responsible for ensuring that consumers receive the services they need to live in the community and reach their personal goals.
- a flexible service delivery — The ACT team meets daily to discuss how each consumer is doing. The team members can quickly adjust their services to respond to changes in consumers' needs.
- a fixed point of responsibility — Rather than sending consumers to various providers for services, the ACT team provides the services that consumers need. If using another provider cannot be avoided (e.g., medical care), the team coordinates the care in order to ensure consumers receive the services they need.
- 24/7 crisis availability — Services are available 24 hours a day, 7 days a week. However, team members often find that they can anticipate and avoid crises.

In Texas, individuals who are eligible to receive ACT services are those living with severe and persistent mental illness (such as schizophrenia or major depressive disorder) who have experienced multiple psychiatric hospital admissions. A history of involvement with law enforcement is likely but not required for placement into this level of care. In Texas, the goal of ACT is to provide a focused and fixed point of responsibility for a comprehensive array of services that merge the skills of clinical, medical, and rehabilitation staff together into one integrated whole. Provision of services takes place within a mobile delivery system so that the team can serve the person in recovery from their home or wherever else in the community is easiest for them.¹²⁶

People receiving ACT services tend to utilize fewer intensive, high-cost services such as emergency department visits, psychiatric crisis services, and psychiatric hospitalization. They also experience more independent living and higher rates of treatment retention.¹²⁷ In one study, only 18 percent of clients participating in ACT were hospitalized the first year compared to 89 percent of the non-ACT treatment group. For those ACT clients that were re-hospitalized, stays were significantly shorter than stays of the group not participating in ACT.¹²⁸ ACT further reduces incarceration and homelessness rates by more than 90%, and studies show that ACT clients have higher employment rates and express high satisfaction with services.¹²⁹

¹²⁶ Hogg Foundation for Mental Health. (2016). A guide to understanding mental health systems and services in Texas.

¹²⁷ NAMI. (2016). Psychosocial Treatments. <http://www.nami.org/Learn-More/Treatment/Psychosocial-Treatments>

¹²⁸ NAMI Minnesota. Assertive Community Treatment (ACT). <http://www.namihelps.org/assets/PDFs/factsheets/General/Assertive-Community-Treatment.pdf>

¹²⁹ Technical Assistance Center for Assertive Community Treatment. (2010). Getting Our ACT Together: Assertive Community Treatment (ACT) for the Seriously Mentally Ill. https://www.healthcare.uiowa.edu/icmh/act/documents/ACT_for_Iowa_Nov23-2010_000.pdf

Today, MHMR delivers ACT with capacity to serve approximately 30 individuals at any given time.¹³⁰

Assisted Outpatient Treatment

Assisted Outpatient Treatment (AOT) is court-supervised, mandatory treatment within the community that is known by different terms in different states, e.g., "involuntary outpatient treatment" or "mandatory outpatient treatment."¹³¹ To be a candidate for AOT, a person must meet specific criteria, such as a prior history of repeated hospitalizations or arrest. AOT services include support and treatment services delivered by community-based, mobile, multidisciplinary, highly trained mental health teams that use very low staff-to-client ratios (i.e., no more than 10 clients per treatment team). In most states, including Texas, AOT is applied after an individual living in the community has decompensated and been found to meet commitment criteria related to either grave disability or dangerousness. It is also widely used in connection with discharge planning from involuntary psychiatric hospitalization to assure treatment continuity (or, less commonly, between jail and the community).¹³²

AOT has demonstrated effectiveness in greatly increasing medication adherence, reducing hospital readmissions and other revolving-door circumstances, and promoting mental health recovery in qualifying individuals.¹³³ In other states, consistent evidence was found that AOT leads to a substantial decline in both the number of psychiatric hospitalizations and the number of inpatient days in the hospital if a person is hospitalized, a reduced likelihood of being arrested, and an increased likelihood that patients receive medications appropriate to their psychiatric conditions.¹³⁴ One large scale, national AOT cost study demonstrated that although, some increases costs were associated with treatment adherence as individuals refilled their medication prescriptions, kept appointments with case workers, and made use of community services, in all cases, the cost savings in other categories resulted in a net savings across the

¹³⁰ MHMR Tarrant. (2016). 2016 Provider Network Development Plan.

http://www.mhmrtc.org/Portals/0/PDF/localProviderNetworkDevPlan_2016.pdf

¹³¹ Treatment Advocacy Center. (2017). Assisted Outpatient Treatment Frequently Asked Questions.

<http://www.treatmentadvocacycenter.org/component/content/article/1336>

¹³² Health Management Associates. (2015). State and Community Considerations for Demonstrating the Cost Effectiveness of AOT Services: Final Report. <http://www.treatmentadvocacycenter.org/storage/documents/aot-cost-study.pdf>

¹³³ <http://www.treatmentadvocacycenter.org/storage/documents/aot-one-pager.pdf>

¹³⁴ Texas Medical Association. (2016). TMA Testimony by Les Secret.

<https://www.texmed.org/Template.aspx?id=26875>

population. In other words, higher community mental health service costs are more than offset by the reduction of other public investments such as hospitalization and incarceration.¹³⁵

Specifically, in Texas, to be deemed appropriate for AOT, a person must be ALL the following criteria:¹³⁶

- severely and persistently mentally ill;
- if untreated, destined to continue to suffer BOTH:
 - severe and abnormal mental, emotional, or physical distress; AND
 - deterioration of the ability to function independently, leading to an inability to live safely in community; and
- unable to voluntarily and effectively participate in outpatient treatment.

Tarrant County's AOT treatment capacity is expanding; beginning October 1, 2016, with support from a grant from the Substance Abuse and Mental Health Services Administration (SAMHSA)¹³⁷, MHMR began to partner with JPS to expand services for post hospital service to serve 400 individuals with serious mental illness who meet civil criteria for outpatient commitment to help facilitate and improve quality of life.¹³⁸ This \$1 million grant will support a four-year pilot program intended to implement and evaluate new AOT programs and identify evidence-based practices to reduce the incidence and duration of psychiatric hospitalization, homelessness, incarcerations, and interactions with the criminal justice system.¹³⁹ Prior to this award, AOT was rarely used in North Texas¹⁴⁰ outside of a 50-slot program in Bexar County operated by the Center for Health Care Services.¹⁴¹

¹³⁵ Health Management Associates. (2015). State and Community Considerations for Demonstrating the Cost Effectiveness of AOT Services: Final Report. <http://www.treatmentadvocacycenter.org/storage/documents/aot-cost-study.pdf>

¹³⁶ Treatment Advocacy Center. What is AOT? <http://www.treatmentadvocacycenter.org/texas>

¹³⁷ SAMHSA. (2016). Assisted Outpatient Treatment Grant Program for Individuals with Serious Mental Illness. <https://www.samhsa.gov/grants/grant-announcements/sm-16-011>

¹³⁸ MHMR Tarrant County. (2016). Board Packet.

<http://courtbook.tarrantcounty.com/sirepub/cache/2/xktonc5jirzsog3ra3oxzrw3/168567201132017064953368.PDF>

¹³⁹ SAMHSA. (2016). SAMHSA awards up to \$54 million for the Assisted Outpatient Treatment Program to help address the need of people who have experienced serious mental illness.

<https://www.samhsa.gov/newsroom/press-announcements/201609091230>

¹⁴⁰ Sunset Advisory Commission Study of HHSC. (2015). Preliminary Local Plan for Indigent Behavioral Health Services.

https://www.sunset.texas.gov/public/uploads/files/reports/CollinCo_PrelimBHSPan%20FinalSubmission_3215.pdf

¹⁴¹ Yanez-Correa, A., & Totman, M. (2010). Costly Confinement & Sensible Solutions: Jail Overcrowding in Texas. [https://www.pretrial.org/download/research/Costly%20Confinement%20and%20Sensible%20Solutions%20-%20Jail%20Overcrowding%20in%20Texas%20\(TCJC%202010\).pdf](https://www.pretrial.org/download/research/Costly%20Confinement%20and%20Sensible%20Solutions%20-%20Jail%20Overcrowding%20in%20Texas%20(TCJC%202010).pdf)

Short Term Acute Residential Treatment

Short Term Acute Residential Treatment (START) provides a residential treatment alternative to psychiatric hospitalization for adults with SMI and (often) co-occurring substance use disorders. START is designed to provide safe and effective, community-based, crisis residential treatment at a much lower cost than treatment in a psychiatric hospital, and return residents to the community with their acute symptoms stabilized and under control in the shortest amount of time possible. The average length of stay in START programs is less than 10 days and discharge planning begins at the time of admission.¹⁴²

START programs are typically located in residential neighborhoods within large homes, and each home typically houses between 11 and 16 clients. START programs are designed to provide a homelike atmosphere where the relationship between staff and residents is recognized as a powerful tool. A core feature of START is adherence to the principles of psychosocial rehabilitation, including an emphasis on the patient's active involvement in treatment planning, goal setting, and planning for discharge as early as possible in the treatment process. Core START services include individual-, family-, milieu-, and group-therapy; community meetings; psychiatric evaluation; life-skills education groups; integrated substance-abuse treatment for those with dual diagnoses; task-oriented groups; and recreational/social activities. When indicated, medications are provided and monitored to further assist individuals in the recovery process.¹⁴³

START programs require a well-educated, multidisciplinary team who provide an accepting and nurturing environment in the provision of care, treat residents respectfully, and emphasize recovery. Staff members collaborate with the residents and their significant others to develop the most effective treatment and discharge plans. A staff psychiatrist visits the program a minimum of three times per week to provide medication management for all the residents and is on call 24/7. Nursing staff are available on site to address any medical needs. Peer Specialists who have lived experience with SMI serve as role models.¹⁴⁴

START programs have demonstrated positive impact on improving housing stability and reducing homelessness, reducing mental health and psychiatric-related symptoms, and improving emotional aspects of functioning.¹⁴⁵

MHMR offers START as part of its service package for individuals living with SMI.

¹⁴² SAMHSA NREPP. Short Term Acute Residential Treatment. <http://nrepp.samhsa.gov/AdvancedSearch.aspx>

¹⁴³ SAMHSA NREPP. Short Term Acute Residential Treatment. <http://nrepp.samhsa.gov/AdvancedSearch.aspx>

¹⁴⁴ SAMHSA NREPP. Short Term Acute Residential Treatment. <http://nrepp.samhsa.gov/AdvancedSearch.aspx>

¹⁴⁵ SAMHSA NREPP. Short Term Acute Residential Treatment. <http://nrepp.samhsa.gov/AdvancedSearch.aspx>

Individuals with SUD

It is estimated that 134,000 individuals in Tarrant County, 12 years of age or older, are in need of SUD treatment services, but less than 10% of these individuals in need are actually able to access that care, leaving more than 124,000 Tarrant County residents with untreated SUD.¹⁴⁶ Many of those 120,000 individuals experience multiple barriers and obstacles in their attempts to receive care in Tarrant County, including lack of knowledge about how to access services, not qualifying as a priority population for admission to care, financial inability to utilize private healthcare, and significant waitlists for the Department of State Health Services (DSHS) funded services (in 2014, there were 1,897 Tarrant County residents on the waiting list for SUD Treatment, 48% of whom were not able to access services during that calendar year).¹⁴⁷ Untreated SUD can have a significantly negative impact on population health and wellbeing within a community, increasing a number of maladaptive factors including:¹⁴⁸

- child maltreatment and neglect: locally, 65% of all child removal cases identified parental substance abuse as the leading factor impacting the family;
- accidental overdose deaths: about one fourth of accidental deaths in Tarrant County (23%) are due to drug overdoses each year;
- criminal justice system involvement: The Tarrant County District Attorney's office reported that over 30,000 cases related to substance use (i.e., possession, DWI) were filed in 2013-2014. In addition, on a national basis, more than three of four (77.5%) federal, state, and local prison and jail inmates who are serving time for committing a violent crime as their primary offense were substance involved.

When an individual with SUD is seeking outpatient treatment in Texas, Outreach, Screening, Assessment and Referral Centers (OSARs) are usually the first point of contact for assessment and referral to appropriate services (although individuals can present directly at a treatment facility to receive screening and assessment services as well). Recovery Resource Council provides the OSAR functions for the HHSC Region 3, which encompasses Tarrant County.¹⁴⁹ Individuals can call the Recovery Resource Council OSAR for immediate and confidential help 24 hours a day, seven days a week. Following the initial call, available services and referral resources will vary from person to person based on need and eligibility for services. In 2014, Recovery Resource Council OSAR saw 3,125 individuals from Tarrant County that were seeking treatment for SUD, who represented the following demographics:

¹⁴⁶ Challenge of Tarrant County. (2015). *The Other Nine: A Community Needs Assessment of Substance Use Disorder in Tarrant County*.

¹⁴⁷ Challenge of Tarrant County. (2015). *The Other Nine: A Community Needs Assessment of Substance Use Disorder in Tarrant County*.

¹⁴⁸ Challenge of Tarrant County. (2015). *The Other Nine: A Community Needs Assessment of Substance Use Disorder in Tarrant County*.

¹⁴⁹ Recovery Resource Council. (2016). <http://recoverycouncil.org/>

Table 15: Demographic Breakdown of Tarrant County Residents Seeking SUD Treatment

Variable	Attribute	% (n=3,125 individuals)
Gender	Male	46%
	Female	54%
Race	Caucasian	67%
	Hispanic	16%
	African American	16%
	Other	2%
Age	17 years and under	3%
	18-24 years	16%
	25-29 years	15%
	30-39 years	31%
	40-49 years	18%
	50 years and older	7%

Source: Challenge of Tarrant County. (2015). The Other Nine: A Community Needs Assessment of Substance Use Disorder in Tarrant County

Tarrant County has eight local not-for-profit organizations that receive funding from DSHS to provide SUD treatment services, predominately for individuals who are medically indigent. In 2014, these organizations provided services to 7,146 individuals, half of whom received outpatient services:

Table 16: Breakdown of Tarrant County SUD Treatment by Service Type

Service Type	% Clients that received type of SUD Treatment (N=7,146)
<i>Outpatient Services</i>	50%
<i>Intensive Residential Services</i>	21%
<i>Detoxification Services</i>	17%
<i>Methadone Treatment</i>	7%
<i>Supportive Residential Services</i>	5%

Source: Challenge of Tarrant County. (2015). The Other Nine: A Community Needs Assessment of Substance Use Disorder in Tarrant County

The most common primary drug among those who received treatment was heroin/opiates (48%), followed by meth/amphetamine (26%), alcohol (9%), cocaine/crack and marijuana (both at 8%), and “other” (1%).¹⁵⁰

Given the substantial gap that exists between the number of individuals in Tarrant County who received treatment and the estimated number of individuals living with SUD in Tarrant County, it is critical that the county system of care develop more robust programs and practices in order to identify, engage, and serve these individuals. A selection of EBPs designed to serve

¹⁵⁰ Challenge of Tarrant County. (2015). The Other Nine: A Community Needs Assessment of Substance Use Disorder in Tarrant County.

individuals living with Substance Use Disorders (SUD) is delineated below, a few of which are currently offered by JPS and/or MHMR.

Screening, Brief Intervention, and Referral to Treatment

Screening, Brief Intervention, and Referral to Treatment (SBIRT) is a comprehensive, integrated, public health approach for delivering early intervention and treatment services to people with, or at risk of developing, substance use disorders. SBIRT is designed to take place in general medical care settings that people routinely visit, and to identify individuals with substance use problems before their problems progress to the point of crisis.

SBIRT is a three-step process that involves the following steps:¹⁵¹

- Screening quickly assesses the severity of substance use and identifies the appropriate level of treatment. Screenings take place in trauma centers, emergency rooms, community clinics, health centers, and school clinics.
- Brief intervention focuses on increasing a person's awareness of substance use and encouraging changes in behavior.
- Referral to treatment provides those who need more extensive substance abuse treatment with referral to specialty care.

Texas HHSC passed a new rule related to SBIRT on July 1, 2016, that aligns the Texas SBIRT benefit with national standards. The new rule is expected to greatly enhance screening and brief intervention strategies for individuals with Texas Medicaid coverage through the following strategies:¹⁵²

- SBIRT is now a covered benefit for adults 21 and older, in addition to those 10 to 20 years of age who already receive SBIRT;
- The SBIRT initial screening session is no longer restricted solely to Emergency Departments, and SBIRT screenings can now also occur in settings like the office, home, outpatient hospital and other appropriate settings.
- Providers are now required to complete four hours of SBIRT training prior to delivering SBIRT.

SBIRT has numerous benefits demonstrated by research, including reducing health care costs, severity of drug and alcohol use, and the percentage of at-risk patients who go without

¹⁵¹ Office of National Drug Control Policy. (2012). Cost Benefits of Investing Early in Substance Abuse Treatment. https://www.whitehouse.gov/sites/default/files/ondcp/Fact_Sheets/investing_in_treatment_5-23-12.pdf

¹⁵² Texas Council of Community Centers. (2016). Integrating Care for Mental Health and Substance Use: The Next Step for Treatment of Brain Disorders. <http://txcouncil.com/wp-content/uploads/2016/09/Integrated-Treatment-HOW-final-71916-MHSUD.pdf>

specialized substance use treatment.¹⁵³ In Washington State, Medicaid administrators saw reductions of \$185-\$192 in per member per month costs after implementing a brief intervention in primary care settings.¹⁵⁴ In fact, multiple studies have demonstrated that these investments can result in healthcare cost savings that range from \$3.81 to \$5.60 per dollar spent on SBIRT.¹⁵⁵

Today, JPS offers SBIRT at a number of its integrated facilities.

Outpatient SUD Treatment

Outpatient treatment for individuals living with SUD varies in the types and intensity of services offered, and in this way, is directly responsive to the severity of the SUD-related issues presented by the patient. The treatment program's intensity (as measured by frequency and duration of visits) will vary during the course of treatment. In general, individuals are engaged in more frequent outpatient treatment visits earlier in the treatment process, and visits generally become less frequent as treatment progresses and the individuals moves towards recovery.¹⁵⁶ Such treatment costs less than residential or inpatient treatment and often is more suitable for people with jobs or extensive social supports. Some outpatient programs are also designed to treat patients with co-occurring medical or other mental health problems in addition to their drug disorders.¹⁵⁷

In many outpatient programs, group counseling can be a major component of care. Each individual's specific plan of care within outpatient treatment are provided according to an individualized assessment of needs and treatment plan, usually developed in collaboration with the patient. Generally, outpatient treatment includes the following procedures:¹⁵⁸

- group and individual counseling;
- education about, orientation to, and opportunity for participation in relevant and

¹⁵³ SAMHSA-HRSA Center for Integrated Health Solutions. SBIRT: Screening, Brief Intervention, and Referral to Treatment. Opportunities for Implementation and Points for Consideration.

http://www.integration.samhsa.gov/sbirt_issue_brief.pdf

¹⁵⁴ Office of National Drug Control Policy. (2012). Cost Benefits of Investing Early in Substance Abuse Treatment.

https://www.whitehouse.gov/sites/default/files/ondcp/Fact_Sheets/investing_in_treatment_5-23-12.pdf

¹⁵⁵ SAMHSA-HRSA Center for Integrated Health Solutions. SBIRT: Screening, Brief Intervention, and Referral to Treatment. Opportunities for Implementation and Points for Consideration.

http://www.integration.samhsa.gov/sbirt_issue_brief.pdf

¹⁵⁶ NYS Office of Alcoholism and Substance Abuse Services. Substance Use Disorder Service Descriptions.

https://www.oasas.ny.gov/hps/state/CD_descriptions.cfm

¹⁵⁷ National Institute on Drug Abuse. (2012). Principles of Drug Addiction Treatment: A Research-Based Guide.

<https://www.drugabuse.gov/publications/principles-drug-addiction-treatment-research-based-guide-third-edition/drug-addiction-treatment-in-united-states/types-treatment-programs>

¹⁵⁸ NYS Office of Alcoholism and Substance Abuse Services. Substance Use Disorder Service Descriptions.

https://www.oasas.ny.gov/hps/state/CD_descriptions.cfm

- available self-help groups;
- alcohol and substance abuse disorder awareness and relapse prevention;
- HIV and other communicable disease education, risk assessment, supportive counseling and referral; and
- family treatment.

