Review of Harris County Mental Health Systems Performance

Final Report

May 2015

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Executive Summary

Harris County engaged the Meadows Mental Health Policy Institute to review its public mental health service delivery systems, with a primary focus on the Mental Health and Mental Retardation Authority of Harris County (MHMRA).

Findings on Mental Health Needs (N) in Harris County

- **N-1: Harris County is large, growing, and diverse; with this growth, the number of people living in the county with severe mental health needs has also grown to over 140,000 adults and 90,000 children.** This report focuses on mental health needs within the context of the broader behavioral health needs of the community, including substance use disorders, co-occurring mental illness and substance use, and developmental disabilities. Within that context, MHMRA has the role of serving those with the most severe needs in the public system. This centers on 143,000 people (87,000 adults and 56,000 children) in poverty (under 200% FPL) that serves as the minimum benchmark of need to be met by the broader public mental health system (see table below). Two-thirds of the overall population – and over 80% of the population in poverty – are African American or Latino.

Adults with SMI and Children with SED Living at or below 200% of Federal Poverty Level (FPL)

County	Total Population	Adults with SMI	Adults with SMI Under 200% FPL	Children with SED	Children with SED Under 200% FPL
Harris	**4,471,427**	**142,930**	**87,283**	**91,414**	**56,044**
Bexar	1,882,834	54,055	34,913	36,974	21,780
Dallas	2,496,859	88,279	54,112	53,222	35,365
Tarrant	1,959,449	64,191	35,873	39,006	21,569
Travis	1,144,887	38,253	21,673	19,965	10,703

- **N-2: For adults, the core outpatient public mental health system in Harris County – comprised of MHMRA, Harris Health, 12 federally qualified health centers (FQHCs), and three Medicaid managed care networks – has capacity to provide some level of service to 75% (65,000) of those in poverty with severe needs, but the system has dramatically too little intensive service capacity. As a result, Harris County relies too much on correctional and emergency room settings to serve those with the most severe and complex needs.**
  - While the other system components can provide ongoing care for those who are relatively stable, persons in need of more intensive supports must rely on MHMRA and the growing array of supports being developed by the Medicaid managed care organizations (MCOs). The most severe mental illnesses generally require multiple years

of recovery-oriented, often intensive, community-based treatment as well as an array of additional supports, including housing, employment, and peer services.
  - In its role, MHMRA has focused on the 16,000 most in need, but – like all of its peer agencies across Texas – it lacks ongoing treatment capacity sufficient to maintain people with the most complex needs in care. Relying primarily on MHMRA, Harris County has an estimated one-ninth of needed intensive service capacity, one-tenth of supported housing capacity, and one-seventh of supported employment capacity, compared to the level of severe need in in the community and best practice benchmarks.
  - As a result, high need cases cycle repeatedly through jails, hospitals, and inadequate outpatient care, costing nearly $50 million in jail costs and $150 million in emergency room costs because the system is designed with too little core capacity.
- **N-3: For children and families, the core outpatient public mental health system in Harris County has capacity to provide some level of service to 56% (31,000) of those in poverty with severe needs, but the system has dramatically too little intensive service capacity. As a result, Harris County relies too much on juvenile justice, child welfare, and emergency room settings to serve those with the most severe and complex needs.**
  - MHMRA and the six child Medicaid MCO networks (five STAR and STAR Health) offer the primary resource for intensive services. MHMRA focuses on the 8,000 with the most severe needs, but – similar to adults and to all other LMHAs in Texas – it has too little capacity for those with the highest needs (less than one-fifth compared to best practice benchmarks).
  - Relatedly, Harris County spent over $18 million in local juvenile justice costs in 2013.
- **N-4: While the crisis system has been a major focus of development since 2007, and while hundreds of new private beds are being built, Harris County's public system relies too much on state-funded psychiatric inpatient capacity, lacks at least 100 inpatient beds for the uninsured, and has only one geographic location for its primary crisis programs: the NeuroPsychiatric Center (NPC) operated by MHMRA and the Ben Taub Psychiatric Emergency Department operated by Harris Health.**
- **N-5: While targeted funding for new projects by DSHS and DSRIP has increased dramatically (especially since 2012), DSHS funding for treatment capacity for the uninsured has shrunk on a per capita basis relative to inflation for adults and children, and Medicaid funding has increased.** Also, MHMRA administrative spending is lower than that for comparison LMHAs, and performance metrics tracked by DSHS show better performance in many areas for adults. Compared to the statewide average of funding for adult and child mental health services, MHMRA is funded between $6 million and $9 million lower.
- **N-6: State-level policy impedes local system development in Harris County by focusing too much on a crisis-driven service model for the uninsured, designing a largely separate system for Medicaid without a structure for coordination with state-funded services,**

failing to ensure equity in the distribution of limited state funds for the uninsured, overly restricting local control over the use of these limited funds, and tying financial incentives to compliance rather than performance improvement.

Primary County Level Findings (CF) and Recommendations (CR)

- CF-1: Harris County lacks an organized, functional and integrated behavioral health system. Major providers and funding streams operate in parallel, rather than in a coordinated manner, leading to both inefficiencies and poor outcomes.
- CF-2: Only Harris County is positioned to convene and develop a new framework for partnership and collaboration across behavioral health providers and systems. MHMRA can take a lead role, but it cannot function as the overarching convener for behavioral health (BH) leadership.
- CF-3: There is a solid foundation on which to build an effective BH system of care across MHMRA, Harris Health, FQHCs, Medicaid MCO networks, other key providers for outpatient care, and the Harris County Psychiatric Center (HCPC) and local hospitals for inpatient care.
- CF-4: Improvements in partnership and collaboration are essential to improve clinical performance.
- CF-5: There is no consistent vision of care at the county level to guide collaboration.
- *CR-1: Commit county resources to convene the leaders of the major county-funded mental health providers – MHMRA, Harris Health, and HCPC – to develop an initial partnership framework for a collaborative, strategic and ongoing planning process at the county level (6 months). Once the initial county-level partnership framework is in place for collaborative planning and management, the process should involve the dozens of additional partners that need to be engaged, with a most immediate priority of engaging the Medicaid MCOs, criminal justice agencies, Council on Recovery, local hospitals, and an array of child-serving agencies.*
- *CR-2: The leadership of the major county-funded mental health providers – MHMRA, Harris Health, and HCPC – will each need to decide if their respective entity wants to commit to engage in this process in a spirit of genuine partnership (6 months), as will each other partner that joins over time (1-2 years).*
- *CR-3: Within the new partnership framework, improved collaboration should be advanced through an initial set of initiatives, with an emphasis on: establishing a vision, engaging major funding partners, and improving information sharing, crisis system capacity, and access (6-12 months).*
- *CR-4: The broader system oversight structure should also coordinate BH system development across a set of more focused medium-term initiatives (1-2 years): crisis continuum development, funding stream coordination (e.g., Medicaid), integrated care (with physical health, substance use disorders), children's system development, justice system diversion, homelessness, public-private partnerships, and workforce development.*

- *CR-5: Harris County should use the new partnership framework to engage its state-level funders, legislative representatives, and local advocates to address state-level policy gaps.*

Major MHMRA Findings (MHF) and Recommendations (MHR)

- MHF-1: MHMRA leadership is committed to a vision of integrated, effective, and efficient person-centered care for individuals and families in need, but MHMRA's functional organizational structure, a lack of a county-level partnership framework, and state-level policy all impede implementation.
- MHF-2: Despite a number of discrete collaborative initiatives, MHMRA is widely perceived by other county-level agencies as more reactive than proactive in terms of collaboration at the agency level.
- MHF-3: MHMRA's board and leadership have indicated a priority to improve collaboration and committed to improve sharing information with the criminal justice system.
- MHF-4: The overall organization of MHMRA lacks key functional capabilities necessary for an agency of its size to operationalize its vision.
- MHF-5: The current organizational structure and processes lack the clinical administrative capacity to operationalize important improvement activities, particularly an organization-wide clinical care vision and quality improvement.
- MHF-6: MHMRA information technology (IT) has a number of significant challenges, including a lengthy, costly and, to date, unsuccessful legacy system replacement and electronic health record (EHR) development project (though a new contract, vendor and plan have been put in place). IT is also challenged by a rapid increase in business area staffing to support DSRIP projects and regulatory changes requiring system modifications.
- MHF-7. Financial oversight, including reporting, at MHMRA has been in place and functioning solidly for several years. MHMRA is operating in a positive financial position.
- *MHR-1 (6-12 months): Without reducing clinical service capacity, modify and enhance the current organizational structure and processes to implement MHMRA's vision and address the scope and responsibilities of an agency of its size with expanded and focused functionality at the executive team level (e.g., Chief Medical Officer function, Chief Operating Officer function focused on clinical operations, Chief Administrative Officer function focused on administrative operations) and other key areas (e.g., quality improvement, children's services leadership, project management).*
- *MHR-2: MHMRA needs to better incorporate front line and mid-management staff in system change and quality improvement processes (6-12 months).*
- *MHR-3: MHMRA needs to clearly define its vision, scope of services and clinical approach.*
- *MHR-4: Continue to develop the current service array and organizational culture to support that vision, focusing on: evolving beyond the current model that is centered primarily on MD / RN / medication care and integrating this base of medical care into a team-based model based more on flexible person/family-centered care; developing more welcoming and*

customer-centered access models (e.g., access at every outpatient clinic); expanding intensive treatment capacity for adults and children; improving treatment of co-occurring substance use disorders; expanding the crisis continuum; organizing delivery of children's services; and expanding peer leadership and programs (initial efforts should begin in the short term, but substantial implementation will likely take 1-2 years).

- *MHR-5: For IT, complete the planned IT risk assessment and update the Disaster Recovery Plan (6 months). Regarding the electronic health record, implement the planned legacy system upgrade to address urgent requirements for ICD-10 (6 months), and finish the full electronic health record conversion (1-2 years).*
- *MHR-6: MHMRA's facility planning should include a strong focus on identifying organizations where co-location of services can occur, with the intent to improve access to services for clients in the neighborhoods where they live (1-2 years).*

Purpose of the Report

Harris County engaged the Meadows Mental Health Policy Institute (MMHPI) to conduct a county-wide review of public mental health service delivery systems. The Mental Health and Mental Retardation Authority of Harris County (MHMRA), as the county's largest publically funded mental health provider, was a primary focus of the review. The broader service delivery systems that also offer mental health and other services were included in the review: additional public health care services, social services and human services systems, the justice system, managed care organizations, and schools. This report includes findings and recommendations from MMHPI's county-wide review of mental health services and our findings and recommendations on MHMRA's role within the county.

While the focus of our review was on mental health services, we also addressed services targeting the broader behavioral health needs of individuals with substance use conditions, co-occurring conditions of mental illness and substance use, and co-occurring conditions of mental illness and developmental disabilities. As a result, the report refers to behavioral health as a comprehensive term that covers mental health, substance use, and co-occurring conditions.

MMHPI would like to thank Harris County and its stakeholders for participating in the review and for providing information, with special appreciation to MHMRA for their open engagement and collaboration in the review process.

Methods and Approach

MMHPI initiated this review in mid-November of 2014 with meetings with the County Judge, MHMRA executive and board leadership, and key contacts identified by the Judge's Office from the broader service delivery system to engage them in the review and request system-wide data that would help us to understand the key system providers and services. MMHPI held an initial meeting with MHMRA and sent a detailed information request inclusive of program descriptions, policies and procedures, organization charts, benchmark data and reports, and financial information. MMHPI also began to collect data from other sources (e.g., Department of State Health Services, Texas Department of Criminal Justice) to assist us with a comparison of Harris County to other Texas counties and other states, as well as a comparison of MHMRA to other local mental health authorities. The background and recommendations section of this report presents this benchmarking information.

From December through February 2015, the MMHPI team – consisting of a psychiatrist, psychologist, two social workers, an operations consultant, and an information system expert – conducted telephone and in-person interviews with staff from MHMRA administration and service delivery sites. Visits to a range of system partners complemented the on-site review of MHMRA and included, but was not limited to, the University of Texas Harris County Psychiatric

Center (HCPC), the Harris Health System, Ben Taub Hospital Psychiatric Emergency Department, The Council on Recovery, Regional Health Partnership staff and committees, the Harris County Attorney, the Harris County Jail, the Harris County Community Supervision and Corrections Department, the Harris County Office of Criminal Justice Coordination, the Harris County Juvenile Probation Department, Harris County Protective Services for Children and Adults, the Harris County Felony Mental Health Court, private hospital providers, crisis programs, veterans services organizations, federally qualified health centers, Medicaid managed care organizations, and residential service providers. A full list of all participants is included in Appendix A.

A preliminary report was shared in February with the County Judge and MHMRA leadership to obtain feedback on our initial findings and recommendations on the system as a whole and on MHMRA's role within it. The preliminary report was reviewed in detail, additional interviews were carried out, and supplemental data were requested and received. The MHMRA Board of Directors was given a verbal briefing on the report. Feedback from all parties was incorporated to improve the accuracy and clarity of report findings and to inform further development of the recommendations.

An initial draft of the final report was provided to the County Judge in late March. Based on this report, a brief overview of primary recommendations was provided to County Commissioners and senior staff in early April. After review and approval by the county, an updated draft (with additional detail on implementation options) was provided to MHMRA, and MHMRA leadership was given two weeks to review the report and provide feedback. MMHPI project leads worked closely with MHMRA and the County Judge's Office to finalize the report based on this feedback. The MHMRA Board of Directors was briefed on the final report in late May, and their feedback was also incorporated.

In this report, MMHPI has included recommendations that are short-term, medium-term, and long-term. Short-term is defined as occurring within six to 12 months, and more specific target dates are provided for some. Medium-term recommendations are those expected to take one to two years to accomplish. Long-term goals are defined as those taking from three to five years to carry out.

The Need for Mental Health Services in Harris County

Finding N-1: Persons in Need

Harris County is large, growing, and diverse; with this growth, the number of people living in the county with severe mental health needs has also grown to over 230,000 (140,000 adults and 90,000 children). This report focuses on the 143,000 people (87,000 adults and 56,000 children) in poverty (under 200% FPL) that serves as the benchmark of need to be met by the overall public mental health system.

Harris County is the most populous county in Texas and is growing fast. From 2000 to 2015, the Harris County population grew by over 31% to 4.47 million people. Behind Los Angeles (CA) and Cook (IL) Counties, Harris County is the third largest county in the United States. Houston is the fourth largest city in the United States, trailing only New York, Los Angeles, and Chicago. Furthermore, if the population of unincorporated Harris County were a city, it would be the fifth largest in the nation.

Harris County is also very diverse. As can be seen in Table 1 below, two-thirds of Harris County residents identify with a race/ethnicity other than White. Among those living in extreme poverty, 87% represent a race/ethnicity category other than White. Latinos and Hispanics represent a majority of the county population living in poverty. More than one quarter (27.6%) of Harris County residents have no current health insurance.[1]

Table 1: Harris County Racial and Ethnic Diversity

Population	Latino / Hispanic	African-American	White	Asian-American / Other
Harris County Population	42%	19%	33%	6%
Harris County Population in Extreme Poverty[2]	58%	25%	13%	5%

Along with this growth in the overall population, the number of people – men, women and children – with mental health needs also grew. To put system performance in context, MMHPI used the best available national prevalence studies to determine the number of people living in each Texas county, including Harris County, with severe needs: adults with serious mental illness (SMI) and serious and persistent mental illness (SPMI), and children with severe

[1] The State of Health in Houston/Harris County 2015-2016. Harris County Healthcare Alliance, Houston, Texas. Content retrieved from: http://houstonstateofhealth.org/soh_doc/ on May 15, 2015.

[2] Data were provided by MHMRA and verified by MMHPI. MHMRA obtained the county-level race/ethnicity data from the 2012 American Community Survey. In identifying the population in poverty, MHMRA used 100% of the federal poverty level (FPL) as the reference point.

emotional disturbances (SED).[3] Accordingly, Harris County, which has by far the highest population of any county in Texas, also has the highest number of people with SMI and SED. The tables that follow show the estimated scope of the need in Harris County relative to other large Texas counties.

Table 2: Twelve-Month Prevalence of Adults with SMI and SPMI, and of Children with SED Compared to Overall Population[4]

Population	Harris	Bexar	Dallas	Nueces	Tarrant	Travis
Total Population	**4,471,427**	1,882,834	2,496,859	357,888	1,959,449	1,144,887
Adults with SPMI	**72,473**	30,455	44,574	6,347	34,228	21,004
% of Population	**1.6%**	1.6%	1.8%	1.8%	1.7%	1.8%
Adults with SMI	**142,930**	54,055	88,279	12,212	64,191	38,253
% of Population	**3.2%**	2.9%	3.5%	3.4%	3.3%	3.3%
Children with SED	**91,414**	36,974	53,222	6,962	39,006	19,965
% of Population	**2.0%**	2.0%	2.1%	1.9%	2.0%	1.7%

To estimate prevalence of mental health disorders, MMHPI used an epidemiological methodology developed by Dr. Charles Holzer. Dr. Holzer uses findings from the most widely accepted national epidemiological studies, particularly the 2004 National Comorbidity Study Replication (NCS-R). Holzer draws on the NCS-R findings of the correlations between demographic variables (e.g. race/ethnicity, age, sex and income) and mental health disorders, as well as on the latest demographic data from the American Community Survey and the national census, to develop algorithms that provide the most precise estimates available of the rate of mental illness in the population. The data are usefully broken out by multiple factors, including race/ethnicity, age, and income (200% federal poverty level), and are therefore more helpful for planning purposes by mental health authorities and advocates.

[3] Serious mental illness (SMI) refers to adults and older adults with schizophrenia, severe bipolar disorder, severe depression, and severe post-traumatic stress, all of which are conditions that require comprehensive and intensive treatment and support. A subgroup of these people is defined as having a Serious and Persistent Mental Illness (SPMI) that more severely impairs their ability to work and live independently and that has either persisted for more than a year or resulted in psychiatric hospitalizations. Severe Emotional Disturbance (SED) refers to children and youth through age 17 with emotional or mental health problems so serious that their ability to function is significantly impaired, or their ability to stay in their natural homes may be in jeopardy.

[4] MMHPI used a methodology developed over several years by psychiatric epidemiologist, Charles Holzer: Holzer, C., Nguyen, H., & Holzer, J. (2015). *Texas county-level estimates of the prevalence of severe mental health need in 2012*. Dallas, TX: Meadows Mental Health Policy Institute. Compared to the overall population, these numbers tend to underestimate the need, as the population figures presented are 2015 estimates and the need figures are 2012 estimates.

In estimating the prevalence of mental health disorders, the NCS-R is much more thorough than other sources that are often cited, such as the National Survey on Drug Use and Health (NSDUH), and more inclusive than older estimates, such as the 1999 Federal Register definition used by the federal Substance Abuse and Mental Health Services Administration (SAMHSA). These other estimation approaches have their uses. For example, Mental Health America (MHA) at the national level used the NSDUH for adults and the National Survey of Children's Health (NSCH) because these data are readily available at the national level for state-by-state comparisons and include insurance status. These sources are less precise and tend to underestimate the level of need in a given state. The NSDUH and NSCH are based on survey methodology and therefore do not include people who are homeless, institutionalized, or on active military duty. Given this, the results have significant limitations in understanding need in a specific locale. Dr. Holzer and colleagues' 2012 estimates were commissioned specifically by MMHPI for use in Texas and are the most recently available. The following table compares levels of severe need to adult and child populations.

Table 3: Twelve-Month Prevalence of Severe Need Compared to Adult and Child Population[5]

County	Adults with SPMI	% of Adults	Adults with SMI	% of Adults	Total Adult Population	Children with SED	% of Children	Total Child Population
Harris	**72,473**	**2.3%**	**142,930**	**4.6%**	**3,085,107**	**91,414**	**7.8%**	**1,167,857**
Bexar	30,455	2.3%	54,055	4.1%	1,309,953	36,974	7.8%	475,403
Dallas	44,574	2.5%	88,279	4.9%	1,785,779	53,222	8.0%	667,950
Nueces	6,347	2.5%	12,212	4.7%	259,019	6,962	7.9%	87,898
Tarrant	34,228	2.5%	64,191	4.7%	1,365,940	39,006	7.6%	513,823
Travis	21,004	2.5%	38,253	4.6%	831,971	19,965	7.6%	263,329

The data are further refined to account for those below 200% of the federal poverty level (FPL) who presumably would need public assistance to afford treatment. In using prevalence to define the level of need for a public mental health system, MMHPI looked closely at poverty, using federal poverty guidelines. In general, public mental health systems provide a safety net to people who are uninsured or otherwise unable to afford care. Because of this, MMHPI focused on the proportion of the population with income at or below 200% of FPL ($23,540 for an individual). It is important to recognize that the overall mental health need in Harris County is much broader, ranging from one in four to nearly one in three, depending on the range of

[5] Estimates for children with SED are broader and more inclusive than estimates for adults with SMI and, in particular, adults with SPMI. Adults with SPMI are included within the number of adults with SMI.

diagnoses included.[6] The MMHPI prevalence data set covers the entire Texas population – not just those in poverty or with the most severe needs – but a public policy discussion related to mental health should begin by addressing the most severe needs of people living in poverty. This report focuses on the 143,000 people in Harris County in poverty with the most severe needs to serve as the benchmark of need that must be met by the overall public mental health system. While there are other severe behavioral health needs in Harris County – for example, severe substance use disorders, complex conditions related to post-traumatic stress, and complex comorbid cases involving developmental disabilities, substance use, or chronic health conditions – these 143,000 people (over half of whom also suffer from the kinds of complexities just noted) are the core population in need of mental health services.

Table 4: Adults with SMI and Children with SED Living At or Below 200% of Federal Poverty Level (FPL)

County	Total Population	Adults Under 200% FPL	Adults with SMI Under 200% FPL	Children Under 200% FPL	Children with SED Under 200% FPL
Harris	**4,471,427**	**1,081,370**	**87,283**	**619,683**	**56,044**
Bexar	1,882,834	456,352	34,913	242,153	21,780
Dallas	2,496,859	665,302	54,112	392,238	35,365
Nueces	357,888	95,695	7,599	47,940	4,379
Tarrant	1,959,449	418,338	35,873	240,450	21,569
Travis	1,144,887	257,714	21,673	117,386	10,703

Finding N-2: Public Outpatient System Capacity for Adults

For adults, the core outpatient public mental health system in Harris County – comprised of MHMRA, Harris Health, 12 federally qualified health centers (FQHCs), and three Medicaid managed care networks – has capacity to provide some level of service to 75% (65,000) of those in poverty with severe needs, but the system has dramatically too little intensive service capacity. As a result, Harris County relies too much on correctional and emergency room settings to serve those with the most severe and complex needs.

Determining the overall capacity of the outpatient public mental health system to serve those in need is complex. To compute our estimate, MMHPI took the following steps:

[6] Bilj, R., de Graaf, R., Hiripi, E., Kessler, R., Kohn, R., Offord, D., et al. (May/June 2003). The prevalence of treated and untreated mental disorders in five countries. *Health Affairs,* 22(3), 122-133.
Kessler, R. C., Demler, O., Frank, R. G., Olfson, M., Pincus, H. A., Walters, E. E., Wang, P., Wells, K. B., and Zaslavsky, A. M. (2005). Prevalence and treatment of mental disorders, 1990 to 2003. *New England Journal of Medicine,* 352:2515-23.

- **Defining the public mental health outpatient system**. The first step was to determine the constituent parts of the system. Our analysis focused on the following:
  - MHMRA of Harris County, the local mental health authority for the county;
  - Harris Health, the local hospital district (focusing on their outpatient services – inpatient and emergency services are discussed later in this section);
  - Medicaid fee-for-service (FFS) – primarily those delivered by the 12 federally qualified health centers (FQHCs) in Harris County – and managed care organizations (MCOs), which are responsible for the behavioral health care of people with Medicaid, including services delivered by MHMRA;
  - Delivery System Reform Incentive Payment (DSRIP) projects under the 1115 Waiver, which provide additional capacity coming more fully online in FY 2015; and
  - A variety of services provided in the correctional system, primarily the county jail (Harris County), adult probation, and the Texas Correctional Office on Offenders with Medical or Mental Impairments (TCOOMMI).
- **Determining the proportion of adults served with SMI in poverty by each system component**. MMHPI obtained data from the Texas Department of State Health Services (DSHS) on the unduplicated number of adults receiving services through MHMRA. MHMRA only serves adults with SMI, but Harris Health and the Medicaid programs serve a broader range. MMHPI worked with data analysts at Harris Health to develop an operational definition to identify the number of adults with SMI. We also identified those with commercial insurance (10%) across all levels of care and applied that percentage to the total to separate out that proportion from the total. The Meadows Foundation commissioned a study in 2014 by researchers from the University of Texas School of Public Health in Houston to determine the number of Texans with SMI served by the Medicaid system. These data just became available in early 2015.
- **Determining the overlap**. The Medicaid data were relatively easy to disentangle, as both MHMRA and Harris Health track payer status. We simply determined the Medicaid proportion and subtracted them from the total. The only area in which there remained overlap was between MHMRA and Harris Health. Based on interviews with system leaders, approximately 1,400 to 1,600 people a year move between the two systems.

The following table summarizes the overall adult service capacity across major outpatient public mental health service systems in Harris County. Our calculation of the number of unduplicated individuals served in outpatient settings indicates that there is capacity among the three major components of the system – MHMRA, Harris Health, and the Medicaid providers – to serve nearly three-quarters of those in need, and in poverty, at some level of care. The critical question remains, however, whether the right type and intensity of care is available.

