
Mental Health Best Practice Opportunities for Denton County

March 2015



*Made possible by the generous support
of the following organizations:*



Table of Contents

Executive Summary	1
Purpose of the Report.....	2
Methods and Approach	2
Overall Findings	3
Denton County Mental Health Needs and Service Capacity	4
System-Level Recommendations.....	7
Recommendations Regarding Potential Improvement Activities.....	9
Appendix One: Determining Prevalence of Severe Mental Health Needs	14
Appendix Two: Inpatient Needs in a Community Context	16
Appendix Three: Additional Detail on Best Practices Noted In Report	21
Adult Best Practices Noted in Report	21
Child and Family Best Practices Noted in Report	25

Acknowledgements

This report was made possible by the generous support of the following organizations:

- Denton County
- City of Denton
- Denton Regional Medical Center
- The Center for Children’s Health led by Cook Children’s
- Flow Health Care Foundation
- Texas Health Presbyterian Hospital of Denton
- City of Lewisville
- United Way of Denton County, Inc.



United Way
of Denton County, Inc.



Executive Summary

The Denton County Citizen's Council on Mental Health (Citizen's Council) is one of the fastest developing, inclusive community **collaborative processes** that the MMHPI team has observed. Having brought together a critical mass of local leaders catalyzed for **system change**, the time has come to embrace system change formally and organize for that purpose.

System recommendations center on shifting the Citizen's Council from **fact-finding to action**:

- **Charter a Denton County Behavioral Health Leadership Team (BHLT):**
 - The BHLT must have the formal chartered backing of political leaders;
 - It functions as a focused (15-28 member) executive team for system change;
 - Its primary function is to develop a strategic plan and actions to implement it;
 - The BHLT should represent all local system resources and political leadership;¹
 - The BHLT should meet at least quarterly in its executive oversight role.
- **Organize a BHLT Work Group Structure:**
 - The work of system change will require work groups accountable to the BHLT.
 - Their function is detailed planning and implementation coordination.
 - Two to four initial work groups are recommended to addressing the following areas:

Veterans	Crisis System / Detention / Commitment
Housing	Child and Family Systems
Mental Health Court	Integrated Care
Jail Diversion	Workforce Development
Community Case Management (data sharing individual and aggregate / QI)	
- **Recruit and Deploy a Senior Director-Level Dedicated Staff Position to Coordinate and Manage the Process.** Through the backbone of the United Way of Denton County, this position will facilitate overall development, support system planning and coordination.
- **Continue to Expand the Citizen's Council**, meeting at least twice annually in order to:
 - Empower Change Agents across the system to support Work Group efforts;
 - Function as the primary forum for community awareness, involvement and participation to support mental health system development;
 - Broaden community awareness and community engagement.

Potential Targeted Improvement Activities:

- Continued crisis response system improvement;
- Systemic justice system diversion across multiple intercepts;
- Enhancing services for children and families;
- Expanding integrated primary care / behavioral health home capacity;
- Implementing specific best practices treatment (e.g., ACT, wraparound); and
- Workforce development, and focused initiatives (e.g., veterans, cross-cultural outreach).

¹ Recommended initial members (and number): Commissioners Court (3-5), Denton City Council (2), Lewisville City Council (2), Small Cities/Towns (1), Health Systems (Hospitals, MHMR, Health Dept.: 3-7), Health Funders/Insurance Providers (1-2), Human Services (ISDs, Higher Ed., Law Enforce., WATCH, Housing: 4-8), United Way (1). Members may serve on multiple work groups.

Purpose of the Report

United Way of Denton County, on behalf of the Denton County Citizen's Council on Mental Health (Citizen's Council), contracted with the Meadows Mental Health Policy Institute (MMHPI) to carry out an independent analysis of the county's local mental health system performance and identify specific strategies for Denton County to support continued development of a highly responsive, clinically effective, and efficient community behavioral health system for the population of the entire county. The project objectives focused on evaluating current capacity based on a self-assessment completed by the Citizen's Council in 2014 and determining viable strategies to continue to develop a system of care for the community that:

- Is responsive, vision-driven, recovery-oriented and integrated;
- Increases the quality and effectiveness of service delivery for populations with increasing complexity; and
- Improves the efficiency of system operations, resource allocations, and revenue generation processes across available federal, state and local funding streams.

The primary deliverables for the project and their anticipated timing as proposed, include:

- A draft report putting the 2014 services inventory and November 2014 preliminary findings in the context of state and national best practices and offers improvement options;
- A final report that includes recommendations to Denton County leaders for continued mental health system of care improvement.

Methods and Approach

MMHPI initiated this review in mid-December 2014 with initial meetings with United Way leadership and a review of the 2014 assessment. Key informant interviews were carried out in January and February 2015 with a cross-section of Citizen's Council members (see table below) provided to MMHPI. An initial draft report was reviewed with Mr. Joe Mulroy and Mr. Gary Henderson in early February, and multiple iterations were worked through. This report is the final report for review with a broader set of stakeholders and will be finalized in March after the final stakeholder review.