In Texas, when Outpatient Treatment providers have a waiting list, they are required to prioritize admissions for certain populations, in accordance with federal Block Grant regulations and state designation, including the following:¹⁵⁹

- Pregnant women with substance use disorders who inject drugs;
- Pregnant women with substance use disorders;
- Males and females with substance use disorders who inject drugs.
- Males and females with substance use disorders who have been referred by the Texas Department of Family and Protective Services (DFPS).

DSHS-funded Youth Outpatient Treatment Providers, which serve children and youth ages 13-17 years (as well as those ages 18-21 whose needs, experiences, and behavior are similar to those of youth clients), are contracted to use specific evidence based practices (as appropriate to each client they serve), including: The Cannabis Youth Treatment Series (CYT), Motivational Enhancement Therapy (MET), Cognitive Behavioral Therapy (CBT), and Family Support Network (FSN) Treatment Models. Currently, there are 21 youth outpatient treatment programs in TX,¹⁶⁰ including three agencies in Tarrant County: MHMR, the Lena Pope Home, and the North Texas Addiction Counseling & Education.¹⁶¹

The Texas Department of State Health Services observed that individuals with an SUD who received treatment had lower average monthly emergency department (ED) costs (\$89) than those with an SUD who did not receive treatment (\$136)—a 35% difference.¹⁶² Cost-benefit analyses of outpatient treatment programs for SUD show that each dollar spent on treatment results in an average of \$7 saved in benefits. These benefits arise from decreased crime and its attendant expenses (incarcerations, costs of time in court, etc.), increased employment, fewer medical expenses and reductions in other miscellaneous expenses.¹⁶³ For example, one comprehensive health maintenance organization found that by increasing access to substance

¹⁵⁹ Texas DSHS. (2016). How to get Help: Substance Abuse. <https://www.dshs.texas.gov/mhsa-sa-help/>

¹⁶⁰ Texas DSHS. (2016). Substance Abuse Treatment Services for Children and Adolescents. <https://www.dshs.texas.gov/sa/child-adolescent-services/>

¹⁶¹ TX DSHS. (2016). Locations of Substance Use Program Centers in Texas. <https://dshs.texas.gov/sa-search/>

¹⁶² Colorado Behavioral Healthcare Council. (2013). Funding Substance Use Disorder Treatment: A Path to Greater Public Cost-Savings. <http://www.cbhc.org/news/wp-content/uploads/2013/03/CBHC-Medicaid-SUD-Cost-Savings-Fact-Sheet.pdf>

¹⁶³ Office of National Drug Control Policy. (2012). Cost Benefits of Investing Early in Substance Abuse Treatment. https://www.whitehouse.gov/sites/default/files/ondcp/Fact_Sheets/investing_in_treatment_5-23-12.pdf

abuse treatment for Medicaid patients, they were able to reduce total medical costs (i.e., hospital stays, emergency visits and clinic visits) by 30% (from \$5,402 per treated member in the year prior to treatment to \$3,627 in the year following treatment).¹⁶⁴

MHMR currently provides substance-use outpatient treatment services at multiple locations in Tarrant County.¹⁶⁵

The Matrix Model

The Matrix Model provides a framework for engaging individuals addicted to stimulants (e.g., methamphetamine and cocaine) in treatment and helping them achieve abstinence.¹⁶⁶ Patients learn about issues critical to addiction and relapse, receive direction and support from a trained therapist, and become familiar with self-help programs. The program specifically addresses the issues relevant to clients who are dependent on stimulant drugs, particularly methamphetamine and cocaine, and their families.¹⁶⁷

The intervention consists of relapse-prevention groups, education groups, social-support groups, individual counseling, and urine and breath testing delivered over a 16-week period. It incorporates and integrates principles from a number of other practices, including: Cognitive behavioral; Motivational enhancement; Couples and family therapy; Individual supportive/expressive psychotherapy and psychoeducation; Twelve Step facilitation; and Group therapy and social support.¹⁶⁸ The program also includes education for family members affected by the addiction. The therapist functions simultaneously as teacher and coach, fostering a positive, encouraging relationship with the patient and using that relationship to reinforce positive behavior change. Therapists are trained to conduct treatment sessions in a way that promotes the patient's self-esteem, dignity, and self-worth.¹⁶⁹

¹⁶⁴ McCarty, C., (2007) Substance Abuse Treatment Benefits and Costs. Robert Wood Johnson Foundation. <http://www.rwjf.org/en/library/research/2007/05/substance-abuse-treatment-benefits-and-costs.html>

¹⁶⁵ MHMR Tarrant County. Adult Outpatient Services. <http://www.mhmrtarrant.org/Services/Addiction-Services/Adult-Outpatient-Services>

¹⁶⁶ National Institute on Drug Abuse. (2012) The Matrix Model (Stimulants). <https://www.drugabuse.gov/publications/principles-drug-addiction-treatment-research-based-guide-third-edition/evidence-based-approaches-to-drug-addiction-treatment/behavioral-3>

¹⁶⁷ SAMHSA. (2013) Counselor's Treatment Manual: Matrix Intensive Outpatient Treatment for People with Stimulant Use Disorders. <http://store.samhsa.gov/shin/content//SMA13-4152/SMA13-4152.pdf>

¹⁶⁸ Hazelden Betty Ford Foundation. (2016). The Matrix Model: What it is. <https://www.hazelden.org/web/public/matrixwhat.page>

¹⁶⁹ DFWHC Foundation. (2017). Matrix Model. <http://www.healthyntexas.org/index.php?controller=index&module=PromisePractice&action=view&pid=853>

Studies on the Matrix Model have shown effective long-term outcomes related to stimulant use/abuse and a reduction in risky behaviors.¹⁷⁰ In addition, Matrix Model participants are 38% more likely to stay in treatment longer and 27% more likely to complete treatment as compared with “like”-individuals receiving treatment as usual.¹⁷¹

JPS currently provides services that include components of the Matrix Model in their behavioral health treatment programs.

Integrated Dual Disorder Treatment

Integrated Dual Disorder Treatment (IDDT) is an evidence-based practice that improves quality of life for people living with co-occurring severe mental illness and substance use disorders by combining substance abuse services with mental health services. Co-occurring mental health and substance use disorders are seen as intertwined, and IDDT works to address both disorders at the same time with close collaboration between a multidisciplinary team, or by a single provider, trained and competent in co-occurring disorders. Treatment by providers in different locations occasionally happens within IDDT, but only if there is very close collaboration, including shared treatment planning.¹⁷² IDDT takes a stages of change approach to treatment, emphasizing that individuals achieve big changes like sobriety, symptom management, and an increase in independent living through a series of small, overlapping, incremental changes that occur over time.¹⁷³

IDDT involves a set of core principles and a combination of clinical and rehabilitative interventions that address all aspects of a person’s life. Counselors, clinicians, and multidisciplinary teams use specific listening and counseling skills to guide individuals’ awareness of how mental and SUDs interact and to foster hopefulness and motivation for recovery.¹⁷⁴ They use cognitive behavioral techniques to assist individuals who are working to reduce or eliminate substance use or who want to prevent relapse and maintain recovery from both disorders.

¹⁷⁰ Texas Council of Community Centers. (2016). Integrating Care for Mental Health and Substance Use: The Next Step for Treatment of Brain Disorders. <http://txcouncil.com/wp-content/uploads/2016/09/Integrated-Treatment-HOW-final-71916-MHSUD.pdf>

¹⁷¹ DFWHC Foundation. (2017). Matrix Model. <http://www.healthytexas.org/index.php?controller=index&module=PromisePractice&action=view&pid=853>

¹⁷² NAMI Minnesota. (2012). Co-Occurring Disorders and Integrated Dual Diagnosis Treatment (IDDT). http://www.namihelps.org/IDDT-Fact-Sheet_final.pdf

¹⁷³ Case Western Reserve University. (2011). Integrated Dual Disorder Treatment. <https://www.centerforebp.case.edu/practices/sami/iddt>

¹⁷⁴ Stanford, M. (2014). Literature Review: A Review of the Research on the Treatment of Substance Use Disorders. <http://www.santacruzhealth.org/Portals/7/Pdfs/SubsAbuse%20Treatment%20Planning/2014%20ADP%20Literature%20Review.pdf>

The evidence-based model of IDDT has been shown to improve outcomes for individuals with severe mental illness and a co-occurring substance abuse disorder when all elements of the model are maintained.¹⁷⁵ In fact, research shows that individuals who participate in IDDT recover better from both their mental health and SUD illnesses; have fewer hospitalizations and relapses; fewer criminal justice problems; and more housing stability.¹⁷⁶

Although not currently being implemented with fidelity, JPS provides services that integrate components of IDDT within its service array.

Double Trouble in Recovery

Double Trouble in Recovery (DTR) is a mutual-aid, self-help program for adults who have been diagnosed with both a mental illness and a substance use disorder. DTR is adapted from the 12 Steps of Alcoholics Anonymous; however, DTR groups are structured with the intent of creating an environment in which people with an active addiction and psychiatric diagnosis can identify with other members and explore their dual recovery needs. DTR meetings follow the traditional 12-step format, which includes group member introductions, a presentation by a speaker with experiences similar to those of the meeting attendees, readings by group members about DTR, and time for all attendees to share their experiences with the group. Meetings typically last between 60 and 90 minutes.¹⁷⁷

DTR members often have a long history of psychiatric disabilities and of substance abuse, and extensive experience with treatment programs in both areas. Most members require medication to control their psychiatric disabilities, and that alone may make attendance at “conventional” 12-step groups uncomfortable.¹⁷⁸ DTR encourages members to discuss their addictions, mental illness, psychotropic medications, and experiences with formal treatment without the stigma they might encounter in traditional 12-step programs, which have a single focus.¹⁷⁹

DTR has demonstrated effectiveness in reducing general substance use, reducing alcohol use and disorders, and improving overall functioning and well-being for individuals living with co-occurring substance use and mental health disorders.¹⁸⁰ Ratings of participant statements

¹⁷⁵ NAMI Minnesota. (2012). Co-Occurring Disorders and Integrated Dual Diagnosis Treatment (IDDT). http://www.namihelps.org/IDDT-Fact-Sheet_final.pdf

¹⁷⁶ Stanford, M. (2014). Literature Review: A Review of the Research on the Treatment of Substance Use Disorders. <http://www.santacruzhealth.org/Portals/7/Pdfs/SubsAbuse%20Treatment%20Planning/2014%20ADP%20Literature%20Review.pdf>

¹⁷⁷ SAMHSA NREPP. Double Trouble. <http://nrepp.samhsa.gov/AdvancedSearch.aspx>

¹⁷⁸ Vogel, H.S., Knight, E., Laudet, A.B., & Magura, S. (1998). Double Trouble in Recovery: Self-Help for People with Dual Diagnosis. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1950134/>

¹⁷⁹ SAMHSA NREPP. Double Trouble. <http://nrepp.samhsa.gov/AdvancedSearch.aspx>

¹⁸⁰ SAMHSA NREPP. Double Trouble. <http://nrepp.samhsa.gov/AdvancedSearch.aspx>

comparing DTR to other 12-step meetings suggest that DTR is a setting where members can feel comfortable and safe discussing their dual recovery needs.¹⁸¹

Intensive Outpatient Treatment

Intensive outpatient programs (IOPs) are direct services for people with substance use disorders or co-occurring mental and substance use disorders who need more support than what can be provided in a general outpatient program, but that do not require medical detoxification or 24-hour supervision. IOPs are alternatives to inpatient and residential treatment that are designed to establish psychosocial supports and facilitate relapse management and coping strategies.¹⁸² IOP treatment services are provided by a team of clinical staff and include a minimum of nine service hours per week delivered during the day, evening or weekends. A team of clinical and medical staff, supervised by a physician Medical Director, provide IOP services.

The IOP treatment program consists of, but is not limited to: individual, group and family counseling; relapse prevention and cognitive and behavioral interventions; motivational enhancement; routine monitoring of alcohol and drug use/abuse; and the development of coping skills to effectively deal with emotions and environmental stressors.¹⁸³ Most IOP programs place clients in several different types of groups during the course of treatment, which often include psychoeducational, skills-development, support, and interpersonal process groups. Some IOP programs also add specialized groups and “clubs” for job-seeking or recreational activities. Individual SUD counseling is an important supportive adjunct to group sessions, with most individual counseling in IOP programs addressing the immediate problems stemming from clients' substance use disorders and their current efforts to achieve and maintain abstinence.¹⁸⁴

¹⁸¹ Vogel, H.S., Knight, E., Laudet, A.B., & Magura, S. (1998). Double Trouble in Recovery: Self-Help for People with Dual Diagnosis. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1950134/>

¹⁸² McCarty, D., Braude, L., Lyman, D.R., Dougherty, R.H., Daniels, A.S., Ghose, S.S., & Delphin-Rittmon, M.E., (2014). Substance Abuse Intensive Outpatient Programs: Assessing the Evidence. <http://ps.psychiatryonline.org/doi/abs/10.1176/appi.ps.201300249>

¹⁸³ NYS Office of Alcoholism and Substance Abuse Services. Substance Use Disorder Service Descriptions. https://www.oasas.ny.gov/hps/state/CD_descriptions.cfm

¹⁸⁴ SAMHSA-CSAT. Substance Abuse: Clinical Issues in Intensive Outpatient Treatment. <https://www.ncbi.nlm.nih.gov/books/NBK64094/>

To date, studies have shown that IOP is as effective in reducing alcohol and drug use as inpatient models of care.¹⁸⁵ Given that IOP costs about half as much (or less) as inpatient care, the model is extremely cost effective.¹⁸⁶

JPS currently provides Intensive Outpatient Treatment for individuals living with behavioral health conditions.

Medication Assisted Treatment (MAT)

Medication-Assisted Treatment (MAT) is the process of using medication to treat substance use disorders, in combination with counseling and behavioral therapies. Medications can reduce the cravings and other symptoms associated with withdrawal from a substance by occupying receptors in the brain associated with using that drug (agonists or partial agonists), block the rewarding sensation that comes with using a substance (antagonists), or induce negative feelings when a substance is taken. To date, MAT has been primarily used for the treatment of opioid use disorder but is also used for alcohol use disorder and the treatment of some other substance use disorders.¹⁸⁷

There are a number of FDA-approved MAT medications in existence, which include:

- Methadone or buprenorphine, which reduce the effects of opioid withdrawal and reduce cravings. These medications specifically have been shown to increase retention in treatment and reduce risk behaviors that lead to transmission of HIV and viral hepatitis, such as using opioids by injection.
- Extended-release injectable naltrexone is particularly useful for people exiting a controlled setting where abstinence has been enforced such as jail or residential rehabilitation or in situations where maintenance with an opioid agonist is not available or appropriate. It reduces the risk of relapse to opioid use and helps control cravings.
- Naltrexone, a medication used to block the effects of opioids, has also been used to reduce craving in those with alcohol use disorders.
- Acamprosate is a medication that reduces symptoms of protracted alcohol withdrawal and has been shown to help individuals with alcohol use disorders who have achieved abstinence go on to maintain abstinence for several weeks to months.
- Disulfiram is another medication which changes the way the body metabolizes alcohol, resulting in an unpleasant reaction that includes flushing, nausea, and other unpleasant

¹⁸⁵ McCarty, D., Braude, L., Lyman, D.R., Dougherty, R.H., Daniels, A.S., Ghose, S.S., & Delphin-Rittmon, M.E., (2014). Substance Abuse Intensive Outpatient Programs: Assessing the Evidence.

<http://ps.psychiatryonline.org/doi/abs/10.1176/appi.ps.201300249>

¹⁸⁶ Colorado Behavioral Healthcare Council. (2013). Funding Substance Use Disorder Treatment: A Path to Greater Public Cost-Savings. <http://www.cbhc.org/news/wp-content/uploads/2013/03/CBHC-Medicaid-SUD-Cost-Savings-Fact-Sheet.pdf>

¹⁸⁷ SAMHSA. (2016). Treatments for Substance Use Disorders. <https://www.samhsa.gov/treatment/substance-use-disorders>

symptoms if a person takes the medication and then consumes alcohol.

MAT, when combined with behavioral treatment, has been demonstrated to be more effective than just individual and/or group counseling alone, and MAT's positive impact is even further strengthened when patients are provided with, or referred to, other psychosocial needs, such as employment, family services, and housing.¹⁸⁸ MAT significantly reduces the need for inpatient detox services for people with SUD, and patients in methadone maintenance showed the greatest reduction in intensity of heroin use, down by two-thirds, of any other type of opioid addiction treatment.¹⁸⁹ In terms of cost effectiveness, studies show that Methadone treatment for opiate-use disorder yields savings of \$3 to \$4 for every dollar spent.¹⁹⁰ Buprenorphine demonstrates similar cost effectiveness, while also having two key benefits over methadone use: there is less risk of overdose from buprenorphine, and the medication can be prescribed in a physician's office rather than through a specialized treatment center.¹⁹¹

MHMR currently offers MAT within its system of care.

Children/Youth with SED

In the United States, as in Texas, more than half of all chronic mental illnesses have their onset by age 14 years, with 75% beginning by age 24.¹⁹² Mental health challenges are common among Texas children and youth, with estimates suggesting that about one in five children experience a mental disorder in any given year. Of the over 300,000 Texas children and youth with SED who are eligible for Department of State Health Services (DSHS)-funded community mental health services, less than 10% actually receive these services in a given month.¹⁹³

Given this, it is clear that more work is needed to get Tarrant County's children and youth access to programs designed to meet their needs. EBPs appropriate for children and youth with SED are listed below, only a few of which are currently being delivered by MHMR and/or JPS.