Table 5: Adults Served by Harris County Providers

Adults Served	Harris County	Comment
Adults in Poverty with Severe Needs (SMI 200% FPL Population)	***87,000***	Rounded to nearest thousand for computational purposes.
Received Public Mental Health Outpatient Services at Any Level	**65,000**	This is an unduplicated estimate of those served by MHMRA, Harris Health, FQHCs and Medicaid MCOs.
Percent of Severe Need in Poverty	***75.0%***	Not necessarily served at right level.
Mental Health Systems		
Served by MHMRA[7]	16,359	Total served in ongoing levels of care.
Percent Medicaid	*25%*	*Overlaps with Medicaid FFS and HMO.*
Harris Health – Outpatient[8]	34,917	Only adults with severe needs (SMI diagnoses, suicidal) in ongoing care (outpatient: therapy and medication).
Percent Medicaid and Commercial	*30%*	*Medicaid and commercial excluded from unduplicated total.*
Medicaid FFS and HMO[9]	28,717	This is the unduplicated number of adults with SMI served in 2012; level of care received is not clear.
Projected DSRIP: MHMRA[10]	7,341	Not included in total.
Projected DSRIP: Non-MHMRA[11]	8,484	Not included in total.

[7] Data on people served in ongoing care (by Texas Recovery and Resiliency Level of Care – TRR LOC) received from DSHS on February 24, 2015.

[8] Data was received from S. Shim of Harris Health on March 16, 2015 and are for 2014 (calendar year). The number served – 34,917 – represents an unduplicated count of adults with diagnoses of Mood Disorders, Schizophrenia and Other Psychotic Disorders, and Suicide Intentional Self-Inflicted Injury, who received outpatient services. Some of those served may not meet the definition of SMI. The count for the same grouping of adults was 19,672 in 2012 and 26,012 in 2013, indicating a 77% increase in only two years, which stakeholders report is due to capacity building through the 1115 Waiver.

[9] Rowan, P.J., Begley, C., Morgan, R., Fu, S., & Zhao, B. (2014, September). Serious and Persistent Mental Illness in Texas: County-Level Enrollee Characteristics of Medicaid-Supported SMI Care, Texas, 2012.

[10] Data are for DY4 and are taken from Lopez, M., & Stevens-Manser, S. (2014, September). *Texas 1115 Medicaid Demonstration Waiver: Review of 4-year behavioral health projects*. Austin, TX: Texas Institute for Excellence in Mental Health. The same source was used for the non-LMHA DSRIP projections. Half of the number projected to be served through projects that serve both adults with SMI and children/youth with SED were applied to adults. Based on personal communication with Scott Hickey of MHMRA on May 8, 2015, we estimate that 2,500 of these adult clients are new clients served by MHMRA as a result of the 1115 Waiver/DSRIP project funding. These clients are included in the total of 16,359 served by MHMRA, cited above in this same table.

[11] Lopez, M., & Stevens-Manser, S. (2014, September). *Texas 1115 Medicaid Demonstration Waiver: Review of 4-year behavioral health projects*. Austin, TX: Texas Institute for Excellence in Mental Health.

Adults Served	Harris County	Comment
Correctional Systems		
Harris County Adult Forensic Unit[12]	35,542	This is the number receiving some level of service in the jail.
TCOOMMI (MHMRA)[13]	811	These services are provided by MHMRA.

In some ways, these data are encouraging:

- **Many people are receiving at least some level of care, though not (as will be seen below) generally the right level.** By looking across all three major components of the mental health system, we see that a substantial majority of people receive some type of care. Of course, more than a quarter who receive no outpatient care represent 23,000 of the county's most vulnerable residents. Some of those 23,000 may receive services in the jail, hospital, or emergency room. In addition, the vast majority of those who do receive outpatient care are receiving services and treatment that are more suitable for routine needs than severe needs. As detailed later in the report, these unmet needs drive millions of dollars of additional costs each year.
- **The safety net is anchored by several key systems: MHMRA, Harris Health, three Medicaid MCOs, and 12 federally qualified health centers (FQHCs).** When discussing public mental health systems in Texas, most policymakers are well acquainted with the central role of local mental health authorities (LMHAs), such as MHMRA. However, more people with severe needs are served across Texas overall (and within Harris County in particular) by the Medicaid system, which moved fully into managed care following the 83rd Legislature. Since September 2014, the MCOs responsible for ensuring adequate care are now responsible for rehabilitative services delivered through LMHAs, thus increasing care coordination potential. Furthermore, in Harris County, MHMRA treats a smaller number of adults with SMI than are treated by these Medicaid networks. The primary MCOs serving adults are the STAR+PLUS plans (Amerigroup, Molina Healthcare of Texas, and UnitedHealthcare Community Plan are the three operating in Harris County), which manage networks of multiple hospitals and outpatient providers (of which MHMRA is the largest provider of mental health services). There are also 12 FQHCs that provide some level of outpatient mental health care. MHMRA has MOUs with three of these FQHCs to develop integrated primary care/behavioral health care services under the 1115 Waiver. These three are: Central Care Community Health Center, Legacy Community Health Services, and El Centro de

[12] Number served between September 1, 2013 and August 31, 2014 through MHMRA's contract with the Harris County Sheriff's Office. Personal communication with S. Hickey on February 13, 2015. Note: The number with SMI and the number receiving more than screening were not precisely known at the time of this report.
[13] Data are for September 2013 through August 2014. Personal communication with S. Hickey on February 13, 2015. Note: 301 of these adults were not in local MHMRA care.

Corazón. Finally, in large urban areas, hospital districts augment the safety net, particularly for the uninsured.

FQHCs providing services in Harris County are listed in the table that follows. In addition to Medicaid revenue, other support for FQHCs comes from additional state and federal grants, local support (including foundations and community funding), and patient self-payments or insurance. Federal grants from the Health Resources Services Administration (HRSA) provide about 30% of FQHC revenue.[14]

Table 6: Harris County FQHCs

Harris County Federally Qualified Health Centers
Bee Busy Wellness Center
Central Care Community Health Center
El Centro de Corazón
Good Neighbor Healthcare Center (Fourth Ward)
Harris County Hospital District – Healthcare For The Homeless
Healthcare For The Homeless – Houston
Hope Clinic (Asian American Health Coalition)
Houston Area Community Services, Inc.
Houston Community Health Centers, Inc.
Legacy Community Health Services, Inc.
Saint Hope Foundation
Spring Branch Community Health Center

As observed above, access to some care is not the same as access to the right care. Harris Health serves many adults with SMI, but it generally provides either routine outpatient care or intensive emergency or hospital care. Harris Health has expanded its service offerings using DSRIP funds and currently provides a significant amount of routine psychiatric care as a coordinated step-down resource for people formerly served by providers such as MHMRA. This is a critical role that can hopefully be expanded over time through more systemic coordination, including better coordination of "step-ups" from Harris Health to MHMRA. Routine outpatient settings such as the Harris Health clinics can manage a wider range of higher acuity cases if they know they have quick and sure access to more intensive services such as those MHMRA delivers.

[14] Content retrieved from: https://www.dshs.state.tx.us/chpr/fqhcmain.shtm.

Medicaid MCOs and FQHCs also provide routine outpatient care and, through the MCOs, higher levels of care such as inpatient. But those MCO networks have generally only been building intermediary levels of care[15] since they began managing the rehabilitative services that, prior to September 2014, had been only available through LMHAs. While Harris County MCOs are developing additional treatment options, MHMRA is still the primary infrastructure for those with intensive needs at risk of using hospitals, emergency departments, and jails.

This scenario is similar to what is seen in communities across Texas, where LMHAs such as MHMRA generally fill the space in between, offering a continuum ranging from crisis alternatives to intensive outpatient services – such as assertive community treatment (ACT) – to skills building treatment, case management, and medication management. As discussed further under finding N-6 below, the state-funded service array in Texas does not include some important levels of care (including an array of crisis alternatives and step-downs), but LMHAs such as MHMRA nevertheless form the primary source for tertiary mental health care (that is, care for cases too complex to be seen in primary or routine specialty care settings) in most Texas communities.

MMHPI obtained FY 2014 data on the current array of state-funded services from DSHS for MHMRA and comparison LMHAs, and this is summarized in the following tables. The first finding is that MHMRA, while serving more adults than any other LMHA, serves a lower proportion of those in need. This trend was generally well known among stakeholders we interviewed, though explanations as to the reasons for this varied (and are examined in more detail throughout this report).

Table 7: Adults Served by LMHAs Relative to Need and Poverty (FY 2014, Unduplicated) [16]

County	Adult Population Under 200% FPL	Adults with SMI Under 200% FPL	Adults Served in Ongoing Treatment	Percent
Harris	**1,081,370**	**87,283**	**16,359**	**19%**
Bexar	456,352	34,913	9,708	28%
Nueces	95,695	7,599	2,471	33%
Tarrant	418,338	35,873	10,912	30%
Travis	257,714	21,673	7,968	37%

To better understand these dynamics, data was also obtained and analyzed regarding the

[15] Rowan, P.J., Begley, C., Morgan, R., Fu, S., & Zhao, B. (2015, February). Serious and Persistent Mental Illness in Texas Medicaid: Descriptive Analysis and Policy Options Final Report. Study Prepared for The Texas Institute on Healthcare Quality and Efficiency and The Meadows Foundation.

[16] Data on people served in ongoing care (by TRR LOC) received from DSHS on February 24, 2015. "Adults Served in Ongoing Treatment" represent the unduplicated number served by the LMHA, across the LOCs, A1, A1M, A1S, A2, A3, and A4.

distribution of care provided by LMHAs at different levels of care. DSHS contracts with local mental health authorities (LMHAs) to provide defined levels of care (LOCs) referred to as Texas Resiliency and Recovery (TRR) levels of care. The LOCs are broken into graduated levels of intensity to meet the various levels of service needs of children and adults entering the public mental health system.

There are five adult LOCs for ongoing mental health services:

- **Medication Management** (A1M): This is the lowest level of service, typically involving less than an hour of care per month, generally for people who are stable and in a maintenance phase needing only medication. LMHAs rarely deliver this level of care.
- **Skills Training** (A1S): This also involves a low level of service, adding an hour or two of psychosocial rehabilitation and minimal case management to medication. This is the more typical level of care delivered to people who are in a stable phase of treatment needing only minimal support.
- **Medication and Therapy** (A2): This adds two to three hours of evidence-based counseling to the mix. This is for people primarily in need of therapy for depression or anxiety (including severe anxiety, such as post-traumatic stress), in addition to medication and minimal support.
- **Team Based Treatment** (A3): This is a more intense level of care for people in need of active treatment and psychosocial skills training and who have severe needs and significant gaps in functioning. Most people with serious mental illness who are not stable would need this level of care.
- **Assertive Community Treatment (ACT)** (A4): This is the highest level of service intensity, emphasizing prevention of repeated psychiatric hospitalizations and coordinating an array of services to meet other intensive and complex needs (housing stability, ongoing justice system involvement, co-occurring substance use). Research suggests that ACT is needed by just over four percent (4%) of adults with serious mental illness (and this is likely a conservative estimate, when applied only to adults under 200% FPL, the primary focus of this report).[17]

In addition to these five ongoing treatment levels, LMHAs also provide two levels of crisis support:

- **Crisis Response:** This is the initial response to a crisis, either through mobile crisis or services at a facility, and can involve up to six days of follow-up.
- **Transitional**: This involves up to 90 days of additional transition services until the situation is resolved.

[17] Cuddeback, G.S., Morrissey, J.P., & Meyer, P.S. (2006). How many assertive community treatment teams do we need? *Psychiatric Services, 57*, 1803-1806.

The following table summarizes the distribution of care provided by LMHAs at different levels of care. The primary trend evident in these data is that most people served by LMHAs (approximately 80%) are served at the lower levels of care (Medication, Skills Training, and Medication and Therapy). This is true for all of the large LMHAs, not just MHMRA, though the trend is more marked for MHMRA (over 85%). Note that this is largely driven by MHMRA providing more counseling than other LMHAs (11% versus 5% or less for comparison LMHAs). This reflects a strength of MHMRA, specifically their capacity to provide evidence-based therapy for depression and anxiety, undergirded by a robust and well-managed training program focused on this capacity. However, intensive capacity – as is the case across Texas generally (see Finding N-6 for additional discussion) – is dramatically lacking.

Table 8: Adult Levels of Care Analysis

LMHA	Crisis Continuum		Ongoing Treatment Levels					
Level of Care[18]	Crisis Response	Transition	Medication Management	Skills Training	Meds & Therapy	Team Based	ACT	Total Non-Crisis
Harris	5,814	392	206	12,010	1,724	2,138	281	**16,359**
% of LOCs			1%	73%	11%	13%	2%	
Bexar	2,965	267	0	5,979	525	2,949	255	**9,708**
% of LOCs			0%	62%	5%	30%	3%	
Nueces	179	248	16	2,002	35	350	68	**2,471**
% of LOCs			1%	81%	1%	14%	3%	
Tarrant	382	581	2	8,386	386	2,037	101	**10,912**
% of LOCs			0%	77%	4%	19%	1%	
Travis	2,738	660	63	6,164	186	1,326	229	**7,968**
% of LOCs			1%	77%	2%	17%	3%	
Total Served	**12,078**	**2,148**	**287**	**34,541**	**2,856**	**8,800**	**934**	**47,418**
% of LOCs			**1%**	**73%**	**6%**	**19%**	**2%**	

Of more concern is the relatively low number of adults receiving Team Based and ACT services, which are the two levels of care providing the intensity of support typically delivered in best practice settings to adults with SMI in active treatment. Only 15% of people served by MHMRA of Harris County – just over 2,300 people – receive the level of care necessary for people with SMI who are not stable in their recovery and need to be in active treatment for functional deficits (as opposed to maintenance or counseling for depression and anxiety). Even the LMHA most focused on this level of care (in Bexar County) provides only one-third of its care at this

[18] The "% of LOCs" exclude crisis and crisis follow-up.

level (serving over 3,200 people). Again, these levels of care are dramatically underdeveloped statewide, but the situation in Harris County is even more concerning.

To better understand the service delivery dynamics related to this lack of capacity for functionally-focused treatment for adults with SMI, additional data was examined for four essential sub-components of active treatment for SMI: peer support, supported housing, supported employment, and the most intensive level of ongoing care, ACT.

Peer Support. A key best practice in service delivery is the use of peer support through certified peer specialists and family partners. Certified peer specialists are individuals who have lived the experience of dealing with a serious mental illness and receiving treatment. In the case of family partners, these individuals have parented a child with SED. In both cases, they have received training and certification to use their experience to help others feel a sense of hope and assist with practical support as the people they serve go through a similar experience.

Peer Support has been designated as an evidence-based model since 2007 by the federal Centers for Medicare and Medicaid Services,[19] and there is good evidence of its effectiveness[20] and emerging evidence of its cost-effectiveness.[21] However, Texas has relatively few peer providers compared to other states. According to the HB 1023 report, as of January 2014, Texas had 333 certified peer specialists, 99 certified family partners, and "over 300" recovery coaches, for a total of just over 700 peer providers (2.75 per 100,000 Texans). By comparison, Pennsylvania has over 9.0 peers per 100,000 population.

Table 9 on the following page shows the number of certified peer specialists who have been trained in each county, which is different than the number employed by the LMHA. Note that consumers in Harris County have sought training to become certified peer specialists at the highest rate of the comparison centers (68 peer specialist trainees), though Harris County has relatively fewer certified peer specialists per 100,000 people in need and faces the same gap as the rest of the state regarding peer support capacity relative to need. At the LMHA level, it is

[19] See State Medicaid Director Letter #07-011 at http://downloads.cms.gov/cmsgov/archived-downloads/SMDL/downloads/SMD081507A.pdf.

[20] Hogg Foundation for Mental Health (2014, October). Peer Support Services Outcomes.

Davidson L, Bellamy C, Guy K, Miller R. Peer support among persons with severe mental illnesses: a review of evidence and experience. *World Psychiatry,* Jun 2012;11(2):123-128.

Sledge, W., Lawless, M., Sells, D., Wieland, M., O'Connell, M., & Davidson, L. (2011.) Effectiveness of peer support in reducing readmission of persons with multiple psychiatric hospitalizations. *Psychiatric Services*, (62)5, 541-544.

[21] Trachtenberg, M., Parsonage, M., Shepherd, G., Boardman, J. (2014.) Peer support in mental health care: Is it good value for money? Centre for Mental Health. Retrieved from http://www.centreformentalhealth.org.uk/pdfs/peer_support_value_for_money_2013.pdf.

Pitt, V., Lowe, D., Hill, S., Prictor, M., Hetrick, S.E., Ryan, R., Berends, L. (2013.) Consumer-providers of care for adult clients of statutory mental health services. Cochrane Database Syst Rev. Retrieved from http://www.ncbi.nlm.nih.gov/pubmed/23203360.

hard to draw comparisons. The only data reported across LMHAs is the number of Peer Support Service Units provided. This column in the table shows that MHMRA is not using the state service code to track delivery of this service, unlike some other LMHAs that are using it (e.g., Bexar and Tarrant Counties). This does not mean that MHMRA is not using certified peer specialists to provide service, but it does reflect a lack of infrastructure to monitor delivery of this important service. MHMRA reported that they currently employ 13 certified peer specialists. Given that this is less than a quarter of the 68 certified peer specialists from Harris County that have been trained, there is an opportunity to expand the peer work force further. Based on our review, there is also a broader opportunity to integrate peer service delivery into clinical operations more comprehensively.

Table 9: Peer Support Services Units Delivered by LMHAs to Adults in FY 2014

Region / County	Adult Need Under 200% FPL	Trained Peer Specialists[22]	Specialists per 100,000 in Need	Peer Support Service Units[23]
Texas	**531,573**	**333**	62.6	**n/a**
Harris County	**87,283**	**68**	77.9	**0**
Bexar County	34,913	45	128.9	98
Nueces County	7,559	5	66.1	0
Tarrant County	35,873	62	172.8	1,518
Travis County	21,673	60	276.8	0

Evidence-Based Practices. Various data were available from MHMRA, comparison counties, and other communities around the country on three evidenced-based practices for adults with serious mental illness: Supported Housing, Supported Employment, and Assertive Community Treatment (ACT). The comparative data include benchmarks to other Texas counties and best practice regions of the United States that place the data from MHMRA of Harris County in context. MHMRA provides all three of these evidence-practices.

Besides examining available data from other large systems in Texas, MMHPI used data on evidence-based practice (EBP) utilization from other systems around the country that were publically available either through published and non-published sources. These include:

- Maricopa County (Phoenix) and Arizona were chosen because Phoenix is a large city (adult population of Maricopa County is 2,995,031) and because it provides "best practice" benchmarks in the areas of ACT.

[22] Number of FY14 trained peer support specialists by county (not LMHAs). Data obtained on February 13, 2015 via personal communication with Dr. Stacey Manser, University of Texas. Number of Peer Specialists at the LMHA is different. For example, MHMRA of Harris County reported 12 Peer Specialists on staff.

[23] Data are number of adult services delivered, by LMHA, that were coded as "Consumer Peer Support" in FY 2014. Data received from DSHS on February 20, 2015. Service provided by Peer Specialists may in many instances be coded as something other than "Consumer Peer Support."

- Because data were readily available from the New York Office of Mental Health online dashboard for New York City, we also obtained EBP utilization data from that very large city. New York City (and state) represent typical national benchmarks (not necessarily best practice benchmarks).
- Finally, Denver, while not a large city, enjoys some of the highest utilization of EBPs nationally, including Supported Housing, Supported Employment, and ACT, and in many ways it provides the broadest "best practice" level of benchmarking we are aware of for these three EBPs. The MMHPI team was able to obtain local (Denver) and state (Colorado) data through key informant contacts at the Mental Health Center of Denver, the LMHA equivalent for the City and County of Denver, Colorado.

Collectively, these comparison communities allowed MMHPI to place EBP utilization among MHMRA clients into a broader context. The best practice benchmarks available from Maricopa County (ACT and Peer Support) and Denver (ACT, Supported Employment, Supported Housing) provide a level of investment in EBPs to which Texas as a whole and MHMRA in particular might aspire over the longer term. Examination of more typical levels of EBP utilization, based on findings from other Texas communities and New York, also help put MHMRA EBP utilization in context. For Texas, Dallas was usually excluded because data from its system was not readily analyzable at the level of detail needed, other than for ACT and co-occurring substance use services.

Supported Housing. Supported Housing (SH), (sometimes called Supportive Housing outside of Texas), involves a wide range of approaches and implementation strategies to effectively meet the housing needs of people with SMI. Supported Housing may include supervised apartment programs, scattered site rental assistance, and other residential options. The overall goal of Supported Housing is to help people find permanent housing that is integrated socially, reflects their personal preferences, and encourages empowerment and skills development. Program staff provide an individualized, flexible, and responsive array of services, supports, and linkages to community resources, which may include such services as employment support, educational opportunities, integrated treatment for co-occurring disorders, recovery planning, and assistance in building living skills. The level of support is expected to fluctuate over time.

DSHS defines Supported Housing as: "Activities to assist individuals in choosing, obtaining, and maintaining regular, integrated housing. Services consist of individualized assistance in finding and moving into habitable, regular, integrated (i.e., no more than 50% of the units may be occupied by individuals with serious mental illness), and affordable housing." The two main components of Supported Housing are:

- Funds for rental assistance as part of a transition to Section 8, public housing, or a plan to increase individual income so housing will become affordable without assistance.

- Services and supports to assist with locating, moving into, and maintaining regular integrated housing.

One major barrier to delivery of Supported Housing in Texas is that these services and supports cannot be billed as rehabilitative services, though concurrent rehabilitative training can be provided. As a result, there is a financial disincentive to deliver this service in Texas.

Supported Housing is a critical service for adults in poverty with SMI. A significant body of research demonstrates that people in Supported Housing experience reduced homelessness, increased residential stability, reduced recidivism to hospitalization and shorter lengths of stay, and reduced time spent incarcerated. A few studies relate Supported Housing to reductions in psychiatric symptoms, increased social functioning, and improved quality of life.[24] In Texas, Supported Housing is not a billable service in and of itself, either for Medicaid or for state funds. Instead, the services that support someone being successful in housing of their choice is often billable under rehabilitation as skills training or psychosocial rehabilitation. In addition, Targeted Case Management is billable and includes components of services that can be billed that help someone obtain or maintain housing.

As the next table shows, MHMRA of Harris County provides a level of Supported Housing similar to one benchmark county in Texas (Travis) and some benchmark areas nationally (Arizona, New York), but it provides significantly less than our estimates for Texas as a state, other Texas counties (Bexar, Nueces, Tarrant), and the best practice site identified (Denver, CO). Note that data on individuals served was not available for comparison Texas counties (it was available at a state level) and had to be estimated based on the number of units provided. We did know the number of people receiving Supported Housing in Harris County using MHMRA data, so we used the proportion of units to people for Harris County to estimate the number of people served in other Texas counties. In summary, Texas is below best practice benchmarks, though comparable to other benchmarks, but MHMRA delivers less than the Texas state average and substantially less than several comparison communities in Texas. This is a major gap.

However, in the last two years MHMRA has been doing substantially more than many other LMHAs to address homelessness. Funding for housing subsidies must come from state or local resources outside of core LMHA funding. Additional state funding for housing allocated by the 83rd Legislature was originally targeted to allow 73 homeless MHMRA clients to be housed. MHMRA was very assertive in pursuing these resources and was actually able to use all of these

[24] Ridgeway, P. and Marzilli, A. (2006). Supported Housing and Psychiatric Disability: A Literature Review and Synthesis: Prepared for the Development of an Implementation Toolkit. Citing Hough, R., Harmon, S., et al. (1994). The San Diego project: providing independent housing and support services. In Center for Mental Health Services (eds.). Making a difference: Interim status report on the McKinney research demonstration program for mentally ill adults, at 91-110.

funds, plus funds unexpended by other LMHAs, to house 254 people in FY 2014 and 222 (as of May 1, 2015) in FY 2015. The average of these two years (approximately 230 slots overall) will be available going forward. MHMRA estimates that an additional 230 people currently in care (over and above the 230 already served) are homeless and many more are in substandard housing that could benefit from additional Supported Housing resources. MHMRA and the broader community clearly have capacity to coordinate with new resources and pursue housing. The Coalition for the Homeless Houston / Harris County coordinates Supported Housing development in the Houston and Harris County region, and MHMRA is a long-standing participant and serves on its Steering Community. However, to match best practice communities like Denver (see the following table), Harris County would need to provide an additional 2,200 slots (10 times the amount allocated by the 83rd Legislature). In other communities like Denver, the local housing authority was able to leverage a mix of state and local resources to pursue additional federal and private development resources, set aside and prioritize subsets of new developments for people with serious mental illness, use the Americans with Disabilities Act and other strategies to accommodate more individuals with substance use and criminal histories, and develop its much broader array of Supported Housing.

Table 10: Adults with SMI (200% FPL) Known to Have Received Supported Housing (SH)

Region	Adult Need Under 200% FPL[25]	SH Service Units Delivered	Adults Receiving SH[26]	Percent of Need Receiving SH
United States	7,495,538	n/a	75,875	1.0%
Arizona[27]	116,710	n/a	2,383	2.0%
Denver County[28]	14,699	n/a	1,650	11.2%
New York State	459,945	n/a	4,983	1.1%
New York City[29]	196,743	n/a	2,351	1.2%
Texas	531,573	n/a	7,826	1.5%

[25] When we have benchmarks for EBPs outside of Texas, we use the total estimated number of people with SMI in each region, applying a 58% factor based on Texas data to estimate the number who are living at/below 200% FPL in order to better facilitate comparisons to the communities outside of Texas.