Name	Title	Organizational Affiliation
Richard Godoy	Family Services Coordinator	Denton Police Department
Pam Gutierrez	CEO	Denton County MHMR
Gary Henderson	President and CEO	United Way of Denton County
Russ Kerbow	Chief of Police	City of Lewisville
Bryan Langley	Assistant City Manager, CFO	City of Denton

Name	Title	Organizational Affiliation
Amy Lawrence	Director of Counseling Services	Denton Independent School District
Sherri McDade	Deputy CEO	Denton Housing Authority
Stan Morton Tim Harris, MD An Nguyen, MD Kathy Srokosz	CEO Chief Medical Officer Emergency Department Medical Director Director, Outpatient and Chronic Care Services	Texas Health Presbyterian Hospital Denton
Joe Mulroy	Co-Chair	Citizen's Council
Randy Plemons	Assistant Chief Deputy	Denton County Sheriff's Office
Laura Prillwitz	Deputy Director	Denton County Juvenile Probation
Matt Richardson	Director	Denton County Health Department
Hon. Bonnie Robison	Judge	Probate Court
Doreen Rue	CEO	Health Services of North Texas
Nicki Roderman	Chief Nursing Officer	Denton Regional Medical Center
Tammy Russell	Probation Officer	Denton County Adult Probation
Hon. Coby Waddill	Judge Board Chair	County Criminal Court No. 5 Denton County MHMR
Chris Watts	Mayor	City of Denton
Julie Westlake	Supervisor	Child Protective Services

Overall Findings

The interviews revealed two major findings related to the Citizen's Council. The individuals involved are highly complimentary of the Citizen's Council for having brought together key community leaders to raise awareness of local mental health needs and build momentum toward system improvement. In the experience of the MMHPI team conducting this review, this is one of the strongest and most rapidly developed community collaboratives we have encountered. Now there is strong interest in "How do we organize ourselves to actually get things done?" The recommendations below offer specific guidance to achieve that goal.

Related to service capacity, the fact-finding by the Council and our supplementary interviews identified several subsets of priority unmet need that could benefit from enhanced and refocused service delivery, described in more detail below.

Prior to discussing these findings, this report provides additional system performance data assembled by the MMHPI team. These data that compare needs and service availability in Denton County to comparison counties in Texas generally, to put the 2014 services inventory findings in additional context.

Denton County Mental Health Needs and Service Capacity

Statistics on mental health need generally focus on the one in five individuals at some level of need for mental health (MH) services in a given year. However, more refined 12-month prevalence estimates show an even higher level of overall need (estimated at 29.1 percent to 30.5 percent, inclusive of substance use disorders),² suggesting that as many as 200,000 Denton County residents a year are in need of services.

However, it is also possible to use these more recent studies to differentiate between different levels of functional impairment associated with each disorder to allow more refined policy development. Examples of different levels of functional impairment include (differences in estimates reflect in part differences in defining mild, moderate and serious):

- 11.5 percent with substance use disorders (SUD) of any kind,
- 10.8 percent to 13.8 percent (depending on the study) with mild conditions (MH, SUD and co-occurring),
- An additional 7 percent to 13.5 percent (depending on the study) with moderate needs, and
- An additional 6.3 percent to 8.2 percent (depending on the study) with severe needs.

Based on these more refined studies, MMHPI worked with Dr. Charles Holzer to develop precise estimates of severe need based on the specific socioeconomic and demographic factors of each Texas county. Using these projections, MMHPI estimates that in 2012, slightly over 20,000 adults and just over 13,000 children and adolescents in Denton County³ suffered from severe psychiatric disorders (serious mental illness, or SMI, for adults and severe emotional disturbance, or SED, for children – please see Appendix One for more information on MMHPI

² 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.

³ 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.

estimates of need). The table below compares these needs to the total county adult and child populations, and provides comparable data for neighboring (Tarrant) and comparison (Nueces) counties.

County	Adults with SMI	Total Adult Population	Children with SED	Total Child Population
Denton	20,308	517,031	13,178	189,724
Nueces	12,212	259,019	6,962	87,898
Tarrant	64,191	1,365,940	39,006	513,823

This is our current best estimate of the overall county need for individuals with severe disorders, which provides a much more manageable target for service delivery system development than the larger number. MMHPI recommends that service delivery system planning for individuals with severe needs focus both on the overall level of need within the county as well as the specific number of individuals with severe needs.

It is also possible to make two further distinctions:

- The number of adults and children with severe needs who live in poverty⁴ (just under 8,700 adults and just over 4,500 children in 2012);
- The number of adults with severe and persistent mental illness (SPMI), which is defined as the subset with a disorder that more seriously impairs their ability to work and live independently and that has either persisted for more than a year or resulted in psychiatric hospitalizations (11,326 in 2012, of whom 4,625 were in poverty); and
- The very small subset of adults at highest risk for repeat use of hospitals, emergency rooms, jails, and homeless services, which MMHPI estimates to be approximately 400 per year.⁵

This analysis puts in context the 2014 Denton County services inventory finding that just under 13,000 Denton County residents receive mental health services each year. Compared to the overall need, these levels of services appear starkly inadequate. However, compared to those with more severe needs and the subset of those with severe needs in poverty, being able to address these needs becomes more feasible.