¹⁸⁸ Texas Council of Community Centers. (2016). Integrating Care for Mental Health and Substance Use: The Next Step for Treatment of Brain Disorders. <http://txcouncil.com/wp-content/uploads/2016/09/Integrated-Treatment-HOW-final-71916-MHSUD.pdf>

¹⁸⁹ SAMHSA-CSAT. Substance Abuse: Clinical Issues in Intensive Outpatient Treatment. <https://www.ncbi.nlm.nih.gov/books/NBK64094/>

¹⁹⁰ SAMHSA-CSAT. Substance Abuse: Clinical Issues in Intensive Outpatient Treatment. <https://www.ncbi.nlm.nih.gov/books/NBK64094/>

¹⁹¹ ASAM. (2015). Proven Clinical and Cost Effectiveness of Medications to Treat Opioid Use Disorder. http://www.asam.org/docs/default-source/2015-conference-epk/asam-impact_cce-4-02-14.pdf?sfvrsn=4

¹⁹² Saxton, J. (2016). Opportunities to Improve Children's Mental Health in Texas. <http://www.legis.state.tx.us/tlodocs/84R/handouts/C3822016081610001/fdcfe5fd-a1e7-49e7-a0a1-1cf9e87b0306.PDF>

¹⁹³ Saxton, J. (2016). Opportunities to Improve Children's Mental Health in Texas. <http://www.legis.state.tx.us/tlodocs/84R/handouts/C3822016081610001/fdcfe5fd-a1e7-49e7-a0a1-1cf9e87b0306.PDF>

Helping the Non-Compliant Child

Helping the Non-Compliant Child (HNC) offers a controlled learning environment for parents to learn new “adaptive” ways to interact with their children. The program is targeted to children ages 3 to 8 years who are at risk for or are displaying aggressive and oppositional behaviors. HNC’s primary treatment goal is the secondary prevention of serious conduct disorder problems in preschool and early elementary school-aged children and the primary prevention of subsequent juvenile delinquency later in life. The model is best implemented in a therapeutically controlled environment, such as a clinic-based playroom with a one-way mirror and audio equipment (although the mirror and audio equipment are not required). HNC can also be delivered in the child and family’s home. Children and their parents meet while the therapist helps guide parents with practicing new skills and focusing on the positive and negative behaviors of the child.¹⁹⁴

Research has shown many positive outcomes resulting from HNC, including improvements in parenting skills and child compliance in the home to within the normal range; improvements of parents’ perceptions of their children’s adjustment; and maintenance effects ranging from 6 months to more than 14 years after treatment termination.¹⁹⁵

Cognitive Behavioral Therapy for Youth

Cognitive Behavioral Therapy (CBT), described above in the context of serving adults, is also a scientifically proven method of treatment that works for younger patients as effectively as it does for adults in the treatment of issues as conduct disorder, depression, anxiety and physical complaints that are not caused by an actual physical condition.¹⁹⁶

CBT for children and adolescents usually is a short-term treatment model (i.e., often between 6-20 sessions) that focuses on teaching young people and their parents’ specific skills. CBT is different from many other therapy approaches by focusing on the ways that a person's cognitions (i.e., thoughts), emotions, and behaviors are connected and how they affect one another.¹⁹⁷ With children and adolescents, CBT is focused on breaking the circle at the thought phase. Having the child focus on the thought and bringing that step in the cycle more under his or her control can help him or her to see the fallacies in the thoughts and thus repair his or her

¹⁹⁴ SAMHSA. (2011). Interventions that Disrupt Behavior Disorders. <https://store.samhsa.gov/shin/content/SMA11-4634CD-DVD/EBPsPromisingPractices-IDBD.pdf>

¹⁹⁵ SAMHSA. (2011). Interventions that Disrupt Behavior Disorders. <https://store.samhsa.gov/shin/content/SMA11-4634CD-DVD/EBPsPromisingPractices-IDBD.pdf>

¹⁹⁶ Kids Mental Health. (2009). Cognitive Therapy for Children with Behavioral and Emotional Disorders. <http://www.kidsmentalhealth.org/cognitive-therapy-for-children-with-behavioral-and-emotional-disorders/>

¹⁹⁷ Society of Clinical Child & Adolescent Psychology. Effective Child Therapy: What is CBT? <http://effectivechildtherapy.org/content/what-cbt>

behavior to the reality of the situation rather than continue in the avoidance behaviors that are inappropriate.¹⁹⁸

CBT has been shown to be effective in the treatment of children and youth through multiple scientifically validated studies. Children treated with CBT showed lower rates of anxiety diagnosis and significantly improved functioning following treatment when compared to a matched group of children who did not receive CBT.¹⁹⁹ In addition, CBT for Adolescent Depression showed more rapid treatment response than other interventions; one study found that at the end of treatment, 17.1% of youth receiving CBT showed evidence of major depressive disorder, compared with 42.4% of youth receiving nondirective support therapy.²⁰⁰ In addition, for every dollar invested in the program, CBT has demonstrated cost savings between \$1.11 and \$7.56.²⁰¹

MHMR currently offers CBT for children and youth, while JPS uses CBT principles within its system of care when serving youth.

Problem Solving Skills Training

Problem-Solving Skills Training (PSST) is a cognitive behavioral approach for treating children ages 6 to 14 years with conduct and delinquency-related problems. PSST emphasizes teaching skills related to the later stages of information processing. The goal of the PSST intervention is to improve a child's interpersonal and cognitive problem-solving skills. PSST is administered in 20 therapeutic sessions that last approximately 45 to 50 minutes each, and is delivered in either a clinic or a home setting by a master's level therapist. PSST does not work with the children in groups, only individually with the child and parent. The therapist works with the child to review his or her process for addressing interpersonal situations and encourages the child to use a step-by-step approach with self-talk to achieve effective solutions. Modeling and direct reinforcement are techniques the therapist uses in PSST. Components of PSST will include practice, feedback, homework assignments, roleplaying, and reinforcement schedules. Additionally, the children receive in vivo practice to apply the skills in a variety of settings

¹⁹⁸ Kids Mental Health. (2009). Cognitive Therapy for Children with Behavioral and Emotional Disorders. <http://www.kidsmentalhealth.org/cognitive-therapy-for-children-with-behavioral-and-emotional-disorders/>

¹⁹⁹ Adler Nevo, G.W., Avery, D., Fiksenbaum, L., Kiss, A., Mendlowitz, S., Monga, S., & Manassis, K. (2014). Eight Years Later: Outcomes of CBT-treated versus Untreated Anxious Children. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4188368/>

²⁰⁰ DFWHC Foundation. (2017). Cognitive Behavioral Therapy for Adolescent Depression. <http://www.healthyntexas.org/index.php?module=promisepractice&controller=index&action=view&pid=847>

²⁰¹ Casey Family Programs. (2015). Levels of Research Evidence and Benefit-Cost Data for Title IV-E Waiver Interventions. http://www.casey.org/media/Title-IV_E-Waiver-Interventions-Research-Brief.pdf

involving structured assignments to help children apply problem-solving skills in everyday situations.²⁰²

Research has demonstrated that the PSST intervention significantly decreases aggression at home and in school, decreases deviant behaviors and increases prosocial behaviors. Specifically, PSST helps the child manage the cognitive deficiencies are believed to contribute to antisocial behavior by improving communication skills, problem solving skills, impulse control, and anger management.²⁰³ Additionally, research shows enhanced outcomes for children when PSST is combined with supportive evidence based interventions for parents, including Parent Management Training and Parent Problem-Solving Intervention.²⁰⁴

Although not implemented with fidelity, JPS is currently offering programming similar to PSST.

Trauma Focused Cognitive Behavioral Therapy

Trauma-Focused Cognitive Behavioral Therapy (TF-CBT) is an evidence-based treatment approach shown to help children, adolescents, and their caregivers overcome trauma-related difficulties. TF-CBT can be provided to those children who have significant behavioral or emotional problems that are related to traumatic life events, even if they do not meet full diagnostic criteria for PTSD. It is designed to reduce negative emotional and behavioral responses following child sexual abuse, domestic violence, traumatic loss, and other traumatic events. The treatment—based on learning and cognitive theories—addresses distorted beliefs and attributions related to the abuse and provides a supportive environment in which children are encouraged to talk about their traumatic experience.²⁰⁵

The goal of TF-CBT is to help address the biopsychosocial needs of children and their parents or primary caregivers using a model of psychotherapy that combines trauma-sensitive interventions with CBT.²⁰⁶ TF-CBT also helps parents who were not abusive to cope effectively with their own emotional distress and develop skills that support their children. Through the model, children and parents are provided knowledge and skills related to processing the trauma; managing distressing thoughts, feelings, and behaviors; and enhancing safety, parenting skills, and family communication.

²⁰² SAMHSA. (2011). Interventions that Disrupt Behavior Disorders. <https://store.samhsa.gov/shin/content/SMA11-4634CD-DVD/EBPsPromisingPractices-IDBD.pdf>

²⁰³ Children's Mental Health Ontario. (2001). Evidence Based Practices for Conduct Disorder in Children & Adolescents. http://cmho.org/documents/EBP_conduct_disorder.pdf

²⁰⁴ SAMHSA. (2011). Interventions that Disrupt Behavior Disorders. <https://store.samhsa.gov/shin/content/SMA11-4634CD-DVD/EBPsPromisingPractices-IDBD.pdf>

²⁰⁵ Child Welfare Information Gateway. (2012). Trauma-Focused Cognitive Behavioral Therapy for Children Affected by Sexual Abuse or Trauma. <https://www.childwelfare.gov/pubPDFs/trauma.pdf>

²⁰⁶ National Child Traumatic Stress Network. (2008). TF-CBT. http://www.nctsn.org/nctsn_assets/pdfs/promising_practices/TFCBT_General.pdf

TF-CBT has proved successful with children and adolescents (ages 3 to 18) who have significant emotional problems (e.g., symptoms of posttraumatic stress disorder, fear, anxiety, or depression) related to traumatic life events.²⁰⁷ TF-CBT is found to be useful in reducing symptoms of PTSD as well as symptoms of depression and behavioral difficulties in children who have experienced a variety of traumas. Studies demonstrate that parents often report reductions in their child's depression, emotional distress associated with the child's trauma, and PTSD symptoms. In addition, parents also report an enhanced ability to support their children.²⁰⁸ Data from a recently completed research study shows a larger decrease in posttraumatic stress and depression scores for children whose clinicians were trained in TF-CBT when compared to those who were seen by non-TF-CBT trained clinicians, who often utilize non-directive, rapport-focused interventions.²⁰⁹ Finally, for children who have experienced trauma, TF-CBT has demonstrated an average systems cost savings of \$6,738 per child over care as usual.²¹⁰

Texas has a large number of therapists certified in TF-CBT, and that number continues to grow. Currently, of all of the therapists in Texas that are certified in TF-CBT, 92% are practicing at a Children's Advocacy Center.²¹¹ TF-CBT is offered in Tarrant County at a number of facilities, including MHMR, as well as the Cook Children's Medical Center, Lena Pope Home, One Safe Place, the Parenting Center of Tarrant County, Santa Fe Youth Services, Trauma Support Services of North Texas, and The Women's Center of Tarrant County.²¹² JPS uses principles of TF-CBT in its services to youth, although the health system is not currently delivering the intervention with fidelity.

Modular Approach to Therapy for Children with Anxiety, Depression, Trauma, or Conduct Problems

The Modular Approach to Therapy for Children with Anxiety, Depression, Trauma, or Conduct Problems (MATCH-ADTC) is a collection of therapeutic components designed to work in day-to-day practice. MATCH-ADTC addresses not only anxiety, depression, trauma-related issues, or conduct problems, but also related issues or challenges that may emerge during therapy.

²⁰⁷ Medical University of South Carolina. Project Best. What is TF-CBT.

<http://academicdepartments.musc.edu/projectbest/tfcbt/tfcbt.htm>

²⁰⁸ Child Welfare Information Gateway. (2012). Trauma-Focused Cognitive Behavioral Therapy for Children Affected by Sexual Abuse or Trauma. <https://www.childwelfare.gov/pubPDFs/trauma.pdf>

²⁰⁹ <http://www.cactx.org/news-events/texas-leads-nation-in-the-most-therapists-certified-in-trauma-focused-cogni>

²¹⁰ Casey Family Programs. (2015). Levels of Research Evidence and Benefit-Cost Data for Title IV-E Waiver Interventions. http://www.casey.org/media/Title-IV_E-Waiver-Interventions-Research-Brief.pdf

²¹¹ Children's Advocacy Centers of Texas. (2017). Texas Leads Nation in Most Therapists Certified in Trauma-Focused Cognitive Behavioral Therapy. <http://www.cactx.org/news-events/texas-leads-nation-in-the-most-therapists-certified-in-trauma-focused-cogni>

²¹² Mental Health Connection of Tarrant County. Tarrant County Services. <http://www.recognizetrauma.org/tarrant-local-services.php>.

MATCH-ADTC modules include components of cognitive behavior therapy, parent training, coping skills, problem solving, and safety planning. The modules are designed to supply providers with a collection of options for treatment delivery, and they are delivered in an order guided by a clinical algorithm, through use of flowcharts based on primary area of concern (anxiety, depression, trauma-related issues, or conduct problems).²¹³ This method allows the flexibility to modify sequencing as needed to address co-occurring problems and shifts in treatment needs. Through MATCH-ADTC., an individualized therapy protocol is created for each child by bringing together only those modules that fit the needs of that particular youth. When new problems surface during treatment, additional modules may be used to address those problems.

MATCH-ADTC has been shown to be more effective in reducing severity ratings of top problem assessments for youth receiving the intervention, compared with the ratings for those receiving usual care. It is also considered promising for reducing disruptive behavior disorders and externalizing/ antisocial behaviors, as well as improving general functioning and wellbeing.²¹⁴

Parent-Child Interaction Therapy

Parent-Child Interaction Therapy (PCIT) is an evidence-based treatment for preventing physical abuse for conduct-disordered young children (ages 2-7 years), with emphasis placed on preventing excessive child discipline, improving the quality of the parent-child relationship, and changing parent-child interaction patterns. PCIT integrates concepts from social learning theory, traditional play therapy, and attachment theory. Through the intervention, parents are taught specific skills to establish a nurturing and secure relationship with their child while increasing their child's pro-social behavior and decreasing negative behavior.²¹⁵

The program is implemented in two phases. The first phase is the Child Directed Interaction (CDI) phase during which parents develop child-centered interaction skills, and the second phase is the Parent-Directed Interaction (PDI) phase during which effective discipline skills are the focus.²¹⁶ During PCIT, therapists coach parents while they interact with their children, teaching caregivers strategies that will promote positive behaviors in children who have disruptive or externalizing behavior problems. Research has shown that, as a result of PCIT,

²¹³ SAMHSA NREPP. MATCH-ADTC. <http://nrepp.samhsa.gov/AdvancedSearch.aspx>

²¹⁴ SAMHSA NREPP. MATCH-ADTC. <http://nrepp.samhsa.gov/AdvancedSearch.aspx>

²¹⁵ Casey Family Programs. (2015). Levels of Research Evidence and Benefit-Cost Data for Title IV-E Waiver Interventions. http://www.casey.org/media/Title-IV_E-Waiver-Interventions-Research-Brief.pdf

²¹⁶ University of Florida Department of Clinical and Health Psychology. (2017). UF-PCIT Training Workshops. <http://chp.phhp.ufl.edu/academics/continuing-education/uf-pcit-training-workshops/>

parents learn more effective parenting techniques, the behavior problems of children decrease, and the quality of the parent-child relationship improves.²¹⁷

Overall, PCIT is an adaptable therapy with long lasting effectiveness that benefits parents and other caregivers. PCIT has demonstrated effectiveness in meeting the needs of trauma survivors through trauma informed adaptation, reducing the risk of child abuse, and improving child behavior and parenting skills.²¹⁸ In addition to significant changes on parent ratings and observational measures of children’s behavior problems, outcome studies have demonstrated important changes in the interactional style of the fathers and mothers in play situations with their children.²¹⁹ Research shows that PCIT can reduce recurrence rates of child abuse from 49% to 19%, as well as 25% reduction in the intensity of child behavior problems and 70% reduction in the number of child behavior problems.²²⁰

In addition, implementation of PCIT for families in the child welfare system has a benefit to cost ratio of \$11.55 for every dollar spent. For children with disruptive disorders, this same study found that PCIT yields \$1.04 in savings for every dollar spent.²²¹

Given its impact, in 2014, Children’s Advocacy Centers (CAC) of Texas became the first state CAC chapter in the nation to engage in a widespread implementation of PCIT.²²² With a grant from the Meadows Foundation, CAC of Texas trained dozens of clinicians across Texas in PCIT, partnering with CAARE Diagnostic and Treatment Center at the University of California-Davis (UCD) on the pilot project. Currently, in Tarrant County, there are three CACs in Arlington, Fort Worth, and Hurst, none of which were involved in this initial pilot. However, PCIT is currently offered at MHMR.²²³

Adolescent Coping with Depression

Adolescent Coping with Depression (CWD-A) is a cognitive-behavioral treatment-based intervention that targets specific problems typically experienced by depressed adolescents.

²¹⁷ Child Welfare Information Gateway. (2012). Parent-Child Interaction Therapy with At-Risk Families. https://www.childwelfare.gov/pubPDFs/f_interactbulletin.pdf

²¹⁸ Child Welfare Information Gateway. (2012). Parent-Child Interaction Therapy with At-Risk Families. https://www.childwelfare.gov/pubPDFs/f_interactbulletin.pdf

²¹⁹ PCIT International. (2011). What is PCIT? <http://www.pcit.org/what-is-pcit1.html>

²²⁰ Children’s Advocacy Centers of Texas. (2017). CACs in Texas receive first telehealth training in PCIT through grant from The Meadows Foundation. <http://www.cactx.org/news-events/cacs-in-texas-receive-first-telehealth-training-in-pcit-through-grant-from>

²²¹ Casey Family Programs. (2015). Levels of Research Evidence and Benefit-Cost Data for Title IV-E Waiver Interventions. http://www.casey.org/media/Title-IV_E-Waiver-Interventions-Research-Brief.pdf

²²² Children’s Advocacy Centers of Texas. (2017). CACs in Texas receive first telehealth training in PCIT through grant from The Meadows Foundation. <http://www.cactx.org/news-events/cacs-in-texas-receive-first-telehealth-training-in-pcit-through-grant-from>

²²³ Mental Health Connection of Tarrant County. Tarrant County Services. <http://www.recognizetrauma.org/tarrant-local-services.php>.

These problems include discomfort and anxiety, irrational/negative thoughts, poor social skills, and limited experiences of pleasant activities. The CWD-A consists of 16, 2-hour sessions that are conducted over an 8-week period for mixed-gender groups of up to 10 adolescents. Core components of the program include the CBT model of change, mood monitoring, increasing pleasant activities (behavioral activation), social-skills training, relaxation training, identification of negative thoughts and cognitive restructuring, communication and problem-solving training, and relapse prevention. Each participant receives a workbook that provides structured learning tasks, short quizzes, and homework forms. To encourage generalization of skills to everyday situations, adolescents are given homework assignments that are reviewed at the beginning of the subsequent session.²²⁴

Six studies of the CWD-A found significant reductions in interviewer-rated, parent-rated, and self-reported depression symptoms for treatment children when compared with those in a control group or alternative treatment group.²²⁵ In addition, this program has been demonstrated to be effective for improving social connectedness, as well as suicidal thoughts and behaviors.²²⁶

Dialectical Behavioral Therapy for Youth

Dialectical Behavioral Therapy (DBT) is another intervention appropriate for both adults and children living with behavioral health conditions. DBT for adolescents involves individual therapy and group skills training, where parents and teenagers learn together. Other components include telephone consultation (patients are encouraged to call their therapists when they feel the urge to self-harm), family therapy, and weekly consultation team meetings where the therapist checks in with other professionals to consult on the case.²²⁷

DBT is designed to help with extreme emotional instability, which clinicians call “dysregulation,” meaning the inability to manage intense emotions. Dysregulation leads to impulsive, self-destructive, or self-harming behaviors. The goal of DBT is to teach adolescents techniques to help them understand their emotions without judgment — the mindfulness component — and also to give them skills and techniques to manage those emotions and change behaviors in ways that will make their lives better. DBT skills training is very structured; for adolescents, it consists of five modules:

- (1) ***Mindfulness skills***: Being present in the moment and understanding the signs of

²²⁴ SAMHSA NREPP. Adolescent Coping with Depression. <http://nrepp.samhsa.gov/AdvancedSearch.aspx>

²²⁵ DFWHC Foundation. (2012). Adolescent Coping with Depression. <http://www.healthyntexas.org/index.php?controller=index&module=PromisePractice&action=view&pid=656>

²²⁶ SAMHSA NREPP. Adolescent Coping with Depression. <http://nrepp.samhsa.gov/AdvancedSearch.aspx>

²²⁷ Child Mind Institute. (2017) DBT: What is Dialectical Behavior Therapy? <http://childmind.org/article/dbt-dialectical-behavior-therapy/>

- unregulated emotions;
- (2) *Emotion regulation skills*: Coping with difficult situations by building pleasant, self-soothing experiences to protect from emotional extremes.
 - (3) *Interpersonal effectiveness skills*: The purpose is to teach adolescents how to interact more effectively with others, and enable them to feel more supported by others;
 - (4) *Distress tolerance skills*: About being able to recognize urges to do things that would be ineffective, such as hurting themselves or trying to kill themselves;
 - (5) *Walking the middle path skills*: Kids and parents learn how to validate one another, how to compromise and negotiate, and how to see the other person's side of things.

DBT has proven effective in treating the emotional instability and severe behavioral symptoms like self-harm and suicidal thoughts or attempts, which are seen in adolescents with other diagnoses including: drug abuse, eating disorders, depression, bipolar disorder, disruptive behavior disorders, ADHD, and anxiety.²²⁸ DBT is often used to treat adolescents with multiple problems and symptoms. A study on a Washington State juvenile offender institution found that its DBT program achieved a \$38.05 financial benefit for every dollar spent on the program.²²⁹

Today, DBT is offered at MHMR, and JPS also provides programming that uses principles from this evidence based intervention.

Adolescent Community Reinforcement Approach

The Adolescent Community Reinforcement Approach (A-CRA) is a specialized program for youths and young adults between the ages of 12 and 24 years who have substance use and co-occurring mental health disorders. A-CRA uses both behavioral and cognitive-behavioral techniques to replace environmental settings and cues that have supported alcohol or drug use with prosocial activities and new social skills that support recovery.