[26] Generally, state-level figures are based on state authorized mental health services, including Medicaid enrollees, reported in the SAMHSA's NOMS system in 2012. Retrieved from http://media.samhsa.gov/dataoutcomes/urs/urs2012.aspx. New York State and New York City "Received SH" data were estimated based on average lengths of stay and quarterly capacity and occupancy data.

[27] Mercer Consulting (2014, June). *Service Capacity Assessment: Priority Mental Health Services, 2014.* (Study Conducted for the Arizona Department of Health Services/Division of Behavioral Health Services.) Unpublished Manuscript. Phoenix, AZ: Mercer Consulting.

[28] Data received through personal communication with Roy Starks and Kristi Mock of the Mental Health Center of Denver in March 2014.

[29] New York State Office of Mental Health (2013). (Online Dashboard) Residential Program Indicators Report: New York County. Retrieved from http://bi.omh.ny.gov/adult_housing/reports?p=rpi&g=New+York&y=2013&q=Dec+31 on January 13, 2015.

Region	Adult Need Under 200% FPL[25]	SH Service Units Delivered	Adults Receiving SH[26]	Percent of Need Receiving SH
Harris County	**87,283**	**1,019**	**823**	**0.9%**
Bexar County	34,913	1,607	*1,298 (est.)*	*3.7%*
Nueces County	7,559	426	*344 (est.)*	*4.6%*
Tarrant County	35,873	3,654	*2,951 (est.)*	*8.2%*
Travis County	21,673	301	*243 (est.)*	*1.1%*

Supported Employment. MHMRA of Harris County also provides Supported Employment (SE) services to adults with serious mental illnesses. Supported Employment promotes rehabilitation and a return to mainstream employment for persons with SMI. Supported Employment programs integrate employment specialists with other members of the treatment team to ensure that employment is an integral part of the treatment plan. DSHS defines Supported Employment as: "Intensive services designed to result in employment stability and to provide individualized assistance to individuals in choosing and obtaining employment in integrated work sites in regular community jobs. Includes activities such as assisting the individual in finding a job, helping the individual complete job applications, advocating with potential employers, assisting with learning job-specific skills, and employer negotiations."

A considerable body of research indicates that specific Supported Employment models, such as Independent Placement and Support (IPS), are successful in increasing competitive employment among adults with SMI.[30] In addition, the research consistently shows that Supported Employment is effective across a broad range of individual factors, such as diagnosis, age, gender, disability status, prior hospitalization, co-occurring substance use disorder, and education.[31] As a result, best practices recommend providing Supported Employment to all individuals with mental illnesses and/or co-occurring disorders who want to work, regardless of prior work history, housing status, or other population characteristics.[32] A review of three randomized controlled trials found that, in general, 60-80% of people served by a Supported

[30] Drake, R.E., Becker, D.R., Clark, R.E. & Mueser, K.T. (1999). Research on the individual placement and support model of supported employment. *Psychiatric Quarterly*, 70, 289-301.

[31] Substance Abuse and Mental Health Services Administration (SAMHSA) Center for Mental Health Services (CMHS) (2003). Evidence-Based Practices: Shaping Mental Health Services Toward Recovery: Co-Occurring Disorders: Supported Employment Implementation Resource Kit. Rockville, MD: U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Center for Mental Health Services. (Supported Employment Resource Kit).

[32] North Carolina Division of Mental Health, Developmental Disabilities, and Substance Abuse Services. Mental Health Systems Transformation: Supported Employment Toolkit. Retrieved from http://www.governorsinstitute.org/index.php?option=com_content&task=view&id=32&Itemid=61&PHPSESSID=c0381139b8ae1fb19764f80bd8d57992.

Employment model obtain at least one competitive job.[33] Research suggests that about half of adults with SMI want to work.

In Texas, Supported Employment is not a billable service in and of itself, either for Medicaid (FFS or MCO) or for state funds. Instead, many services that support someone getting and keeping employment can be billable under rehabilitation as skills training or psychosocial rehabilitation, and formal vocational rehabilitation (VR) services must be coordinated with the Department of Assistive and Rehabilitative Services (DARS). One coordination issue involves the DARS intake and eligibility process, which often involves substantial delays and works optimally only where there are strong relationships between the mental health clinician and the DARS VR counselor. In a large system, this is particularly challenging. In addition, Targeted Case Management is billable and includes components of services that can be billed that help someone obtain or maintain housing. Under the new Medicaid 1915i State Plan Amendment that Texas hopes to have approved in 2015, a more comprehensive and formal Supported Employment benefit will be available for eligible individuals.[34]

Table 11 on the following page shows that MHMRA (which provides all Supported Employment to people with SMI in Harris County of which we are aware) has capacity to provide approximately one-seventh of the Supported Employment capacity needed in Harris County, compared to best practice benchmarks. As noted later in Finding N-6, this is largely a function of state (rather than local) policy, and MHMRA's rate is higher than the national and Texas averages, much higher than in California and New York, and higher than some major Texas counties (Bexar and Travis). However, there is more to do, as MHMRA is lower than Nueces and Tarrant counties in Texas and substantially lower than the benchmark communities that represent best practices, such as Phoenix (Maricopa County) and Denver.

[33] New Freedom Commission on Mental Health (2003). Achieving the Promise: Transforming Mental Health Care in America. Final Report. Rockville, MD: DHHS Pub. No. SMA-03-3832 at 41, *citing* Drake, R.E., Becker, D.R., Clark, R.E., and Mueser, K.T. (1999). Research on the individual placement and support model of supported employment. *Psychiatric Quarterly*, 70, 289-301.

[34] Texas Department of State Health Services (n.d.). Home and Community-Based Services – Adult Mental Health Billing Guidelines, pp. 41-46. Retrieved from https://www.dshs.state.tx.us/WorkArea/linkit.aspx?LinkIdentifier=id&ItemID=8589993416 on May 15, 2015.

Table 11: Adults with SMI (200% FPL) Known to Have Received Supported Employment (SE)[35]

Region	Adult Population Under 200% FPL	Adults Needing SE[36]	Adults Receiving SE[37]	Percent of Need Receiving SE
United States	7,495,538	3,364,000	54,190	1.6%
Arizona	116,710	54,333	12,137	22.3%
Maricopa County[38]	72,217	32,615	7,366	22.6%
California	552,096	249,340	893	0.4%
Colorado	123,567	55,806	1,380	2.5%
Denver County[39]	14,699	6,639	680	10.2%
New York (state)	459,945	207,722	1,634	0.8%
Texas	531,573	240,071	4,525	1.9%
Harris County	**87,283**	**37,305**	**1,287**	**3.4%**
Bexar County	34,913	15,414	193	1.3%
Nueces County	7,559	3,187	182	5.7%
Tarrant County	35,873	16,754	784	4.7%
Travis County	21,673	9,984	270	2.7%

Assertive Community Treatment (ACT). ACT is an intensive, self-contained service approach in which a range of treatment, rehabilitation, and support services are directly provided by a multidisciplinary team composed of psychiatrists, nurses, vocational specialists, substance abuse specialists, peer specialists, mental health professionals, and other clinical staff in the fields of psychology, social work, rehabilitation, counseling, and occupational therapy. The majority of ACT services are delivered to the person within his or her home and community, rather than provided in hospital or outpatient clinic settings, and services are available around the clock. Each team member is familiar with each consumer served by the team and is

[35] Data for Texas LMHAs received through personal communication with DSHS on January 15, 2015 for FY 2014. Data for communities outside of Texas are as follows: Arizona and Colorado, 2013; New York and California, population data, 2012, and the number of people receiving Supported Employment, 2013.

[36] The unemployment rate for people with SMI served in publicly funded mental health systems is approximately 90%, but research shows about 50% of people with SMI want vocational help. These rates were applied to SMI prevalence of each region to determine estimated need for Supported Employment.

[37] State-level figures are based on state authorized mental health services, including Medicaid enrollees, reported in the SAMHSA's NOMS system in 2012. Retrieved from http://media.samhsa.gov/dataoutcomes/urs/urs2012.aspx.http://media.samhsa.gov/dataoutcomes/urs/urs2012.aspx.

[38] Mercer Consulting (2014, June). *Service Capacity Assessment: Priority Mental Health Services, 2014.* (Study Conducted for the Arizona Department of Health Services/Division of Behavioral Health Services.) Unpublished Manuscript. Phoenix, AZ: Mercer Consulting.

[39] Data received through personal communication with Roy Starks and Kristi Mock of the Mental Health Center of Denver in March 2014.

available when needed for consultation or to provide assistance. Contemporary best practices for ACT include peer specialists as integral team members. ACT is intended to serve individuals with severe and persistent mental illness, significant functional impairments (such as difficulty with maintaining housing or employment), and continuous high service needs (such as long-term or multiple acute inpatient admissions or frequent use of crisis services).[40]

As noted above, research suggests that ACT is needed by just over 4% of adults with serious mental illness.[41] ACT is one of the most well-studied service approaches for persons with SMI with the most complex needs, with over 50 published studies demonstrating its success,[42] 25 of which are randomized clinical trials (RCTs).[43] These research studies indicate that when compared to treatment as usual (typically standard case management), ACT substantially reduces inpatient psychiatric hospital use and increases housing stability, while moderately improving psychiatric symptoms and subjective quality of life for people with serious mental illnesses. This intervention is most appropriate and cost-effective for people who experience the most serious symptoms of mental illness, have the greatest impairments in functioning, and have not benefited from traditional approaches to treatment. It is often used as an alternative to restrictive placements in inpatient or correctional settings.

Data on the provision of ACT in, as shown in the following table, indicate that the two ACT teams at MHMRA of Harris County meet just over 10% of the estimated need for ACT services among the population of people with SMI in Harris County living at or below 200% of the federal poverty level. (No other providers in Harris County were known to provide ACT at the time of the study.) This compares unfavorably to best practices communities, such as Phoenix and Denver (both of which provide more ACT than may be necessary), but it is also below other communities such as New York City and all Texas benchmark counties other than Tarrant. Overly restrictive and dated state policies related to ACT that complicate local service delivery are discussed further in Finding N-6.

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[40] Morse, G., & McKasson, M. (2005). Assertive Community Treatment. In R.E. Drake, M. R. Merrens, & D.W. Lynde (Eds.). *Evidence-based mental health practice: A textbook.*

[41] Cuddeback, G.S., Morrissey, J.P., & Meyer, P.S. (2006). How many assertive community treatment teams do we need? *Psychiatric Services, 57*, 1803-1806. This study examined the prevalence of people with serious mental illness who need an ACT level of care and concluded that 4.3% of adults with serious mental illness (SMI) receiving mental health services needed ACT level of care. The authors stipulated that people with SMI needed ACT level of care if they met three criteria: received treatment for at least one year for a qualifying mental health disorder, had been enrolled in SSI or SSDI and in treatment for at least two years, and had three or more psychiatric hospitalizations within a single year.

[42] The Lewin Group. (2000). Assertive community treatment literature review. Retrieved from SAMHSA Implementation Toolkits website: http://media.shs.net/ken/pdf/toolkits/community/13.ACT_Tips_PMHA_Pt2.pdf

[43] Bond, G. R., Drake, R.E., Mueser, K.T., & Latimer, E. (2001). Assertive community treatment for people with severe mental illness: Critical ingredients and impact on patients. *Disease Management & Health Outcomes*, 9, 141-159.

Table 12: Adults with SMI (200% FPL) Known to Have Received Assertive Community Treatment (ACT)

Region	Adult Population Under 200% FPL	Adult ACT Target[44]	Adults Receiving ACT[45]	Percent of Target Receiving ACT[46]
United States	7,495,538	322,308	63,445	20%
Arizona	116,710	5,019	8,683	173%
Maricopa Co. (AZ)[47]	72,217	3,105	1,361	44%
California	552,096	23,740	5,227	22%
Colorado	123,567	5,313	3,182	60%
Denver[48]	14,699	632	800	127%
New York	459,945	19,778	6,189	31%
New York City[49]	196,743	8,460	1,500[50]	18%
Texas	531,573	22,858	3,335	15%
Harris County[51]	**87,283**	3,753	**427**	**11%**
Bexar County	34,913	1,501	255	17%
Dallas County	54,112	2,327	525	23%

[44] Based on an analysis by Cuddeback, G.S., Morrissey, J.P., & Meyer, P.S. (2006). How many assertive community treatment teams do we need? *Psychiatric Services, 57*, 1803-1806. The Cuddeback et al. estimate was applied to people with SMI, regardless of income level.

[45] State-level figures are based on state authorized mental health services, including Medicaid enrollees, reported in the SAMHSA's NOMS system in 2012. Retrieved from http://media.samhsa.gov/dataoutcomes/urs/urs2012.aspx.http://media.samhsa.gov/dataoutcomes/urs/urs2012.aspx

[46] Note that best practice communities (Maricopa and Denver Counties) deliver ACT in excess of the Cuddeback, et al. percentage, when compared to the number of persons under 200% FPL. This is more likely a function of the conservative nature of the Cuddeback, et al. estimate when applied just to the proportion of the population under 200% FPL, rather than an excessive level of ACT service delivery in these communities.

[47] Mercer Consulting (2014, June). *Service Capacity Assessment: Priority Mental Health Services, 2014.* (Study conducted for the Arizona Department of Health Services/Division of Behavioral Health Services.) Unpublished Manuscript. Phoenix, AZ: Mercer Consulting.

[48] Data received through personal communication with Roy Starks and Kristi Mock of the Mental Health Center of Denver in March 2014.

[49] New York State Office of Mental Health. (2014). (Online Dashboard) Assertive Community Treatment Length of Stay – January 2015. Retrieved from http://bi.omh.ny.gov/act/statistics?p=los on January 13, 2015.

[50] This is a low estimate, based on quarterly census data provided by the New York Office of Mental Health.

[51] This data was provided by MHMRA in December, 2014. It represents a number served that is larger than the 281 reported in the "Adult Levels of Care Analysis" table earlier in the report that compared LMHAs on the distribution of adults served across DSHS levels of care, because it represents all adults served by MHMRA's ACT and Forensic ACT teams, including people who were assessed to need a level of care lower than ACT (A4). In May 2015, MHMRA sent information indicating that even more with lower levels of care received an intensity of service, on average, that would be expected for ACT clients, in general. However, these people were not served by ACT teams, and MMHPI does not have comprehensive data that would enable us to compare the MHMRA rate to other LMHAs.

Region	Adult Population Under 200% FPL	Adult ACT Target[44]	Adults Receiving ACT[45]	Percent of Target Receiving ACT[46]
Nueces County	7,559	325	68	21%
Tarrant County	35,873	1,543	101	7%
Travis County	21,673	932	229	25%

However, the quality of ACT services delivered is also important. Best practice ACT services – including those in Texas – seek to systematically promote consistent outcomes across programs over time through a comprehensive process of interactive, qualitative fidelity monitoring using best practice measures. Such an approach is particularly critical because high fidelity implementation of programs like ACT is a predictor of good outcomes[52] and of system-wide cost savings.[53] Rigorous fidelity assessment also provides a basis for needed service delivery enhancements within a continuous quality improvement (CQI) process. In effect, qualitative clinical services monitoring will help ensure fidelity to the ACT model, evaluate whether settlement stipulations are being met, and contribute to a continuous quality improvement process. MHMRA performs well on these audits, indicating that its teams – both its regular ACT team and its forensic ACT team – deliver high quality services according to Texas standards.

However, Texas uses the Dartmouth Assertive Community Treatment Scale (DACTS) developed in the late 1990s, rather than the current state of the art Tool for Measurement of Assertive Community Treatment (TMACT).[54] The TMACT is the current standard in the field and represents the best currently known way to promote high quality ACT services.[55] Key advantages of the TMACT model include:

- More specialized requirements for staffing and role functioning for peer, housing, and substance abuse specialists on the team.
- Dynamic caseload modeling that allows caseloads to flex up or down depending on levels of staffing. This allows more flexible service delivery than the Texas standards, as caseloads for a standard team of 100 could maintain full fidelity and range as high as 125 (thus allowing for more capacity, alongside the enhanced staffing requirements).
- TMACT also emphasizes movement on and off teams:

[52] Teague & Monroe-DeVita (in press). Not by outcomes alone: Using peer evaluation to ensure fidelity to evidence-based Assertive Community Treatment (ACT) practice. In J. L. Magnabosco & R. W. Manderscheid (Eds.), *Outcomes measurement in the human services: Cross-cutting issues and methods* (2nd ed.). Washington, DC: National Association of Social Workers Press.

[53] See for example, Latimer, E. (1999). Economic impacts of assertive community treatment: A review of the literature. *Canadian Journal of Psychiatry, 44*, 443-454.

[54] Monroe-DeVita, M., Teague, G.B., & Moser, L.L. (2011). The TMACT: A new tool for measuring fidelity to assertive community treatment. *Journal of the American Psychiatric Nurses Association, 17*(1), 17-29.

[55] The TMACT is currently the standard used in numerous states for statewide ACT implementation (e.g., Delaware, Indiana, North Carolina, Pennsylvania, and Washington).

- It requires teams operating below full capacity (TMACT Standard OS7) to "actively recruit[s] new consumers who could benefit from ACT, including assertive outreach to referral sites . . . [and] common referral sources and sites outside of usual community mental health settings (e.g., state and community hospitals, ERs, prisons/jails, shelters, street outreach)."
- It also requires teams to work to graduate consumers to lower levels of care through "regular assessment of need for ACT services [for current team members]," "explicit criteria or markers for need to transfer to less intensive service option," and "gradual and individualized" transition "with assured continuity of care" and monitoring following transition, with "an option to return to team as needed" (TMACT Standard OS9).

Integrated Services for People with Co-Occurring Psychiatric and Substance Use Disorders (COPSD). Adults with SMI also have high rates of comorbid substance use disorders (SUDs), with the best estimates indicating 50% co-occurrence of SUDs among people with SMI.[56] Data from MHMRA of Harris County summarized in the following table indicate that they meet only six percent (6%) of the county need for integrated co-occurring services among adults in poverty with SMI in Harris County (although they meet the need of about 30% of the adults with SMI whom they serve). MHMRA has recognized the need for integrated co-occurring services and recently added Licensed Chemical Dependency Counselors to each adult clinic (30 total) through a contract with The Council on Recovery using DSRIP funding. In FY 2014, 1,174 people with co-occurring conditions received integrated services through this new program. And additional 1,370 received other integrated substance abuse (SA) services. While these new services represent an important step forward in developing integrated mental health/substance use disorder (MH/SUD) capacity, there is not a system-level framework to coordinate what continues to be largely independent systems addressing mental health (e.g., MHMRA) and substance use disorders (e.g., The Council on Recovery).

[56] We refined the estimated breakout between persons with primarily SUD only and persons with co-occurring SUD and mental health (MH) conditions based on our team's national experience across systems and our own synthesis of the results of the National Comorbidity Survey Replication (NCS-R) estimates for comorbid SUD among adults with SPMI [Center for Substance Abuse Treatment. The Epidemiology of Co-Occurring Substance Use and Mental Disorders. COCE Overview Paper 8. DHHS Publication No. (SMA) 07-4308. Rockville, MD: Substance Abuse and Mental Health Services Administration, and Center for Mental Health Services, 2007.]

Table 13: Services for People with Co-Occurring Psychiatric and Substance Use Disorders (COPSD)

Region	Adult Population Under 200% FPL	Need COPSD	Received COPSD	Percent of Need Receiving COPSD
Harris County	**87,283**	**43,642**	**2,544**	**6%**[57]
COPSD[58]			1,174	
Integrated SA			1,370	

Other communities also struggle in this area, and very few even report data publicly on capacity and service trends. For example, NorthSTAR reports that over 5,000 adults in Dallas County with co-occurring disorders received services, substantially more than the 2,544 adults receiving integrated services through MHMRA. However, a meaningful comparison is not possible, for several reasons. First, it is not clear how many of those clients in Dallas County received integrated mental health and substance abuse services versus parallel care from different providers. Second, the NorthSTAR data include all providers in the publicly funded system, whereas for Harris County, we only have data on integrated services from MHMRA.

Finding N-3: Public Outpatient System Capacity for Children

For children, the core outpatient public mental health system in Harris County (MHMRA, Harris Health, Medicaid FQHCs and MCO networks) has capacity to provide some level of service to just over half (56% or 31,000) of those in poverty with severe needs, but the system has dramatically too little intensive service capacity. As a result, Harris County relies too much on juvenile justice, child welfare, and emergency room settings to serve those with the most severe and complex needs.

MMHPI used the same approach to determine overall capacity to serve children as we did for adults. We focused on the primary constituent parts of the mental health system – MHMRA, Harris Health, and the Medicaid providers – and also reviewed the scope of capacity expansion through DSRIP projects under the 1115 Waiver. We focused primarily on children with the highest needs (severe emotional disturbances or SED) and further narrowed the focus to those in poverty (under 200% FPL). We also worked to disentangle overlap among system providers.

The table on the following page summarizes the overall capacity across systems in Harris County for children. As can be seen, there is capacity between the three major components of the system – MHMRA, Harris Health, and the Medicaid providers – to serve just over half (56%) of children in need and poverty (compared to three-quarters of adults). As with adults, the

[57] This is the sum of COPSD and Integrated SA Counseling services divided by the estimated number in need of COPSD in the county.
[58] Data received through personal communication with MHMRA of Harris County in December, 2014.

critical question remains, however, whether the right type and intensity of care is available (and this is explored further below).

Table 14: Children Served by Harris County Providers

Children Served	Harris County	Comment
Children in Poverty with Severe Needs (SED 200% FPL Population)	***56,000***	Rounded to nearest thousand for computational purposes.
Received Public Mental Health Outpatient Services at Any Level	***31,000***	This is an unduplicated estimate of those served by MHMRA, Harris Health, FQHCs and Medicaid MCOs.
Percent of Severe Need in Poverty	***56%***	Not necessarily served at right level.
Mental Health Systems		
Served by MHMRA[59]	3,947	Total served in ongoing levels of care.
Percent Medicaid[60]	*73.6%*	*Overlaps with Medicaid FFS and HMO.*
Harris Health – Outpatient[61]	8,221	Only children with severe needs (SED diagnoses, suicidal) in ongoing care (outpatient therapy and medication).
Percent Medicaid and Commercial	*90%*	*Medicaid and commercial excluded from unduplicated total.*
Medicaid FFS and HMO[62]	29,578	This is an estimate of children with SED served in 2013 (on medication); level of care received is not clear.
Projected DSRIP: MHMRA[63]	1,350	Not included in total.

[59] Data on children served in ongoing care (by Texas Recovery and Resiliency Level of Care – TRR LOC) received from DSHS on February 24, 2015.

[60] Based on TRR LOC data on percent Medicaid, received from DSHS on February 24, 2015. Medicaid-indigent breakouts are for all children served in any LOC, not only ongoing care.

[61] Data received from Sharon Shim of Harris Health on March 16, 2015 and are for 2014 (calendar year). The number served – 8,221 – represents an unduplicated count of children with diagnoses of ADHD, Conduct Disorder, Disruptive Behavior Disorders, Impulse Control Disorders, Schizophrenia and Other Psychotic Disorders, and Suicide Intentional Self-Inflicted Injury, who received outpatient services. Some of those served may not meet the definition of SED. The count for the same grouping of children was 2,416 in 2012 and 4,409 in 2013, indicating a 240% increase in only two years.

[62] The Rowan et al. study focused only on adults, so this number had to be estimated from multiple sources. A total unduplicated number of children receiving Medicaid mental health services in FY 2013 – 306,809 – was provided (personal communication with Sonja Gaines, August 19, 2014). Since this was all children served, it was necessary to use other data to estimate the number with more severe needs. FY 2012 data comparing the overall number of Medicaid children with mental health diagnoses to the number receiving psychotropic medication was available (Becker, E.A. (2013). *UTHSCA Update.* HHSC; slide 11 uses data from Office of Strategic Decision Support, Xiaoling Huang), showing that 59.7% of children with mental health diagnoses also received psychotropic medications in FY 2012. Applying this to the FY 2013 data, we estimated that 183,203 children received care. Finally, to determine the Harris County portion of this statewide estimate, we divided the number of children in Harris County living in poverty (under 200% FPL) by the total number of such children in Texas and applied that proportion to the total.

Children Served	Harris County	Comment
Projected DSRIP: non-MHMRA[64]	1,260	Not included in total.
Juvenile Justice System		
Juvenile Detention[65]	1,164	These are provided by MHMRA.
TCOOMI Contract[66]	194	These are provided by MHMRA.
Child Welfare System		
Children with SED in Foster Care[67]	863	Their services are included in the Medicaid totals above.