This also raises the question of which of the services described in the 2014 services inventory are available for those with the most severe needs. It is unlikely that all 13,000 treatment slots

⁴ For prevalence analyses, MMHPI defines poverty as the proportion of the population with income at or below 200% of FPL (\$23,540 for an individual).

⁵ Based on findings from Cuddeback, G.S., Morrissey, J.P., & Meyer, P.S. (2006). How many assertive community treatment teams do we need? *Psychiatric Services*, 57, 1803-1806.

are designed for those with severe needs, so MMHPI used data available from the Department of State Health Services (DSHS) to determine the capacity of the local mental health authority (LMHA), MHMR of Denton County, to provide more intensive treatment.

The table that follows compares 2014 service delivery patterns for Denton County to those of Tarrant and Nueces counties, focusing just on individuals in ongoing treatment (excluding those that received only crisis services). The columns show the proportion of individuals treated by level of care, going from lowest (medication only) to highest (assertive community treatment, or ACT, an evidence-based treatment for those with repeat hospital, jail and homeless services). Note that the pattern of service delivery in Denton County is similar to the two comparison counties, namely that most people received only skills-building rehabilitative therapy and relatively few received the more intensive services necessary for people with the most severe needs. These data suggest that current capacity is adequate to serve just under one-third of people with severe needs (SMI) in poverty (2,844 out of 8,696 or 32.7%), which is nearly identical to the percentages for Tarrant (30.4%) and Nueces (32.5%) counties. Furthermore, the capacity for those with the most severe needs (and those most likely to repeatedly use hospital, emergency department, jail and homeless services) is approximately one-quarter of capacity (101 out of 400; Tarrant and Nueces have even less capacity, at 7% and 21% of need, respectively).

Adult Levels of Care Analysis FY 2014

LMHA	Medication Management	Skills Training	Medication Coordination and Therapy	Medication and Case Management	Assertive Community Treatment	Total
Denton	6	2,047	321	369	101	2,844
% Total	0%	72%	11%	13%	4%	
Nueces	16	2,002	35	350	68	2,471
% Total	1%	81%	1%	14%	3%	
Tarrant	2	8,386	386	2,037	101	10,912
% Total	0%	77%	4%	19%	1%	
Combined	24	12,437	742	2,756	270	16,227
% Total	0%	77%	5%	15%	3%	

Intensive service capacity for children is even more limited, and – like other Texas counties – most of the capacity resides in the juvenile justice system. Only 410 children received MHMR services in 2014 (less than 10% of those in poverty with severe needs) and just over 125 received the most intensive services. This compares with the hundreds in care with juvenile probation in Denton County any given year (500 to 800, per interviews), many of whom receive intensive services. One factor that may help with this is the potential of Denton County's future

participation in the state's YES Waiver for Medicaid. Tarrant County currently participates in this waiver and was able to increase both the range of its intensive services (the YES Waiver pays for additional supports such as respite) and the number of children receiving intensive services (increasing capacity by 40%).

These additional data on need and capacity for intensive services informed the recommendations that follow.

System-Level Recommendations

Within the context of the overall findings and data on needs and system capacity, MMHPI makes the following system-level recommendations. As noted, the Citizen's Council is one of the fastest developing, inclusive community collaborative processes that the MMHPI team has observed. Having brought together a critical mass of local leaders catalyzed for system change, the time has come to embrace system change formally and organize for that purpose. In addition, there must be capacity to continue to add more partners to the process, including additional county and municipal leaders not currently involved, and others with relevant resources.

The following system recommendations center on shifting the Citizen's Council from fact-finding to action. They include priority activities ideally to be achieved in the next 90 days (by June 30, 2015) and follow-on activities for the remainder of 2015.

Priority System Level Activities (April to June 2015)

- **Charter a Behavioral Health Leadership Team (BHLT) for Denton County:** The process must have the formal backing of political and system leaders with formal authority over the financial, health care delivery, and human services resources needed to address community mental health needs. MMHPI recommends developing as soon as possible a focused (15-17 member)⁶ executive team to guide system change by overseeing development of a strategic plan and initiating the actions necessary to implement it. The BHLT should strive over time to represent all local system resources and political leadership involved in mental health service delivery, both those whose missions include mental health service delivery as a primary role, as well as the political entities and community organizations for which mental health care is critical to system outcomes, including Commissioners Court, large and small municipalities within the county, other health systems, health payers (especially the Medicaid managed care organizations that last year in Texas served more adults with serious mental illness than did LMHAs⁷), and human service systems for adults and children. MMHPI recommends that the BHLT

⁶ Recommended initial members (and number): Commissioners Court (3-5), Denton City Council (1), Lewisville City Council (1), Small Cities/Towns (1), Health Systems (Hospitals, MHMR, Health Dept.: 3), Health Funders/Insurance Providers (1), Human Services (ISDs, Higher Education, Law Enforcement, Housing: 4), United Way (1).

⁷ Data breakouts for Denton County should be available in April 2015.

should meet at least quarterly in its executive oversight role. As it starts up, meetings likely will be more frequent.