A-CRA is administered by a behavioral health clinician through three types of sessions: 1) for adolescents alone, 2) for parents/caregivers alone, and 3) for adolescents and parents/caregivers together. According to the youth's needs and self-assessment of happiness in multiple areas of life functioning, the therapist chooses from among 21 procedures for developing problem-solving skills to cope with day-to-day stressors. A-CRA skills training involves coaching, practice, and feedback, particularly to support the acquisition of better family relationship skills, anger management, and relapse prevention skills. Homework is assigned between sessions and consists of practicing learned skills and participating in prosocial leisure activities. The A-CRA intervention is typically delivered over 12 to 14 weeks and

²²⁸ Child Mind Institute. (2017) DBT: What is Dialectical Behavior Therapy? <http://childmind.org/article/dbt-dialectical-behavior-therapy/>

²²⁹ Casey Family Programs. (2015). Levels of Research Evidence and Benefit-Cost Data for Title IV-E Waiver Interventions. http://www.casey.org/media/Title-IV_E-Waiver-Interventions-Research-Brief.pdf

generally includes 10, 1-hour individual sessions; two, 1-hour sessions with parents/caregivers; and two, 1-hour sessions with both adolescents and parents/caregivers together. Clinicians also provide typical case-management services, including linkage to other needed community services, home/community therapy sessions, and midweek telephone calls between the therapist and the adolescent.²³⁰

A-CRA has demonstrated effectiveness in reducing substance use and issues related to both mental health and substance use²³¹ that is greater than the reductions experienced by youth served through usual care.²³²

Although not being delivered with fidelity, MHMR currently offers programming similar to the A-CRA model of care.

Multi-Systemic Therapy

Multi-Systemic Therapy (MST) is an intensive family- and community-based treatment program that focuses on addressing all environmental systems that impact chronic and violent juvenile offenders -- their homes and families, schools and teachers, neighborhoods and friends. MST recognizes that each system plays a critical role in a youth's world and each system requires attention when effective change is needed to improve the quality of life for youth and their families. The MST approach views individuals as being surrounded by a network of interconnected systems that encompass individual, family, and extra-familial (peer, school, neighborhood factors). Intervention may be necessary in any one or a combination of these systems. In MST, this "ecology" of inter-connected systems is viewed as the client. MST addresses the multiple factors known to be related to delinquency across the key settings, or systems, within which a youth lives. Using the strengths of each system (e.g., family, peers, school, neighborhood, indigenous support network) to facilitate positive change, the intervention strives to promote behavioral change in the youth's natural environment. Specific treatment techniques that facilitate these gains are integrated from therapies with the most empirical support, such as cognitive behavioral, behavioral, and pragmatic family therapies.²³³

MST works with the toughest youth offenders ages 12 through 17 who have a very long history of arrests. Increasing the parenting skills of caregivers and changing the behavior of violent and criminal youth is the foundation of the MST model. Unlike other treatment models where the

²³⁰ SAMHSA NREPP. Adolescent Community Reinforcement Approach. <http://nrepp.samhsa.gov/AdvancedSearch.aspx>

²³¹ SAMHSA NREPP. Adolescent Community Reinforcement Approach. <http://nrepp.samhsa.gov/AdvancedSearch.aspx>

²³² Henderson, C.E., Wevodau, A.L., Henderson, S.E., Colbourn, S.L., Gharagozloo, L., North, L.W., Lotts, V.A. (2016). An Independent Replication of the Adolescent-Community Reinforcement Approach with Justice-Involved Youth. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4918901/>

²³³ MST. Multisystemic Therapy: How is it Done?. <http://mstservices.com/files/howitsdone.pdf>

troubled youth sees a therapist at a clinic once a week, MST therapists go to where the youth lives, hangs out and attends school. Often, the MST therapist meets with the family and other people in the youth's life much more than once a week. They are there when needed. And since problems don't have business hours from 9 to 5, therapists on the team are on call 24 hours a day, seven days a week. Such an intensive service is possible because therapists work with a limited number of families at any given time.²³⁴

MST research demonstrates the following impact and effectiveness as a result of the intervention²³⁵:

- Long-term re-arrest rates in studies with serious juvenile offenders reduced by median of 42%
- Out-of-home placements, across all MST studies, reduced by a median of 54%
- Improved family functioning
- Decreased substance use among youth
- Fewer mental-health problems for youth
- Higher levels of client satisfaction
- Considerable cost savings

MHMR does not offer MST anymore with fidelity, although the principles of the intervention infuse services that they provide to the highest risk youth.

Trauma-Informed Care Best Practices

In addition to the evidence based practices listed above for individuals living with SMI, SUD, and SED, there are a number of best practices that can be implemented in the community to support individuals who have experienced significant trauma. Behavioral health conditions and trauma are often correlated, with 88% of men and 79% of women diagnosed with Post Traumatic Stress Disorder (PTSD) also having another co-occurring behavioral health condition.²³⁶ In addition, people who have experienced trauma are at increased risk of experiencing other maladaptive outcomes; they include the following:²³⁷

- 15 times more likely to attempt suicide
- 4 times more likely to develop a sexually transmitted disease
- 3 times more likely to be absent from work
- 3 times more likely to have serious job problems
- 2.5 times more likely to smoke
- 2 times more likely to develop chronic obstructive pulmonary disease

²³⁴ MST. (2015). What is Multisystemic Therapy?. <http://mstservices.com/>

²³⁵ MST. (2017). Multisystemic Therapy: Research at a Glance. <http://mstservices.com/files/outcomestudies.pdf>

²³⁶ SAMHSA Center for Substance Abuse Treatment. (2014) Trauma Informed Care in Behavioral Health Services. <https://www.ncbi.nlm.nih.gov/books/NBK207192/#section1.s36>

²³⁷ Mental Health Connection of Tarrant County. Statistics. <http://www.recognizetrauma.org/statistics.php>.

- 2 times more likely to have a serious financial problem

MHMR has a fairly robust trauma-informed care practice across its programs, and the agency is implementing several of the EBPs that are listed below. However, opportunities remain for both JPS and MHMR to support the expansion of these EBPs within the Tarrant County system of care.

Addiction and Trauma Recovery Integration Model

The Addiction and Trauma Recovery Integration Model (ATRIUM) is a 12-session recovery model designed for groups as well as for individuals and their therapists and counselors. The model intended to bring together peer support, psycho-education, interpersonal skills training, meditation, creative expression, spirituality, and community action to support survivors in addressing and healing from trauma. ATRIUM is designed specifically to serve survivors of sexual and physical abuse, those with substance abuse and other addictive behaviors, those who are actively engaged in harmful relationships, who self-injure, have serious psychiatric diagnoses, and for those who enact violence and abuse against others.²³⁸

Attachment, Regulation, and Competency

Attachment, Regulation, and Competency (ARC) is a framework for intervention with youth and families who have experienced multiple and/or prolonged traumatic stress. ARC identifies three core domains (Attachment, Regulation, and Competency) that are frequently impacted among traumatized youth, and which are relevant to future resiliency. Designed to be applied flexibly across child- and family-serving systems, ARC provides a theoretical framework, core principles of intervention, and a guiding structure for providers. Across the domains, routines and rituals, as well as psychoeducation, are integrated as cross-cutting elements of intervention. ARC is designed for youth from early childhood to adolescence and their caregivers or caregiving systems. MHMR is currently implementing ARC.

Child-Parent Psychotherapy

Child-Parent Psychotherapy (CPP) is a trauma-intervention that is designed for children ages 0 to 6 years who have experienced multiple trauma, as well as those whose parents have histories of chronic trauma. CPP is based on attachment theory, but the model also integrates psychodynamic, developmental, trauma, social learning, and cognitive behavioral theories.²³⁹

²³⁸ Alameda County Trauma Informed Care. (2013). ATRIUM—Addictions and Trauma Recovery Integration Model. <https://alamedacountytraumainformedcare.org/atrium-addictions-and-trauma-recovery-integration-model/>

²³⁹ National Child Traumatic Stress Network. (2012). CPP: Child-Parent Psychotherapy. http://nctsn.org/sites/default/files/assets/pdfs/cpp_general.pdf.

Typically, the child is seen with his or her primary caregiver, and the dyad is the unit of treatment. CPP examines how the trauma and the caregivers' relational history affect the caregiver-child relationship and the child's developmental trajectory. A central goal is to support and strengthen the caregiver-child relationship as a vehicle for restoring and protecting the child's mental health. Treatment also focuses on contextual factors that may affect the caregiver-child relationship (e.g., culture and socioeconomic and immigration related stressors).

Targets of the intervention include caregivers' and children's maladaptive representations of themselves and each other and interactions and behaviors that interfere with the child's mental health. Over the course of treatment, caregiver and child are guided to create a joint narrative of the psychological traumatic event and identify and address traumatic triggers that generate dysregulated behaviors and affect.²⁴⁰ CPP implementation has demonstrated effectiveness in reducing children's trauma-related behavior problems and traumatic stress symptoms, as well as strengthening of the caregiver-child attachment.²⁴¹ In Tarrant County, CPP is provided at MHMR,²⁴² and although it is not being implemented with fidelity at JPS, principles similar to CPP are used across many of their programs as well.

Essence of Being Real

The Essence of Being Real model is a manualized approach to creating, facilitating, and maintaining a peer support program for people who have experienced traumatic events. It has also been successfully used by service providers who work with trauma survivors, for peer to peer support among helpers. The Essence of Being real helps practitioners create a safe group environment for trauma survivors to test out what it is like to establish trust with others, experience safety, and make meaningful, healthy connections. It provides the framework, methods, and techniques to facilitate the development of successful peer support and examine some of the obstacles likely to be encountered.²⁴³ MHMR is currently implementing the Essence of Being Real.

Risking Connection

Risking Connection teaches a relational framework and skills for working with survivors of traumatic experiences. The focus of the model is on relationship as healing, and on self-care for

²⁴⁰ The California Evidence-Based Clearinghouse for Child Welfare. (2015). Child-Parent Psychotherapy.

<http://www.cebc4cw.org/program/child-parent-psychotherapy/detailed>

²⁴¹ National Child Traumatic Stress Network. (2012). CPP: Child-Parent Psychotherapy.

http://nctsn.org/sites/default/files/assets/pdfs/cpp_general.pdf.

²⁴² Mental Health Connection of Tarrant County. Tarrant County Services.

<http://www.recognizetrauma.org/tarrant-local-services.php>.

²⁴³ Center for Mental Health Services: National Center for Trauma-Informed Care. (2008). Models for Developing Trauma-Informed Behavioral Health Systems and Trauma Specific Services.

<http://www.ct.gov/dmhas/lib/dmhas/trauma/TraumaModels.pdf>

service providers. Risking Connection speaks to the particular challenge of maintaining safe and trusting alliances with individuals who have been repeatedly hurt within the context of significant relationships. While others facilitating a safe and trusting therapeutic environment is necessary in all therapies, it is particularly relevant with survivors of trauma for whom themes of safety and trust typically emerge in the therapeutic process. Risking Connection frames the therapeutic alliance as the basis for developing a secure attachment, without which techniques would be unsuccessful. Themes such as trust and safety are well served in relational approaches such as Risking Connection, which emphasize the importance of establishing trust and mutuality in the therapeutic relationship.²⁴⁴

Sanctuary Model

The Sanctuary Model is a theory-based, trauma-informed, trauma-responsive, evidence-supported, whole culture approach that has a clear and structured methodology for creating or changing an organization's approach. The model offers a set of interactive tools to change people's minds and the way we go about working together, thinking together, acting together, and living together. Whether or not Sanctuary "works" is entirely dependent on the ways in which groups of people implement the methodology we have developed. This methodology has been developed and honed over the course of the last thirty-plus years and is grounded in several hundred years of accumulated wisdom - as the Bible points out, there is nothing new under the sun.²⁴⁵

Seeking Safety

Seeking Safety is an evidence-based, present-focused counseling model to help people attain safety from trauma and/or substance abuse. It can be conducted in group (any size) and/or individual modality. It is an extremely safe model as it directly addresses both trauma and addiction, but without requiring clients to delve into the trauma narrative (the detailed account of disturbing trauma memories), thus making it relevant to a very broad range of clients and easy to implement. The key principles of Seeking Safety are safety as the overarching goal, integrated treatment, a focus on ideals to counteract the loss of ideals in both PTSD and substance abuse, knowledge of four content areas (cognitive, behavioral, interpersonal, and case management), and attention to clinical processes. The model has been delivered successfully by peers in addition to professionals of all kinds and in all settings. Seeking Safety

²⁴⁴ Tokayer, N. (2001). A brief note on research support for the Risking Connection Approach. http://riskingconnection.com/rc_pdfs/RC_ResearchPage/ABriefNoteonResearchSupportforthe.pdf

²⁴⁵ Bloom, S. (2017). The Sanctuary Model: Four Pillars. <http://sanctuaryweb.com/TheSanctuaryModel/THESANCTUARYMODELFOURPILLARS.aspx>

can be conducted over any number of sessions available, more sessions are considered better when possible.²⁴⁶

In Tarrant County, Seeking Safety is offered at MHMR,²⁴⁷ and JPS incorporates Seeking Safety principles into its programs as well.

Trauma, Addiction, Mental Health, and Recovery

Trauma, Addiction, Mental Health and Recovery (TAMAR) is a trauma-focused program for women that has been implemented in select Maryland detention centers. The TAMAR program aims to provide appropriate services to trauma victims and break the cycle of substance abuse, arrest, and incarceration. The TAMAR program provides a series of group sessions that meet for 90 minutes (typically on a twice-weekly basis) and is designed to provide participants with necessary techniques to self-soothe and self-regulate. Facilities that are implementing TAMAR have received training on trauma for all staff, and employ a trauma specialist at each facility. Up to 15 TAMAR modules may be used in the program. These modules incorporate psychodynamic therapy with expressive art therapy and psycho-educational techniques.²⁴⁸

Trauma Affect Regulation: Guide for Education and Therapy

Trauma Affect Regulation: Guide for Education and Therapy (TARGET) is an educational and therapeutic approach for the prevention and treatment of post-traumatic stress disorders (PTSD). TARGET provides a seven-step sequence of skills, called the FREEDOM Steps, which are designed to enable youth and adults to understand and gain control of trauma-related reactions triggered by current daily life stresses. The goal in TARGET is to help youth and adults recognize their personal strengths using the FREEDOM Steps, and to use these skills consistently and purposefully when they experience stress reactions in their current lives.²⁴⁹

Trauma Recovery and Empowerment Models

The Trauma Recovery and Empowerment Models (TREM/M-TREM) are fully manualized group interventions for women (TREM) and men (M-TREM) who are trauma survivors. The model offers group-based interventions that address a broad range of trauma experiences among people living with behavioral health conditions. Both TREM and M-TREM use cognitive restructuring, psychoeducation, and coping skills training, weaving each of these techniques throughout the intervention, which incorporates a specific recovery topic in each weekly 75-minute session. The current version of TREM is 29 sessions long while M-TREM comprises 24

²⁴⁶ Treatment Innovations. (2016). Seeking Safety. <http://www.treatment-innovations.org/ss-description.html>

²⁴⁷ Mental Health Connection of Tarrant County. Tarrant County Services. <http://www.recognizetrauma.org/tarrant-local-services.php>.

²⁴⁸ <http://cjinvolvedwomen.org/innovator-profile-trauma-addiction-mental-health-and-recovery-tamar/>

²⁴⁹ <http://www.advancedtrauma.com/services.html>

sessions. TREM groups are for women only with female co-leaders; M-TREM groups are for men and routinely have male co-leaders. TREM is organized into three major parts: empowerment, trauma education, and skill-building. M-TREM is similarly organized but differs in the content of the three major parts.²⁵⁰

EBPs and Services for Geriatric Populations (over 65)

Recent data indicate that over 20-25% of adults aged 65 years of age and older meet criteria for a mental health condition,²⁵¹ with depression being the most common mental health problem among this population.²⁵² About half of older adults with depression also suffer with chronic pain,²⁵³ so recognizing and treating depression in adults must also be coordinated with medical issues. In addition, about a fifth (20%) of older adults are thought to have substance abuse problems, the bulk of whom consume alcohol in excess of agreed upon standards, but a much smaller percentage of older adults (3-5%) have substance abuse issues severe enough to be diagnosed as a substance use disorder.²⁵⁴

The behavioral health service system for the elderly falls into three different categories of primary, secondary, and tertiary care, as illustrated by the following figure.

²⁵⁰ <http://www.cdc1.org/web/page/657/interior.html>

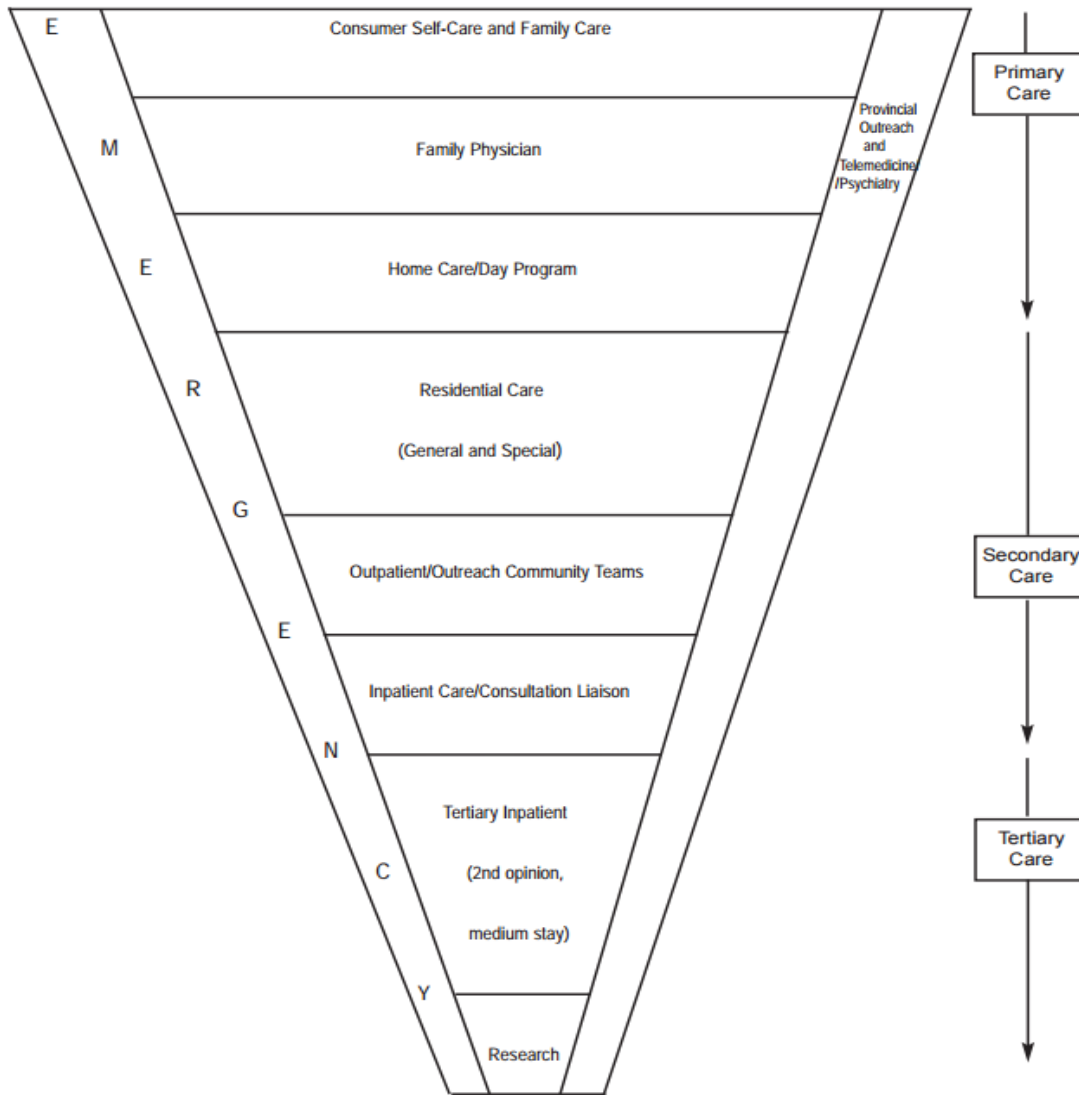
²⁵¹ American Psychological Association. (2017). Mental and Behavioral Health and Older Americans. <http://www.apa.org/about/gr/issues/aging/mental-health.aspx>

²⁵² PEARLS. (2016). PEARLS for Older Adults. <http://www.pearlsprogram.org/Our-Program/PEARLS-for-Older-Adults.aspx>

²⁵³ The John. A. Hartford Foundation. (2011). Mental Health and the Older Adult. <http://www.johnhartford.org/ar2011>

²⁵⁴ Friedman, M.B., & Williams, K.A., (2015). Substance abuse and misuse in older adults. *Behavioral Health News*. <http://www.mhaofnyc.org/wp-content/uploads/2014/11/Substance-Abuse-BHN-Winter15.pdf>

Figure 8: Behavioral Health Care Service System for the Elderly



Source: British Columbia Ministry of Health Services: Elderly Mental Health Care Working Group. (2002). Guidelines for Elderly Mental Health Care Planning for Best Practices for Health Authorities.

http://www.health.gov.bc.ca/library/publications/year/2002/MHA_elderly_mentalhealth_guidelines.pdf

Although this EBP review focuses on the secondary and tertiary levels of care, it is important to note that many community supports for the geriatric population are provided by informal caregivers (i.e., family, close friends, community members). Therefore, it is critical that service providers identify these individuals and coordinate with them around the care of each geriatric patient.²⁵⁵

²⁵⁵ National Academy of Sciences. (2008). Retooling for an Aging America: Building the Health Care Workforce. Patients and Informal Caregivers. <https://www.ncbi.nlm.nih.gov/books/NBK215403/>

Overall, older adults with evidence of behavioral health disorders are less likely than younger and middle aged adults to receive mental health services from a mental health specialist.²⁵⁶ Older Americans underutilize behavioral health services for a variety of reasons, including: inadequate insurance coverage; lack of coordination among primary care, mental health and aging service providers; stigma surrounding mental health and its treatment; denial of problems; and access barriers such as transportation.²⁵⁷ In addition, there is also a shortage of mental health professionals available to provide services to older adults, and this will become more dire as the number of older adults with mental health conditions steadily rises.²⁵⁸ For example, there are currently fewer than 1,800 geriatric psychiatrists in the United States, and by 2030 there will be only about 1,650, representing less than one appropriately trained psychiatrist per 6000 older adults with mental health and substance-use disorders.²⁵⁹

Both Tarrant County and Texas have a younger Median Age than the U.S., but the 65+ age group has been the fastest growing age group, with a 22% growth between 2010 and 2014.²⁶⁰

The number of people over the age of 65 years with Alzheimer’s disease alone in Tarrant County is projected to increase by 44% by 2025.²⁶¹ This growth in the population of older adults within the Tarrant County community makes it critical for the system of care to begin to develop practices and programs to support the growing need.