As observed above, access to some care is not the same as access to the right care. Harris Health serves twice as many children with SED as does MHMRA, but it generally provides either routine outpatient care or intensive emergency or hospital care. As with adults, Medicaid MCOs and FQHCs also provide routine outpatient care to children and, through the MCOs, higher levels of care such as inpatient care. This also includes services to children in foster care through the STAR Health system, a managed care system operated by Superior; MHMRA managers report that they do not actively work or coordinate with Superior. The primary MCOs serving children in Harris County are the STAR plans (Amerigroup, Community Health Choice, Molina Healthcare of Texas, Texas Children's Health Plan, and UnitedHealthcare Community Plan are the five operating in Harris County), which manage networks of multiple hospitals and outpatient providers. As with the adult plans, these MCO networks have generally only been building intermediary levels of care[68] since they began managing the rehabilitative services that, prior to September 2014, had been only available through LMHAs. However, MCOs report

[63] Data are for DY4 and are taken from Lopez, M., & Stevens-Manser, S. (2014, September). *Texas 1115 Medicaid Demonstration Waiver: Review of 4-year behavioral health projects*. Austin, TX: Texas Institute for Excellence in Mental Health. The same source was used for the non-LMHA DSRIP projections. Half of the number projected to be served through projects that serve both adults with SMI and children/youth with SED were applied to children. Based on personal communication with Scott Hickey of MHMRA on May 8, 2015, we estimate that 500 of these child/youth clients are new clients served by MHMRA as a result of the 1115 Waiver/DSRIP project funding. These clients are included in the total of 3,947 served by MHMRA, cited above in this same table.

[64] Lopez, M., & Stevens-Manser, S. (2014, September). *Texas 1115 Medicaid Demonstration Waiver: Review of 4-year behavioral health projects*. Austin, TX: Texas Institute for Excellence in Mental Health. (Half of the SMI/SED category were allocated to children, versus adults.) However, these data were not included in the total and percent in need estimated served.

[65] Data are for September 2013 through August 2014. Personal communication with S. Hickey on February 13, 2015. Youth are served in four (4) Juvenile Justice Programs: Aftercare-CBSU (164), Alternative Education (50), Choices (285), and CUPS (665).

[66] Data are for September 2013 through August 2014. Personal communication with S. Hickey on February 13, 2015.

[67] Data are for September 2013 through August 2014. Data received through personal communication with Catherine Farris of DFPS on March 18, 2015.

[68] Rowan, P.J., Begley, C., Morgan, R., Fu, S., & Zhao, B. (2015, February). Serious and Persistent Mental Illness in Texas Medicaid: Descriptive Analysis and Policy Options Final Report. Study Prepared for The Texas Institute on Healthcare Quality and Efficiency and The Meadows Foundation.

assertive efforts to develop capacity, much of it outside of the MHMRA system, and in late 2016, the STAR Kids plans will be available and will further broaden the range of available supports. While Harris County MCOs are developing additional treatment options, MHMRA still provides much of the capacity for children with intensive needs at risk of out-of-home placement, similar to other communities across Texas.

MMHPI obtained FY 2014 data on these services from DSHS for MHMRA and comparison LMHAs, and this is summarized in the following tables. The first finding is that MHMRA, while serving more children than any other LMHA (and more children than required under its current DSHS contract), serves a lower proportion of those in need than other LMHAs. This trend was generally well known among stakeholders we interviewed, though explanations as to the reasons for this varied (and are examined in more detail throughout this report).

Table 15: Unduplicated Number of Children with SED Living At or Below 200% FPL Who Were Served (September 2013 to August 2014)

County	Child Population Under 200% FPL	Children with SED Under 200% FPL	Children Served in Ongoing Treatment	Percent	Percent Medicaid
Harris	619,683	**56,044**	**3,947**	**7%**	**74%**
Bexar	242,153	27,780	1,918	9%	75%
Nueces	47,940	4,378	546	12%	85%
Tarrant	39,006	21,568	2,060	10%	82%
Travis	240,450	10,703	1,657	15%	67%

As with adults, all LMHAs in Texas provide defined Texas Resiliency and Recovery (TRR) levels of care (LOCs) to children. The LOCs are broken into graduated levels of intensity to meet the various levels of service needs of children and adults entering the public mental health system.

There are four primary child LOCs for ongoing mental health services:

- **Medication Management** (C1): This is the lowest level of service, typically involving less than an hour of care per month, generally for children who are stable and in a maintenance phase needing only medication or low levels of psychosocial or case management supports. A child with SED would need to be relatively stable to receive this LOC.
- **Targeted** (C2): This adds two to three hours of family / individual counseling or skills training to the mix. This is for children primarily in need of treatment with low levels of functional impairment. As with Medication Management, a child with SED would need to be relatively stable functionally to receive this LOC.
- **Complex** (C3): This is a more intense level of care for children with functional impairments in need of active treatment and psychosocial skills interventions aimed at

preventing juvenile justice involvement, expulsion from school, displacement from home, or worsening of symptoms or behaviors. Most children with SED who are not stable would need this level of care.

- **Intensive Family Services** (C4): This is the highest level of service intensity for children, generally for children with significant involvement with multiple child serving systems. It involves intensive family-focused treatment (target of two or more hours per week on average), generally delivered in the home or community. The level of functional impairment must be high, resulting in (or at least likely to result in) juvenile justice involvement, expulsion from school, out-of-home placement, hospitalization, residential treatment, serious injury to self or others, or death.

Children and families also have access through LMHAs to two specialized levels of care:

- **Young Child Services** (YC): These are services for children ages three to five with a particular focus on the relationship between the parent and child.
- **Youth Empowerment Services (YES) Waiver** (YES): In a subset of larger Texas counties, including Harris County, YES Waiver services are available. LMHAs coordinate the care and provide high-fidelity wraparound planning and service coordination, but the additional supports are provided by non-LMHA providers. YES Waiver home and community-based supports are only available for Medicaid recipients. In addition to regular Medicaid services, waiver participants are eligible for other services as needed, including respite care, adaptive aids and supports, community living supports, family supports, minor home modifications, non-medical transportation, paraprofessional services, professional services, supportive employment services, supportive family-based alternatives, and transitional services.

In addition to these ongoing treatment levels, LMHAs also provide:

- **Crisis Response:** This is the initial response to a crisis, either through mobile crisis or services at a facility and can involve up to six days of follow-up.
- **Transitional**: This involves up to 90 days of additional transition services until the situation is resolved.

Table 16 on the following page summarizes the distribution of care provided by LMHAs at different levels of care. The primary trend evident in these data is that most children served by Texas LMHAs (approximately 77%) are served at the lower levels of care (Medication Management, Targeted). This is true for all of the large LMHAs, not just MHMRA, though the trend is higher for MHMRA (approximately 85%). Note that this is largely driven by MHMRA providing more Targeted services than other LMHAs (70% versus 52% or less for comparison LMHAs). However, the total services provided for children with significant functional needs reach less than 900 children a year in a county with nearly the same number of children with

SED in foster care, over 1,100 children with SED in juvenile justice system services, and over 56,000 children with severe needs.

Based on our work in multiple states (WA, MA, NE, and PA) that implement intensive services for those children with SED most at risk for out-of-home placement, the MMHPI team estimates that one in 10 children with SED at any one time (approximately 5,600) would require intensive services (LOC C4). As noted in Table 16, MHMRA served only 33 children at this level of care in 2014. While many of these children would likely be served by Medicaid MCOs and not necessarily solely at MHMRA, such capacity is dramatically lacking.

Table 16: Children's Levels of Care Analysis

LMHA	Crisis Continuum		Ongoing TRR Treatment Levels				Specialized	
Level of Care[69]	**Crisis**	**Transition**	**Medication Management**	**Targeted Services**	**Complex Services**	**Intensive Family**	**YES Waiver**	**Young Child**
Harris	638	61	707	3,303	668	33	171	228
% of LOCs			15%	70%	14%	1%		
Bexar	448	16	487	1,258	601	54	448	136
% of LOCs			20%	52%	25%	2%		
Nueces	6	2	208	229	126	18	0	52
% of LOCs			36%	39%	22%	3%		
Tarrant	56	19	176	390	183	22	163	139
% of LOCs			23%	51%	24%	3%		
Travis	254	133	1,285	981	363	52	132	81
% of LOCs			48%	37%	14%	2%		
Total Served	**1,402**	**231**	**670**	**890**	**352**	**90**	**914**	**636**
% of LOCs			33%	44%	18%	4%		

One area of both concern and opportunity is the delivery of fidelity-based **Wraparound Service Coordination** (based on the standards of the National Wraparound Initiative) as part of the YES Waiver array. This support is delivered by MHMRA and involves an integrated care coordination approach for children involved with multiple systems and at the highest risk for out-of-home placement.[70] Wraparound is not a treatment per se. Instead, wraparound facilitation is a care

[69] The "% of LOCs" include all LOCs for children's services.

[70] Bruns, E.J., Walker, J.S., Adams, J., Miles, P., Osher, T.W., Rast, J., VanDenBerg, J.D. & National Wraparound Initiative Advisory Group. (2004). Ten principles of the wraparound process. Portland, OR: National Wraparound Initiative, Research and Training Center on Family Support and Children's Mental Health, Portland State University.

coordination approach that can fundamentally change the way in which individualized care is planned and managed across systems. The wraparound process aims to achieve positive outcomes by providing a structured, creative, and individualized team planning process that, compared to traditional treatment planning, has been shown to result in plans that are more effective and more relevant to the child and family. Additionally, wraparound plans are more holistic than traditional care plans in that they address the needs of the youth within the context of the broader family unit and are also designed to address a range of life areas. Through the team-based planning and implementation process, wraparound also aims to develop the problem-solving skills, coping skills, and self-efficacy of the young people and family members. Finally, there is an emphasis on integrating the youth into the community and building the family's social support network. The wraparound process also centers on intensive care coordination by a child and family team (CFT) coordinated by a wraparound facilitator. The family, the youth, and the family support network comprise the core of the CFT members, joined by parent and youth support staff, providers involved in the care of the family, representatives of agencies with which the family is involved, and natural supports chosen by the family. The CFT is the primary point of responsibility for coordinating the many services and supports involved, with the family and youth ultimately driving the process. The wraparound process involves multiple phases over which responsibility for care coordination increasingly shifts from the wraparound facilitator and the CFT to the family.[71]

MHMRA is beginning to build this capacity. Based on our work in those same states (WA, MA, NE, and PA), it is likely that approximately 2,000 to 3,000 of the most functionally impaired children and their families in Harris County would need wraparound and the broader YES Waiver service array, which are only available through MHMRA (MHMRA is the coordinating entity and wraparound provider and works with a network of providers). The YES Waiver was initially implemented in Harris County in January 2015 and, as of March 2015, an initial 171 children were being served. MHRMA expects this to grow to 220 by August 2015. Since this is a Medicaid benefit, funding theoretically should be available to serve every one of these children. However, capacity would need to increase ten-fold to meet the demand estimated by MMHPI.

Family Partner Services (Peer Support). Additional analysis of levels of care for children includes data on family partner services, a subset of peer support provided to and delivered by family members of children with SED. Increasingly, collaboration and partnership between families, youth and service providers have been recognized as the threads that link successful

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Aos, S., Phipps, P. Barnoski, R., & Lieb, R. (2001). The Comparative Costs and Benefits of Programs to Reduce Crime. Olympia: Washington State Institute for Public Policy.

Hoagwood, K., Burns, B., Kiser, L., et al. (2001). Evidence-based practice in child and adolescent mental health services. *Psychiatric Services*, 52:9, 1179-1189.

[71] For additional information on the phases of the wraparound process, see information at http://www.nwi.pdx.edu/NWI-book/Chapters/Walker-4a.1-(phases-and-activities).pdf

programs, policies, and practices. A recent literature review sponsored by the University of South Florida Research and Training Center for Children's Mental Health provides synthesis of available evidence for the approach.[72]

MMHPI was able to obtain data from the University of Texas on the number of certified family partners (CFPs) and data from DSHS on CFP Service Units, which are summarized in the table that follows. At the time of this report, only data from MHMRA of Harris County was available for the number of unique families that received a CFP service, so we used the proportion of units to people for Harris County to estimate the number of people receiving CFP in other Texas counties.

It is evident that MHMRA is actively pursuing the use of CFPs and, based on our estimates, provides CFP services to the families of more children than all but one of the comparison counties.

Table 17: Family Partner Services (Peer Support) Units Delivered by LMHAs to Families of Children in FY2014

Region / LMHA	Child Need Under 200% FPL	CFPs FY13[73]	CFPs FY14[74]	Children Receiving CFP[75]	Percent of Need Receiving CFP	CFP Units[76]
Harris County	**56,044**	**4**	**9**	**1,376**	**2.5%**	**4,954**
Bexar County	21,780	7	8	*227 (est.)*	*1.0% (est.)*	817
Nueces County	4,378	3	1	*209 (est.)*	*4.8% (est.)*	754
Tarrant County	21,568	3	4	*388 (est.)*	*1.8% (est.)*	1,398
Travis County	10,703	3	1	*82 (est.)*	*0.8% (est.)*	296

[72] Robbins, V., Johnston, J., Barnett, H., Hobstetter, W., Kutash, K., Duchnowski, A. J., & Annis, S. (2008). Parent to parent: A synthesis of the emerging literature. Tampa, FL: University of South Florida, The Louis de la Parte Florida Mental Health Institute, Department of Child & Family Studies.

[73] Number of certified family partners by LMHA. Data obtained on February 13, 2015, personal communication with Dr. Stacey Manser, University of Texas.

[74] Number of certified family partners by LMHA. Data obtained on February 13, 2015, personal communication with Dr. Stacey Manser, University of Texas. According to DSHS data, MHMRA of Harris County had no turnover in CFPs from FY13 to FY14. MHMRA also reported nine CFPs on staff in December, 2014.

[75] Data received from MHMRA of Harris County in December, 2014.

[76] Data are number of children's services delivered, by LMHA, that were coded as "Family Partner" in FY 2014. Data received from DSHS on February 20, 2015. Service provided by CFPs may in many instances be coded as something other than "Consumer Peer Support."

Finding N-4: Public Inpatient Capacity

While the crisis system has been a major focus of development since 2007, and while hundreds of new private beds are being built, Harris County's public system relies too much on state-funded psychiatric inpatient capacity, lacks at least 100 inpatient beds for the uninsured, and has only one geographic location for its primary crisis programs: the NeuroPsychiatric Center (NPC) operated by MHMRA and the Ben Taub Psychiatric Emergency Department operated by Harris Health.

In addition to outpatient capacity, we also examined inpatient capacity. Based on our discussions with hospital system administrators, between 200 and 300 new psychiatric inpatient beds are scheduled to begin operations in the Harris County metro area from late 2014 through 2016. While most of these facilities are reportedly focusing on private sector patients, such an expansion is also expected by some local health leaders to include excess capacity that could be purchased by public payers.

Given the multiple payers involved in Harris County, the MMHPI team was not able to assemble a complete count of inpatient use. Data available through MHMRA focused solely on beds purchased by either MHMRA through the Harris County Psychiatric Center (HCPC) or by the state under contract or through state facilities. In addition, DSHS completed a statewide state psychiatric hospital capacity assessment in late 2014 that provided an estimate of system gaps. However, both of these sources primarily focus on adult capacity. Most children are served through the Medicaid program, and these data were not currently available to our team, though other studies currently underway may shed light on them.[77] As a result, our analysis of inpatient care primarily focused on adult needs.

MHMRA currently relies primarily on three hospitals for adults: HCPC, Rusk State Hospital (mainly for forensic cases), and Harris Health. However, adults served through MHMRA receive care annually in 16 different facilities (including over 100 people a day served across eight state facilities located outside of the county), as summarized in Table 18 on the following page. On average across the year, just over 392 persons per day are served in facilities either purchased by MHMRA at HCPC (144.1 per day) or purchased by the state through contracts with community hospitals or at state facilities (247.9 per day).

[77] MMHPI has two projects under way – one using THCIC data and the other using broader data from HHSC on Medicaid use – that should provide additional information on inpatient use trends in Harris County by late 2015.

Table 18: Total Psychiatric Bed Days for MHMRA Consumers, by Hospital (FY 2014)[78]

Hospital	Bed Days	Average Daily Census
HCPC Bed Days Purchased through MHMRA State Contract		
Harris County Psychiatric Center (HCPC) Primary Beds	42,963	117.7
Adult HCPC Restoration Beds	7,912	21.7
Adult HCPC FY14 Expansion Bed	1,737	4.8
Total HCPC Bed Days – MHMRA State Contract	**52,612**	**144.1**
Direct State-Paid Bed Days		
County Hospitals		
Harris County Psychiatric Hospital	5,724	15.7
Montgomery County Hospital	2,667	7.3
State Hospitals		
Rusk State Hospital	53,613	146.9
North Texas State Hospital	12,668	34.7
Kerrville State Hospital	7,123	19.5
San Antonio State Hospital	3,404	9.3
Austin State Hospital	1,905	5.2
Big Spring State Hospital	1,352	3.7
Terrell State Hospital	599	1.6
Rio Grande State Hospital	76	0.2
Waco Center for Youth	1,013	2.8
Other	11,943	32.7
Private Psychiatric Hospitals		
Tri-County Private Psychiatric Hospital	266	0.7
CHCS Private Psychiatric	62	0.2
Tropical Private Psychiatric Hospitals	14	0.0
John Peter Smith Hospital	13	0.0
Total Bed Days – Direct State-Paid	**90,499**	**247.9**

In early 2014, HHSC commissioned a consulting firm to provide an analysis of psychiatric inpatient capacity and needs for the entire state, with a focus on services provided by state psychiatric hospitals (SPH). CannonDesign was selected as the consultant for the work and their

[78] Data received through personal communication with S. Hickey of MHMRA on February 11, 2015. Data were obtained by MHMRA from CARE.

report was recently published on the DSHS website.[79] Using this study, DSHS compiled a ten-year plan using the analysis provided by CannonDesign. According to this analysis, there are currently 4,855 inpatient beds being utilized across the state. This falls short by 570 beds of the actual need of 5,425 beds they estimated. By 2024, it is estimated that a total of 6,033 inpatient beds will be needed across the state. The current and projected need is addressed with a combination of SPH and community-based beds.

In addition, in January 2015, DSHS also released an estimate of state hospital needs statewide from the HB 3793 Task Force. This report originated from the 83rd Legislature (HB 3793), which required a plan to identify needs for inpatient and outpatient services for both forensic and non-forensic groups. A diverse stakeholder group was identified in the legislation to advise DSHS in determining the need and developing a plan to address it. The HB 3793 Task Force recommended that DSHS request 720 additional inpatient beds in the 2016-2017 biennium and an additional 1,260 over subsequent biennia to meet the current and projected population growth.

One of the primary factors identified by both CannonDesign and the HB 3793 Task Force – and a factor very much evident in Harris County – is forensic use of civil beds. Data provided by MHMRA on FY 2015 use through April 2015 found that 195 out of 285 people served during that period (68%) were forensically involved. This court involvement considerably complicates discharge planning and community step-down development.

To address the identified concerns, the Long Term Plan and CannonDesign reports recommended the development of integrated mental health, substance abuse and primary care community-based services, in addition to creating more inpatient beds. They also acknowledged that a more integrated system of community-based services would reduce the demand for inpatient services, consistent with the recommendations later in this report. However, neither report factored this into their analysis. Instead, they assumed that community services would remain the same, and they explicitly avoided any attempt to assess the impact of the 1115 Waiver DSRIP projects or the implementation of the pending 1915i State Plan Amendment. The HB 3793 report also addressed in its narrative the potential impact of community-based services, but it presented no data to determine its potential for reducing inpatient demand. The primary weakness of both plans was their lack of elaboration and specificity on how development of community capacity to reduce the need for "beds" fits into the equation. This is an important reason why Harris County needs to take a broader approach

[79] CannonDesign et al. (2014). Analysis for the Ten-Year Plan for the Provision of Services to Persons Served by State Psychiatric Hospitals: Consulting Services Regarding DSHS Rider 83 RFP Final Report. Retrieved from http://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=0CB8QFjAA&url=http%3A%2F%2Fwww.dshs.state.tx.us%2Fmhsa%2Freports%2FSPH-Report-2014.pdf&ei=XacBVfuqGZCTyATf7oCYBA&usg=AFQjCNFXiZEIWILKJIVFJ1mIsWzicdYpMw&bvm=bv.87920726,d.aWw

to leverage resources across MHMRA, Medicaid MCO, HCPC, and county resources for this population in order to reduce pressure on the highest levels of care. However, the estimates of need do present one valid measure of current community need.

In the DSHS 10 Year Plan, the Harris County area (denoted as the Montgomery County / Harris County / Houston area) was identified as one of three areas of the state that was underserved by the current configuration of SPHs given the distance required to utilize these facilities (a two hour drive time is the standard used by the report). The recommendation is to continue the contracting with local hospitals to fill the need for initial assessment and short-term hospitalization for stabilization and reserve SPH beds for tertiary care for individuals with complex conditions.

The state estimate of current unmet need (101) matches well the current average number of MHMRA consumers served in state facilities outside of the local area (over 109 on average), but both are likely conservative estimates. The HB 3793 Task Force recommended development of approximately 50% more beds over the short and longer term (though it did not provide regional breakouts for its estimate).

However, as noted above, the availability of intensive treatment and crisis services can mitigate this need. The data under Finding N-2 above underscored the dramatic lack of intensive treatment capacity for adults. It is reasonable to expect that more capacity in this area, targeted toward those with high needs using inpatient care, could reduce inpatient use as well as the flow of people with SMI into the Harris County Jail (though housing availability will be a major limiting factor across the board). Note that these types of services should ideally be jointly funded by multiple payers (MHMRA, Medicaid MCO, county) in order to optimize efficiencies and economies of scale, rather than each funding stream supporting a separate crisis care continuum. The HHSC Sunset Commission report in Recommendation 6.1 for Issue 6 also prioritized such cross-payer crisis coordination.[80]

Crisis capacity development has been a major focus of state investments since 2007 and the recent 1115 Waiver DSRIP projects. Dedicated crisis funding has grown from none in 2007 to over $29.9 million in FY 2014 (as described in more detail in the following section). Crisis diversion investment is also a major funding priority for MCOs. In fact, one of the MCOs is currently developing a crisis diversion unit (Recovery Response Center) in the northern part of Harris County, working with Recovery Innovations, a nationally-recognized, peer-oriented crisis provider.

[80] Sunset Advisory Commission (2015, February). Report to the 84th Legislature (see page 15). Retrieved from https://www.sunset.texas.gov/public/uploads/u64/Report%20to%20the%2084th%20Legislature.pdf

There are some indications that hospital and emergency room use in Harris County is lower than in comparison counties. One data point we were able to examine in Table 19, below, was use of state operated and purchased psychiatric facilities (including HCPC). By this point of comparison, Harris County uses less hospital capacity per person in need.

Table 19: State-Operated Psychiatric Hospital Days by Age, FY 2014[81]

Age Group	Harris	Bexar	NSTAR	Nueces	Tarrant	Travis
Child/Adolescent	**1,900**	**5,184**	**13,572**	**924**	**4,160**	**1,288**
SED <200% FPL	56,044	21,780	35,365	4,378	21,568	10,703
Days per 1,000 for Population in Need	33.9	238.0	383.8	211.1	192.9	120.3
Adult	**69,390**	**47,481**	**109,760**	**14,523**	**41,820**	**32,490**
Days per 1,000 for Population in Need	795.0	1,360.0	2,028.4	1,911.2	1,165.8	1,499.1
SMI <200% FPL	87,283	34,913	54,112	7,599	35,873	21,673
Geriatric	**7,975**	**14,040**	**9,504**	**132**	**2,592**	**3,792**
Days per 1,000 for Population in Need	91.4	402.1	175.6	17.4	72.3	175.0
SMI <200% FPL	87,283	34,913	54,112	7,599	35,873	21,673

This suggests that fewer people in Harris County end up in state facilities (which, of course, does not include access to non-state facilities). Analysis of emergency room expenditures by county also suggests that Harris County spends less per capita on emergency room use than comparison counties, as seen in the following table.

Table 20: Estimated ED visits for MH Crisis, Relative to Estimated Prevalence of Adults with SMI[82]

Population	Harris	Bexar	Dallas	Nueces	Tarrant	Travis
Visits	**37,881**	22,087	41,623	5,022	38,126	12,483
Adults with SMI Under 200% FPL	**87,283**	34,913	54,112	7,599	35,873	21,673
Visits per 1,000 Adults in Need	**434.0**	632.6	769.2	660.9	1,062.8	576.0

[81] Data received through personal communication with DSHS on February 13, 2015. Data are for LMHAs and for NorthSTAR. Data were calculated by multiplying the number of admissions in FY14 by the Average Length of Stay.
[82] Emergency Department (ED) data for both mental health and substance abuse are from: Meadows Mental Health Policy Institute and Texas Conference of Urban Counties. (2015). *Survey of County Behavioral Health Utilization.* Unpublished Document. Dallas, TX: Meadows Mental Health Policy Institute.

However, while relatively better than other parts of Texas, these data do not mean that the system is functioning adequately. While crisis system capacity has been expanded, the two primary crisis facilities – MHMRA Neuropsychiatric Center (NPC) and Harris Health's Ben Taub Psychiatric Emergency Room – are located at a single site. In spite of the advantages in having so much capacity co-located (e.g., treatment of complex comorbid medical conditions), key disadvantages are that (1) both facilities are frequently unable to accept crisis / emergent cases from law enforcement and others due to being used to capacity and (2) having only one location in a county of over 1,700 square miles in size[83] puts a tremendous burden on people in crisis and their families.

Another major indicator showing system needs involves lengths of stay in inpatient facilities. Comparison data shows that Harris County adults have longer lengths of stay, as summarized in Table 21, below. This could be due in part to higher needs and greater complexity. It is also likely related to the lack of intensive treatment capacity and other supports (most importantly, housing) in the community. These longer lengths of stay are also likely driven by the distances involved when people are placed in inpatient facilities outside of the county.