- **Organize a BHLT Work Group Structure:** The work of system change will require work groups accountable to the BHLT able to carry out more detailed planning and ongoing coordination of implementation activities in areas of prioritized action. Work groups would be accountable to the BHLT and goals for each would be defined through the strategic planning process. As much as possible, these should build upon, rather than duplicate, existing efforts, such as current DSRIP projects under the 1115 waiver and the current WATCH collaborative sponsored by Cook Children's (led by Dr. Elliott). The first committees / work groups formed should be tied to the specific improvement activities identified from the list below. Two to four initial work groups are recommended to address the following areas of priority need (these are discussed more in the following section):
 - Veterans,
 - Crisis System / Detention / Commitment,
 - Mental Health Court,
 - Jail Diversion,
 - Housing,
 - Community Case Management (focused on data sharing at the individual and aggregate levels),
 - Integrated Care (mental health, substance abuse, primary care),
 - Child and Family Systems, and
 - Workforce Development.
- **Recruit and Deploy a Senior Director-Level Dedicated Staff Position to Coordinate and Manage the Process:** Such a position is critical to enable the BHLT and Work Group structure by facilitating overall system development and directly supporting system planning and coordination. It will be important to recruit an individual with just the right balance of system experience and expertise in facilitating the involvement and ideas of others. This person cannot be expected to be an expert in all of the areas necessary for change; that expertise rests in the community. Instead, the person should be expert in bringing together diverse, cross-functional groups that span both hierarchy (executive to line staff) and organizations. The position should be employed by a "backbone organization," an entity able to provide administrative support to system planning and coordination activities. United Way of Denton County has served in this role, and MMHPI recommends that they continue to do so.

Follow-On System Level Activities (July to December 2015)

- **Develop a Strategic Plan:** Drawing on the MMHPI best practice recommendations in this report, the 2014 community inventory, and opportunities emerging through the legislative session, a strategic plan with specific quality improvement (QI) goals in each

work group area should be developed during the summer, to be in place by summer's end in order to support implementation in the fall. Targeted technical assistance will likely be needed to support both the planning process and the development of specific goals. The strategic plan should include measurable goals, objectives, and timeframes. The MMHPI assessment has indicated significant momentum with multiple opportunities for improvement, both within current resources and with targeted resource investments that can be enhanced by being part of a larger organized effort capable of collaborative impact. It will be critical to facilitate the group's development of a broader strategic plan based on collaborative impact that is achievable, and provides the Citizen's Council with early success in a way that reinforces further investment and commitment. The MMHPI assessment has identified improvement opportunities that would be cost effective starting places within most of the major areas identified above as potential work groups. It will be important to get Citizen's Council members working as teams to create improvements within the areas they are most passionate about, as well as engaging the Council as a whole to bring in more people with front-line experience who are closer to the ground in the areas of targeted improvement and therefore able to implement changes more effectively.

- **Continue to Expand the Citizen's Council and Empower Change Agents:** The Citizen's Council will continue to be the primary forum for community awareness, involvement, and participation in support of mental health system development. In addition to continuing to develop the Council and expand its membership, individuals from across the community will take on change agent roles through the work groups and implementation process. The Citizen's Council's primary goals should center on: (1) empowering change agents across the system to support Work Group efforts and (2) broadening community awareness and engagement regarding mental health needs and solutions. As the group shifts into more focused action, its initial mission to raise awareness and combat stigma should be maintained and strengthened through the process. In addition, work groups can allow for additional information sharing about the specific processes underlying system challenges (e.g., clarifying how the process for court orders to a facility are affected by capacity).

Recommendations Regarding Potential Improvement Activities

As part of the overall shift in opportunity to build a framework for community-based care management of high need individuals with behavioral health needs, MMHPI noted the following examples of improvement opportunities in our review. Progress in any one of these areas individually may not be dramatic, but all of them together as part of a community strategy over time could yield significant impact.

Underlying all of these activities (and future activities going forward) is the opportunity for the Council to use well-recognized public health strategies of community health improvement to

provide the information-sharing framework for successful cross-system case management. Doing so will require a focus both on individual and aggregate data sharing capacity. At an individual level, the emerging health information exchange (HIE) infrastructure offers a framework on which to build, but system protocols to meet HIPAA and 42 CFR Part II data sharing requirements need to be developed. At the aggregate level, strategies will involve systematic gathering of baseline data across different settings, populations, and data sets, and then designing improvement strategies that can produce continuous and incremental improvement with measurable results. At the moment, there is no vehicle for developing that kind of “best practice” approach in Denton County, but the emerging infrastructure within the Council could prioritize this as a near-term capacity to build.