Many of the evidence based practices described above in relation to serving people with SMI and SUD, including cognitive behavioral therapy, screening (CBT), brief intervention, and referral to treatment (SBIRT), and problem solving therapy (PST) are also appropriate interventions for serving older adults. However, there are some additional practices that are designed specifically for older adults living with behavioral health conditions that are worth highlighting as best practices for serving older adults in a number of settings, including primary care, behavioral health, and in the home, a selection of which are delineated below.

²⁵⁶ PEARLS. (2016). PEARLS for Older Adults. <http://www.pearlsprogram.org/Our-Program/PEARLS-for-Older-Adults.aspx>

²⁵⁷ American Psychological Association. (2017). Mental and Behavioral Health and Older Americans. <http://www.apa.org/about/gr/issues/aging/mental-health.aspx>

²⁵⁸ The John. A. Hartford Foundation. (2011). Mental Health and the Older Adult. <http://www.johnhartford.org/ar2011>

²⁵⁹ Bartels S., & Naslund J. (2013). The Underside of the Silver Tsunami — Older Adults and Mental Health Care:: New England Journal of Medicine 368; 6.

²⁶⁰ United Way of Tarrant County. (2015). 2015 United Way Tarrant County Community Assessment. <http://unitedwaytarrant.org/wp-content/uploads/2015/12/2015-COMMUNITY-ASSESSMENT.pdf>

²⁶¹ United Way of Tarrant County. (2015). 2015 United Way Tarrant County Community Assessment. <http://unitedwaytarrant.org/wp-content/uploads/2015/12/2015-COMMUNITY-ASSESSMENT.pdf>

Only a couple of the following EBPs specific to older adults are being delivered by JPS or MHMR, leaving ample room for expansion of these specialized services within Tarrant County's delivery system.

Geriatric Inpatient Best Practices

Although there are no official evidence based practices designed for inpatient care for the geriatric population, there are guidelines and best practices that can inform care delivery for this population within inpatient units.

For instance, some hospitals have implemented **Acute Care for Elders (ACE) units**, or inpatient units that are specifically designed to serve older adults. The distinguishing feature of an ACE unit is the use of an interdisciplinary team model within the hospital setting, as opposed to a multidisciplinary model in which providers from all disciplines deliver care but practice predominantly independently or in silos. Within an ACE Unit, the interdisciplinary team model integrates disciplines to collaboratively develop the patient-centered care plan. ACE unit teams typically consist of a geriatrician, a nurse coordinator, staff nurses, rehabilitation therapists, pharmacists, dietitians, and social workers/care managers. The ACE unit model of care consists of the proactive identification and management of geriatric syndromes, frequent (often daily) interdisciplinary team rounds that focus on patient-centered vs. disease-centered care, care transition planning from the day of admission, communication of team recommendations to the appropriate caregiver (i.e., physician, nurse, family, patient), and often environmental modifications that promote safe mobility, cognitive stimulation, and an overall less institutional and more homelike atmosphere.²⁶² ACE unit design modifications may include the use of color contrasting for low vision; handrails in bathrooms, patient rooms, and hallways; furniture designed to ease transfers; and a congregate room as a destination for group activities (e.g., music or art therapy sessions).²⁶³

The **Geriatric Resource Nurse (GRN) Model** also offers some guidance around improving inpatient care for the geriatric population. The underlying goal of the model is to improve the geriatric knowledge and expertise of the bedside nurse, which is thought to be foundational to implementing system wide improvement in the care of older adult patients. The GRN model is an educational and clinical intervention model that prepares staff nurses as the clinical resource person on geriatric issues to other nurses on their unit. GRNs are trained by geriatric advanced practice nurses to identify and address specific geriatric syndromes such as falls and confusion, and to implement care strategies that discourage the use of restrictive devices and promote

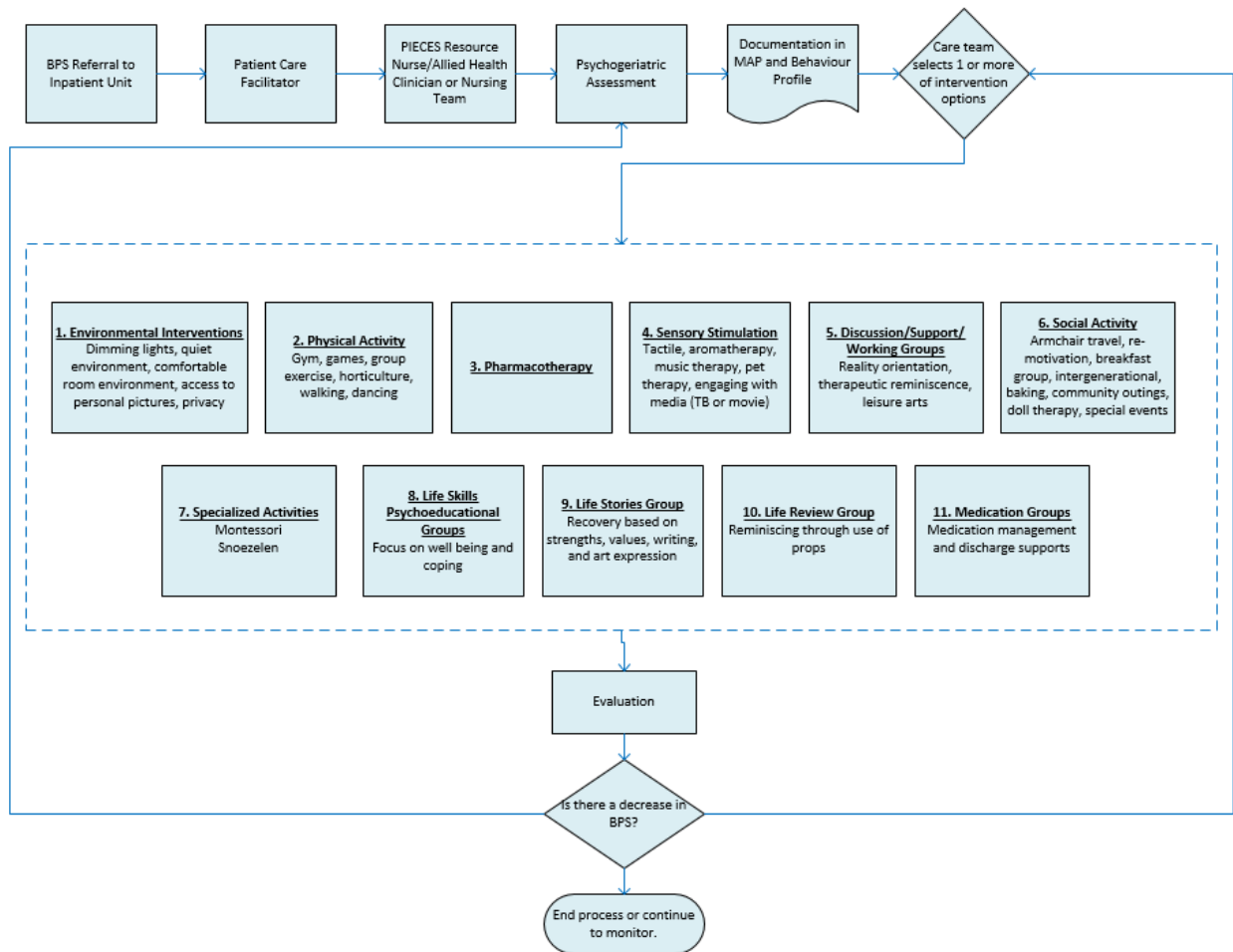
²⁶² Flood, K.L., & Allen, K.R. (2013). ACE Units Improve Complex Patient Management. <http://www.todaysgeriatricmedicine.com/archive/090913p28.shtml>

²⁶³ Flood, K.L., & Allen, K.R. (2013). ACE Units Improve Complex Patient Management. <http://www.todaysgeriatricmedicine.com/archive/090913p28.shtml>

patient mobility. Implementation of the GRN model has demonstrated effectiveness in improving nurses' perceptions of caring for acutely ill older adults.²⁶⁴

One last example of best practice in geriatric inpatient care comes from the Ontario Shores Centre for Mental Health Science, which convened an inter-professional best practices working group to raise the bar in the delivery of inpatient care for the geriatric population (over 65 years). As a culmination of the group's research and innovation, they developed a **therapeutic model for geriatric psychiatry inpatient services** illustrated by the following figure:

Figure 9: Geriatric Inpatient Care Process Map: Behavioral & Psychological Symptoms (BPS)



Source: Ontario Shores Centre for Mental Health Sciences. (2011). Geriatric Psychiatry: Therapeutic Model for Inpatient Care. <http://seniorfriendlyhospitals.ca/files/Ontario%20Shores%20Therapeutic%20Model%20of%20Care.pdf>

²⁶⁴ NICHE. Models of Care. <http://www.nicheprogram.org/models-of-care/>

Using this Care Process Map as a guide, there are additional core components that can be elevated as best practices for providing inpatient care to the geriatric population, delineated below.

First, critical to service planning for the geriatric population is a **comprehensive psychosocial assessment** that identifies the needs of each patient across disciplines. PIECES, which considers each individual's **P**hysical, **I**ntellectual, and **E**motional health, supportive strategies to maximize **C**apabilities, the individual's social and physical **E**nvironment, and his/her **S**ocial self (cultural, spiritual, Life Story), offers a practical framework for assessment and developing supportive care strategies.²⁶⁵ Another assessment tool appropriate for the geriatric population is the Comprehensive Geriatric Assessment, which includes assessment of medical, psychological, social, and environmental components, as well as functional components (i.e., the individual's level of activities of daily living and instrumental activities of daily living).²⁶⁶

Based on the comprehensive assessment results, interventions and considerations for care for older adults on the inpatient unit can cross a number of domains, including but not limited to:

- **Environmental Considerations:** Soft lighting, with ample natural daylight, including sunlight in patient rooms can optimize patient wellbeing. In addition, focus on creating a home-like environment (i.e., reducing the institutional feel of the facility, offering patients the opportunity to display personal pictures in their rooms when appropriate) has been associated with enhanced emotional and intellectual wellbeing.²⁶⁷
- **Pharmacotherapy:** Because older patients often have multiple chronic conditions and use polypharmacy (i.e., when patients take multiple medications concurrently), identifying and monitoring existing medications, including potential medication interactions, is critical when serving older adults. Including a pharmacist as an expert advocate and prescriber on the treatment team for older adults can yield safer and more effective medication regimens for older adult populations served in inpatient units.²⁶⁸
- **Psychoeducational Groups:** Oftentimes, older adults will experience “late-life transitions,” such as coping with loss, as well as adjusting to grandparenthood, caregiving for a spouse, and/or retirement/reduced income. These late life transitions

²⁶⁵ P.I.E.C.E.S. Learning & Development Model. (2013). A practical, effective approach to change and continuous quality improvement. <http://pieceslearning.com/>

²⁶⁶ Wieland, D., & Hirth, V. (2003). Comprehensive Geriatric Assessment.

http://www.medscape.com/viewarticle/465308_4

²⁶⁷ Karlin, B.E., & Zeiss, R.A. Environmental and Therapeutic Issues in Psychiatric Hospital Design: Toward Best Practices.

https://www.researchgate.net/publication/6758958_Best_Practices_Environmental_and_Therapeutic_Issues_in_Psychiatric_Hospital_Design_Toward_Best_Practices

²⁶⁸ Lee, J.K., Alshehri, S., Kutbi, H.I., & Martin, J.R., (2015). Optimizing pharmacotherapy in elderly patients: the role of pharmacists. <https://www.dovepress.com/optimizing-pharmacotherapy-in-elderly-patients-the-role-of-pharmacists-peer-reviewed-fulltext-article-IPRP>

can impact an individual's functioning and wellbeing. For these types of issues, group counseling has long been identified as the treatment of choice for most problems and challenges of later life. Both topic-specific groups (e.g., those dealing with topics such as widowhood, specific health challenges, adjustment to retirement, and creation of leisure lifestyles) and participant-specific groups (e.g., groups designed for older men, older women, bereaved persons, and older adults dealing with substance abuse) are recommended and have demonstrated effectiveness in inpatient settings.²⁶⁹

Community-Based (Outpatient) Evidence Based Practices for Older Adults

In addition to the above best practices and considerations for inpatient settings, there are a number of evidence based practices specifically designed to meet the needs of older adults in community settings.

Cognitive Behavioral Therapy for Late-Life Depression

Cognitive behavioral therapy (CBT) for late-life depression (LLD) refers to several treatment programs that are rooted in the original CBT, described above in relation to EBPs for individuals living with SMI, which have been modified to meet the needs of older adults. This conceptual model integrates case conceptualization (and treatment planning) with information about the client's medical and functional status, social support network, role engagement, and coping strategies that have been successful in the past.²⁷⁰ CBT-LLD is an effective, problem focused model for older adults with depression, examining and treating present-day problems that negatively impact the client's quality of life.²⁷¹ CBT-LLD has demonstrated effectiveness in reducing depression and depressive symptoms and improving general functioning and wellbeing.²⁷²

MHMR is currently implementing CBT-LLD as part of its comprehensive service array.

Cognitive Bibliotherapy

Cognitive Bibliotherapy is a self-directed, non-manualized intervention that focuses on altering thought patterns that cause or maintain depression. It is delivered through self-guided written materials with guidance from a mental health practitioner. The model entails reading books and completing written exercises that are designed to teach information about depression and ways to reduce its symptoms. The reading materials and written exercises are completed as

²⁶⁹ Myers, J.E., & Harper, M.C., (2004). Evidence-Based Effective Practices with Older Adults. *Journal of Counseling and Development*. <https://pdfs.semanticscholar.org/5177/ccfc92bc8f7b94576563b3d7b164cdc39681.pdf>

²⁷⁰ SAMHSA NREPP. (2016). Cognitive Behavioral Therapy for Late-Life Depression. <http://nrepp.samhsa.gov/ProgramProfile.aspx?id=88#hide1>

²⁷¹ American Psychological Association. (2013). Cognitive–Behavioral Therapy for Late-Life Depression. <https://www.apa.org/pubs/videos/4310907.aspx>

²⁷² SAMHSA NREPP. (2016). Cognitive Behavioral Therapy for Late-Life Depression. <http://nrepp.samhsa.gov/ProgramProfile.aspx?id=88#hide1>

homework assignments at the participant's own pace.²⁷³ Given its individually-driven nature, Cognitive Bibliotherapy can also be used as a homework assignment when conducting cognitive therapy with older adults.²⁷⁴ Cognitive Bibliotherapy participants are first taught to monitor depressive symptoms and then are introduced to the concept of cognitive distortions and techniques to help them question depressive thoughts and improve their mood. The reading materials for Cognitive Bibliotherapy are divided into seven parts: (1) theory and research; (2) practical applications (i.e., building self-esteem, defeating guilt); (3) realistic depressions (i.e., depression is not sadness); (4) prevention and personal growth; (5) defeating hopelessness and suicide; (6) coping with the stresses and strains of daily living; and (7) the chemistry of mood (i.e., the mind-body connection, antidepressant medications). The intervention has been found to be effective in the treatment of mild to moderate levels of depression and can be completed within four weeks with weekly contacts from a mental health professional who has expertise in CBT and depression.²⁷⁵

Functional Adaptation Skills Training

Functional Adaptation Skills Training (FAST) is specifically designed for community-dwelling middle-aged and older patients with schizophrenia or psychotic mood disorder. FAST is a manualized social–cognitive theory based behavioral intervention focused on improving six areas of everyday functioning: medication management, social skills, communication skills, organization and planning, transportation, and financial management. The FAST program consists of 24 semi-weekly, 120- minute group sessions led by two individuals: a masters/doctoral-level therapist and a para-professional/nursing staff. A typical FAST session includes the following: 1) review of the appropriate weekly class agenda; 2) review of homework; 3) opportunity for praise for homework practiced; 4) brief discussion of application of skills learned during homework exercise to other life domains (generalization); 5) introduction to new concept/review of current concept; 6) in-session practice including behavioral modeling, role-playing, and reinforcement; 7) review of homework; and 8) review of skills learned during the session. FAST has demonstrated effectiveness in producing global

²⁷³ Saginaw County Community Mental Health Authority. (2013). A guide to evidence-based practices for older adults with mental illness. <https://www.sccmha.org/userfiles/filemanager/293/>

²⁷⁴ Hartman-P., & McClure, L. (2006). A model of service delivery: Meeting the behavioral healthcare needs of community residing older adults. <https://www.nationalregister.org/pub/the-national-register-report-pub/the-register-report-spring-2006/a-model-of-service-delivery-meeting-the-behavioral-healthcare-needs-of-community-residing-older-adults/>

²⁷⁵ Saginaw County Community Mental Health Authority. (2013). A guide to evidence-based practices for older adults with mental illness. <https://www.sccmha.org/userfiles/filemanager/293/>

improvements on a performance-based measure of everyday functioning, even among older adults with very longstanding schizophrenia or other psychotic mood disorders.²⁷⁶

Geriatric Resources for Assessment and Care of Elders

The Geriatric Resources for Assessment and Care of Elders (GRACE) model of primary care for low-income seniors and their primary care physicians (PCPs) was developed to improve the quality of geriatric care to optimize health and functional status, decrease excess healthcare use, and prevent long-term nursing home placement.²⁷⁷ Through this model, a team consisting of a social worker and nurse practitioner collaborates with a larger interdisciplinary team and primary care physicians to develop and implement individualized care plans for low-income seniors. The social worker/nurse team proactively manages and coordinates the patient's care on an ongoing basis through regular telephone and in-person contact with both patients and providers. GRACE has demonstrated effectiveness in improving a variety of important metrics related to care for older adults, including improvement in falls, depression, medication management, and advance directives.²⁷⁸

Healthy IDEAS (Identifying Depression, Empowering Activities for Seniors)

Healthy IDEAS is a depression self-management program designed to detect and reduce the severity of depressive symptoms in older adults with chronic conditions and functional limitations. The program incorporates four evidence-based components into the ongoing service delivery of care/case management or social service programs serving older individuals in the home environment over several months. Healthy IDEAS program components include screening and assessment of depressive symptoms, education about depression and self-care for clients and family caregivers, referral and linkage to health and mental health professionals, and behavioral activation. Behavioral activation is a brief, structured approach to help clients reduce depressive symptoms through increased involvement in meaningful activities, which are pleasurable or reduce stress. For this intervention, the presence and severity of depressive symptoms will determine the scope and duration of the intervention. The core program

²⁷⁶ Patterson, T.L., McKibbin, C., Taylor, M., Goldman, S., Davila-Fraga, W., Bucardo, J., Jeste, D.V. (2003). Functional Adaptation Skills Training (FAST): A pilot psychosocial intervention study in middle-aged and older patients with chronic psychotic disorders.