Table 21: State-Operated Psychiatric Hospital Average Lengths of Stay by Age, FY 2014[84]

Age Group	Harris	Bexar	NSTAR	Nueces	Tarrant	Travis
Child/Adolescent	**100**	32	116	66	130	46
Adult	**257**	119	64	141	123	57
Geriatric	**1,595**	936	352	66	144	316

Finding N-5: Public Funds Available for Mental Health Services

While targeted funding for new projects by DSHS and DSRIP has increased dramatically (especially since 2012), DSHS funding for treatment capacity for the uninsured has shrunk on a per capita basis relative to inflation for adults and children and Medicaid funding has increased.

Total funding for public mental health in Harris County exceeds $500 million a year just for the three components of the system for which data are available: MHMRA, Harris Health, and 1115 Waiver DSRIP projects, as summarized in Table 22 on the following page. The table does not include total Harris Health mental health costs (it only includes costs of uncompensated care), nor did we have access to costs for the majority of people with severe needs who are served through the Medicaid program. The table also does not include substance abuse services

[83] http://quickfacts.census.gov/qfd/states/48/48201.html.

[84] Data received through personal communication with DSHS on February 13, 2015. Data are for LMHAs and for NorthSTAR.

funding, IDD funding, or mental health funding through Medicaid MCOs (other than purchased through MHMRA or Harris Health), local independent school districts (ISDs), adult or juvenile probation, homeless programs, or any private system in the county. Based on state data and our review of other local systems in Texas, the total of these additional funding sources likely exceeds the total value of services delivered through MHMRA, but local funding breakouts beyond those listed below were not available. In the following two tables, the available amounts are contrasted with funds spent on mental health in the Harris County Jail and local emergency rooms (which overlaps with the Harris Health costs, in part).

Table 22: Partial Data on FY 2014 Mental Health Funding in Harris County

Funding Source	FY 2014 Expenditures / Valuation	Comment
MHMRA	$225,081,072	All FY 2014 funding and revenue sources reported through DSHS.[85]
Harris Health	$207,458,772	Uncompensated care costs only for FY 2014.
1115 Waiver DSRIP Projects[86]	$113,028,713	Valuation of all behavioral health projects in DY 4 (October 2014 to September 2015)

Table 23: Other Costs Related to Mental Health Needs

Source of Costs	FY 2014 Costs	Comment
Harris County Jail Costs[87]	$49,066,450	Includes housing and booking ($40,066,450) and estimated medication and treatment costs ($9,000,000).
MH Emergency Room Costs	$111,403,359	Estimates by MMHPI based on 2013 data.[88]

By contrast to the system as a whole, considerable data was available regarding MHMRA funding and expenditures. While MHMRA is an important part of the local system, it is critical to keep in mind that the majority of public funding for mental health in Harris County falls outside of the MHMRA system. This is true in every Texas county and a primary reason why it is

[85] This includes all funding, including IDD and other non-mental health services.
[86] Lopez, M., & Stevens-Manser, S. (2014, September). *Texas 1115 Medicaid Demonstration Waiver: Review of 4-year behavioral health projects*. Austin, TX: Texas Institute for Excellence in Mental Health.
[87] Meadows Mental Health Policy Institute and Texas Conference of Urban Counties. (2015). *Survey of County Behavioral Health Utilization.* Unpublished Document. Dallas, TX: Meadows Mental Health Policy Institute. Data was provided directly by Harris County.
[88] Meadows Mental Health Policy Institute and Texas Conference of Urban Counties. (2015). *Survey of County Behavioral Health Utilization.* Unpublished Document. Dallas, TX: Meadows Mental Health Policy Institute. Estimates were based on a 2012 Texas Health Care Information Collection hospital survey of 580 hospitals and costs from a 2013 Dallas Fort Worth Hospital Council Foundation report.

essential to develop a broader cross-system, cross-payer framework to coordinate across funding streams at the county level.

MHMRA's budget has risen in recent years, primarily as a result of increased DSRIP spending and the increase in mental health funding provided by the 83rd Legislature. In addition, while most Texas counties only provide the minimum required match for state expenditures, Harris County spends nearly four times the match. A significant portion of the local resource array stems from the concerted efforts of MHMRA to secure affordable medications for clients through pharmacy assistance programs (PAP). In FY2014, 13,855 non-duplicated individuals received 26,892 prescriptions (counting PAP medications only). The value of those medications was nearly $22 million for the year. In the table that follows, MHMRA funding is summarized by funding source (rows) and focus of funding (columns).

Table 24: MHMRA Funding Summary

Funding Sources	Adult Services	Child Services	Crisis Services	Hospital (HCPC)	Total Priority Mental Health	Other Services (IDD and others)	Totals
DSHS Allocated Funding (State and Federal)	**$40,032,638**	**$10,159,052**	**$14,271,797**	**$32,808,898**	**$97,272,385**		**$97,272,385**
Other State	**$2,492,372**	**$723,370**	**$0**	**$0**	**$3,215,742**	**$13,047,514**	**$16,263,256**
TCOOMMI	$2,046,372	$723,370	$0	$0	$2,769,742	$0	
Other – MH	$446,000	$0	$0	$0	$446,000	$0	
Other – IDD						$13,047,514	
Medicaid IDD						**$7,168,194**	**$7,168,194**
MH Federal	**$15,834,306**	**$6,951,954**	**$6,506,420**	**$0**	**$29,292,680**	**$15,212,225**	**$44,504,905**
Medicaid - MH	$7,302,785	$3,337,253	$1,473,574	$0	$12,113,612		
Medicaid - Other	$0	$0	$0	$0	$0	$15,212,225	
1115 Waiver	$8,531,521	$3,614,701	$5,032,846	$0	$17,179,068	$0	
Local Funds							**$59,872,332**
Required Match	$6,620,217	$0	$0	$0	$6,620,217	$1,059,179	$7,679,396
Other County							$30,333,482

Funding Sources	Adult Services	Child Services	Crisis Services	Hospital (HCPC)	Total Priority Mental Health	Other Services (IDD and others)	Totals
Local (non-cash)[89]	$21,352,839	$295,231	$0	$0	$21,648,070	$0	$21,648,070
Local – Other							$211,384
Totals	**$91,194,079**	**$20,308,603**	**$29,902,793**	**$41,291,554**	**$182,697,029**	**$42,384,043**	**$225,081,072**

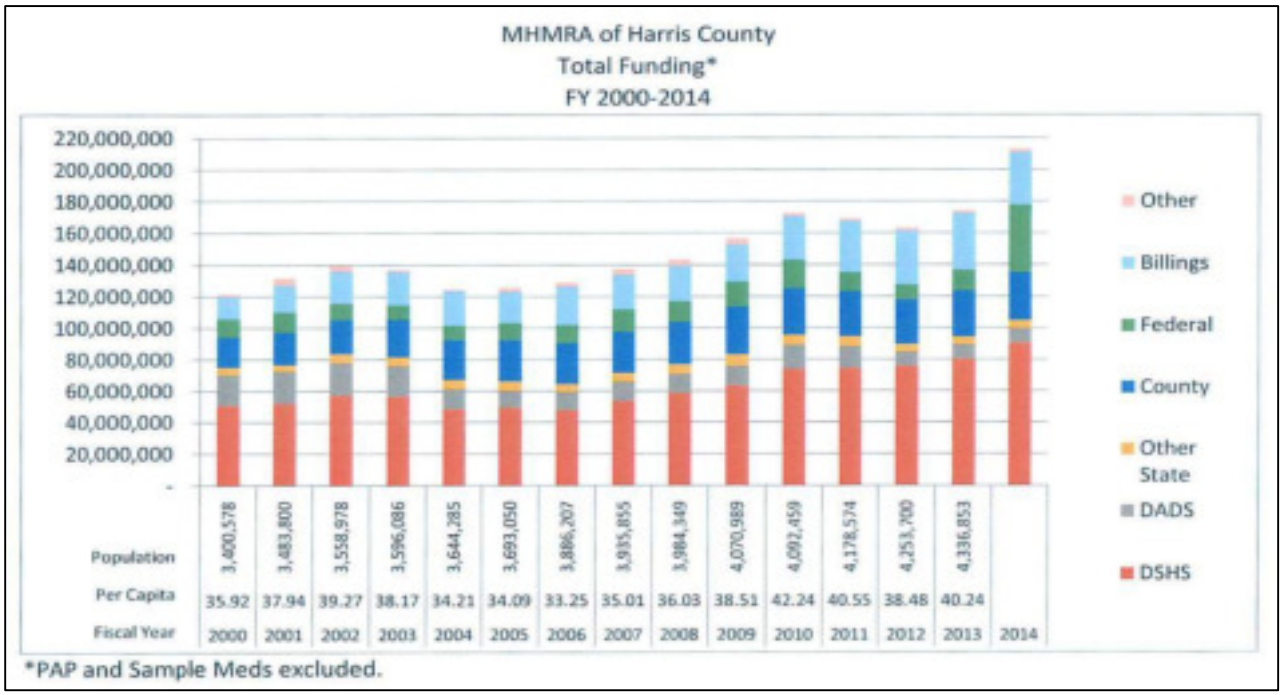
The Harris County Budget Office provided additional breakdown for the county funding, as follows:[90]

- MH Child, Adolescent & Juvenile Justice Services: $1.3 million,
- MH Community Support & Criminal Justice Services (Jail-Based): $8.3 million,
- Competency-Related Services: $771,000,
- Jail Diversion SB 1185: $3.8 million, and
- TRIAD Clinical Services:[91] $1.3 million.

MHMRA completed an analysis for this report in March that put current funding from all sources in the context of population growth (see the following table), factoring in total population growth and showing the substantial impact of DSRIP funds (in the federal category).[92]

[89] This represents the value of pharmacy assistance program (PAP) medications reported by MHMRA in Report III for adults and children served.
[90] Personal communication with K. Oliver on April 7, 2015.
[91] The TRIAD Prevention Program is a consortium of three county agencies (MHMRA, Protective Services for Children and Adults, Juvenile Probation) working together to coordinate their resources to serve at-risk youth, including youth with SED. The MHMRA component provides in-home, family-based counseling and therapy to youth with SED and their families.
[92] MHMRA of Harris County. March 26, 2015. *Analyses of State General Revenue Allocations.* Table prepared by MHMRA.

Table 25: MHMRA of Harris County Total Funding, FY 2000-2014



DSRIP Funding Increase. As noted above, the biggest single factor driving increased expenditures in FY 2014 were the 1115 Waiver DSRIP projects, which are summarized in the tables below. Nearly 300 full time equivalent (FTE) staff positions have been filled out of a total of 350 new positions developed for the projects across MHMRA and its partners. It should be noted that the future of funding for these projects is only assured through September 2016, so MHMRA has appropriately put aside substantial reserves should this funding not be renewed.

Table 26: 1115 Waiver Delivery System Reform Incentive Payment (DSRIP) Project Overview[93]

1115 BH DSRIP Projects	MHMRA Projects	MHMRA Projected Numbers Served	MHMRA Valuation (DY4)	Non-MHMRA Projects	Non-MHMRA Projected Numbers Served	Non-MHMRA Valuation
Adult SMI	12	6,341	$40,141,180	9	7,224	$29,519,915
Child SED	1	350	$3,740,715	1	0	$4,935,947
Combined SMI/SED	3	2,000	$5,553,045	1	2,520	$4,277,532
Other	3	357	$4,422,513	7	6,717	$20,437,866
Total	19	9,048	$53,857,453	18	16,461	$59,171,260

[93] Lopez, M., & Stevens-Manser, S. (2014, September). *Texas 1115 Medicaid Demonstration Waiver: Review of 4-year behavioral health projects*. Austin, TX: Texas Institute for Excellence in Mental Health.

The following tables summarize LMHA-related and non-LMHA-related DSRIP projects in Harris and comparison counties. The data indicate that MHMRA and Harris County, in general, have succeeded in procuring funding for projects that will dramatically increase the number of people with SMI and SED served. We estimate that MHMRA will increase the number of adults with SMI served in DY4 by over 7,000 and the number of children and youth with SED served by more than 1,000. New DSRIP-related funding to MHMRA for adults with SMI will top $40 million in DY4 and will exceed $6 million for children/youth with SED.

Table 27: Adults with SMI to Be Served Through 1115 Waiver DSRIP Projects, DY4

Adults to be Served	Harris	Bexar	Dallas[94]	Nueces	Tarrant	Travis
Adults with SMI (LMHA)	**6,341**	1,300	3,250	200	1,407	1,200
Funding	***$40,141,180***	*$5,966,200*	*$1,829,831*	*$331,902*	*$17,866,007*	*$2,031,397*
Adults with SMI (non-LMHA)	**7,224**	545	6,095	315	3,280	3,500
Funding	***$29,519,915***	*$11,453,049*	*$6,828,047*	*$1,878,136*	*$11,011,258*	*$4,331,172*
People with SMI and SED (LMHA)	**2,000**	3,595	750	150	0	1,254
Funding	***$5,553,045***	*$0*	*$1,635,304*	*$1,532,838*	*$0*	*$4,886,950*
People with SMI and SED (non-LMHA)	**2,520**	0	0	0	4,557	603
Funding	***$4,277,532***	*$0*	*$0*	*$0*	*$4,639,977*	*$6,023,129*
Total Estimated to be Served[95]	**15,825**	**3,643**	**9,720**	**590**	**6,966**	**5,629**
Total Funding	***$74,576,384***	***$18,525,906***	***$9,475,530***	***$2,976,752***	***$31,197,254***	***$11,817,609***

[94] Dallas CMHC and non-CMHC programs are used for Dallas County to compare to LMHAs.
[95] Half of those to be served in projects that include people with SMI and SED were estimated to be adults.

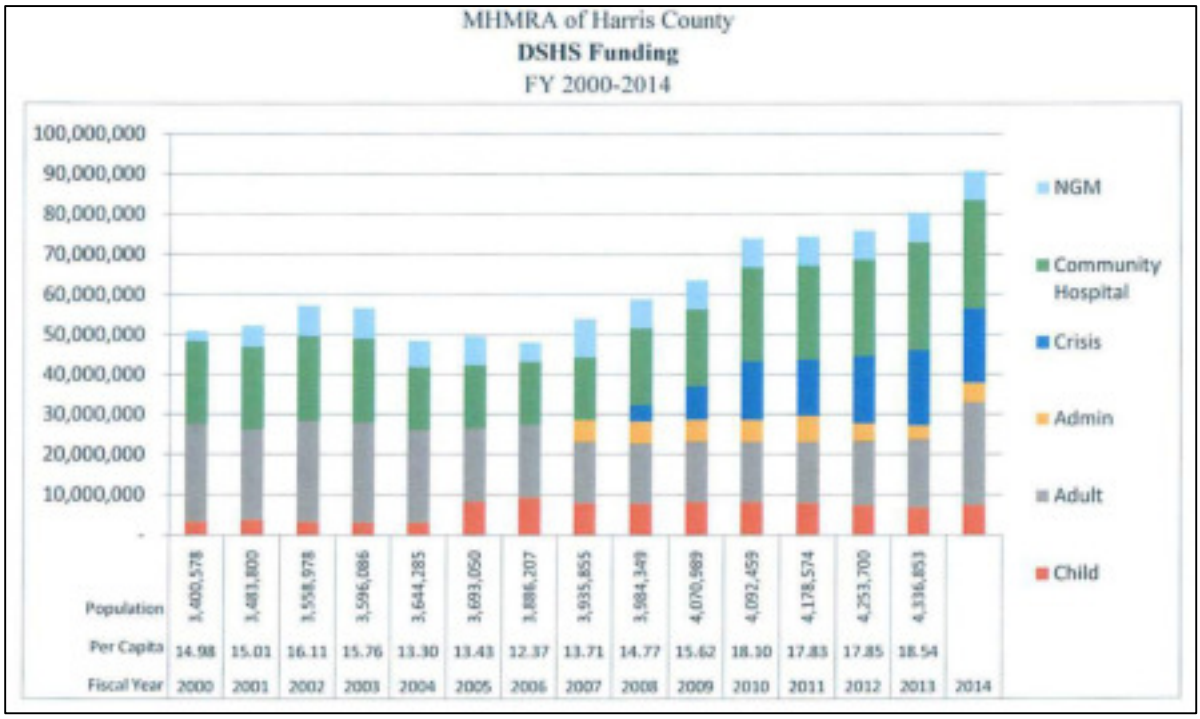
Table 28: Children/Youth with SED to Be Served Through 1115 Waiver DSRIP Projects (DY4)

Children to be Served	Harris	Bexar	Dallas	Nueces	Tarrant	Travis
Children with SED (LMHA)	**350**	800	240	315	0	7,390
Funding	***$3,740,715***	*$1,972,172*	*$726,884*	*$1,878,136*	*$0*	*$23,350,453*
Children with SED (non-LMHA)	**0**	4,789	0	0	300	15
Funding	***$4,935,947***	*$2,204,930*	*$0*	*$0*	*$262,500*	*$212,000*
People with SED and SMI (LMHA)	**2,000**	3,595	750	150	0	1,254
Funding	***$5,553,045***	*$2,213,314*	*$1,635,304*	*$1,532,838*	*$0*	*$4,886,950*
People with SED and SMI (non-LMHA)	**2,520**	0	0	0	4,557	603
Funding	***$4,277,532***	*$0*	*$0*	*$0*	*$4,639,977*	*$6,023,129*
Total Estimated to be Served	**2,610**	**7,387**	**615**	**390**	**2,579**	**8,334**
Total Funding	***$13,591,951***	***$5,283,759***	***$1,544,536***	***$2,644,555***	***$2,582,489***	***$29,017,493***

DSHS Funding Trends. In addition to the new DSRIP-funded capacity, the 83rd Legislature increased mental health funding substantially, and DSHS funding for MHMRA has increased by nearly $15 million a year since FY 2012.[96] However, these increases occurred in the context of substantial cuts prior to FY 2007 and tremendous growth in Harris County's population. In collaboration with MMHPI, MHMRA carried out an analysis of DSHS funding and Harris County population trends since FY 2000. These data are presented in the following table.[97]

[96] Based on analysis conducted by MHMRA and reviewed by MMHPI staff.
[97] MHMRA of Harris County. March 26, 2015. Table prepared by MHMRA.

Table 29: MHMRA of Harris County DSHS Funding, FY 2000-2014



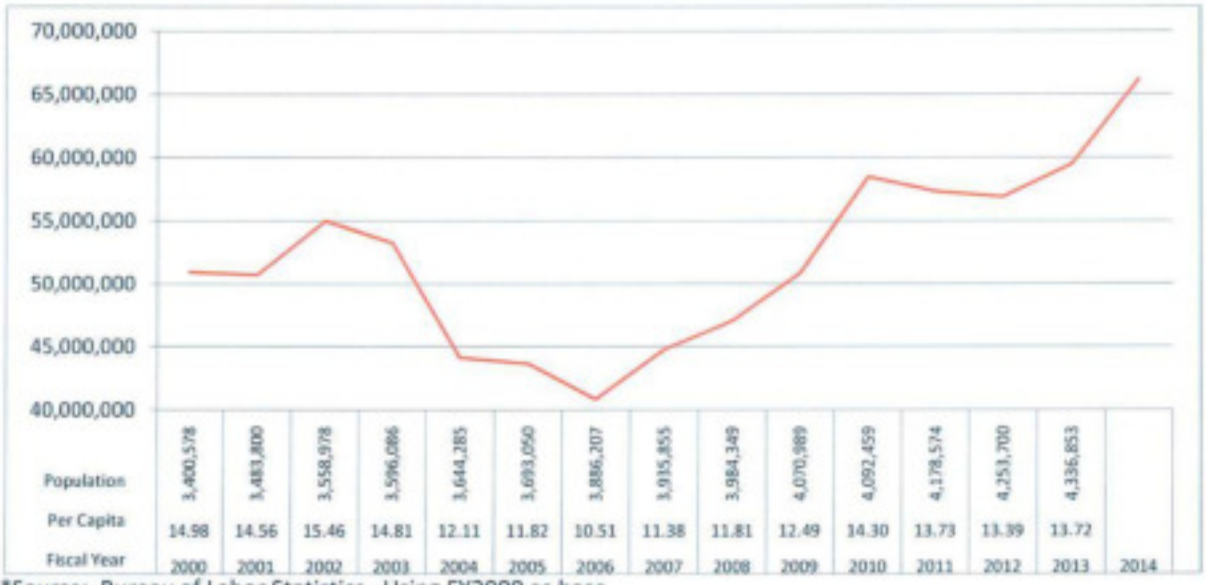
It is also useful to observe that funding requirements from DSHS have become more restrictive since that time. Note that from FY 2000 to FY 2006, DSHS only tracked four categories of funding (child, adult, community hospital, and new generation medications, or NGM). An administrative category was added in FY 2007 and then a crisis category was added in FY 2008.

When analyzed in the context of population growth, funding increases since FY 2007 have been much lower. In addition to population, the costs of doing business also increased during this time. MHMRA conducted additional analysis, factoring in inflation over this time (using the consumer price index or CPI), which over that entire 15 year period represents a more conservative estimate of inflation than the higher medical inflation rate. This analysis is presented in the following table, showing that per capita and inflation adjusted funding for FY 2013 is actually below FY 2000 levels ($13.72 versus $14.98).[98]

[98] MHMRA of Harris County. March 26, 2015. MMHPI agrees that CPI is a conservative estimate of cost increases over this period.

Table 30: MHMRA of Harris County Total DSHS Funding – CPI Inflation Adjusted, FY 2000-2014

MHMRA OF HARRIS COUNTY
TOTAL DSHS FUNDING- CPI INFLATION ADJUSTED*
FY 2000-2014



Fiscal Year	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Population	3,400,578	3,483,800	3,558,978	3,596,086	3,644,285	3,693,050	3,886,207	3,915,855	3,984,349	4,070,989	4,092,459	4,178,574	4,253,700	4,336,853	
Per Capita	14.98	14.56	15.46	14.81	12.11	11.82	10.51	11.38	11.81	12.49	14.30	13.73	13.39	13.72	

*Source: Bureau of Labor Statistics. Using FY2000 as base.
Note: There are other factors which drive up the cost of providing services such as the shortage of psychiatrists and nurses in the local Harris County labor market.

During this and recent past legislative sessions, the Texas Council of Community Centers (the Texas Council) has been focusing on the differences in funding across LMHAs on a per capita basis. This session, the Texas Council factored poverty into the analysis. MMHPI conducted its own analysis of the gaps between LMHAs based on population in poverty (under 200% FPL) and severe needs (SMI/SED), and also worked with the Texas Council to replicate the Texas Council analysis of LMHAs. Depending on the estimation model used, when compared to the statewide average of funding for adult and child mental health services, MHMRA is funded between $5.8 million and $9.9 million per year lower than the average per capita costs.

LMHA Spending Per Person Served. DSHS expenditures across LMHAs such as MHMRA are often analyzed for comparison purposes in terms of spending per person served. The tables that follow break down expenditures per person served for children and adults by each comparison LMHA. MHMRA spends more per person than comparison LMHAs for both adults and children, a fact widely known and sometimes used to criticize MHMRA for spending too much. However, the well documented shortage of psychiatrists and other mental health professionals in Texas overall and Harris County in particular, as well as the relatively large number of health care and hospital centers in the Houston area, exert an upward pressure on salaries.

Table 31: Average Mental Health Services Expenditures per Adult Served and per Child Served (Excludes Inpatient)[99]

Population	Harris	Bexar	Nueces	Tarrant	Travis
Adults	$4,019	$2,926	$2,446	$3,116	$1,829
Children	$4,374	$3,103	$2,567	$3,172	2,107

The tables that follow look at these differences more closely. Please note that per person adult costs for MHMRA include expenditures for services in the Harris County Jail ($7,016,245), costs for the SB 1185 Jail Diversion program ($400,513) are included in the "Other Outpatient Services" line, and the number of people served is not included in the denominator, adding $391 per person to the cost per adult served for MHMRA.

Table 32: Adult Service Expenditure Detail

Total Expenditures per Adult	Adult Services				
	Harris	Bexar	Nueces	Tarrant	Travis
New Generation Medications	$16	$127	$164	$50	$18
Other Medications	$59	$10	$16	$137	$21
Medication Related Services (EKG & Labs)	$177	$0	$156	$16	$0
Flex Funds	$0	$117	$39	$8	$19
Medicaid Type Services (both Eligible and Ineligible)	$2,792	$2,151	$1,300	$1,954	$955
Value Added Services	$4	$0	$0	$0	$128
Screening & Eligibility	$140	$133	$116	$251	$143
All Other Outpatient Services	$614	$0	$380	$403	$194
Crisis Residential/Inpatient	$0	$37	$112	$224	$96
Crisis Outpatient	$216	$246	$0	$11	$205
Crisis Screening & Eligibility	$0	$104	$20	$61	$51
Crisis Other	$0	$0	$142	$0	$0
Total MH Adult	**$4,018**	**$2,925**	**$2,445**	**$3,115**	**$1,828**

However, the biggest driver of the difference between MHMRA and other LMHA services is "Medicaid Type Services" at $2,792 per person served. While higher than comparison LMHAs, the MMHPI team's conclusion is that this is not because spending per person is too high. If

[99] Data are from the Report III of each benchmark LMHAs submitted to DSHS as a Performance Contract requirement. Report III from each LMHA was received from DSHS December 19, 2014, per an open records request.

anything, spending per person is too low given the severity of need served. Benchmarks for team-based care (LOC A-3) are more in the $8,000 per person per year range (for intensive case management) and benchmarks for Assertive Community Treatment (ACT – LOC A-4) are more in the $14,000 per person per year range.[100]

We also broke down children's service expenditures and found a similar trend of higher "Medicaid Type Services" and "All Other Outpatient Services." As with adult services, expenditures per person – while higher than for comparison LMHAs – are relatively low given the severity of need served.