Priorities for potential system improvement activities include the following:

- **Continued crisis response system improvement.** Enhancements can be made to address current flow barriers to speedy response for people in crisis presenting to emergency departments (ED), as well as some procedural changes that can improve access to and utilization of the existing triage center. There is already positive momentum and concrete improvement evidenced in the discrete DSRIP projects at Texas Health Presbyterian Hospital Denton (ED navigators) and Denton County MHMR (primary care integration, mobile crisis, new crisis residential), as well as capacity building at community providers such as Health Services of North Texas. There is now a need to bring leaders of these efforts together to develop a coordinated strategy with concrete improvement targets. There is opportunity to coordinate and enhance multiple interventions: improved crisis flow using the new MHMR and existing ED facilities, improvement in continuing care management for high risk individuals in crisis, coordination with law enforcement and the courts, expansion of (and facilitation of access to) diversion capacity, improved information and coordination about the process for accessing state hospital and other psychiatric inpatient beds, and better linkages to ongoing care. The current state budget has new crisis funds in it, which should be an immediate target of planning and system development, and Article II riders in the House have added \$60 million for inpatient capacity expansion (see statewide MMHPI recommendations regarding inpatient expansion options in Appendix Two) and \$30 million for improved treatment capacity (though Denton County may receive less because it is currently funded above what the state is defining as the per capita average). MMHPI also recommends engaging representatives of the Medicaid MCOs, who have significant populations in Denton County, to better coordinate local resource planning for diversion (in accord with HHSC Sunset Recommendation 6.1).

- **Systemic justice system diversion across a sequential intercept model.** There is a need to develop a framework to tie together and coordinate the multiple efforts currently underway. The sequential intercept model⁸ can help with this:
 - **Intercept 1 – Law Enforcement:** The goal here is to empower law enforcement to divert those only in need of services to the crisis system; these improvements will enhance the ability of specialized teams to effectively divert individuals to needed services. The sheriff’s Mental Health Unit is a resource for the entire county and can help anchor the law enforcement end. However, better cross-system coordination is necessary for this capacity to achieve optimal results. Information sharing (at both an individual and system level) and coordination with the rapidly developing crisis system are near-term process improvement opportunities.
 - **Intercept 2 – Pretrial:** There is opportunity to improve data collection at the time of booking to identify the subset of individuals with substantial behavioral health needs (mental health and substance abuse) at relatively lower criminogenic risk (and thereby at lower likelihood to reoffend if placed in community diversion). However, this will require review of existing probation capacity (specialized probation is currently operating substantially over capacity) and supports to those on probation. The possibility of adding 30 slots (10 new slots from existing resources, plus 20 more from new resources) focused on forensic need to the existing MHMR assertive community treatment (ACT) team could both better serve those on probation (or potentially under the supervision of a specialty court) and should be explored (more on ACT below). However, to maximize opportunities here, the District Attorney’s office will need to be fully engaged and supportive of the changes. Ancillary supports, such as supported employment and vocational rehabilitation (building on new resources through DARS) and supported housing, will also be critical to treatment success and recidivism prevention.
 - **Intercept 3 – Specialty Court and Jail Based BH Services:** Interest in developing a mental health court is high, and this is a best practice model that can serve approximately 20 people at a time. While this program targets a relatively small number of people, it could be part of a broader strategy to improve coordination. There are also several opportunities to improve services to people who are incarcerated, such as increasing continuity of medication from and back to community settings. There is also a need to increase behavioral health treatment capacity within the jail.
 - **Intercept 4 – Reentry:** Capacity to coordinate reentry is necessary to facilitate planning for release, which should begin right from the time of entry into the jail. Reportedly, collaboration between the county jail and MHMR has been recently

⁸ See http://gainscenter.samhsa.gov/pdfs/integrating/GAINS_Sequential_Intercept.pdf for additional information.

reinvigorated. This positive momentum should be built upon, but referral capacity post-release is essential.

- **Intercept 5 – Community Corrections:** Building the capacity to retain high need individuals post-release within the community is also essential. The forensic ACT team discussed below may help with this.
- **Enhancing services for children and families.** There is already good collaboration in place that might lead to some policy and procedure changes that would facilitate access to early intervention services for high need kids in school, before they become involved in more expensive services. Opportunities include:
 - Building on MHMR outreach to schools by developing ongoing processes to streamline referrals and coordinating community resources to meet the needs.
 - Better linkages to natural supports and strategies to enhance these supports, including the Mentor Denton program through United Way, municipal recreation programs, and opportunities to expand faith-based collaboration focused on youth.
- **Expanding integrated primary care / behavioral health home capacity.** There are significant community opportunities for building on existing DSRIP and individual provider efforts to enhanced behavioral health service delivery capability integrated within existing primary health delivery. Improving linkages between these efforts across agencies and tying them to system-wide improvement goals could be a win-win for both the community and for individual health providers. There is also a broader need to expand integrated physical health care delivery at all levels of the system, including inpatient units and for people presenting in EDs with complex physical and behavioral health needs.
- **Implementing specific best practices treatment (e.g., ACT, wraparound).** Existing DSRIP projects at MHMR and hospitals are beginning to show success in diverting people from emergency departments and linking them to ongoing care. Many people have been linked to the new integrated primary care resources at MHMR (which can be further enhanced through better coordination, per the prior bullet). However, as noted earlier, there is a dramatic lack of high intensity treatment capacity. This is not unique to Denton County – in fact, Denton’s ACT team seems to be among the higher performing teams in Texas that we have reviewed. Specific best practices to consider include the following (and additional information is provided on these practices in Appendix Three):
 - **For the highest-utilizing adults,** expanding the existing ACT team may be the most immediate path to improve ongoing intensive treatment capacity, though other approaches (e.g., Critical Time Intervention) may be valuable to consider. A modest expansion of ACT capacity (e.g., 20 to 30 additional slots over the current 100) would require (1) additional physician time; (2) two additional case managers, ideally with specialties (e.g., supported housing) not present on the existing team); and (3) training in more contemporary fidelity models (e.g., the TMACT) that focus more on outreach, engagement, peer support, employment, housing, and relatively rapid