<http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.608.1382&rep=rep1&type=pdf>

²⁷⁷ Indiana University School of Medicine. (2016). Geriatric Resources for Assessment and Care of Elders (GRACE). <http://medicine.iupui.edu/iucar/research/grace/>

²⁷⁸ AHRQ. (2014) Team-developed care plan and ongoing care management by social workers and nurse practitioners result in better outcomes and fewer emergency department visits for low-income seniors. <https://innovations.ahrq.gov/profiles/team-developed-care-plan-and-ongoing-care-management-social-workers-and-nurse-practitioners>

components/steps are delivered over 3 to 6 months through a minimum of three in-person visits in the client’s home and five or more telephone contacts.²⁷⁹

Improving Mood—Promoting Access to Collaborative Treatment

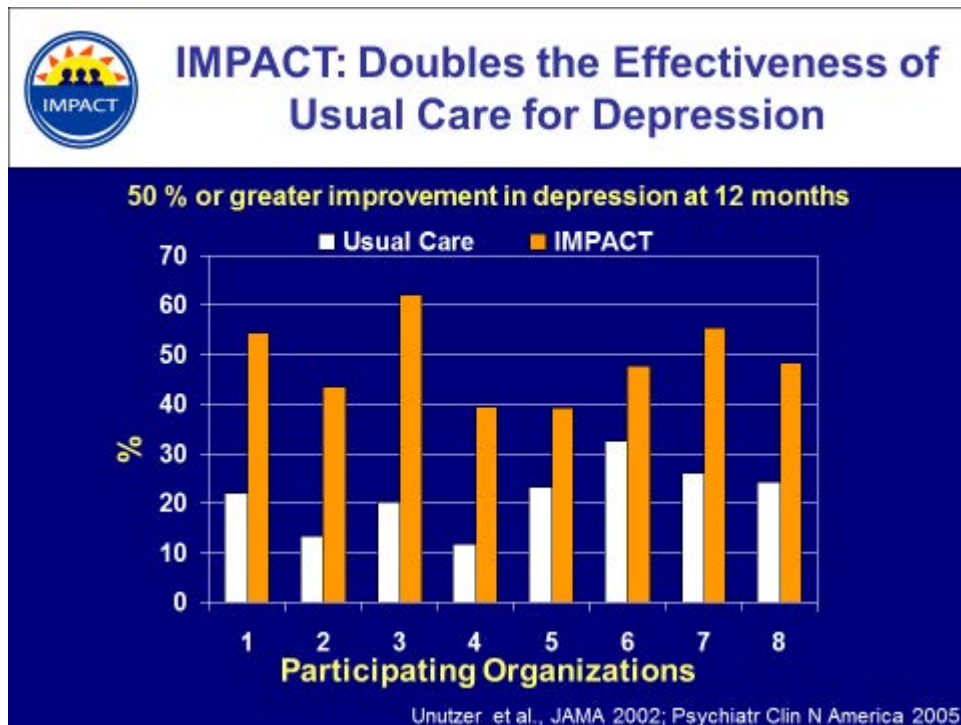
Improving Mood—Promoting Access to Collaborative Treatment (IMPACT), also known as Collaborative Care, is an evidence based practice designed to treat older adults who are living with depression as well as a chronic health problem. The intervention is designed to be delivered in a primary care setting. The IMPACT model uses a stepped-care approach in which a trained depression care manager (DCM)—usually a nurse, social worker, or psychologist—works with the patient, the patient’s primary care provider, and a psychiatrist to develop and administer a course of treatment. At the beginning of the intervention, the patient meets with the DCM and receives a 20-minute educational video and a booklet about late-life depression. During this meeting, the DCM completes an initial assessment of the patient’s depressive symptoms, encourages the patient to engage in behavioral activation (e.g., physical activity, pleasant events), and discusses options for treatment over the next 10–12 weeks (i.e., the first treatment step): antidepressant medication or a course of six to eight sessions of psychotherapy (e.g., Problem Solving Treatment in Primary Care) delivered by the DCM in a primary care setting. For patients already taking antidepressant medication, treatment can include increasing the dose, augmenting the medication with a course of psychotherapy, or switching to a different medication or psychotherapy. The DCM then works with the patient and the patient’s primary care provider to establish the treatment plan.²⁸⁰ IMPACT has been shown to more than double the effectiveness of depression treatment for older adults in primary care settings, as illustrated by the graphic below.²⁸¹

²⁷⁹ Schneider, E. Healthy IDEAS (Identifying Depression, Empowering Activities for Seniors). <https://www.ncoa.org/wp-content/uploads/Healthy-Ideas.pdf>

²⁸⁰ Administration for Community Living. IMPACT (Improving Mood—Promoting Access to Collaborative Treatment). https://acl.gov/Programs/CPE/OPE/docs/IMPACT_summary.pdf

²⁸¹ AIMS Center. (2017). IMPACT: Improving Mood—Promoting Access to Collaborative Treatment. <http://aims.uw.edu/impact-improving-mood-promoting-access-collaborative-treatment>

Figure 10: Results of the IMPACT Model



Source: Bartels, Stephen J, Coakley, Eugenie H, Zubritsky, Cynthia, Ware, James H (2004) Improving Access to Geriatric Mental Health Services: A Randomized Trial Comparing Treatment Engagement with Integrated Versus Enhanced Referral Care for Depression, Anxiety, and At-Risk Alcohol Use; Use; The American Journal of Psychiatry; 161, 8.

Interpersonal Psychotherapy

Interpersonal psychotherapy (IPT) is a time-limited therapy that has been found to be effective in the treatment of depression in different age groups, including older adults. IPT focuses on one or two interpersonally relevant problems including interpersonal role disputes, role transitions, grief, and interpersonal deficits.²⁸² IPT is a structured, time-limited therapy for depression. In the initial phase of the treatment the depressive symptoms are explored and psycho-education about depression is given. The interpersonal context of the patient is explored and the depressive symptoms are linked to recent interpersonal events. There are four possible treatment focuses to be distinguished: complicated grief, interpersonal conflict, role-transition and interpersonal deficit. One of these focuses is chosen. The nature of this specific interpersonal event is explored and accompanying emotions are clarified. The patient is supported in considering and working out possible solutions. It is assumed that once the patient has gained mastery over one problem area this effect will generalize to other areas.

²⁸² American Psychological Association. (2007). Interpersonal Psychotherapy for Older Adults with Depression. <http://www.apa.org/pubs/videos/4310796.aspx>

During the last sessions, the therapy is evaluated, and attention is paid to the prevention of relapses.²⁸³

Both JPS and MHMR are implementing IPT within their systems of care for older adults.

Prevention of Suicide in Primary Care Elderly: Collaborative Trial

Prevention of Suicide in Primary Care Elderly: Collaborative Trial (PROSPECT) aims to prevent suicide among older primary care patients by reducing suicidal ideation and depression. It also aims to reduce their risk of death. The intervention uses three components, which include: (1) recognition of depression and suicidal ideation by primary care physicians, (2) application of a treatment algorithm for geriatric depression in the primary care setting, and (3) treatment management by health specialists (e.g., nurses, social workers, psychologists). The treatment algorithm assists primary care physicians in making appropriate care choices during the acute, continuation, and maintenance phases of treatment. Health specialists collaborate with physicians to monitor patients and encourage patient adherence to recommended treatments. Through PROSPECT, patients are treated and monitored for 24 months.²⁸⁴

Program to Encourage Active and Rewarding Lives for Seniors

PEARLS for Older Adults was designed to treat minor depression and dysthymic disorder in adults aged 60 and older. The PEARLS depression intervention is typically conducted over six to eight sessions in a six-month period and consists of problem solving treatment (PST), behavioral activation, and pleasant activities scheduling.²⁸⁵ Results show that PEARLS participants are more likely to have a significant reduction in depression when compared to treatment as usual, and the program is helpful in effectively screening for and treating frail older adults through community-based organizations that used non-pharmacological methods.²⁸⁶

Progressively Lowered Stress Threshold Model

The Progressively Lowered Stress Threshold Model (PLST) can provide a frame or reference to understand and reduce the challenging behaviors associated with Alzheimer's disease and related dementias. According to the PLST, people with these conditions have difficulties

²⁸³ Van Schaik, D.J.F., van Marwijk, H.W.J., Beekman, A.T.F., de Haan, M. & van Dyck, R. (2007). Interpersonal psychotherapy (IPT) for late-life depression in general practice: uptake and satisfaction by patients, therapists and physicians. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2077866/>

²⁸⁴ Suicide Prevention Resource Center. (2007). PROSPECT (Prevention of Suicide in Primary Care Elderly: Collaborative Trial). <http://www.sprc.org/resources-programs/prospect-prevention-suicide-primary-care-elderly-collaborative-trial>

²⁸⁵ PEARLS. (2016). PEARLS for Older Adults. <http://www.pearlsprogram.org/Our-Program/PEARLS-for-Older-Adults.aspx>

²⁸⁶ The National Council for Behavioral Health Care. (2015). Older Adults and Mental Health. <https://www.thenationalcouncil.org/topics/older-adults-behavioral-health/>

receiving, processing, and responding to environmental stimuli. These difficulties are the direct result of the progressive deterioration in cognitive, affective, and functional abilities that accompany dementia. Severity and frequency of behavior varies based upon the environmental stimuli and the person's stage of dementia. The more advanced the stage of dementia the more behaviors typically present.²⁸⁷ The PLST model focuses on reducing environmental stress in order to reduce behavioral disturbances associated with dementia. The model is based on the provision of caregiver psychoeducation that is designed to help caregivers understand behaviors and plan for the care of individuals with dementia.²⁸⁸

Reminiscence Therapy (RT)

Reminiscence therapy (RT) entails discussion of a person's past activities, events, and experiences in individual or group session in order to help them resolve conflicts and accept both the successes and failures in their lives. It is typically used in long-term care facilities, senior housing, and senior community centers and delivered by trained practitioners of different disciplines (e.g., nursing, social work, and psychology) over the course of four to twelve weekly sessions of sixty to ninety-minutes in duration. RT can also be used in outpatient settings and can be integrated into other approaches, including cognitive behavioral therapy. RT is appropriate for older with major depression, anxiety, dementia, grief and substance abuse. Weekly topics are used to guide participants in recalling memories from different stages of their lives and to stimulate discussion of major life events in order to promote feelings of mastery over past and present life events by counteracting learned helplessness. In some studies, RT has been found to be effective in treating mild levels of depression and can lead to reductions in hopelessness and functional disability, and improve life satisfaction.²⁸⁹

Integrated Primary and Behavioral Health Care in Corrections

Across the country there is a growing awareness that the health care provided in correctional facilities is part of a larger continuum of community health care and public health. Criminal justice-involved individuals fare worse in terms of health and behavioral health care than the general population. Compared with the general population, jail and prison inmates have higher odds of hypertension, asthma, arthritis, cervical cancer, and hepatitis.²⁹⁰ Nationally,

²⁸⁷ Warchol, K. (2010) The "Progressively Lowered Stress Threshold" Model—Understanding and Minimizing Challenging Behavior. <https://www.crisisprevention.com/Blog/October-2010/The-Progressively-Lowered-Stress-Threshold-Model-U>

²⁸⁸ Saginaw County Community Mental Health Authority. (2013). A guide to evidence-based practices for older adults with mental illness. <https://www.sccmha.org/userfiles/filemanager/293/>

²⁸⁹ Saginaw County Community Mental Health Authority. (2013). A guide to evidence-based practices for older adults with mental illness. <https://www.sccmha.org/userfiles/filemanager/293/>

²⁹⁰ Binswanger, I.A., Krueger, P.M., & Steiner, J.F. (2009). Prevalence of chronic medical conditions among jail and prison inmates in the USA compared with the general population. <https://www.ncbi.nlm.nih.gov/pubmed/19648129>

approximately 14% of men and 24% of women who are incarcerated have a serious mental illness (SMI), a statistic that far exceeds the general adult population, where 4.2% of adults have SMI. Further compounding the issue, the majority of adults with SMI who are booked in jails each year also present with a co-occurring substance use disorders (SUD).²⁹¹ In Texas specifically, more than half (52%) of individuals in the state's psychiatric hospital system are part of the forensic population, and as of April of 2016, there were nearly 400 justice-involved individuals waiting in local jails pending admission to a state psychiatric hospital.²⁹²

Nearly all incarcerated men and women return to the community within two years, and their chronic diseases, mental illnesses and substance use disorders remain with them before, during and after incarceration.²⁹³ In recognition of this and in support of easing the transition from incarceration back to the community, the Select Committee on Mental Health Report, described above, recommended that the Texas state legislature review suspension rather than termination of Medicaid benefits for those in jail.²⁹⁴ This type of reform is happening in many places around the country²⁹⁵, and is instigating health care providers in prisons and jails to begin to consider adopting new models of care that have gained wide acceptance in community primary care settings, including integrated behavioral health and primary care. While not all components of community based integrated care models are appropriate in correctional settings, many important features can be used in prisons and jails to bring the same improvements in quality and optimal use of scarce resources that community practices are experiencing.²⁹⁶

In communities across the country, integrated care is demonstrating significant improvements in patient adherence to treatment plans, clinical outcomes of medical and behavioral conditions, the use of emergency services and hospital inpatient care, and patient satisfaction.

²⁹¹ Joint Committee on Access & Forensic Services. (2016). Recommendations for the Creations of a Comprehensive Plan for Forensic Services.

²⁹² Joint Committee on Access & Forensic Services. (2016). Recommendations for the Creations of a Comprehensive Plan for Forensic Services.

²⁹³ Strugar-Fritsch, D. & Follenweider, L. (2016). A Call for New Models of Care in Correctional Health. *National Commission on Correctional Health Care*.

²⁹⁴ House Select Committee on Mental Health. (2016). Interim Report to the 85th Texas Legislature. <http://www.house.state.tx.us/media/pdf/committees/reports/84interim/Mental-Health-Select-Committee-Interim-Report-2016.pdf>

²⁹⁵ Families USA. Medicaid Suspension Policies for Incarcerated People: 50 State Map.

<http://familiesusa.org/product/medicaid-suspension-policies-incarcerated-people-50-state-map>

²⁹⁶ Strugar-Fritsch, D. & Follenweider, L. (2016). A Call for New Models of Care in Correctional Health. *National Commission on Correctional Health Care*.

²⁹⁷ Models of integrated care are also demonstrating enhanced provider satisfaction, which supports recruitment and retention of a high-quality health care workforce. ²⁹⁸

In integrated care models, a patient’s medical, mental health and substance use disorders are addressed in a whole-person approach by an integrated team of medical and behavioral health practitioners. The team uses a single integrated problem list and integrated plan of care. The whole integrated care team can apply evidence-based behavioral health interventions, such as motivational interviewing, to chronic medical conditions. The team can also help patients better manage depression and anxiety that often accompanies chronic medical conditions. Overall, the team can work with the patient on the complex interplay of medical and psychiatric symptoms and treatment options. This is especially important for those with serious mental illness, who have an extraordinarily high burden of metabolic syndrome, smoking and shortened life expectancy.

The integrated care model is especially relevant to correctional health because of the high volume of serious mental illness and chronic medical conditions in correctional populations. Unfortunately, in prisons and jails, mental health and medical care are nearly always separated and the separation is often exaggerated by physical plant, separate provider contracts and even separate medical records. ²⁹⁹ Integrated care within criminal justice can bring all of the benefits noted in community settings. It also offers a means to address inmate behavior in housing units and can potentially improve safety for inmates and staff, as many “acting out” behaviors may be the direct result of untreated or unidentified mental health conditions. A few correctional settings have begun to implement integrated care models, one of which is highlighted below.

Case Example: California Correctional Health Services³⁰⁰

Based on the recognition of the need for improved care for individuals involved in the criminal justice system related to both health and behavioral health, the California Correctional Health Care Services (CCHCS) decided to transition its entire system to the “Complete Care Model” in alignment with new and effective models of primary care in the community. The intent of the Complete Care Model is to improve patient safety and increase the effectiveness and efficiency of prison-based primary care by focusing on the following:

- Improved communications among licensed clinicians caring for the same patient

²⁹⁷ Strugar-Fritsch, D. & Follenweider, L. (2016). A Call for New Models of Care in Correctional Health. *National Commission on Correctional Health Care.*

²⁹⁸ Strugar-Fritsch, D. & Follenweider, L. (2016). A Call for New Models of Care in Correctional Health. *National Commission on Correctional Health Care.*

²⁹⁹ Strugar-Fritsch, D. & Follenweider, L. (2016). A Call for New Models of Care in Correctional Health. *National Commission on Correctional Health Care.*

³⁰⁰ Dunalp, J., Gomez, J., & Strugar-Fritsch, D. (2016). New Models of Care in Correctional Health: The California Prisons System’s “Complete Care Model.”

- Improved continuity in transitions of care such as inpatient to outpatient settings and between correctional facilities
- Efficient and effective use of health care staff, equipment, and clinic space
- Appropriate preventative, routine, and urgent primary care services provided to all patients throughout the system

CCHCS' Complete Model of Care includes five components that closely mirror the PCMH model, including Care Teams, Population Health Management, Scheduling and Access to Care, Care Coordination and Care Management, and a Quality Management System, all of which are described in more detail below.

Figure 11: Components of the Complete Care Model

Source: Dunalp, J., Gomez, J., & Strugar-Fritsch, D. (2016). *New Models of Care in Correctional Health: The California Prisons System's "Complete Care Model."*

Care Teams. CCHCS primary care providers, nurses, and ancillary staff have transitioned from traditional, line-based, reactive care to Care Teams that jointly share the patients in their panel. Each Care Team is responsible for the clinical outcomes of each patient on its panel, and uses a variety of tools and techniques to work more productively together to advance their goals and to enhance the outcomes for their patients at the highest clinical risk, such as daily huddles, non-traditional patient visits, and a single, integrated care plan.

Population Health Management. Implementing population health management in corrections requires a fundamental change from reactive to proactive care that focuses resources on patients with complex needs and aggressively manages patient and population risk. CCHCS' Care Teams are given protected time to meet as a team to conduct population health management activities twice a month. At these sessions, clinical leaders assess team performance and provide mentoring and guidance in problem solving. On a day-to-day basis, in order to focus resources in the most effective way, each Care Team uses a process of *case*

finding, identifying unique patients within a practice that merit focused interventions and increased resources, and *surveillance*, monitoring the status of the population as a whole.