Table 33: Child Service Expenditure Detail

Total Expenditures per Child	Children's Services				
	Harris	Bexar	Nueces	Tarrant	Travis
New Generation Medications	$0	$10	$5	$8	$2
Other Medications	$21	$0	$14	$35	$8
Medication Related Services (EKG & Labs)	$0	$0	$133	$2	$0
Family Support Services	$0	$316	$99	$76	$20
Medicaid Type Services (both Eligible and Ineligible)	$3,515	$2,446	$1,785	$2,209	$1,714
Value Added Services	$0	$0	$0	$0	$18
Screening & Eligibility	$0	$86	$235	$440	$226
All Other Outpatient Services	$742	$0	$124	$228	$79
Crisis Residential/Inpatient	$0	$0	$166	$165	$0
Crisis Outpatient	$94	$245	$0	$0	$33
Crisis Screening & Eligibility	$0	$0	$6	$10	$8
Total MH Child	**$4,372**	**$3,103**	**$2,566**	**$3,173**	**$2,108**

Administration. DSHS expenditures across LMHAs are also often analyzed for comparison purposes in terms of spending on administration, as summarized in Table 34 on the following page. Note that, overall for FY 2014, the rate of MHMRA combined spending for general

[100] Washington State Institute for Public Policy (2014, May). Inventory of evidence-based, research-based and promising practices: Prevention and intervention services for adult behavioral health.

Iowa Department of Human Services. (n.d.). Assertive Community Treatment in Iowa – Fact Sheet. Retrieved from https://dhs.iowa.gov/sites/default/files/FactSheetACTinIowa2010_09-16-2011.pdf. Data also are drawn from states in which MMHPI evaluators have had access to confidential cost information.

administration (which includes administration costs for its clinical operations) and authority administration (which includes administrative functions more focused on the broader system, as defined by DSHS) is in the mid-range of the comparison LMHAs. However, in FY 2014 these expenditures included $10,046,865 for the purchase of a building, and this type of expenditure for the other comparison LMHAs was under $1 million each. If we exclude $9,000,000 (the rough difference between MHMRA and the highest of the other LMHAs) from the analysis, MHMRA General Administrative spending drops to a flat 10%, well below the other MHMRAs, and the overall sum drops to 15.2%. In an agency the size of MHMRA, the gap between this and the lowest other LMHA (Travis County) equals nearly $6 million a year in lower administrative spending.

Table 34: Administration Expenditure Detail

Expenditures	LMHA				
	Harris	Bexar	Nueces	Tarrant	Travis
General Administration[101]	$21,294,584	$8,063,670	$2,018,922	$9,835,425	$4,112,036
Authority Administration	$6,325,242	$1,639,629	$233,935	$1,732,628	$2,837,105
Sum of Administration	$27,619,826	$9,703,299	$2,252,857	$11,568,053	$6,949,141
Total Expenditures	$131,013,798	$42,623,480	$10,271,724	$55,516,257	$35,056,335
General % of Total	**16.3%**	**18.9%**	**19.7%**	**17.7%**	**11.7%**
Authority % of Total	**4.8%**	**3.8%**	**2.3%**	**3.1%**	**8.0%**
Total Admin % of Total	**21.1%**	**22.8%**	**22.0%**	**20.8%**	**19.8%**

DSHS Performance Indicators. While efforts are also under way at the local level through the 1115 Waiver Regional Health Partnership to look at performance across systems, there is as of yet no framework or coordinated effort at the local level to look at performance across behavioral health systems and funding streams. Similar to the prior funding analysis, we only have performance data for MHMRA's component of the local mental health service array and can therefore only compare MHMRA performance for the people they serve to LMHA counterparts in other counties. The drawbacks of a lack of system-wide performance indicators are discussed in more detail under finding N-6.

[101] MHMRA had a capital outlay of $10,046,865 for the purchase of a building. All other LMHAs used for benchmarking in this study had capital outlays but each were under $1million. All data are from Report III.

Along with the spending comparisons for DSHS expenditures across LMHAs, attention is increasingly turning to performance. DSHS implemented two best practice outcomes tools in September 2013: the Child and Adolescent Needs and Strengths (CANS) and the Adult Needs and Strengths Assessment (ANSA). The CANS and the ANSA are best practice outcomes tools used now in the majority of states for children and in a growing number of states for adults. DSHS is now in its second year of implementation of these tools and in the process of determining how best to integrate the CANS and ANSA into its outcome monitoring.

MMHPI has reviewed these tools in other contexts and they are among the best. However, like any tool, factors such as training, reliability across users, and application of the data are as essential to the utility of the information generated as the tool itself. While DSHS has invested in a moderate degree of training to support the initial year of implementation, MMHPI is not aware of studies in Texas of the reliability of use of the tools across LMHAs or of the adequacy of training and fidelity to implementation protocols. Anecdotally, through our work with multiple LMHAs in local systems, MMHPI is aware of concerns about reliability that would be typical of any large-scale shift to a new measurement protocol in its first year of implementation. In addition, the CANS and ANSA are best used as clinical planning and progress evaluation tools; when they are used as the basis for comparing provider outcomes, their reliability and accuracy can be compromised due to raters' awareness that the ratings are being used to judge their performance.

As such, DSHS performance data should be viewed with caution, and until strong evidence on the reliability and validity of the data used to compare and contrast LMHAs are available, it should be assumed that the data are somewhat unreliable. In other words, precise comparisons between data from different local systems are not possible at this time. If adequate reliability and validity could be assumed, a reasonable rule of thumb would assume that differences of less than five percent (5%) are not clinically meaningful. However, given that the CANS and ANSA have shown reliability and validity in research studies, and given that DSHS conducted training and prepared LMHAs for their use, large difference across services areas should be taken seriously.

The data summarized in the tables that follow are from FY 2014, the first year of implementation of this new tool. Looking across the performance metrics, people receiving services through MHMRA had good outcomes, compared to outcomes for people receiving services at other LMHAs.

Adult performance was relatively superior to other LMHAs in the areas of reduced Risk Behaviors and improved Life Functioning and Mental Health Symptoms. However, Life Functioning improved only for 39% of adults served and Mental Health Symptoms for 45.9% of

adults served, leaving opportunity for improvement over time.

Table 35: Outcomes for Adults Receiving Ongoing Outpatient Services (FY 2014)[102]

ANSA Domains	Harris	Dallas	Tarrant	Bexar	Travis
	Percent	Percent	Percent	Percent	Percent
Risk Behaviors					
Improved/Acceptable	83.4%	78.0%	76.2$	76.4%	80.0%
Worsened	10.3%	14.7%	15.0%	14.4%	12.7%
Unchanged	6.3%	7.3%	8.8%	9.2%	7.3%
Life Functioning					
Improved/Acceptable	39.0%	26.0%	19.2%	24.9%	37.3%
Worsened	14.1%	16.3%	17.7%	24.6%	13.2%
Unchanged	47.0%	57.6%	63.1%	50.4%	49.5%
Building on Strengths					
Improved/Acceptable	28.9%	21.6%	16.7%	22.2%	24.9%
Worsened	15.2%	12.2%	11.0%	17.7%	14.2%
Unchanged	55.9%	66.3%	72.4%	60.2%	60.9%
Mental Health Needs					
Improved/Acceptable	45.9%	29.4%	23.4%	24.0%	33.2%
Worsened	14.6%	16.8%	18.6%	24.6%	18.1%
Unchanged	39.5%	53.7%	58.0%	51.4%	48.7%
Crime					
Improved/Acceptable	98.5%	97.6%	98.3%	97.3%	97.7%
Worsened	1.4%	2.4%	1.5%	2.6%	2.2%
Unchanged	0.1%	0.0%	0.2%	0.1%	0.1%
Vocational/Career					
Improved/Acceptable	71.6%	57.4%	39.7%	55.9%	81.8%
Worsened	12.0%	16.9%	12.9%	20.1%	7.1%
Unchanged	16.4$	25.7%	47.4%	24.0%	11.1%
Psychiatric Hospital					
Improved/Acceptable	93.8%	94.9%	95.1%	93.2%	93.3%
Worsened	5.8%	4.8%	4.7%	6.2%	6.1%
Unchanged	0.5%	0.4%	0.3%	0.6%	0.6%

[102] DSHS. (2015, February). A Comparative Analysis of NorthSTAR and Other Behavioral Health Service Delivery Areas: As Required By 83rd Legislature, Regular Session, 2013 (Article II, Department of State Health Services, Rider 58). February 2015, Revised. The same source was used for adult and child outcomes.

In addition to the positive outcomes for MHMRA adult clients found on the ANSA instrument, two of the DSHS performance indicators that are used to compare LMHA performance to state standards and other LMHAs' performance also reflect favorably on MHMRA. As can be seen in the table below, MHMRA has a higher percentage of adults in paid employment in comparison to other large LMHAs. In addition, the DSHS performance indicator below shows that adults served through MHMRA have a high rate of adults living in the more desirable housing categories that are tracked by DSHS.

Table 36: Performance Indicator: Percentage of Adults Employed and Housed[103]

Population	Harris	Bexar	Nueces	Tarrant	Travis
Employed	**19.6%**	10.4%	21.8%	13.9%	11.9%
Housed	**97.2%**	91.2%	94.1%	96.6%	89.6%

Outcomes for children also compare relatively well and are summarized in the table that follows. In all areas, MHMRA is at least in the middle of the range and in some (Risk Behaviors, Juvenile Justice, Substance Use, Psychiatric Hospital) its performance is in the highest range.

Table 37: Outcomes for Children Receiving Ongoing Services (FY 2014)

CANS Domains	Harris	Dallas	Tarrant	Bexar	Travis
	Percent	Percent	Percent	Percent	Percent
Risk Behaviors					
Improved/Acceptable	69.1%	61.3%	67.8%	68.9%	65.8%
Worsened	13.5%	18.3%	14.3%	13.7%	17.7%
Unchanged	17.4%	20.4%	18.0%	17.4%	16.6%
Life Functioning					
Improved/Acceptable	38.7%	32.1%	38.0%	42.6%	44.8%
Worsened	14.8%	21.9%	18.0%	13.8%	14.1%
Unchanged	46.5%	46.0%	44.0%	43.7%	41.1%
Behavioral/Emotional Needs					
Improved/Acceptable	32.9%	27.0%	31.4%	44.1%	37.0%
Worsened	13.9%	12.4%	19.4%	11.9%	13.6%
Unchanged	53.2%	60.6%	49.3%	44.0%	49.4%

[103] All LMHA performance indicator data summarized in this report are from Department of Social and Health Services, LMHA performance indicator report, second half of FY 2014, retrieved from: https://www.dshs.state.tx.us/mhsa/prs/ on December 6, 2014.

CANS Domains	Harris	Dallas	Tarrant	Bexar	Travis
	Percent	Percent	Percent	Percent	Percent
Juvenile Justice					
Improved/Acceptable	96.3%	94.9%	97.6%	97.5%	96.1%
Worsened	3.5%	0.0%	2.0%	2.3%	3.6%
Unchanged	0.2%	5.1%	0.4%	0.2%	0.4%
School					
Improved/Acceptable	63.3%	54.8%	60.1%	72.1%	64.4%
Worsened	21.1%	27.0%	24.1%	13.3%	18.5%
Unchanged	15.6%	18.3%	15.8%	14.6%	17.1%
Psychiatric Hospital					
Improved/Acceptable	93.1%	88.3%	88.8%	85.7%	89.7%
Worsened	3.3%	6.6%	4.3%	4.9%	4.0%
Unchanged	3.6%	5.1%	6.9%	9.5%	6.3%

Finding N-6: State-Level Policy and Local System Development

State-level policy impedes local system development in Harris County by focusing too much on a crisis-driven service model for the uninsured, designing a largely separate system for Medicaid without a structure for coordination with state-funded services, failing to ensure equity in the distribution of limited state funds for the uninsured, overly restricting local control over the use of these limited funds, and tying financial incentives to compliance rather than performance improvement.

The many system gaps noted in Findings N-2 through N-5 are to a significant degree driven and reinforced by state-level policy at the agency (e.g., HHSC, DSHS) and legislative levels. Despite these challenges, local systems must nonetheless prioritize and address local needs, though too often with limited resources and wasteful workarounds to maintain compliance with requirements that are not tailored to local conditions. As discussed later in the County Recommendations section, the experience of the MMHPI team in other states suggests that improved collaboration at both state and local levels can improve state policy to help local systems perform better.

MMHPI's analysis of state-level policy was grounded in five principles developed over the past year to inform all of MMHPI's state-level analysis and initiatives:

1. Texans deserve behavioral health care that is accessible, understandable, efficient, and effective.

2. The state of Texas and its agencies must be accountable to taxpayers for the performance of its behavioral health systems.
3. Behavioral health care is best delivered through local systems that are held accountable for results and able to work collaboratively to help Texans in need.
4. Performance evaluation of the behavioral health system must be continuous, outcome focused, and driven by meaningful data.
5. A skilled and robust behavioral health care workforce is essential to improve the wellness of Texans.

Drawing on this framework, the MMHPI team examined Harris County's system performance to identify any local needs that might be in part driven by state policies. We identified four areas where this appears to be the case.

State-level funding decisions for the uninsured have been based primarily on improving the crisis system and front end access without adequately investing in intensive ongoing treatment capacity. The DSHS budget, as set by the legislature and implemented by DSHS, has since 2007 emphasized development of the crisis system over development of the treatment system. While there are still significant gaps in the crisis system, the current system operates as if it is predicated on an assumption that individuals in severe need must in most cases first experience a tragedy – such as a crisis or justice system involvement – in order to access treatment. Ongoing treatment capacity is so limited that even this highest need group cannot be fully served, necessitating a cycle of crisis, crisis response, failure by public systems to maintain individuals in ongoing treatment, and repeated crisis. Treatment of the intensive and complex needs of adults with SMI and children with SED generally requires continuous treatment of varying intensity and focus over a period of multiple years. However, as a practical matter, the DSHS-funded system has evolved to primarily focus on discrete episodes of care focused on resolving crises, rather than engaging people in ongoing care.

While the 83rd Legislature took unprecedented leadership in beginning to rebuild and expand treatment capacity and the 84th Legislature continued this development, at the state agency level, a focused commitment and a clear vision to systematically build intensive outpatient and recovery support (e.g., supported housing, supported employment, peer support) needs to be strengthened. This is a major driver of the continued reliance of the broader mental health system on county jails and the correctional system to augment a basic lack of core treatment capacity. While Harris County has invested substantial county resources to shore up the system, a commitment at the state level is needed to work with counties and local partners to develop a vision predicated on greater ongoing treatment capacity. Along with this, the state must also work with counties and local partners to invest in a commitment to this vision and systematically build over the next decade the necessary array of intensive and routine

outpatient care, crisis diversion and step down, and recovery supports to ensure that all Texans with severe needs receive necessary medical care to avoid tragedy.

HHSC has designed a largely separate system for Medicaid without a structure for coordinating this system with state-funded services overseen by DSHS. The HHSC Sunset Commission report under Issue 6 noted the concerning lack of coordination between the State's major health care initiatives.[104] Additionally, the 84th Legislature took important steps to require development of a strategic framework across state-funded mental health services in Article IX, Section 10.04, and Rider 84 requires expenditures to be consistent with this plan. One remaining concern is that the plan does not explicitly incorporate Medicaid expenditures.

Texas is unusual among states in the degree to which its state-funded mental health system is organized separately from its Medicaid system. Furthermore, Medicaid mental health services are exceptionally fragmented across multiple programs, with so little coordinating infrastructure within HHSC that the Legislative Budget Board was unable to compute total expenditures. Given that MMHPI estimates that HHSC Medicaid expenditures for mental health exceed those through DSHS, this is an especially concerning policy gap.

In addition to concerns related to state-level policy, Texas is also unusual in not having local infrastructure to coordinate state-funded and HHSC funded mental health services for those with the most intensive needs. In the HHSC Sunset Commission report, Recommendation 6.1 within Issue 6 focused on the need for coordination between Medicaid, DSRIP, and DSHS-funded mental health for crisis services and transitions between benefits for the many people each year who go on and off Medicaid. Because of this, Texas counties increasingly (e.g., Bexar County, Dallas County, Denton County) are developing their own local coordination entities.

The distribution of limited state funds for the care of the uninsured is inequitable. Compounding this lack of state commitment is the historically inequitable distribution of limited state funds in urban and other areas of the state with higher numbers of people living in poverty, such as Harris County. The Sunset Commission identified this inequity as a major concern in its 2014 review of DSHS,[105] and the 84th Legislature has taken a substantial step forward by allocation over $37 million for the biennium to partially realign per capita funding, based on both population and the proportion of the population in poverty.

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[104] Sunset Advisory Commission (2015, February). Report to the 84th Legislature (see page 15). Retrieved from https://www.sunset.texas.gov/public/uploads/u64/Report%20to%20the%2084th%20Legislature.pdf

[105] Sunset Advisory Commission (2014, August). Staff Report with Commission Decisions. Department of State Health Services. Downloaded at https://www.sunset.texas.gov/public/uploads/files/reports/DSHS%20Commission%20Decisions_2.pdf on May 25, 2015.

The state overly restricts local control over the use of these limited funds. Compounding this lack of base funding and inequity in its distribution are a myriad of state requirements that overly restrict the ability of local systems to deploy funds optimally in light of local needs and resources. Some of these requirements are imposed by the legislature, but many also reflect the stance of DSHS in the oversight of state funding for the uninsured. Examples include the following:

- **Funding is rigidly allocated** by strategy (e.g., adult, child, crisis, hospital) without flexibility to shift funds between strategies in light of local needs and priorities; this is analogous to tying local transportation funding to a fixed budget for freeways, a fixed budget for local streets, a fixed budget for bridges, etc., rather than an overall funding amount accountable to state performance metrics and local planning;
- **The primary performance metric is number of people served** (linked in DSHS to up to 22% of the adult and child funding strategies[106]), incentivizing maximization of numbers served rather than service effectiveness and population health management, contributing to the crisis cycling noted above by putting the primary emphasis on serving more people rather than retaining people in care and addressing their needs;
- **The state inhibits local innovation by seeking to control use of local funds beyond local match requirements**; in negotiating the FY 2015 contract, DSHS imposed service targets based on the total number of people served based on both state and local funds, counting local funds beyond the required match, thereby seeking to impose its controls beyond the funding it supplies to also overly restrict local purchasing;
- **The state restricts treatment types**; the Texas Resiliency and Recovery (TRR) standards overly limits the ability of local systems to deliver care by limiting the types of treatment that can be provided and prioritizing rigid service targets over person-centered care planning.[107]

The state focuses on compliance at the expense of performance improvement. As noted above, the primary "performance" requirement placed on MHMRA (and all other local mental health authorities across the state) is number of persons served, with 22% of adult and child treatment funding tied to this "metric." The 83rd Legislature required DSHS to tie an additional 10% of funding to performance. The DSHS Sunset Report was very critical of this implementation process. There are currently no positive financial incentives defined, and many create a disincentive to serve those most in need (because, if the people for which it will be

[106] DSHS. (n.d.). FY 2015 Performance Contract Notebook Program Attachment. Downloaded at http://www.dshs.state.tx.us/WorkArea/linkit.aspx?LinkIdentifier=id&ItemID=8589990915 on May 25, 2015.

[107] Monroe-DeVita, M., Moser, L.L. & Teague, G.B. (2011). The tool for measurement of assertive community treatment (TMACT): Version 1.0. The TMACT is currently the standard used in numerous states for statewide ACT implementation (for example, Delaware, Indiana, North Carolina, Pennsylvania, and Washington).

Monroe-DeVita, M., Teague, G.B., & Moser, L.L. (2011). The TMACT: A new tool for measuring fidelity to Assertive Community Treatment. *Journal of the American Psychiatric Nurses Association, 17*(1), 17–29

hardest to achieve performance are simply not served, it will be easier to achieve the performance targets). In addition, the potential penalties are so severe that they create a disincentive to enact them, so even basic compliance functions (including safeguards for fraud and abuse) are hampered by political pressure against enacting sanctions. As the DSHS Sunset Staff Report notes in its discussion of efforts to reduce funding inequities, too often system improvement is stymied by a "chorus of providers raising the specter of causing so much disruption in the system that efforts to correct the situation are rendered dead on arrival."[108]

The end result of this over emphasis on compliance is that, in order to avoid severe penalties for narrowly defined performance standards, MHMRA (and all other local mental health authorities) is often forced to either sacrifice actual performance or engage in time-intensive administrative workarounds to ensure that compliance is documented.

Addressing this issue will require the state to adopt a different stance toward local systems as well as develop additional infrastructure to track data across funding streams (e.g., DSHS, DSRIP projects, and multiple Medicaid databases, including MCOs, Texas Health Steps, DADS, FQHCs, pharmacy expenses, and other sources). For the foreseeable future, the MMHPI team believes that local systems will be in a better position to develop a formal structure to organize collaborative leadership by key parties at the local level (e.g., county departments, hospital districts, LMHAs, Medicaid MCOs, FQHCs, other local hospitals and providers) rather than wait on the state. However, state barriers that were well documented in the DSHS and HHSC Sunset Reports (see Issue 2 for DSHS and Issues 6 and 7 from the HHSC report) complicate local efforts.

County Level Findings and Recommendations

As seen in the review of data on needs and current services available, the delivery of public mental health services in Harris County involves multiple agencies and funding streams. In fact, of those in poverty with severe needs who are served in outpatient care at some level, most adults (75%) and the vast majority of children (87.4%) are served either by Harris Health or the Medicaid system. However, those with the most severe needs – those regularly using hospitals, emergency rooms, and the correctional and juvenile justice systems – tend either to be served by MHMRA, the emerging Medicaid MCO networks (which are currently in a new phase of development following the September 2014 transition of responsibility for Medicaid rehabilitation and targeted case management services), or justice systems, to the extent that they receive services at all. It should be kept in mind that these different groups overlap significantly over time. People served in the Harris Health outpatient system, by routine outpatient providers in the Medicaid MCO networks, and through local FQHCs have just as

[108] Sunset Advisory Commission (2014, August). Staff Report with Commission Decisions. Department of State Health Services. Cited previously.

severe diagnoses and risk factors as those served at MHMRA, the broader Medicaid MCO networks, or in justice systems, and people move across these systems as their acuity, needs, eligibility, and circumstances change over time. Coordinating care and care transitions across systems – stepping people up to the more intensive MHMRA, Medicaid MCO network, or inpatient supports from FQHCs, Harris Health, and other routine settings when needs increase; stepping people down from intensive service levels (whether inpatient, MHMRA or the Medicaid networks) into more routine levels of care, and diverting as many as possible from justice systems at multiple intercepts – will require development of more formal systems and coordinated planning and care coordination processes across these systems.

This section of the report offers a series of more specific findings related to this broader framework, as well as recommendations to move forward over the short-term (six to 12 months), medium-term (one to two years), and long-term (three to five years).

County Level Findings

County Level Finding (CF) CF-1: Harris County lacks an organized, functional and integrated behavioral health system of care. The implication of the data reviewed in the prior section is clear – there are multiple entities delivering hundreds of millions of dollars' worth of care to over 96,000 adults and children in poverty with severe needs across the county, but there is no entity or process coordinating planning and service delivery across these entities and systems. Major providers and funding streams operate in parallel, rather than in a coordinated manner, leading to both inefficiencies and poor outcomes. Harris County is not unique in this; despite the presence of a single behavioral health managed care system in Dallas County (which did better align Medicaid and uninsured services outside the hospital district), a 2010 study found similar gaps,[109] as did a 2014 review of El Paso mental health systems.[110] While there are some notable examples of coordinated planning, such as the Continuum of Care process for addressing homelessness in Harris County through the Coalition for the Homeless Houston / Harris County and the cross-agency justice system diversion planning process developing around the SB 1185 jail diversion project, the absence of an overall organized approach in a county as complex, large and diverse as Harris County impedes communications, service delivery, and care coordination. A county this large and complex requires a system-wide framework that includes:

- An integrated county-wide infrastructure to plan, coordinate, and communicate about behavioral health and broader social support services.

[109] TriWest Group and ZiaPartners. (2010, September). *Assessment of the Community Behavioral Health Delivery System in Dallas County: Detailed Report.* Dallas County Behavioral Health System Redesign Task Force. Available at: http://www.dallasbhlt.org/images/docs/reports/dallas%20bh%20assessment%202010-10-04%20detailed%20report.pdf.

[110] TriWest Group. (2014, February). *El Paso Community Behavioral Health System Assessment: Final Summary of Findings and Recommendations.* El Paso Community Behavioral Health Consortium.

- System leadership capacity among the major public system funders, including Harris County, MHMRA and Harris Health (for funding for crisis services and the uninsured); the Medicaid MCOs; substance abuse, criminal justice, juvenile justice, and child welfare systems; schools; foundations; IDD services; and others.
- Clinical administrative leadership capacity within MHMRA and other leading health agencies (e.g., Harris County, Harris Health, Harris County Psychiatric Center, The Council on Recovery, hospitals, the medical schools and other health training programs, and other providers) to communicate and collaborate to promote the successful operation of behavioral health service systems, with links to other agencies in the substance abuse, criminal justice, educational, physical health, and social service systems, as well as the private sector.
- An overarching strategic framework collaboratively developed among the key system leaders centered on a core set of agreed upon priorities, including priorities for targeting behavioral health funding, given that funding is not adequate to serve all needs.
- Clarity about roles and responsibilities in the delivery of mental health and broader social support services, which is essential to help all agencies understand the service delivery gaps as well as the opportunities and limitations for addressing the needs of county residents.
- Capacity to aggregate and report on data at the system level, establish performance benchmarks, and evaluate them in the context of ongoing quality improvement (rather than simply contract compliance).