transitions to lower levels of care. In the area of housing, there is clearly a broader system-level need for cross-training and enhanced liaison capacity between housing resources (e.g., Denton Housing Authority staff) and treatment providers, and increasing capacity in this regard on the ACT team could be one focus of such efforts. In addition, a systemic effort to improve system-wide capacity to treat high need, complex cases would help the overall system increase its capacity to maintain these individuals in care (Comprehensive, Continuous, Integrated System of Care, or CCISC, is a potential model to use here). A comprehensive effort would likely cost between \$250,000 to \$300,000 per year for the first two years, dropping to \$150,000 per year ongoing after that. The example of the community coming together to enhance capacity at the Children's Advocacy Center offers a model for building community buy-in and identifying additional local resources to support change.

- **For high need youth** in the juvenile justice in particular, and to a lesser degree in the child welfare system, there are strong programs in the community, but a lack of coordination supports. There is opportunity under the expanding Medicaid YES Waiver to build capacity to deliver Wraparound Service Coordination to high need youth served in multiple systems (other than child welfare) and this can be built on and expanded. While the YES Waiver can provide ongoing funding, start-up funds to build capacity are necessary. Tarrant County has had considerable success using the waiver, which also builds capacity for natural supports and respite for families.
- **Workforce development.** There are multiple efforts by individual providers to recruit and enhance resources and some linkages to medical schools and universities. There should be a concerted effort to work at a community level on recruitment and retention for cross-system needs (e.g., psychiatry overall and child psychiatry in particular, as well as social work and other critical non-medical professionals, emphasizing cultural and linguistic competence). A joint position at multiple institutions can help pull medical leadership together, and a university partner can help make positions more attractive. There is interest among multiple parties for such an effort.
- **Additional focused initiatives (e.g., veterans, cross-cultural outreach).** Existing efforts to organize a response to the Texas Veteran's Initiative (TVI) provide a sound starting place for further progress, whether or not the initial proposal is funded. Additionally, the legislature currently has in both the House and Senate budgets an additional \$10 million a year to fund additional communities, and SB 55 (the authorizing legislation to expand TVI) was passed out of committee. There was also indication that resources for Latino and Spanish-speaking subgroups may need to be enhanced, both within and perhaps separate from the initiatives described above. Cultural approaches also need to take into account differences across faith communities.

Appendix One: Determining Prevalence of Severe Mental Health Needs

Defining Prevalence of Severe Need and the Public Role

Prevalence, in the context of public health, refers to the proportion of the population who exhibit a specific characteristic in a given time period. The prevalence of mental health disorders in the general population is important to understand for mental health system planning and usually focuses on *annual prevalence*, that is the number of people suffering from a mental health condition at some point during a specific year. Other prevalence approaches look at a single point in time (i.e., point prevalence) or over a lifetime (i.e., lifetime prevalence).

In using prevalence to define the level of need for a public mental health system, the Meadows Mental Health Policy Institute (MMHPI) employs two additional constructs.

The first is poverty, using the **federal poverty guidelines** (FPL). 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 focuses on the proportion of the population with income at or below 200% of FPL (\$23,540 for an individual).

The second construct is **severity**. Because needs have to be prioritized, it is important to identify the subset of the population with the most severe needs. To do this, MMHPI focuses on serious mental illness (SMI) for adults and serious emotional disturbance (SED) for children:

- **Serious Mental Illness (SMI)** – This includes adults and older adults with schizophrenia, severe bipolar disorder, severe depression, 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 seriously 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)** – This 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.

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 with addressing the most severe needs of people living in poverty.

Methodology

To estimate prevalence of mental health disorders, MMHPI uses 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, such as 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 (e.g., 200% federal poverty level), and are therefore more helpful for planning purposes by mental health authorities and advocates.

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. Dr. Holzer's and colleagues' 2012 estimates were commissioned specifically by MMHPI for use in Texas. While comparable data is not available for states other than Texas, the Texas estimates allow comparisons by county and key demographics.

When comparing the MMHPI estimates to data in the MHA report, it should be kept in mind that, while the MHA data allow for reliable cross-state comparisons, they 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 state.

However, when estimating the prevalence of substance use disorders, MMHPI also relies on the NSDUH, as more refined sources are not available.

Appendix Two: Inpatient Needs in a Community Context

The Need for “Beds”

In January 2015, two important reports were released attempting to define the need for inpatient “beds” in the state of Texas:

- **Rider 83 State Hospital Long Term Plan:** This Department of State Health Services (DSHS) report draws a great deal from the November 2014 consulting report by CannonDesign. That report was based on an architectural review of selected state hospitals, review of data from DSHS on State Psychiatric Hospital (SPH) utilization, and demographic trends. It recommends development of 570 beds in the near term and an additional 607 beds to keep pace with population growth through 2024.
- **Allocation of Outpatient Mental Health Services and Beds in State Hospitals:** This DSHS 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 Task Force recommended that DSHS request 720 additional inpatient beds in the 2016-2017 biennium and an additional 1260 over subsequent biennia to meet the current and projected population growth.