Scheduling and Access to Care. Within criminal justice settings, access to care variables differ across prisons based on the prison's mission/correctional focus, security level, and clinical population variations. Therefore, CCHCS recognized that this component calls for considerable flexibility from prison to prison. Within each setting, Care Teams are trained to assess team-specific demand and supply issues by studying data such as "no shows" and refusals, policies driving mandatory visits, and variations in the frequency of chronic care visits by patient risk level. Additionally, the primary care nurse and primary care provider are encouraged to co-consult on sick call visits as needed and to keep a few open slots for same-day access for patients who needed urgent care overnight or have returned from a community hospitalization or a high priority specialty service. In addition, at a management level, access across and among care teams is evaluated to identify variation in nursing referrals, variation in frequency of visits based on level of control or acuity, and other factors.

Care Coordination and Care Management. CCHCS is currently developing a learning collaborative for the care management and care coordination component of its model of care, and plans to introduce it in 2017. Mirroring the PCMH model in community primary care, Care Teams will assign a Care Manager to highly complex patients. The Care Team will serve as the hub for organizing, coordinating and scheduling health care services, follow-ups and associated delivery of care, while the Care Manager will serve as the primary contact for the patient and for all members of the Care Team. The team may include mental health providers, off-site medical specialists, community hospital staff, state utilization management staff, custody, family members, and regional clinical leaders. The Care Manager will most often be an RN or, in cases where the patient has a serious mental illness, a behavioral health specialist.

Quality Management System. The culture and practice of quality improvement are incorporated throughout the Complete Care Model. The CCHCS Quality Management System has been organically evolving as the model has been implemented. Performance measures, working tools, and processes have been designed, tested, and refined by users at the patient level, the highest leadership level, and everywhere in between.

Specialty Populations

Criminal Justice Diversion Models

Sequential Intercept Model

In response to the high prevalence of individuals with mental health and substance use conditions involvement in the criminal justice system, the Substance Abuse Mental Health Services Administration (SAMHSA) National GAINS Center developed the Sequential Intercept Model. The model provides a framework for communities to consider key points of collaboration between the behavioral health and criminal justice sectors that can “intercept” or change the outcome for individuals and the system broadly. The ultimate goal is for communities to develop methods that prevent individuals from entering or moving further into the criminal justice system.³⁰¹ The model has been successfully used by many communities across the country to understand interactions between mental health and criminal justice systems, to identify where and how diversion activities should be developed within the community, and to identify decision makers and key stakeholders necessary to successfully develop and implement targeted strategies.³⁰²

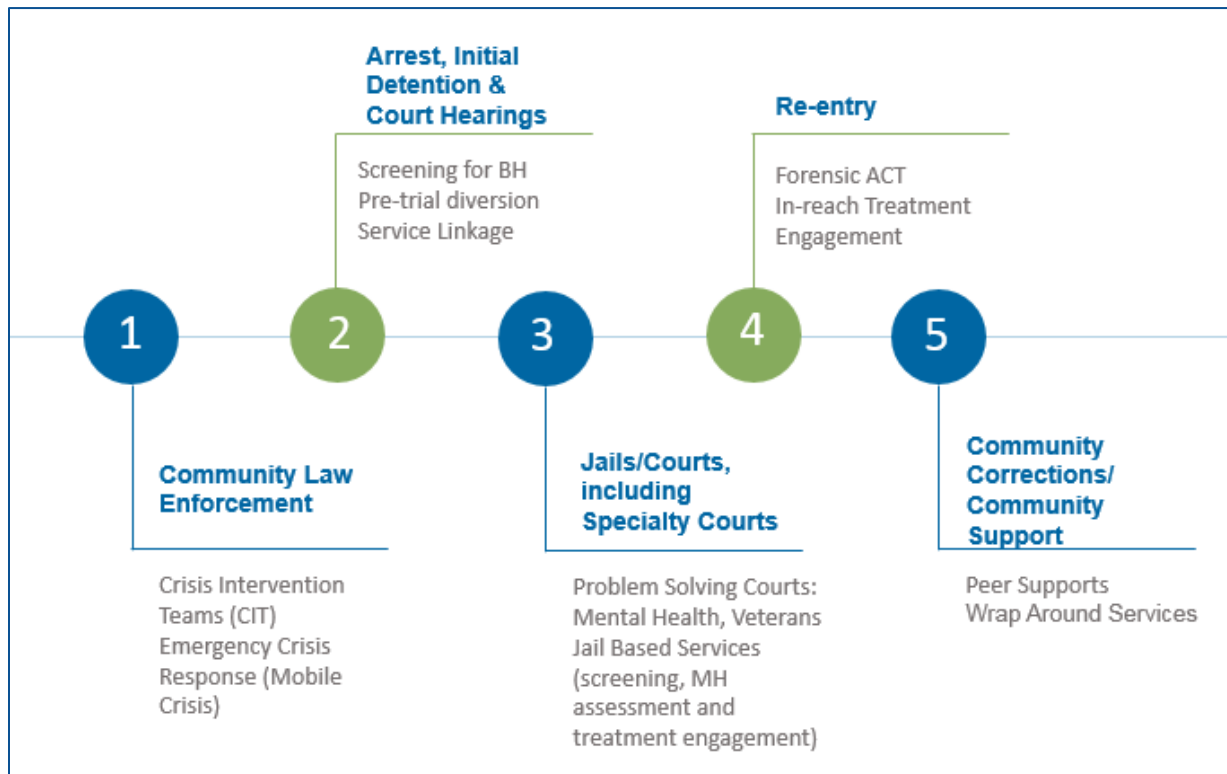
Although the model has five points of interception, there are three main responses for a community including diversion programs; institutional services; and reentry transition.³⁰³ Central to the model is that the earlier the intervention, the better and that service linkage is central to successful outcomes. Preventing individuals from further penetration into criminal justice is the first step but getting them connected to the appropriate services and community based treatment is fundamental to preventing long-term criminal justice involvement.

³⁰¹ Munetz, M.R. & Griffin, P.A. (2006) Use of the sequential intercept models an approach to decriminalization of people with serious mental illness. *Psychiatric Services*, 57(4), 554-549.

³⁰² Munetz, M.R. & Griffin, P.A. (2006) Use of the sequential intercept models an approach to decriminalization of people with serious mental illness. *Psychiatric Services*, 57(4), 554-549.

³⁰³ SAMSHA GAINS Center; developing a comprehensive plan for behavioral health and criminal justice collaboration: sequential model.

Figure 12: The Sequential Intercept Model



County Models

Across the country as communities have invested in program design and development, key lessons have emerged for developing a sustainable and effective collaboration between behavioral health and criminal justice partners.

- 1. Assess the current system:** It is important for communities to understand existing services and gaps in the system with clear data on where important “pain points” are causing criminal justice penetration. For example, length of time law enforcement awaits crisis response; time between release and re-entry and post-release treatment engagement, etc.
- 2. Clarify the Problem:** With the assessment phase completed, it is important for communities to understand the specific problem they are trying to solve and to target additional program design and implementation to addressing the specifics of the problem.
- 3. Build on Existing Resources:** Leveraging existing resources and partners is central to building buy-in for the new programming and for ensuring new intercepts are built. No community builds the entire array of services at once or immediately and so it is essential that time and energy are given to the right development and build on other parts of the system in place.

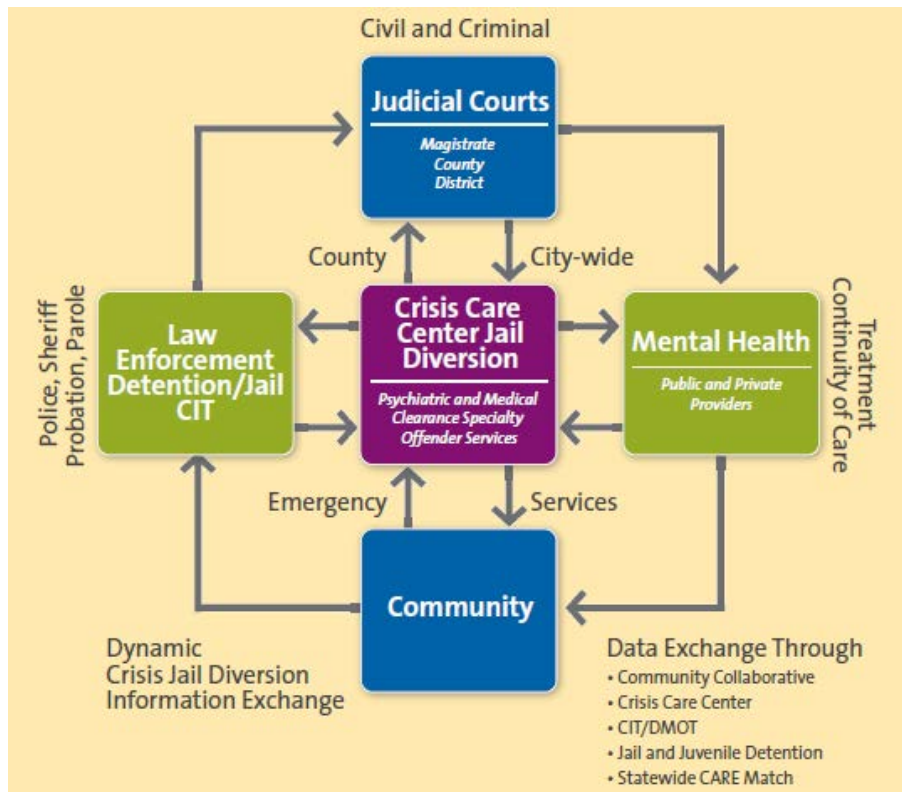
4. **Strong Collaboration:** In the communities with solid outcomes, there has been strong leadership and collaboration across the sectors. Community leaders have invested in long-term relationships and put a premium on accountability to partners and shared problem solving.
5. **Creative Funding:** Although these services may produce a return on investment for the community and individual systems (e.g., law enforcement and behavioral health), communities often need to think creatively about the funding to develop needed points of intercept including leveraging grant funding, private donation, and shared partner investment.

The following are County-based models that have demonstrated effectiveness across the country.

Bexar County, Texas

One of the most well-known and successful diversion models is the Bexar County, Texas Jail Diversion Program in San Antonio. The Bexar County program started as a community collaboration to implement a pre-booking Crisis Intervention Team (CIT) program in 2000, but has since evolved into an array of interconnected services across multiple points of diversion. The program was initially conceptualized by the CEO of the Community Mental Health provider who was concerned about the criminalization of individuals with behavioral health concerns. After working with law enforcement leaders, the CEO decided his organization could offer a solution for a nagging pain point for the Sheriff and Police; long waits in the emergency department to clear individuals for detention. The initial program was to create a central law enforcement drop off center that could address physical and behavioral health needs and get law enforcement back onto the street. In diverting these individuals, the behavioral health provider could assist in preventing criminal justice penetration—a win/win solution. Through strong partnership and collaboration across the county leadership the program as grown and emerged as the national leader.

Figure 13: System County City-Wide Entry Points



Source: The Center for Health Care Services. *Blueprint for success: the Bexar County Model. How to set up a jail diversion program in your community.*

Program components include a Crisis Care Center (CCC)—called the “Restoration Center”—to provide medical and mental health care services, including a crisis hotline and drop-off point for law enforcement; a Crisis Intervention Team (CIT); a Deputy Mobile Outreach Team (DMOT) to conduct field assessments prior to transportation to crisis care; a Central Magistration Facility that can receive detainees from law-enforcement officers, screen for needed mental health services, work with the mental health court to handle misdemeanors, and divert offenders from jail to the care and services they need; and pre-trial services for offenders already incarcerated. Overall, Bexar County has incorporated jail diversion practices at 46 separate intervention points in the criminal justice and mental health systems.³⁰⁴

After opening in 2003, the programs implemented in Bexar County saved taxpayers over \$50 million in the first 5 years of operation as a result of successfully diverting over 17,000 people from jail and emergency rooms.³⁰⁵ As the San Antonio model has proven, it is more cost-

³⁰⁴ The Center for Health Care Services. *Blueprint for success: the Bexar County Model. How to set up a jail diversion program in your community.* Available at <http://www.fairfaxcounty.gov/policecommission/subcommittees/materials/jail-diversion-toolkit.pdf>

³⁰⁵ The Center for Health Care Services. <http://chcsbc.org/innovation/jail-diversion-program/>

effective to provide mental health services and supports at the front-end rather than pay for jail beds and prison time on the back-end. Today, San Antonio’s Restoration Center provides services to approximately 25,000 customers each year and generates savings of at least \$11 million a year. Some individuals arrive at the center as walk-ins; others are brought in by police officers or diverted to the Center from programs inside the jail. The programs in Bexar County have also significantly reduced overcrowding in the jail—so much so that the jail went from being over capacity when the collaborative began to now having 500 empty beds.³⁰⁶

According to the Bexar County leaders, key strategies for developing new diversion programs in other communities include:³⁰⁷

1. Stakeholder/partnership engagement is key to success—it is essential that partners are accountable to one another and that the outcomes of the model have to be relevant to these stakeholders in order for them to fully engage in implementation and maintenance of the services. For example, it was essential for the community behavioral health provider to view law enforcement as a customer and focus on solving the problems identified by that sector first to engage in diversion activities. Ultimately, this kind of model is more about building collaborative partnerships than building a service array. The focus should be on the strong collaboration first and on the model specifics second. A few specifics to enhance collaboration:
 - a. Incorporate and interpret the language and culture of different systems and providers.
 - b. Identify champions from critical systems who can engage the right people to include.
2. It is essential for the community to understand the problem it is trying to solve. Before developing the specific model, spend time gathering data and identifying the measures that the model needs to target; these are most frequently related to timeliness, access and quality of services (e.g., in Bexar County, one of the main objectives was to reduce police time waiting in the emergency department). The specifics of the model need to be tailored to the unique environment and needs of each county, and the defined measures and objectives should be based on clear data.
3. Involve people in the planning who have experienced incarceration and behavioral health issues, either directly or through a family member.

Milwaukee County, Wisconsin

Milwaukee, Wisconsin, is a community that has implemented robust pretrial diversion programs for after an individual is arrested. The County formed a collaborative partnership

³⁰⁶ Personal Communication; HMA meeting with Leon Evans, October 19, 2015.

³⁰⁷ Personal Communication; HMA meeting with Leon Evans, October 19, 2015.

called the Community Justice Council (CJC) in 2008 with the goal of creating a “fair, efficient and effective justice system.”³⁰⁸ The CJC’s efforts began with an analysis of data and cost drivers in the justice system and the development of pre-trial diversion programs. The County contracts with a non-profit organization, JusticePoint, Inc.,³⁰⁹ to handle the majority of its services, which now include the following:

■ ***Universal screening***

24-hours a day/7 days a week jail screenings to predict an individual’s risk for pretrial misconduct and make recommendations to mitigate those risk factors. Staffed by team of pre-trial investigators who conduct interviews and investigations of all arrestees; determine the individual’s risk for pretrial misconduct; and make recommendations to judicial officers on bond type, bond amount and other conditions of bail to mitigate risk.

■ ***Central Liaison Unit (CLU)***

Supervision and case management for low-risk offenders who enter into pre-charge diversion agreements. The CLU also offers cognitive-based therapy groups using the National Institute of Correction’s “Thinking for a Change” curriculum.

■ ***Treatment, Alternatives and Diversion (TAD) program***

Screening, assessment, and case management for individuals who have entered Deferred Prosecution Agreements, which allow charges to be dismissed or reduced if restorative justice plans are followed. In this program, the defendant admits to wrong-doing and enters into the program, however successful completion results in charges being dismissed or reduced.

■ ***Addiction Severity Index Screening and Assessment and Recovery Support Coordinators***

Provide access to addictions treatment, as well as Cognitive Behavioral Therapy groups and groups to address trauma issues for participants in Milwaukee’s Drug Treatment Court.

■ ***Psychiatric Crisis Service/Admission Center***

As part of this collaboration, Milwaukee County Mental Health and Substance Use Disorder Services provides Crisis Intervention Services with a 24/7 Crisis Center and a mobile crisis team. There is capacity for client observation for up to 48 hours. There is also a 24/7 Psychiatric Crisis Line.

³⁰⁸ Milwaukee County Community Justice Council website. <http://milwaukee.gov/cjc>.

³⁰⁹ JusticePoint, Inc. website: <http://www.justicepoint.org/programs/#mke-county>.

■ ***Drug Treatment Court Coordination and Case Management***

Provided and the Court Coordinator is responsible for organizing referrals to drug treatment court, maintaining records related to daily operation of the court, and ensuring court compliance with court policies and procedures and those promulgated by National Association of Treatment Court Professionals. They also provide case management services for participants of the court to identify treatment and other supports to maintain recovery.

■ ***The Community Access to Recovery Services Division***

Provides supportive recovery services for people with severe mental illness and/or substance use disorders.

■ ***The Service Access to Independent Living (SAIL) program***

Helps adults with mental illness achieve independence and connect to community-based services and supports, including supportive housing, peer support, medication management, and skill training.

■ ***The Milwaukee Co-occurring Competency Cadres (MC3)***

Coordinates and integrates care for people with complex and co-occurring needs.

Funding for much of these services came from a \$10 million investment from the state legislature in 2009 to expand community-based recidivism reduction programs, including substance use treatment, employment services, and access to mental health care.³¹⁰

Milwaukee County projects that the success of these programs will decrease the jail population by 20% in five years and generate \$6.6 million in savings annually.³¹¹

Harris County, Texas

Similar to other counties the goal for creating additional services often starts with capacity concerns and challenges within the criminal justice system. Harris County has one of the largest jails in Texas with reports of at least a quarter of the inmates taking psychotropic medications, making it one of the largest facilities for mental health in the State.³¹² In response, a State Senator (Joan Huffman) sponsored a Senate Bill in 2013 that created a pilot program to focus on diverting individuals with mental health conditions from the jail. On an annual basis, the legislation appropriates \$5 million to the County and the County has matched this equally. The goal of the pilot is to reduce arrests, reduce incarceration, and increase access to housing, mental health treatment and other social services. The pilot must serve at least 200 individuals

³¹⁰ Council of State Governments. Justice Center. <https://csgjusticecenter.org/jr/wi/>.

³¹¹ Center for Effective Public Policy. Justice Reinvestment Initiative at the Local Level: Getting to know Milwaukee County, Wisconsin.

³¹² [National Association of Counties. Mental Health and Criminal Justice. Case Study Harris County, Texas.](#)

a year.³¹³ The Harris County Judge’s Office operates the Mental Health Jail Diversion Program, which incorporates a variety of partners, including the Harris Center for Mental Health and Intellectual and Developmental Disabilities (previously the Mental Health and Mental Retardation Authority of Harris County), the primary provider of services. Working together, they provide a continuum of services that are designed to improve care for individuals with serious mental illness as well as reduce their involvement in the criminal justice system.

For the pilot initiative specifically, there are numerous points of referral (community providers, law enforcement and criminal courts), however the individuals must have previous experience with the Harris County jail (three or more bookings in the past two years) and have a diagnosed serious mental illness.³¹⁴ The program also uses the Texas Risk Assessment System (TRAS) to assess criminogenic risk factors and a moderate to high score for risk factors is required to be enrolled in the pilot funded programming.

The Harris Center for Mental Health and IDD has developed a continuum of services and work through three types of teams: jail-based, community/clinic based and Critical Time Intervention. All of the teams provide eligibility and screening; assessment and engagement of the individual; substance use intervention and treatment for mental health conditions (focused on cognitive behavioral therapy); peer support; medication management and intensive case management.³¹⁵

Other essential elements of the continuum that can be leveraged are designed and run by the Center for Mental Health and IDD and can also be engaged by those individuals who do not meet criteria for the specific pilot project funded through the Senate Bill.

■ ***Psychiatric Emergency Services (PES)***

The Psychiatric Emergency Services Unit (PES) is staffed 24 hours a day with registered nurses, clinical social workers, licensed professional counselors, and psychiatric technicians. There are psychiatrists on site at all times. Consumers are assessed and treated and may be referred to other services as needed. Each person seen receives an individualized clinical service plans that can include:

- medication administration,
- reinforcement of coping skills,
- close observation by clinical staff,
- family meetings, and

³¹³ [National Association of Counties. Mental Health and Criminal Justice. Case Study Harris County, Texas.](#)

³¹⁴ [National Association of Counties. Mental Health and Criminal Justice. Case Study Harris County, Texas.](#)

³¹⁵ [National Association of Counties. Mental Health and Criminal Justice. Case Study Harris County, Texas.](#)

- determination of appropriate community supports.