County Level Finding CF-2: Only Harris County is positioned to convene and develop a new framework for partnership and collaboration across behavioral health providers and systems. MHMRA can take a lead role, but it cannot function as the overarching convener for behavioral health (BH) leadership. In a system as large and complex as Harris County, only the county has sufficient authority and resources to convene and develop a new partnership framework. Harris County has a governance role with the three biggest providers – MHMRA (appointing board members), Harris Health (appointing board members), and HCPC (joint governance with the state). It is also a major funder, and, as the local government it is positioned to also convene other major institutions (hospitals, Medicaid MCOs, training programs, other providers) in a collaborative planning and partnership-based system oversight process.

Although MHMRA is the largest single public behavioral health provider in Harris County and carries out the role of the local mental health authority under statute, it does not and cannot function as the overarching convener for behavioral health leadership across the broader scope of services and supports, and public and private providers, throughout the county. This is true for all Texas counties and their local mental health authorities. MHMRA does not control major funding streams, in particular Harris Health and Medicaid, and most people with severe needs

are served in other settings (though MHMRA is a lead provider for those with the most severe needs). While the LMHA can lead, it needs to do so in partnership with other agencies within a framework convened by the county.

County Level Finding CF-3: There is a solid foundation on which to build an effective BH system of care across MHMRA, Harris Health, FQHCs, Medicaid MCO networks, other key providers for outpatient care, and HCPC and local hospitals for inpatient care. The task of creating and organizing a local system leadership structure to operationalize a system of care entails many challenges. However, there is considerable strength across MHMRA and other agencies already, many successful collaborations to build on (e.g., Coalition for the Homeless Houston / Harris County, SB 1185 cross-agency justice system diversion planning, and many others), and, most importantly, many individuals and contributors who would strongly welcome the opportunity to create such a structure.

County Level Finding CF-4: Improvements in partnership and collaboration are essential to improve clinical performance across the county. Although there are multiple examples of good collaboration within specific initiatives, and collaboration is reported to have improved in many areas in the past several years, there remain numerous examples where increased partnership and collaboration would enhance clinical outcomes for MHMRA and other leading agencies, such as Harris Health and the Medicaid managed care organizations for STAR (children), STAR Health (foster care), and STAR+PLUS (adults). Further, funding pressure and the lack of mechanisms for system-level coordination results in individual agencies acting either independently or competitively in ways that adversely affect other county systems, rather than collaboratively. The multiple ways in which this manifests creates a culture of mistrust and pressure to act rapidly, without collaboration, and this will need to be reversed for successful collaborations to be further developed.

County Level Finding CF-5: There is no consistent vision of care throughout Harris County that could focus on collaboration. Although there are many good programs and excellent clinicians delivering care in a resource-challenged system, there is no explicitly defined vision of care or priorities around which to align resource planning across agencies county-wide, even among the three main agencies funded by the county (MHMRA, Harris Health, and HCPC). Furthermore, the lack of system coordination infrastructure noted above contributes to the absence of a consistent mechanism for developing and operationalizing that vision.

Discussions with MHMRA clinical leadership and other county leaders suggest substantial overlap in priorities for such a vision that could serve as a basis for rapid development and formal adoption by a core set of future partners of a shared vision. Components include:

- A priority on criminal justice, emergency department, and inpatient diversion;

- Recognition of the importance of maintaining (and expanding) access to priority populations more broadly (so that criminal justice system involvement is not a prerequisite to service and services are increasingly offered earlier, e.g., through schools);
- A priority on integrated care, including both substance abuse and physical health service availability to those with severe needs and bidirectional referral relationships between specialty care (e.g., MHMRA) and primary care (e.g., Harris Health, FQHCs);
- Movement to increase early intervention to enhance opportunities for individuals and families to access treatment before justice system involvement or broader debilitation.
- Increased recognition of the role of trauma in mental illness, as well as the capacity of providers (including MHMRA) to treat complex conditions with substance abuse, developmental disability, chronic illness (e.g., diabetes, hypertension), and other comorbidities, including intellectual and developmental disabilities;
- Community partnerships that begin in day care and schools, building out services accessible to children and families, and providing care in settings that children and families routinely use (e.g., pediatric care, schools), rather than just more restrictive systems (e.g., juvenile justice, foster care);
- Access to and availability of supportive housing and subsidized housing for people with low income who have mental health and/or substance use conditions and developmental and intellectual disabilities that interfere with their ability to obtain and maintain stable housing;
- A commitment to culturally competent services and a clinical workforce that reflects the cultural diversity of the communities served; and
- A broad work force development strategy to attract and retain the best clinical and culturally competent talent available to the nation's third most-populated county, home to some of the finest medical institutions in the world.

County Level Recommendations

The following recommendations provide a series of short- and medium-term steps to address the findings just noted.

County Level Recommendation (CR) CR-1: Commit county resources to convene the leaders of the major county-funded mental health providers – MHMRA, Harris Health, and HCPC – to develop an initial partnership framework for a collaborative strategic and ongoing planning process at the county level (3-6 months). Once the initial county-level partnership framework is in place for collaborative planning and management, the process should involve the dozens of additional partners that need to be engaged, with a most immediate priority on the Medicaid MCOs, criminal justice agencies, Council on Recovery, local hospitals, and an array of child-serving agencies (6-12 months). Harris County needs a cross-system structure to

coordinate behavioral health service delivery county-wide within a partnership framework to enable agencies from across the county to work together to manage and improve county behavioral health delivery systems.

Given the wide range of entities involved, MMHPI recommends a step-wise approach that begins with the development of a partnership framework among the three provider agencies that receive substantial county funding for mental health services: MHMRA, Harris Health, and HCPC. Harris County will need to act in the dual role of convener and participant, recognizing that, while the county has a role in governance (appointing the boards of MHMRA and Harris Health, and alongside DSHS for HCPC) and is a major funder, each provider organization has governance and funding separate from the county. As a result, while the county has an oversight role, MHMRA, Harris Health and HCPC are also accountable to their specific governing bodies and funders (including direct state and federal funders separate from the county). Furthermore, Harris County also delivers services (e.g., through the SB 1185 pilot), and these services should also be coordinated within a partnership framework.

Once a formal partnership framework is defined among the county (both in the role of convener and funder, as well as service provider) and the three core county-funded entities – MHMRA, Harris Health, and HCPC – the partnership framework can begin to involve others within a collaborative planning framework that will need to be designed once the partnership is established. Immediate next partners should be the Medicaid MCOs, The Council on Recovery (Council), and county agencies funding mental health – Community Supervision and Corrections Department, Juvenile Probation, and Child Protective Services. An early emphasis on better coordination for child-serving systems and involving housing/homelessness service agencies should also be a priority. Coordinated representation for behavioral health providers (MHMRA, Harris Health, HCPC, and the Council) with the criminal justice system is also needed within the Harris County Criminal Justice Coordinating Council.

To develop a collaborative framework for county-wide behavioral health system planning, there are dozens of additional partners (e.g., MHA of Greater Houston), provider collaboratives (e.g., Houston Recovery Initiative, Network of Behavioral Health Providers), and providers (hospital systems, training programs, etc.) that need to be engaged over time, but the process must start with a new commitment to a meaningful partnership in strategic and operational planning among these core county health systems to commit to resolve and move past current disagreements, and refocus on and invest together in broader cross-system development.

The initial task of this emerging cross-system planning structure would be to use this assessment report to obtain a formal commitment by the Harris County Commissioners Court and the governing boards of each agency to an adequately resourced planning process and framework for collaborative engagement of other mental health and substance abuse

providers. The initial mission of this collaborative initiative would be to develop an overarching strategic plan for the county behavioral health system, with measurable targets, achievable time frames, a transparent implementation structure, and appropriate accountability to all stakeholders.

County Level Recommendation CR-2: The leadership of the major county-funded mental health providers – MHMRA, Harris Health, and HCPC – will each need to decide if their respective entity wants to commit to engage in this process in a spirit of genuine partnership (6 months), as will each other partner that joins over time (1-2 years). While the individual leaders of each organization that we interviewed all endorse the value of collaboration, a formal commitment backed up by executive support and alignment of organizational resources will be required. This will be an important first step, and it will have to be backed up by a renewed commitment to collaborative, cross-agency planning, resource coordination, problem solving, and performance improvement.

This assessment process took a closer look at MHMRA than the other necessary system partners. A key finding from this in-depth review was that MHMRA currently lacks the organizational capacity to fully engage in system-wide leadership (more detail is provided on this gap in the section below on MHMRA capacity). Compounding this for MHMRA, events over the past two years regarding criminal justice system collaboration have negatively positioned the organization in a way that was increasingly alienating it from county and state funders. MHMRA leadership has decided to act assertively to resolve that impasse, but engaging in the county-level process just described will necessitate a broader commitment to developing capacity to engage the broader system as a proactive partner. MHMRA has a history of taking proactive action, most notably the development of its own discrete 1115 DSRIP projects focused on collaboration with schools, FQHCs, the crisis system, the Council on Recovery, DFPS, and several community organizations. Since MMHPI does not recommend reducing clinical service availability by MHMRA to address administrative gaps, the potential of additional resources made available through the 84th Legislature or other sources will in part determine the administrative staffing capacity that can be dedicated by MHMRA to such a process. But most importantly, a broader partnership framework must be established within which MHMRA's renewed commitment can be recognized, reciprocated, and built upon.

County Level Recommendation CR-3: Within the new partnership framework, improved collaboration should be advanced through an initial set of initiatives, with an emphasis on: establishing a vision, engaging major funding partners, and improving information sharing, crisis system capacity, and access (6-12 months). While MHMRA has taken important action toward resolving the information sharing impasse related to mental health treatment and the criminal justice system, it is not alone in needing to redouble commitment to collaboration and coordination. For example, the Criminal Justice Coordinating Council had not until recently

included MHMRA or the broader set of behavioral health agencies serving people in the justice system, and representation can hopefully continue to improve as the behavioral health partnership develops as described above under Recommendation CR-1.

More broadly, as part of the emerging system-level behavioral health partnership, visible communication and demonstration of a commitment to more collaborative effort through concrete action by the county and all the future partners is needed to reassure the broader group that improved collaboration and coordination is a top priority and that each partner is willing to take steps to improve their own role in this effort. This will require the dedication of leadership time and resources by each partner.

County Level Recommendation CR-4: The broader system oversight structure should also coordinate behavioral health system development across a set of more focused medium-term initiatives (1-2 years): crisis continuum development, funding stream coordination (e.g., Medicaid), integrated care (with physical health, substance use disorders), children's system development, justice system diversion, homelessness, public-private partnerships, and workforce development. An array of activities prioritizing collaboration and partnership is necessary to produce better outcomes. The major areas for broader system oversight and county-wide strategic planning and problem solving around complex issues include developing:

1. An effectively resourced crisis continuum of services (while substantial progress should be made in the short-term through the steps outlined in Recommendation CR-3);
2. Routine mechanisms to share and coordinate multiple funding streams at the local level to produce better results (i.e., DSHS, TDCJ/TCOOMMI, Harris County, Harris Health, Medicaid MCOs, municipal funds, and juvenile justice, child welfare, and other funds);
3. Integrated mental health and substance use delivery systems;
4. Integrated physical health and behavioral health delivery systems;
5. Children's system of care development encompassing health, behavioral health, child welfare, juvenile justice, and education, centered on a trauma-informed care model;
6. Comprehensive approach to juvenile and criminal justice, with an emphasis on behavioral health diversion (e.g., SB 1185) and collaboration;
7. Strategic approach to individuals with behavioral health needs who are homeless, including the development of Permanent Supportive Housing and enhanced use of Housing First approaches;
8. Public-private partnerships to better leverage resources and outcomes; and
9. Workforce development through cross-system partnerships with medical schools and universities.

These nine areas are the major challenges facing most behavioral health systems across Texas and the nation. While the list may appear daunting, there is extensive local expertise in all of these areas and resources on which to build collaborative system enhancements. Furthermore,

many of these issues overlap. For example, homeless individuals with co-occurring mental health and substance use conditions often come to the notice of the justice system. Focusing efforts on these challenging issues among shared populations has the potential to result in improved outcomes for the individuals involved and efficiencies for the broad county-wide system of care. MMHPI recognizes that additional resources will be necessary to fully address the recommendations above. Collaborative approaches to planning are critical to identifying existing resources, gaps, and potential ways to leverage existing and new resources to achieve the best outcomes.

County Recommendation CR-5: Harris County should use the new partnership framework to engage its state-level funders, legislative representatives, and local advocates to address the four state policy gaps described in Finding N-6. In the MMHPI team's experience, the relative position of the Harris County mental health system within the state of Texas is markedly different than that of major cities in other states. Our team has worked with mental health systems in the largest communities in other states – Miami, FL (Dade County), New York, NY, Phoenix, AZ (Maricopa County), Philadelphia, PA, Denver, CO, Seattle, WA (King County) – and all of these counties wield considerable leverage in their states given their large populations and political clout. Unlike Harris County, these counties and their respective cities have formal county-level structures that are empowered by the state to work collaboratively across funders to better manage the care of populations in need of mental health services. They are also generally allocated higher per capita funding and special consideration by their state mental health agencies regarding regulatory oversight given their size and local resources. While they must follow the same state and federal regulations as other jurisdictions, they both have the infrastructure to manage care locally and build consensus across local parties regarding how to respond to priority needs. Examples include the Miami-Dade County Managing Entity, the Maricopa County Regional Behavioral Health Authority, Community Behavioral Health (CBH) in Philadelphia, and King County Regional Support Network in Seattle. By investing substantially in local infrastructure to coordinate mental health services, these counties are better able to coordinate services across state-funded care, county allocations, Medicaid, and related services in the homeless services, criminal justice, juvenile justice, child welfare, and education systems. As a result, state officials by necessity must work closely with county leadership and the local oversight structure to respond to the challenges these large communities face.

MHMRA Findings and Recommendations

This section of the report focuses on specific findings and recommendations related to the organization and performance of MHMRA as the largest public mental health provider in Harris County. It is important to note that there were many strengths identified in the review of MHMRA, including the following highlights:

- Implementation of a broad array of 27 Delivery System Reform Incentive Payments (DSRIP) projects serving thousands of people that required proactive facility development and aggressive hiring of nearly 300 clinical staff FTE by MHMRA (249 of 298 FTE positions filled) and its partners (50 of 53 FTE positions filled) in a challenging labor market for projects that: broadened system capacity to serve people with severe functional needs within a broader range of diagnoses; expanded crisis and hospital diversion capacity; initiated development of integrated care primary care / behavioral health capacity with partner FQHCs; and developed collaborative projects to expand school-based, co-occurring mental health / substance use disorder, and co-occurring mental health / intellectual and developmental disability capacity;
- Commitment of its leadership and staff to serving adults with serious mental illness (SMI) and children severe emotional disturbance (SED);
- Elimination of a longstanding wait list with at least some level of service, primarily due to assertive efforts to obtain new DSRIP funding;
- Strong physician base on which to build a trauma-focused, person-centered recovery model of care; this includes three divisional medical directors that hold joint faculty appointments at Baylor College of Medicine and University of Texas Medical School; training relationships for general and child psychiatry residents from these medical schools have been in place for a decade;
- A high fidelity Assertive Community Treatment (ACT) Team, which scores very high on the standards required by the state for this evidence-based practice;
- A new (December 2014) Early Onset Program (EOP) with capacity to serve up to 60 young adults ages 18 to 30 experiencing the early stages of a psychotic disorder and providing an intensive best practice service array (e.g., substance abuse counseling, family supports, supported education/employment) derived from a leading first-episode of care model developed by Dr. Lisa Dixon and colleagues;
- Effective leadership and operations of the crisis programs;
- A 24-hour helpline that is well organized, person-centered and responsive to callers;
- Notable skills in delivering cognitive behavioral therapies, undergirded by a strong training and skill-development program;
- An expert capacity for outcomes management with dedicated leadership and demonstrated data analytic and evaluation capacity;
- Recognition that the current ways individuals access services are inadequate and of the need to make services more accessible, including redesign of the Eligibility Center,

where work is underway, and efforts across new programs to enroll people directly on site;
- Considerable progress in beginning to develop a recovery-oriented system, including hiring of certified peer specialists and peer leaders across the agency to help individuals seeking services at the clinics engage in wellness activities;
- Efforts to co-locate credentialed substance use disorder treatment providers within its clinics; and
- A strong clinical approach in services for individuals with dual conditions of mental illness and intellectual and/or developmental disabilities (IDD).

MHMRA also has an impressive track record of recruiting and retaining a work force that matches the demographics of the communities it serves far better than most organizations we have reviewed. While almost exactly three of every four clients represent a race/ethnicity group other than White, an even higher percentage (81%) of staff is non-White. The very close approximation between the percentage of clients and staff who fall into each race/ethnicity category is quite impressive for a provider the size of MHMRA of Harris County. In addition, data submitted by MHMRA staff indicate that 37 different languages are spoken by their clients, and MHMRA received 10,000 requests for interpreters in FY 2014. However, the following table, which examines race/ethnicity differences across the county population, MHMRA clients, and MHMRA staff, does suggest a potential disparity for Latino/Hispanic residents, a pattern observed in many communities we review in Texas and nationally. Latinos/Hispanics represent a majority of the county population living in poverty, but only one in every four MHMRA clients served. The percentage of staff that are Latino/Hispanic (21%) is only slightly below the percentage of clients who are Latino/Hispanic (25%), however. African-Americans, Whites, and Asian-Americans, on the other hand, are strongly represented in both the client and staff categories.

Table 38: Harris County and MHMRA of Harris County Race/Ethnicity Diversity[111]

Population	African-American	Latino/ Hispanic	White	Asian-American/ Other
Harris County Population	19%	42%	33%	6%
Harris County Population in Poverty (100% of FPL)[112]	25%	58%	13%	5%
MHMRA Clients	47%	25%	26%	3%
MHMRA Staff	55%	21%	19%	5%

[111] Data received from MHMRA on May 1, 2015.
[112] MHMRA obtained the county-level race/ethnicity data from the 2012 American Community Survey. In identifying the population in poverty, MHMRA used 100% of the federal poverty level (FPL) as the reference point.

There are many other strengths on which to build, yet, there are also challenges that are specific to MHMRA, as well as challenges that are endemic to any mental health delivery system where there is no overarching platform or cross-system infrastructure to plan, coordinate, and communicate about behavioral health and broader social support services essential to an effective system of care. It should be kept in mind that, should MHMRA only address these gaps individually without a county-wide commitment to the system-level development needs noted in the prior section, success will be limited and cross-system problems may very well undermine efforts to improve.

MHMRA Findings (MHF)

MHMRA Finding MHF-1: MHMRA leadership is committed to a vision of integrated, effective, and efficient person-centered care for individuals and families in need, but MHMRA's functional organizational structure, a lack of a county-level partnership framework, and state-level policy all impede implementation. MHMRA leadership is committed to developing and implementing a more recovery-oriented, trauma-informed, person-centered and integrated care approach, building on its strong base of physicians and medical care. Efforts toward this vision are in development and not uniformly evident across care delivery, but the commitment of senior leaders, middle managers, and the senior staff with whom we interacted was consistently evident.

MHMRA Finding MHF-2: Despite a number of discrete collaborative initiatives, MHMRA is widely perceived by other county-level agencies as more reactive than proactive in terms of collaboration at the agency level. As described in the prior section, state level requirements and significant budget cuts dating back to 2003 have created tremendous external pressure on MHMRA that has contributed to the county-wide lack of a collaborative framework. In addition, MHMRA has not developed administrative capacity to proactively engage the community as a lead partner in behavioral health system development. This lack of robust capacity for external system engagement was in large part driven by dramatic budget cuts in the 2003-05 biennium in response to which MHMRA eliminated key administrative positions (e.g., its Chief Medical Officer) and redistributed duties across other managers. While a useful strategy for reducing administrative costs, this substantially reduced capacity to engage in system development. This lack of administrative leadership capacity limits the range of system development activities in which MHMRA can participate. For example, while MHMRA did a remarkable job in quickly developing its own DSRIP projects, its participation in the development of other system DSRIP projects and its participation in other major initiatives (for example, the early stages of implementation for the SB 1185 Jail Diversion Program) was widely perceived by other agencies as lacking in terms of proactive involvement.

The SB 1185 Jail Diversion project is also an example where perceived initial collaboration challenges rooted in a lack of communication and a lack of formal mechanisms for collaborative

action have been developed into a strong example of collaboration, largely through the development of a visible and well-functioning collaborative entity responsible for its oversight through the leadership of its Director, Regenia Hicks, PhD. Over years leading up to this project, multiple MHMRA senior staff had engaged in collaborative criminal justice activities, including the work of Chief Operating Officer, Scott Strang, PhD; Acting Deputy Director for Mental Health Forensic Services, Mona Lisa Jiles, LMFT; Deputy Director for the Comprehensive Psychiatric Emergency Program, Barbara Dawson, MSE; Director of Outcomes Management, Scott Hickey, PhD; and other key executive, management, clinical, and technical support. The jail diversion project is a critical initiative, both to Harris County and the state more broadly, as the only focused effort of its kind designed to reduce recidivism and improve clinical outcomes for adults with SMI with repeated involvement in the criminal justice system and incarceration. Collaboration will continue to be essential to the success of this initiative, and the current collaboration is a model that can be leveraged toward the improved system partnership goals described in the recommendations below. Currently, in response to the county's request, MHMRA has taken primary responsibility for clinical service delivery and technical support under the SB 1185 Jail Diversion project, including operational responsibility for the electronic medical record owned by the program.

MHMRA Finding MHF-3: MHMRA board and leadership have indicated a priority to improve collaboration and committed to improve sharing information with the criminal justice system. Significant agreement has been reached in this area, and this represents a meaningful step toward embracing a more partnership-oriented stance toward other county and criminal justice agencies. However, the agreement is only one step in developing a true partnership for treating individuals with severe mental health needs in the criminal justice system, and the current impasse will only be successfully resolved if information sharing occurs in the context of a genuine partnership between MHMRA and county criminal justice agencies to ensure that both treatment and public safety goals are met. In order for that to occur, the focus of implementation will need to expand beyond a process that ensures compliance with relevant statutes to a broader process of developing a strong working collaboration between MHMRA and county criminal justice agencies, supported by a renewed performance improvement partnership to guide its continued development over time.

MHMRA Finding MHF-4: The overall organization of MHMRA lacks key functional capabilities necessary for an agency of its size to operationalize its vision. While the Chief Executive Officer (CEO) has responsibility for external operations, he also is responsible for the clinical direction of the organization (and is very respected by staff for his leadership and policy expertise). However, the organization lacks a sufficiently organized executive leadership framework for clinical operations able to effectively delegate responsibilities to senior clinical staff, focus clinical leadership effort on proactive external relations, and support planning with other agencies. The CEO also needs more support to operationalize plans and agreements

made with partner agencies. Typically, an organization of this size positioned in a system leadership role requires an organized senior leadership group working together as a team to manage the organization and take leadership for promoting a community-wide vision for effective and efficient mental health services. This team would include a CEO, a single point of accountability inside and outside the organization for medical practices (e.g., a Chief Medical Officer or CMO), a single point of accountability within the organization for administrative functions (e.g., a Chief Administrative Officer or CAO), and a single point of accountability for clinical service delivery operations (e.g., Chief Operating Officer or COO).

MHMRA Finding MHF-5: The current organizational structure and processes lack the clinical administrative capacity to operationalize important improvement activities, particularly an organization-wide clinical care vision and quality improvement. MHMRA leadership includes strong individual leaders, all of whom present as expert, dedicated to the mission of the organization, hard-working, and demonstrably achieving discrete improvements in their areas of clinical and administrative responsibility. However, as described above, these efforts are not organized within a clear organizational structure with coordinated points of clinical authority, which leads to a subsequent lack of organizational tools and administrative protocols for decision-making. Ultimately, this results in disempowerment of managers at all levels, as well as team leaders and front line staff, who describe not being adequately involved in important decisions that directly affect their ability to provide helpful services. This is reflected in various projects and activities at multiple levels.

MHMRA Finding MHF-6: MHMRA information technology (IT) has a number of significant challenges, including a lengthy, costly and to date unsuccessful legacy system replacement and electronic health record (EHR) development project (though a new contract, vendor and plan have been put in place). IT is also challenged by a rapid increase in business area staffing to support DSRIP projects and regulatory changes requiring system modifications. Like the rest of the organization, IT does not have a history of making use of project managers responsible for developing detailed project plans to manage large organizational projects. MHMRA would benefit greatly from developing and implementing policies and procedures regarding how IT projects are initiated, approved, and managed. There is also a short-term need to address immediate functional requirements in order to comply with federal law.

MHMRA Finding MHF-7. Financial oversight, including reporting, at MHMRA has been in place and functioning solidly for several years. There were no negative items reported on the latest annual audit review. MHMRA is operating in a positive financial position.

MHMRA Finding MHF-8: The facilities department is well staffed and efficiently run. Budgets are established annually and tracked monthly. Large infrastructure projects are managed by project leaders and tracked individually. The facilities area has successfully addressed rapid

increases in staff due to the addition of the DSRIP projects as well as the unexpected closure of the Bay Shore site. The organization is looking forward to moving into the newest (and largest) building located at 9401 Southwest Freeway.