Using a cost-estimate of approximately \$280,000 per inpatient bed, these two reports recommend new expenditures of \$160 to \$200 million annually.

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. However, neither report factored this into their analysis. They instead 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 the potential impact of community-based services in the narrative, but presented no data to determine its potential for reducing inpatient demand. Nor did any of the reports address the use of crisis alternatives or best practices such as Assertive Community Treatment (ACT), Forensic ACT, or Critical Time Intervention. 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. Access to crisis supports, outpatient care, and intensive treatment services affect the need. There was also:

- Inadequate attention to the role that best practice jail diversion strategies could play in reducing demand from forensic commitments;
- Absence of data on SPH property values and how those values would figure into the financing of elements of the Long Term Plan;

- Lack of an analysis of the impact of potential income losses from Disproportionate Share Funds (DSH) and Medicaid/Medicare reimbursements financing;
- Lack of analysis of the use of telehealth for areas with workforce shortages; and
- Lack of concrete plans to allow communities to determine the best use of resources to address service needs and manage inpatient demand locally.

What is a “Bed”?

Despite these limitations, both reports identify a substantial need for new “beds.” While both reports focus on inpatient beds in state hospital and community settings, the functional need that both reports attempt to address is not just a need for inpatient “beds.” ***MMHPI recommends reframing the “bed” need to instead be a need for a 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:

- **State-purchased Inpatient Beds:** The state estimates the annual cost of these beds to be \$280,000 or just under \$770 a day. There is evidence that this rate may not be competitive, given reports that DSHS efforts to request qualifications from facilities willing to provide capacity at this rate have had limited success. Typical rates for community inpatient beds generally are closer to \$1,000 or higher per day.
- **Crisis Stabilization Beds:** These 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 16-24 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 (\$82,000 per year, or \$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. It 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.

MMHPI 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.

Appendix Three: Additional Detail on Best Practices Noted In Report

Adult Best Practices Noted in Report

Assertive Community Treatment (ACT). ACT is an integrated, 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. Given the breadth of expertise represented on the multidisciplinary team, ACT provides a range of services to meet individual consumer needs, including (but not limited to) service coordination, crisis intervention, symptom and medication management, psychotherapy, co-occurring disorders treatment, employment services, skills training, peer support, and wellness recovery services. The majority of ACT services are delivered to the consumer within his or her home and community, rather than provided in hospital or outpatient clinic settings, and services are available round the clock. Each team member is familiar with each consumer served by the team and is available when needed for consultation or to provide assistance. The most recent conceptualizations of 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).⁹

The Substance Abuse and Mental Health Services Administration (SAMHSA) also developed an ACT Implementation Kit (often referred to as a “toolkit”) to provide guidance for program implementation.¹⁰ More recent ACT promotion efforts seeking to systematically promote consistent outcomes across programs over time in the states of Washington, Indiana, North Carolina, and elsewhere have focused on supporting ACT service development through a comprehensive process of interactive, qualitative fidelity monitoring of clinical services using best practice measures such as the Tool for Measurement of Assertive Community Treatment (TMACT). This is the current standard in the field and represents the best currently known way to broadly develop high quality teams system wide building on the lessons of best practice implementation science.¹¹ Such an approach is particularly critical because high fidelity

⁹ 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.

¹⁰ Substance Abuse and Mental Health Services Administration (SAMHSA) Center for Mental Health Services (CMHS). (2003). Evidence-Based Practices: Shaping Mental Health Services Toward Recovery: Assertive Community Treatment 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. (SAMHSA/CMHS ACT Resource Kit).

¹¹ Fixen, D.L. et al. (2005). Implementation research: A synthesis of the literature. Tampa: University of South Florida. 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.

implementation of programs like ACT is a predictor of good outcomes¹² and of system wide cost savings.¹³ 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.

ACT is one of the most well-studied service approaches for persons with SPMI, with over 50 published studies demonstrating its success¹⁴, 25 of which are randomized clinical trials (RCTs).¹⁵ 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.¹⁶ Studies also show that consumers and their family members find ACT more satisfactory than comparable interventions and that ACT promotes continuity.

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.

Comprehensive, Continuous, Integrated System of Care (CCISC): An Evidence-Based Approach for Transforming Behavioral Health Systems by Building A Systemic Customer-Oriented Quality Management Culture and Process. Multiple methods have been developed for improving quality management in organizations, building on Deming's original Plan-Check-Act-Do model, including the ISO 9001:2008 standards for manufacturing noted above, various specific quality planning approaches (e.g., kaizen, lean, six sigma, etc.), and quality frameworks for healthcare more broadly (e.g., the National Committee for Quality Assurance). It was noted

¹² 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.

¹³ See for example, Latimer, E. (1999). Economic impacts of assertive community treatment: A review of the literature. *Canadian Journal of Psychiatry*, 44, 443-454.