Of those served, 78% are referred to an outpatient provider or clinic and do not require hospitalization.

■ ***Crisis Counseling Unit (CCU)***

Anyone can receive counseling services if:

- they are Harris County residents;
- they are not in therapy elsewhere; and
- they have an issue that can be resolved with brief, solution-focused therapy.

The program provides both individual and family therapy. Referrals are made from community agencies and from individuals.

■ ***The Neuropsychiatric Center (NPC)***

The NeuroPsychiatric Center (NPC) is a crisis and emergency center that is open 24 hours a day, 7 days a week. It is the main public mental health emergency program in Harris County. The NPC serves over 10,000 consumers a year. Adults, adolescents, and children come to the NPC for help. Many of those served are indigent or uninsured. Individuals seeking services may come voluntarily or may be brought to the NPC by law enforcement.

The goal of NPC is to quickly and accurately evaluate consumers with mental health emergencies. NPC uses the least restrictive means possible to stabilize people so that they may return to the community and stay out of the hospitals and jails. The NPC has several programs that serve anyone with an emergent or urgent psychiatric condition.

■ ***Crisis Stabilization Unit (CSU)***

The Crisis Stabilization Unit is for people in crisis who need more intensive psychiatric treatment and observation. It is a 16 bed, licensed unit on the second floor of the NPC. Trained medical personnel including a psychiatrist, nurses, and clinical social workers work at the CSU. Consumers are voluntary. They stay in the unit for 3 to 5 days. After that time, staff help them find other places in the community for help. Referrals to CSU generally come from the Psychiatric Emergency Services (PES) or other outside hospitals or therapists.

CSU Admission Criteria:

- Uninsured voluntary consumer with a GAF < 50.
- Resident of Harris County, AND
- Capacity to make a decision to enter into voluntary treatment, AND

- Validated principal DSM-IV Axis I or II diagnosis, AND
- Treatment at a lower level of care has been attempted or given serious consideration, AND EITHER:
 - Loss of ability to perform activities of daily living due to moderate impairment in judgment, poor impulse control, or moderate impairment in cognitive perceptual abilities.
 - Danger to self; Danger to others.
 - Danger to property where such damage would endanger others.
- The presence of a coexisting medical condition that would complicate or interfere with the treatment of the psychiatric disorder at a less intensive level of care.
- A high risk for placing self or others at risk for significant harm through impulsive behavior or exercising poor judgment.
- Consumer has deteriorated to level of disorganization and dysfunction that they cannot cooperate with outpatient care or treatment plan.

■ ***Crisis Residential Unit***

The Crisis Residential Unit (CRU) is for people who are chronically and seriously ill. They frequently come seeking emergency services and are not improving on their own. People stay anywhere from 3 days to 4 weeks. The average amount of time people remain in the CRU is 10 to 14 days. The client must not have insurance, must live in Harris County, be voluntary and must be 18 or older. There are 18 beds at this facility, and referrals may be made from the community. Referrals can be made to the CRU without a recommendation by an MD or other healthcare personnel.

Initial outcomes of the pilot project have been positive with lower rates of recidivism, however the initial legislation required a formal evaluation report to be conducted with results presented in December of 2016. This report should have more robust findings about the program including clinical and criminal justice outcomes and cost implications.

Harris County also received a grant of \$150,000 from the MacArthur Foundation in May of 2015. The money is bestowed to conduct research on how to improve its criminal justice system and some of the services added will include pre-trial diversion. Although this money is not targeted at behavioral health diversion, it may also have an impact on the system of care.

Diversion Program Outcomes

The overarching conclusion about Diversion program outcomes is that they vary significantly. There have been program evaluations of specific programs or individual sequential intercept model components that examine outcomes in three categories including improvement of behavioral health clinical outcomes, reduction of criminal justice involvement (generally arrest

rate as a measure of recidivism), and cost savings and return on investment. The results tend to be highly program specific with some evaluations demonstrating significant outcomes for all three categories and other programs showing improvement in behavioral health symptoms but limited change in recidivism. Similarly, while some programs seem to have significant cost savings, other programs appear to shift costs from criminal justice to behavioral health without any real change in overall dollars spent.

Appendix I - The Future Direction of Texas Behavioral Health Delivery System: Select Committee on Mental Health Report

In November of 2015, the Speaker of the Texas House of Representatives, Joe Straus, appointed the Select Committee on Mental Health, which was mandated to holistically study and make recommendations on virtually every aspect of behavioral health in Texas. In order to do this, the Select Committee conducted over 40 hours of hearings on eight separate days involving more than 100 expert witnesses, including diverse mental/behavioral health care professionals, judges, and experienced law enforcement officials, as well as public testimony. In December of 2016, the Select Committee released a report that included key takeaways from each of the Public Hearings and recommendations for the state Legislature to improve the behavioral health delivery system. A selection of these key takeaways and recommendations are included in Table 17 below:

Table 17

Public Hearing Topic: Mental Health Overview
<p><u>Key Takeaways:</u></p> <ul style="list-style-type: none"> - Texas has been providing mental health care in State Hospitals since 1861 when the facility in Austin accepted its first patients. The state currently has ten state hospital facilities plus a youth facility in Waco which provide mental health services for forensic and civil, adult and youth, patients. - Government funded mental health care is also provided in community settings, which began, at least in part, over 50 years ago, when the federal government passed the Community Mental Health Act of 1963 providing federal funding for community mental health/intellectual development disability (MH/IDD) centers with a community-based service philosophy - Accordingly, the Texas MH/IDD Act of 1965 was passed to authorize local taxing authorities (counties, cities, hospital districts, school districts) to create a local governmental entity and appoint a local governing board to develop community alternatives to treatment in large residential facilities; and to establish local, state and federal partnerships to a create community-based system for people with mental illness and intellectual disabilities. These entities are known as Local Mental Health Authorities (LMHAs), or community centers. Thirty-nine (39) LMHAs are positioned throughout Texas, and today they provide the bulk of community mental health services. - Identified gaps in services include the lack of integration of care, workforce shortages, the lack of IDD population recognition, not offering the opportunity for self-directed services, not supporting peer support services, the lack of parity, the lack of early intervention programs, and the lack of affordable housing during recovery <p><u>Committee Recommendations:</u></p> <ul style="list-style-type: none"> - Improve opportunities for integrated health care. - Develop a comprehensive plan for workforce development. - Provide for a definition of peer support services in the Insurance Code and require insurers to pay for peer support services. Also, review considerations for the expansion of support services provided by certified substance use recovery coaches. - Review reciprocity of psychiatrists and other mental health professional licenses to ensure maximum utilization of providers and services. - Numerous programs are in place and much funding is provided for mental health and behavioral health but comments are being heard about the system not working. Create a team from the Behavioral Health Coordinating Council to ascertain the hindrances in the system and enhance the Council's plan to address the specific issues found.

- New and innovative programs are many times needed as population grows and technology changes; however, proven and best practices are being utilized throughout the state and can potentially be wholly or partially implemented by others if the knowledge is made available.
- Increase access to substance abuse treatment and housing supports and continued investment in mental health outpatient services

Public Hearing Topic: Mental and Behavioral Health Services and Treatments for Children

Key Takeaways:

- There is only one nonprofit inpatient and outpatient mental health organization in Texas that strictly serves children (The Clarity Child Guidance Center in San Antonio)
- Children's behavioral health services in communities are provided/coordinated through the LMHAs. Services are provided according to levels of care
- Of over 400 behavioral health-focused projects in Texas in the 1115 Waiver/DSRIP program, 46 focus specifically on providing services to children and/or adolescents (29 of which are provided through LMHAs)
- The Texas Juvenile Justice Department (TJJD) manages five secure correctional institutions and eight medium restriction halfway houses for a gradual transition home. TJJD also has contracts with 10 facilities where youth can be placed with three of those ten being secure facilities.
- In Texas, one challenge is that a vast disconnect exists between mental health professionals and educators/administrators. While there are some excellent models of collaboration between mental health professionals and educators, there is a genuine disconnect in serving public school age children with mental health issues. Factors are many: the two professions speak different languages and jargons, e.g. behavioral health for educators means a disciplinary issue whereas mental health providers define the term of art as including co-concurrent mental health and substance abuse disorders.

Committee Recommendations:

- Develop referral networks that link non-mental health providers and parents to child mental health treatment specialists. The all-too-common practice of giving a parent of a mentally ill child a phone number would be unacceptable for any other serious condition, such as hearing deficit or diabetes
- Promote integrated care practices as integrated care supports mental health affect physical health. The two are intertwined in childhood in ways that require us to treat the whole child
- Restructure mental health first aid (MHFA) to address concerns about DSHS not knowing statistics regarding the breakdown of which regions, which schools, and the specific personnel benefiting from the courses offered through the LMHAs
- Require OSARs to interact with public schools and increase services for youth with mental health and/or substance abuse needs
- In school environments, accept psychologists as in-network providers with all private and government insurance companies and organizations in the area, as allowing campus-based mental health providers to be designated as in-network will increase access to much needed services

Public Hearing Topic: Mental and Behavioral Health Services and Treatment Access, Continuity of Care, Coordination, and Workforce

Key Takeaways:

- In the past, individuals in a mental health crisis were typically taken by law enforcement either to jail or to a hospital emergency room. Today, intervention services and diversion programs are in place for assessment and treatment and are located in many communities across the state.
- Professional mental health providers include psychiatrists, primary care physicians, nurses, physician assistants, psychologists, counselors, and social workers. Settings include care in hospital emergency rooms, psychiatric hospitals, doctor's offices, clinics, and via telemedicine. Insurance claims, however, are often denied because mental health services have been rendered but are not covered.
- Much emphasis is placed on the need for more integrated, whole person care in the community and

better discharge planning between settings. In Texas, the stigma of mental illness and stress that parity continues to be unrealized exists across the delivery system.

- Anxiety is the most common mental health illness addressed by family physicians
- A major challenge in Texas is workforce shortages. A majority of Texas counties are designated as Mental Health Professional Shortage Areas, and many have no psychiatrist. However, the shortfall is not limited to just psychiatry. Universities and care providers are studying and implementing ways to address the shortfall in the workforce

Committee Recommendations:

- Realize potential of each of the varied mental health professionals, and increase utilization accordingly. Review allowing such professionals to practice to the full scope of their authority and knowledge
- Amend Medicaid rules to allow Masters of Social Work to be reimbursable service providers
- Review and address capacity needs for growing forensic commitments
- Increase service provider rates in rural regions

Public Hearing Topic: Insurance Coverage and Parity and Law Enforcement

Key Takeaways:

- Parity is a complex issue. Generally, regulations began in the 1990s with the federal Mental Health Parity Act (MHPA), expanded in 2008 with federal Mental Health Parity and Addiction Equity Act (MHPAEA) to include substance use disorder coverage, and further expanded coverage requirements with the federal Affordable Care Act. In 2011, Texas implemented mental health parity regulations under the Texas Administrative Code.
- However, citizens continue to advise that mental health services are not being covered under insurance plans and that in many cases they are having to pay cash for services or are not receiving services. Also, service providers continue to advise that they are unable to obtain pre-authorizations to provide mental health care or are denied payment if a claim is submitted
- Social workers, licensed professional counselors and licensed marriage and family therapists receive 70% of the full rate for the exact same billing codes for mental health services, with psychologists and psychiatrists receiving 100%.
- All Texas peace officers go through a minimum of 643 hours for their basic licensing course; 16 hours of Crisis Intervention Training (CIT) is included. The CIT course includes training on how to identify a person in crisis and techniques to calm them down and deescalate a situation. Officers also have the opportunity to obtain a Mental Health Officer Proficiency Certificate through a 40-hour course. There are 6,256 peace officers in Texas with these certificates. This number was up by 528 from September 2015 to June 2016.
- Although many cities and counties utilize their own Crisis Intervention Training (CIT) programs and Mobile Crisis Outreach Teams (MCOT) as jail diversion measures, rural counties may not have the means to do so but that the LMHAs do offer services.

Committee Recommendations:

- Address the billing disparity by modifying or eliminating the HHSC rule affecting rates for social workers, licensed professional counselors and licensed marriage and family therapists
- Enact a mental health "Parity" state law: either full parity for all mental health conditions or a scaled version requiring parity coverage of specific mental health conditions or all serious mental illnesses
- Expand crisis intervention services and jail diversion programs. Specifically enhance support for regional crisis intervention teams
- Review suspension rather than "termination" of Medicaid benefits for those in jail
- Expand best practices such as mental health court in jail or having a mental health docket

Public Hearing Topic: Substance Abuse, Homelessness, and Veterans

Key Takeaways:

- Identified gaps related specifically to substance use and homelessness are: Access to appropriate

behavioral health services; Access to timely treatment services; Use of peer services; and Access to housing.

- Identified underserved populations include individuals with: Substance Use Disorder (SUD); Co-occurring psychiatric disorders and SUD; Severe Mental Illness; and Super-utilizers of jail, emergency room and inpatient services.
- Provider shortages, wait lists for services, and the common perception that an individual's mental health needs take priority over SUD needs when both should be treated simultaneously are identified issues caused by lack of access to SUD treatment services.
- Approximately 2,400 Texas veterans were considered homeless in 2015 due to mental health issues, PTSD, depression, substance abuse and brain injury, and 38% of them receive no shelter assistance
- In accordance with HB 19 passed during the 83rd Legislative Session, Texas Veterans
- Workforce shortage is a challenge for SUD. Current research shows that peer support provided by certified recovery coaches for SUD treatment decrease substance use, reduce utilization of inpatient and emergency room care and increase consumer engagement in care. Increasing access to peer support services offers a cost-effective strategy for expanding the behavioral health workforce and reducing reliance on crisis, inpatient, and other more restrictive types of care. Additionally, peers can play an important role in crisis response and critical transitions, including community re-entry after hospitalization and incarcerations.

Committee Recommendations:

- Increase access to peer support services by defining "peer services" so that more service locations may be able to employ and bill for services potentially increasing the ability to provide continuity of care and reduce recidivism. Allow substance abuse recovery
- coaches, certified mental health peer specialists for "peer services" and "certified family partner services" to be reimbursed for services provided in a manner appropriate to the scope of their practice; define in rule the scope of peer services; expand the Loan
- Repayment Program (SB239, 84th) to include college debt for certified peer specialists and certified recovery coaches; billing codes reimburse care but also shape and limit the extent of a specialist's practice, currently operating under mental health rehabilitation services is not only insufficient to cover the range of services provided by peer specialists, it is also provided only through LMHAs—these restrictions severely limit the settings in which peer specialists may practice.

Public Hearing Topic: State Hospitals, Options for Addressing Needs and Mental Health Care on Campuses of Higher Education

Key Takeaways:

- Bed capacity continues to be an issue for both the forensic and the civil populations; the forensic population in Texas' state hospitals surpassed the civil population in late 2013. DSHS and state hospitals continue to express infrastructure and workforce concerns. County officials continue to advise that their jails have a wait list for individuals with a forensic commitment and these persons are having to be held in the jails at county expense
- Within the current system, there are opportunities include improved cost efficiency with better designed facilities for more effective use of staff; potential to decrease length of stay due to ability to serve more people with same resources; minimizing outside medical costs; and utilization of technology such as telehealth
- A challenge within the system continues to be Bed Capacity. Due to the growing forensic population, beds that were previously deemed as "civil" have been transitioned to "forensic". This has affected county jails and hospitals that need to transfer patients to a facility for care. Although the Legislature has been funding community beds for patients, the need for beds continues to exceed the beds available.
- In addition, capital funds to maintain state hospitals are very much needed. State hospital maintenance costs have been deferred for many years. Some facilities are irreparable.

- Counseling services are required to be made available at public institutions of higher education both through federal and state regulation, however, due to broad language and limited resources, the availability of mental health services varies across Texas's two and four year institutions
- A repeated trend heard throughout the testimony is that resources are limited and very few schools meet the recommended staff-to-student ratio of 1:1,000-1,500. However, despite widespread staffing shortages, different programs are able to leverage peer supports, training and community services outside of the university to increase mental health awareness and prevention efforts.
- Many Texas students in higher education institutions suffer from mental health illness, especially anxiety. Second only to financial constraints, mental health issues cause students to drop out of school. Institutions of higher learning at a minimum are required to have information on their websites about the availability of mental health services, but students may need additional services provided and not all campuses are compliant.

Committee Recommendations:

- Conclusively determine and adopt a feasible long-term plan for addressing the infrastructure and staffing problems at the various state hospital facilities and fund accordingly. Consider the adopted new method by DSHS at the suggestion of the consultant to funding community beds for the less complex needs patients, academic partnerships to provide care, utilization of the varied mental health professionals, changes in the criminal justice system for fewer forensic placements, and the benefits of early identification. Compare the costs of rebuilding or refurbishing the current state hospital facilities, funding community beds, and creating academic partnerships. Consider the availability of workforce. Consider the loss of funds to state hospitals by private insurers for the care of civil patients.
- Consider a study to reallocate or relocate patients across our hospitals to determine if efficiencies can be gained
- Require a PHQ9 depression screening for every student who presents to the general campus student health center to increase collaboration between health and counseling centers, as well as emphasize early intervention. If a student falls within a specified guideline on the scale, the student must then be referred to the campus counseling center for a consultation
Promote community resources to help ease the burden of higher education counseling centers. Though community resources vary across the state and each school has access to different kinds of resources, they are valuable and necessary partnerships to help students stay in school and receive services at the same time
- Provide statutory guidance regarding the minimum services state institutions of higher education should provide along with state funding and requiring these institutions to interact with their LMHA

Source: House Select Committee on Mental Health. (2016). Interim Report to the 85th Texas Legislature. http://www.house.state.tx.us/_media/pdf/committees/reports/84interim/Mental-Health-Select-Committee-Interim-Report-2016.pdf

One recurring theme that stood out to the Committee across all testimonies was the fact that communities and stakeholders who work in partnership and collaboration provide more effective mental health/behavioral health services and in many cases to a greater number of persons and have the greatest successes. A clear example of this is the Haven for Hope model in San Antonio, a community agency that offers a place of hope and new beginnings through a comprehensive system of care approach for people experiencing homelessness in Bexar County.³¹⁶ The agency operates two major programs at its main campus site: the Courtyard, a

³¹⁶ House Select Committee on Mental Health. (2016). Interim Report to the 85th Texas Legislature. http://www.house.state.tx.us/_media/pdf/committees/reports/84interim/Mental-Health-Select-Committee-Interim-Report-2016.pdf

low-barrier safe sleeping program that offers shelter and basic needs, and the Transformational Campus, a center that offers services and shelter with an emphasis toward addressing the root causes of homelessness. Programs and services offered within these programs range from intensive behavioral health treatment (for both SUD and SMI) to a jail outreach program to kennels for client's pets. In order to address each client's multi-dimensional needs and facilitate a true system of care, Haven for Hope partners with 93 different entities, 33 of whom are On-Campus Partners who provide services on Haven for Hope's campus, 43 of whom are Community Referrals who are contracted with Haven for Hope to partner with staff on behalf of clients, and 17 of whom are Community Support Partners with a non-contractual relationship with Haven for Hope to provide supportive services to Haven and its residents.³¹⁷ Haven for Hope is a true public/private initiative with private, city, county, and state monies provided for the construction funding. In 2016, private contributions funded over 40 percent of the operational budget.³¹⁸

Although it is certainly not guaranteed that all of the Committee's recommendations will pass Legislative scrutiny and come to fruition, the report does provide a holistic picture of the capacity and gaps of the Texas behavioral health delivery system, as well as some future direction for providers with which to advocate. Continued monitoring of the status of the recommendations is advised in order to remain abreast of new opportunities and funding streams to expand and enhance community based behavioral health services.

³¹⁷ Haven for Hope. <http://www.havenforhope.org/new/>

³¹⁸ House Select Committee on Mental Health. (2016). Interim Report to the 85th Texas Legislature. <http://www.house.state.tx.us/media/pdf/committees/reports/84interim/Mental-Health-Select-Committee-Interim-Report-2016.pdf>