MHMRA Recommendations (MHR)

In developing these recommendations, the MMHPI team was keenly aware of the broader environment in which MHMRA operates, as discussed in detail above under finding N-6. The recommendations below are offered in the context of this uncertainty, but these recommendations are seen as essential whether or not the state further addresses gaps.

MHMRA Recommendation MHR-1: Without reducing clinical service capacity, modify and enhance the current organizational structure and processes to implement MHMRA's vision and address the scope and responsibilities of an agency of its size with expanded and focused functionality at the executive team level (e.g., Chief Medical Officer function, Chief Operating Officer function focused on clinical operations, Chief Administrative Officer function focused on administrative operations) and other key areas (e.g., quality improvement, children's leadership, project management). In addition, once these functions are established, additional restructuring will likely be necessary to ensure that lines of delegation and accountability are clear. Additional funds for administration will be necessary for most of these positions. MMHPI does not recommend reducing clinical spending to build administrative capacity, but a combination of restructuring and, ideally, new funding for the next biennium will be necessary to create a structure sufficient for an agency approaching a quarter billion dollars in annual revenue. Enhancing staffing of the administrative structure is a high priority recommendation. The top three positions that should be created and hired as soon as possible (within three to six months) include: a senior licensed clinician as the Quality Improvement Director, a senior licensed clinician as the Director of Children's Services, and an experienced board certified psychiatrist as the Chief Medical Officer. Other recommended positions should be phased in between six months and two years.

MHMRA Recommendation MHR-2: MHMRA needs to better incorporate front line and mid-management staff in system change (Short Term). To meet the complex needs of the people it serves across a multi-disciplinary workforce, MHMRA is faced with the need to develop tools and administrative protocols that better incorporate front line and mid-management staff in system development and quality improvement efforts. Relatedly, enhanced project management capacity, including additional project managers, is essential to address top priorities, including coordination with other key agencies on the issues identified and similar to those listed in County Level Recommendation CR-3 and MHMRA Finding MHF-4 above (i.e., Eligibility Center, weekend discharges, NPC rapid follow-up at Harris Health, etc.).

MHMRA Recommendation MHR-3: MHMRA needs to clearly define its vision, scope of services and clinical approach (Short-Term). MMHPI makes this recommendation to support the current efforts of MHMRA to accomplish its vision, understanding that all systems of care in Texas and nationally have not yet fully achieved the goals inherent in this vision. A key issue in achieving the vision involves questions about what services and supports the Board and Executive Team want to provide within the broader context of the county. For example, does MHMRA want to provide the full array of home- and community-based services? Supported Employment for adults? Supported Education for young adults? Trauma-informed care? A more welcoming and accessible system? Does it want to be a housing provider managing bricks and mortar as well as providing housing supports to individuals? Under the new 1915(i) Medicaid initiative in Texas, a broader array of social supports will be available that can be provided if MHMRA and other county agencies participate in the new initiative. Furthermore, as more services fall under Medicaid managed care, the MCOs will be required to offer provider choice. To be clear, MHMRA is developing capacity in nearly all of these areas, but it lacks a specifically defined, clearly articulated vision to undergird these efforts. This is also related to the lack of a state vision described under finding N-6 and the lack of a county level vision described in the prior section.

Within this vision, decisions about the scope of services will need to address internal and external environmental issues. For example, how much bigger does MHMRA want to become and how will it work with other providers? To what extent does MHMRA want to provide social supports and to what extent should there be a broader provider network that is part of the Harris County system of care for individuals and families with behavioral health conditions? Without clearly defining MHMRA's scope of services, Harris County, its stakeholders, and MCOs will not know if they should build needed services and service delivery enhancements, or rely on MHMRA for specific services.

MHMRA Recommendation MHR-4: Continue to develop the current service array and organizational culture to support that vision, focusing on: evolving beyond the current model that is centered primarily on MD / RN / medication care and integrate this base of medical care into a team-based model grounded more on flexible person/family-centered care; developing more welcoming and customer-centered access models (e.g., access at every outpatient clinic); expanding intensive treatment capacity for adults and children, improving treatment of co-occurring SUD, and expanding the crisis continuum; organizing delivery of children's services; and expanding peer leadership and programs (initial efforts should begin in the short term, but substantial implementation will likely take one to two years). To be most effective, MHMRA will need additional administrative staffing to support the redesign of services. This is a top priority. Thus, MMHPI recommends adding a CMO, separating the current COO function into two (the clinically-focused COO and administratively-focused CAO), and augmenting project management staff and CQI staff (as described in MHMRA Recommendation

MHR-1) to provide much needed clinical and administrative capacity to oversee service delivery system development and to support performance improvement. As noted above, the additional administrative resources should not be diverted from clinical services. As described above in findings N-2 through N-4, the public sector level of severe need greatly outstrips MHMRA and broader system clinical capacity. Specific to medical care, MHMRA physicians currently operate at very high caseloads (adult psychiatrist caseloads average over 500 and child caseloads average 245, much higher than clinically optimal for severely impaired populations). This continued development should build on and augment MHMRA's current system role of providing services to people with the most complex and severe needs (which MHMRA labels as a tertiary level of care). The continuing shift to person- and family-centered care is one challenge confronting community mental health in general, both in Texas and nationally. While MHMRA capacity is very limited compared to national best practices, in many areas (crisis system development, total number of certified peer specialists, physician quality, promotion of best practices) MHMRA leads the state.

MHMRA Recommendation MHR-5: For IT, complete the planned IT risk assessment and update the Disaster Recovery Plan (6 months). Regarding the electronic health record (EHR), implement the planned legacy system upgrade to address urgent requirements for ICD-10 (6 months), and finish the full electronic health record conversion (1-2 years). Delays on the part of the contracted vendor have resulted in reliance on outdated technology and slower implementation of a new EHR. Fortunately, over the long-term, MHMRA is now moving forward with its plan to replace the existing Anasazi software and the partnership with Tarrant County overseeing implementation has shifted to a new vendor (Dallas Metrocare Services) to develop the new software. A detailed project plan with deliverables is in development, but assertive project management will be required to assure timely development and implementation even with this new arrangement. Two other urgent priorities will also require focused attention in the next six months: as noted above, MHMRA has developed a short-term, assertive plan to implement ICD-10 changes; in addition, the disaster plan should be updated for the existing technology, reviewed and approved by executive leadership, and tested annually.

MHMRA Recommendation MHR-6: Facilities Management (Long Term). MHMRA's facility planning should include a strong focus on identifying organizations where co-location of services can occur, with the intent to improve access to services for clients in the neighborhoods where they live. The FQHCs, Harris Health clinic sites, and other social service settings where clients seek services would allow easier access to clients and afford the opportunity to share infrastructure expenses for the facility and support staff, such as security services. MMHPI recognizes that this recommendation will require the broader support of the county-wide planning structure (as described in County Level Recommendation CR-1).

Appendix A: List of Participants in Mental Health System Review

January 2015 Site Visit Participants

Name	Title	Organizational/Departmental Affiliation
Community Organizations		
LaToya Darden Asha Freeman, MD Erica Arrezola	President and CEO Chief Medical Officer Site Administrator	Central Care Community Health Center
Matt Barnes	Independent Consultant	Barnes Strategies
Chuck Bagnato	Executive Director	Lone Star Veterans Association
Mary Beck	COO	The Council on Recovery
Shannon Evans	Regional Operations Liaison	Southeast Texas Regional Healthcare Partnership, 1115 Waiver – DSRIP Team
Andrew Harper, MD	Medical Director	The University of Texas Harris County Psychiatric Center
Francis Isbell	Executive Director	Healthcare for the Homeless – Houston
Nicole Lievsay	Director, Health System Strategies	Harris Health System, Health Systems Strategy
Tom Mitchell	Executive Director	US VETS Texas
Susan Fordice Alejandra Posada Bill Kelly	President and Chief Executive Officer Director, Education and Training Director, Public Policy and Government Affairs	MHA of Greater Houston
Asim Shah, MD	Chief of Psychiatry	Harris Health System and Ben Taub Hospital, Baylor College of Medicine
Tony Solomon	Director, Veterans Behavioral Health Initiative	MHA of Greater Houston
Harris County		
Laura Cohen, LCSW	Project Director	Harris County Felony MH Court

Name	Title	Organizational/Departmental Affiliation
Deborah Colby	Director, TRIAD Prevention Program	Harris County Protective Services for Children and Adults, TRIAD Program
Ginger Harper	Director, Community Youth Services	Harris County Protective Services for Children and Adults, Youth Services Division
Joel Levine, MA, LCSW	Children's Services Administrator	Harris County Protective Services for Children and Adults, Child Protective Services
Kathy Luhn Bill Schnapp	Chief of Staff Mental Health Policy Advisor	Harris County, Judge Emmett's Office
Nick Lykos Lisa Dahm	Managing Attorney – Forensic Sciences Assistant County Attorney and Privacy Officer	Office of County Attorney
Teresa May, PhD Lori Lovins, PhD	Director Director of Clinical Services	Harris County Community Supervision and Corrections
Diana Quintana, PhD	Deputy Director of Health Services	Harris County Juvenile Probation Department, Health Services
Mike Seale, MD	Executive Director, Health Services, Criminal Justice Command	Harris County Jail, Jail-Based MH Services
MHMRA of Harris County		
Betty Adams	Practice Manager Children's / Juvenile	Mental Health Forensic
Rita Alford, RHIT	Director Health Information Management/Privacy Officer	Administration
Jennifer Battle, LMSW	Program Director HelpLine	Comprehensive Psychiatric Emergency Program
Lance Britt	Practice Manager ACT/FACT	Mental Health Services

Name	Title	Organizational/Departmental Affiliation
Sandra Brock, LMSW	Practice Manager Collaboration for Action	Mental Health Administration
Dana Brown, LPC	Practice Manager Children's Southeast Clinic	Mental Health Services
Michelle Bryon, PhD, LMFT	Clinical Psychologist / Trainer	Mental Health Services
Rose Childs, MSW	Former Deputy Director	Mental Health Services
Ron Coots	Director Information Systems	Administration
Julia H. Davis	Employment Specialist	Collaboration for Action
Lakeisha Davis	Housing Specialist	Mental Health Services
Barbara Dawson, MSE	Deputy Director	Comprehensive Psychiatric Emergency Program
Mike Downey, LPC	Acting Deputy Director, MH Clinical Services	Mental Health Services
Carson Easley, RN	Director of Nursing	Administration
Wesley Farris, MAM, CISSP	Information Systems Security Officer	Administration
Sarah Flick, MD	Medical Director	Intellectual and Developmental Disabilities Services
Sara Flores, MD	CSU Medical Director	Comprehensive Psychiatric Emergency Program
Felecia Garner, MD	Psychiatrist	Intellectual and Developmental Disabilities
Gregory Gigax, RN	Nursing Supervisor	Mental Health Services/Forensics
Sharon Gunter, MD	ACT Medical Director	Mental Health Services
Scott Hickey, PhD	Director	Outcomes Management
Dionne Hill, PhD, LPC	Practice Manager Adult Southwest Clinic	Mental Health Services

Name	Title	Organizational/Departmental Affiliation
Penny Hipp, RN	Division Nurse Manager	Comprehensive Psychiatric Emergency Program
Sam Hom	Program Director Housing Development	Mental Health Administration
Eddie Jessie	Program Manager Vocational Services	Collaboration for Action
Mona Lisa Jiles, LMFT	Acting Deputy Director	Mental Health Forensic Services
Cassandra Johnson, LPC	Unit Manager CRU	Comprehensive Psychiatric Emergency Program
Ea'a Jones, LPC	Practice Manager New START	Mental Health Forensics
Vinay Kapoor, MD	PES Medical Director	Comprehensive Psychiatric Emergency Program
Darryl Knox, MD	Medical Director	Comprehensive Psychiatric Emergency Program
Kim Kornmayer, LCSW	Asst. Deputy Director	Comprehensive Psychiatric Emergency Program
Brent Lawless, LPC	Practice Manager Adult Southeast Clinic	Mental Health Services
Caryn Lira, LPC, LMFT	Practice Manager Co-Location	Mental Health Services
Alex V. Lim, CPA	CFO	Administration
Evelyn Locklin, LPC	Program Director MCOT	Comprehensive Psychiatric Emergency Program
Jeffrey Lovell, LPC	Practice Manager Northeast	Northeast Clinic (part of Eligibility Center meeting)
Lynn Malseed, MD	Psychiatrist	Intellectual and Developmental Disabilities
Cami Manley	Asst. Deputy Director (UM/Network)	Continuity Services
Chandra Mayers-Elder, MD	CRU Medical Director	Comprehensive Psychiatric Emergency Program
Jeannie Mayo	General Counsel	Administration

Name	Title	Organizational/Departmental Affiliation
Michael McGinnis, MD	ACT Medical Director	Southeast Clinic
Ashley Montondon	Consumer Council Coordinator	Mental Health Services
Dorothy Morgan	Outcomes Analyst	Outcomes Management
Sylvia Muzquiz, MD	Medical Director	Mental Health Services
Yen Phan	Nurse Manager	Mental Health Services
Maria Quintero, MD	Asst. Deputy Director	Intellectual and Developmental Disabilities Services
Daniel Rooker	Employment Specialist	Collaboration for Action
Linda Schmalstieg, MD	Psychiatrist	Intellectual and Developmental Disabilities
Steve Schnee, PhD	Executive Director	Administration
Patricia Sibley	Assistant Deputy Director	Juvenile Justice, CUPS, New START
Tamika Sieh	Outcomes Analyst	Outcomes Management
Charlotte Simmons	Director	Human Resources
Robert Simon	Practice Manager	Forensic Services
Mende Snodgress, LCSW	Asst. Deputy Director	Comprehensive Psychiatric Emergency Program
Robert Stakem	Program Compliance Officer	Administration
Scott Strang, PhD	COO Interim Deputy Director	Administration Intellectual and Developmental Disabilities Services
Wilson Sylvan	Program Monitor	Mental Health Services
Carolyn Taylor	Executive Secretary	Administration
Clarice Taylor, LPC	Training Coordinator	Mental Health Services
Kendra Thomas	Attorney / Analyst, Harris County Courts	Mental Health Services
Chantee Vavasseur, MD	Medical Director	Southeast Clinic

Name	Title	Organizational/Departmental Affiliation
Diana Villareal, MD	MCOT Medical Director	Comprehensive Psychiatric Emergency Program
Jeanne Wallace	DSRIP Project Director	Outcomes Management
Alex Walt	Employment Specialist	Collaboration for Action
Shelia Whiteside, MD	CAS Medical Director	Southeast Clinic
Tiffanie Williams-Brooks	Practice Manager	Northwest Clinic
Braque Wilson	Program Monitor	Mental Health Services
Paul Wilson	Director	Facility Services

February 2015 Interview and Meeting Participants

Name	Title	Organization
In-Person Meetings		
Mary Beck Anna Fornaris Carol Garza	COO Supervisor of Public Sector Programs Supervisor, MHMRA LCDCs	The Council on Recovery
Brian Brooks	Vice President HCMS, Behavioral Health, West Regional	Amerigroup
Roy Douglas	Facilities Director	YMAC/DDRP Program *(YMAC/DDRP Program Site Review, Harris County Probation Department)*
Cheryl Fisher Steve Steiner Destine Rawls Jesse Stakes	Senior Director of Foster Care and Child Welfare Supervisor, Utilization Management Texas Foster Care Clinical Supervisor Clinical Manager, Texas	Cenpatico (Behavioral Health Representatives)
Greg Gigax, RN	Nursing Supervisor, Mental Health Services/Forensics	MHMRA of Harris County *(YMAC/DDRP Program Site Review, Harris County Probation Department)*

Name	Title	Organization
In-Person Meetings		
Regina Hicks, PhD	Director, Mental Health Diversion Program	Harris County, Judge Emmett's Office
Mona Lisa Jiles, LMFT	Acting Deputy Director, Mental Health Forensic Services	MHMRA of Harris County *(YMAC/DDRP Program Site Review, Harris County Probation Department)*
Debra Katz, MD	National Medical Director, Community & State Market	Optum Behavioral Solutions
Leonard Kincaid	Director of Operations	Houston Recovery Center/Sobering Center
Lori Lovins, PhD	Director of Clinical Services	Harris County Community Supervision and Corrections *(YMAC/DDRP Program Site Review, Harris County Probation Department)*
Sylvia Muzquiz, MD Darryl Knox, MD Sarah Flick, MD	Medical Director, MH Services Medical Director, CPEP Medical Director, IDD Services	MHMRA of Harris County
Yen Phan	Nurse Manager, Mental Health Services	MHMRA of Harris County *(YMAC/DDRP Program Site Review, Harris County Probation Department)*
Asim Shah, MD	Chief of Psychiatry	Harris Health System and Ben Taub Hospital, Baylor College of Medicine
Gerald Stansbury Tom Updyke, PhD	Regional Director	Recovery Innovations Recovery Response Center

Name	Title	Organization
Phone Interviews		
Richard Denegal Judi Taylor	Principal Principal	National Smart Healthcare Services
Kelly Harty	Vice President of Peer Services	GreenRiver Wellness and Recovery Center

Name	Title	Organization
Phone Interviews		
Debra Jackson, LCSW, LMFT, LCDC Linda Kutac, RN.C.	Owner Owner	Deblin Health Concepts & Associates, Inc.

Appendix B: MMHPI Crisis System Framework

An effective crisis system is focused on the ***need for a continuum of safe, effective, and efficient treatment option for people with acute needs, particularly those in emergency room, correctional, or other community settings.*** The focus of this care is on people with the highest, most acute needs (people who are most dangerous to themselves and others or most actively psychotic or otherwise psychiatrically disabled). While an inpatient bed is one way to meet this need, the full range of alternatives includes many options that can be just as safe but more effective and efficient, if part of a well-functioning local system of care.

A Continuum of Beds. One set of options includes a range of other 24/7 beds in safe treatment facilities. Many people end up in inpatient beds because of a lack of an intermediary alternative option up front or the lack of a lower-level step-down after the immediate risk has stabilized. In addition to state-run and state-purchased inpatient beds, **Crisis Stabilization Beds** can fill an important role. These types of beds are very short-term residential treatment programs designed to reduce acute symptoms of mental illness within a secure and protected setting, with 24/7 clinical staff availability (including 16 to 24 hours a day of nursing), psychiatric supervision, daily psychiatric management, and an active treatment environment. These programs have lower medical and nursing capacity than a hospital inpatient unit and do not have the full spectrum of laboratory and related services that hospital units provide, but they can offer safe medical treatment services for those at the right level of need. Costs per day are typically much lower than inpatient care (e.g., $225 per day) and even lower for less intensively staffed options. Longer-term versions (Crisis Residential) are typically less intense and can have longer lengths of stay. These programs are sometimes called Crisis Respite programs, though this term can also apply to lower intensity and less costly alternatives.

Continuum of Treatment Alternatives. As noted above, Assertive Community Treatment (ACT), Forensic ACT, Integrated Dual Disorder Treatment, and other best practices such as Critical Time Intervention are specifically designed for use by high utilizers of inpatient and correctional system resources. The cost of a best practice ACT team is approximately $15,000 per year, per treatment slot. In general, cost-effectiveness studies have found ACT teams to cost about the same per person as the inpatient care and other costs averted by their use.

Continuum of Crisis Supports. In addition to bed and treatment alternatives, an array of other crisis supports can reduce the need for inpatient care and divert individuals from both inpatient and forensic settings. These include:

- **Psychiatric Emergency Centers:** The essential functions of a psychiatric emergency center include immediate access to assessment, treatment, and stabilization for individuals with the most severe and emergent psychiatric symptoms in an environment with immediate access to emergency medical care.

- **Observation Beds:** These are very high acuity (and high cost) evaluation beds, time-limited to 23 hours or less where individuals receive evaluation and intervention to determine if their acute situation can be stabilized sufficiently to avoid hospitalization (often discharging to another crisis placement). These settings are usually located within hospitals because of the high acuity situations they manage.
- **Crisis Triage / Assessment Centers and Crisis Urgent Care Centers:** These are walk-in locations in which crisis assessments and the determination of priority needs are determined by medical staff (including prescribers). Crisis urgent care centers provide immediate walk-in crisis services. They may or may not be based in a hospital. Such centers may be peer-run (such as the Recovery Innovations program in Harris County).
- **Mobile Crisis Outreach Team (MCOT):** These are mobile services that provide psychiatric emergency and urgent care, with the capacity to go out into the community (in the person's natural environment) to begin the process of assessment and treatment outside of a hospital or health care facility. The MCOT has access to a psychiatrist and usually operates 24/7 (though overnight response may be less comprehensive).
- **Crisis Telehealth:** These are crisis assessment or intervention services provided through telehealth systems. They can allow access to higher-level medical (e.g., psychiatrist) capacity within the crisis settings noted above or other settings. They can also include consultation through telehealth systems by a behavioral health specialist to non-psychiatrist medical staff to facilitate the assessment or management of individuals in other non-behavioral settings (e.g., general emergency departments, jails).

MMHPI Recommendations

Based on our ongoing review of the available data on costs and effectiveness, MMHPI recommends that communities be empowered and held accountable for developing comprehensive crisis systems to reduce use of state hospitals and inappropriate use of forensic and criminal justice settings. This requires more than having the state "purchase or build more beds"; it requires effective procurement of an array of crisis supports, operating in a system for which the local community is accountable and responsible.

MMHIP recommends that states align purchasing of inpatient capacity, crisis services, and intensive treatment capacity in a coordinated effort to help local communities fill gaps, such as those noted above. Furthermore, in Texas multiple payers (DSHS, counties, Medicaid managed care organizations, private insurance payers) have need of crisis services for the people they serve, so the service should be developed as an integrated, multi-payer system.

If willing and able to pass proportionate costs on to third party payers (e.g., Medicaid managed care organizations), local mental health authorities (LMHAs) would be one possible point of responsibility and accountability for such systems. However, not all LMHAs may be willing or able to carry out these requirements, so provisions may be necessary to purchase regional

systems through other means. Local match requirements may be necessary to ensure that local governments appropriately participate in costs. Ideally, in alignment with DSHS Sunset Recommendation 2.1, these systems would be part of integrated behavioral health systems that include access to substance abuse treatment and detox services.

If contracted to local service systems, MMHPI projects that the cost of filling the gap could be substantially less than the cost of developing a comparable number of inpatient beds, and the effectiveness would likely be higher. This could be done by:

- Shifting responsibility for the allocation of current beds to LMHAs, per DSHS Sunset Recommendations;
- Allocating the cost of developing additional needed inpatient capacity proportionally, as recommended in the CannonDesign report;
- Instituting cost-sharing requirements, per DSHS Sunset Recommendations, from LMHAs that overuse their allocated capacity to LMHAs that underuse;
- Instituting performance metrics related to emergency response time initially and, over time, emergency department overuse, post-inpatient discharge follow-up, and criminal justice system overuse. Performance metrics should be developed in collaboration with stakeholders, per DSHS Sunset Recommendations.

In order to achieve cost and performance goals, local systems would need to move toward implementing the following features in their crisis systems:

- **Promote universal and early access to help.** Each community should have a clear protocol by which an individual or a family, regardless of insurance status (including uninsured, Medicaid, and commercial insurance), in any kind of mental health or substance abuse crisis, can ask for and receive help quickly and easily and obtain a proactive and timely response, whether through walk-in or mobile services. Measurement of timeliness of response and access to voluntary help versus help through law enforcement or an emergency department should be key success metrics.
- **Identify and fund local crisis coordination and continuity "leads" in each region or community.** These entities would be responsible for coordinating all care for individuals in crisis and providing oversight and performance improvement activities. Access to crisis intervention, including mobile outreach, for those at high risk of hospitalization, incarceration, or homelessness, should be a priority metric for system success and a priority for system funding by all payers, including Medicaid and private insurers.
- **Develop and fund a full range of diversion services.** Policy makers need to provide definitions for each type of service, with local flexibility and development incentives to fill gaps. Policy makers could also address the current licensing and certification rigidity that interferes with development. All funders would need to certify and adequately reimburse diversion services, just as they are required to reimburse inpatient services.

- **Promote a wide range of locally accessible psychiatric inpatient services (in freestanding and community hospitals) to eliminate reliance on state hospitals for acute care.** In accord with the Long Term Plan and HB 3793 recommendations, state hospitals should be used only for long-term rehabilitative and recovery services for the most severely impaired individuals, as well as for forensic services that cannot be performed in less restrictive settings. The state needs to coordinate all funding, including state, local, Medicaid, Medicare, and private insurance to help local systems and their hospitals develop adequate acute capacity at the local level. State licensing and oversight needs to be supportive of the ability of hospitals to develop successful programs within the rate structure provided. Successful application of this approach could result over time in additional savings through reduced reliance on selected state hospitals in which physical plant challenges are especially costly to repair.
- **Facilitate access to crisis help, including emergency detention, with minimal use of law enforcement and the judicial system.** Many states facilitate access to civil commitment by providing authority to physicians, psychologists, nurse practitioners, and licensed social workers to initiate short-term emergency holds for evaluation without requiring the involvement of justice personnel. The 2012 Texas Appleseed review of the Texas Mental Health Code includes many ideas to help Texas reduce reliance on law enforcement.
- **Maximize access to peer support.** Peer support should be a core feature of diversion programs and acute care. As recommended by the Hogg Foundation, reimbursement models should remove restrictions on use of peer support to include all types of mobile and site-based diversion services, regardless of provider type. Peer-operated crisis services should be developed in all local systems.
- **Maximize access to telehealth.** Telehealth services by licensed practitioners should be made available throughout the full range of crisis diversion services, including mobile crisis, rather than only in licensed health facilities.