¹⁴ The Lewin Group. (2000). Assertive community treatment literature review. from SAMHSA Implementation Toolkits website: http://media.shs.net/ken/pdf/toolkits/community/13.ACT_Tips_PMHA_Pt2.pdf

¹⁵ 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.

¹⁶ 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.

above that the challenges in behavioral health systems are specific and in some ways more complex. Fortunately, over the last 15 years a specific model for behavioral health system design and implementation, consistent with the core quality improvement principles of the IOM framework, has been developed and replicated in numerous public behavioral health systems.

The Comprehensive, Continuous, Integrated System of Care (CCISC) model was developed over the past 15 years by ZiaPartners. It is an evidence-based model¹⁷ that has been identified by SAMHSA as a “best practice” for system design, and has been used in dozens of local and state systems of care internationally, in over 25 states across the U.S., and in 10 California counties. CCISC is designed to create a framework for systems to engage in this type of vision-driven transformation. It is built on the framework of the IOM Quality Chasm series, which has recommended the need for a customer-oriented quality improvement approach to inform all of health and behavioral health care. Below are the key elements:

1. The system must be built to fulfill the biggest possible vision of meeting the needs and hopes of its customers: both the individuals and families who are seeking help, and the system partners (e.g., criminal justice, child welfare, juvenile justice, homeless services, public health, etc.) that share the responsibility to respond. The emphasis always begins with those individuals and families who the system is currently not well designed to serve (people with co-occurring issues, people with cultural diversity, people in complex crisis, etc.).
2. The whole system must be organized into a horizontal and vertical continuous quality improvement partnership, in which all programs are responsible for their own data-driven quality improvement activities targeting the common vision that all programs become person/family-centered, recovery/resiliency-oriented, trauma-informed, complexity capable (that is, organized to routinely integrate services for individuals and families with multiple complex issues and conditions), and culturally/linguistically competent. In addition, all the major processes and subsystems (e.g., crisis response) must be reworked within this quality improvement partnership to be better matched to what people need.
3. The whole process is designed to implement a wide array of best practices and interventions into all the core processes of the system at an adequate level of detail to ensure fidelity and achieve associated outcomes. This is not about simply "funding special

¹⁷ Minkoff, K. and Cline, C. 2004. Changing the world: The design and implementation of comprehensive continuous integrated systems of care for individuals with co-occurring disorders. *Psychiatric Clinics of North America*, 27: 727-743.

Minkoff, K. and Cline, C. 2005. Developing welcoming systems for individuals with co-occurring disorders: The role of the Comprehensive Continuous Integrated System of Care model. *Journal of Dual Diagnosis*, 1:63-89.

programs," but rather about defining what works and making sure, within the systemic continuous quality improvement (CQI) practice improvement/workforce development framework, that what works is routinely provided in all settings.

4. The whole process is data driven. Each CQI component, whether at the program level, the subsystem level, or the overall system level, is driven by commitment to measurable progress toward quantifiable objectives.
5. The whole process is built within existing resources. All systems need more resources, but it is critical to challenge ourselves to use the resources we have as wisely as possible before acquiring more. In most behavioral health systems, as noted by the IOM, poor system design produces inefficient and ineffective results, and then more resources are invested to work around the poorly designed system. The goal of CCISC is to create processes to move beyond that over time.
6. The whole process is built with the assumption that every piece of practice and process improvement needs to be anchored firmly into the supporting operational administrative structure and fiscal/regulatory compliance framework. This includes not only clinical instructions, but also resource and billing instructions, quality and data instructions, paperwork and documentation requirements, and so on. The fiscal/regulatory compliance framework can be the biggest supporter of quality-driven change, if the same rigidity that may hold ineffective processes in place is "re-wired" to hold improved clinical processes in place that are consistent with the overall values and mission of the systems. Many systems think that this cannot occur, and therefore stop trying. CCISC challenges systems to discover the ways that financial integrity and value-driven practice can be anchored into place simultaneously.

The whole CCISC process begins with a big vision of change and puts in place a series of change processes that proceed in an incremental, stepwise fashion over time. However, because the design of the process is to create organized accountability for change at every level of the system concurrently, thereby increasing the total activation and personal responsibility for improvement by both customers and staff (both front line and managers), even though each part of the system may only take small steps, the whole system starts to make fundamental changes in its approach to doing business. Although a transformation process is by design "continuous improvement" and will involve significant changes over several years, the shift to implementation of a quality-driven framework process can occur in a relatively short time frame (e.g., six to 12 months).

Child and Family Best Practices Noted in Report

Wraparound Service Coordination (based on the standards of the National Wraparound Initiative) is an integrated care coordination approach delivered by professionals, alongside youth and family partners, for children involved with multiple systems and at the highest risk for out-of-home placement.¹⁸ Wraparound is not a treatment per se. Instead, wraparound facilitation is a care coordination approach that fundamentally changes 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, results 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 (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](http://www.nwi.pdx.edu/NWI-book/Chapters/Walker-4a.1-(phases-and-activities).pdf)).

¹⁸ 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.

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.