

AUSTIN STATE HOSPITAL

ASH Brain Health System Redesign

Report

As Requested by

Senate Bill No. 1, Riders 145, 147 Eighty-fifth Texas Legislature

The University of Texas at Austin Dell Medical School December 2018



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Executive Summary

Austin State Hospital Brain Health System Redesign EXECUTIVE SUMMARY

Texans deserve the best mental (brain) health care available. In response to this goal, the 85th Legislature invested \$300 million to initiate and plan several public hospital expansions and replacements to advance the mental health care of its citizens. The Legislature expressed its intent to complete expansion and replacement of the hospitals over a three biennia period. Additionally, the Legislature encouraged academic/public partnerships in these plans. After decades of deferred maintenance, the outmoded Austin State Hospital (ASH) must be replaced. Austin State Hospital was specifically referenced in the Cannon Report as needing replacement with planning funds toward this end allocated in the 85th Session. Consequently, the Health and Human Services Commission (HHSC) approached Dell Medical School (DMS) of the University of Texas at Austin to lead the redesign of ASH and the delivery of mental health services in the ASH Service Area. Dell Medical School organized a regional Steering Committee and planning cascade, engaging stakeholders from throughout the ASH Service Area to complete this task. The core principle leading planning was "People first."

ASH serves 38 counties for adults and 75 counties for youth. In FY18, ASH operated 252 beds, including a 30-bed child and adolescent unit (CAPS). At times, capacity at ASH has been reduced due to workforce shortages, a problem that affects the entire Service Area and state. ASH is always full. The structure and workflow of the hospital are better designed for longer-term subacute care rather than either short-term acute stabilization or residential care. Nonetheless, approximately 70 individuals essentially live at ASH. Consequently, these 70 beds are 'off-line' for new admissions, resulting in 95 individuals each day waiting to be accepted into ASH, usually from jails. Increasingly, ASH is occupied by individuals mandated to the hospital by courts for competency restoration, waiting to stand trial. Competency restoration procedures are overly complex and conflate clinical need for treatment with inability to participate in legal decision-making. Waitlists in jails delay initiation of treatment and timely resolution of legal

charges. A typical inpatient competency restoration at ASH costs more than \$75,000 and lasts longer than ideally recommended. Less expensive, more effective, alternatives

The core principle leading planning was "People first."

are available, if gaps and processes in care can be addressed. Indeed, underfunded gaps in mental health care in the ASH Service Area cost Texas over \$150 million annually, with much of this cost in the legal system. Better allocation of these dollars would gain efficiencies and make care more effective.

Within the ASH Service Area, more than 20 community hospitals treat over 12,000 people annually. These hospitals typically have up to 150 beds available daily to provide acute stabilization in lieu of an admission to ASH. These facilities are better designed than ASH for short-term admissions. The 12 regional Local Mental Health Authorities (LMHAs) buy private beds in these facilities to manage people needing care. These LMHAs also serve over 80,000 adults and 50,000 youth annually in outpatient and crisis programs. Despite providing these services, the existing systems cannot address the epidemiological need. Currently, nearly 600,000 residents in the Service Area will experience a need for mental health services. Additionally, the Service Area population is rapidly growing and mental disorders directly scale with the population. Simply building a few more hospital beds will not manage this growth.

With this information in mind, we developed a care continuum (the ASH Brain Health System Redesign). This continuum served as a substrate to frame recommendations for the 86th Legislative session and beyond. These recommendations are:

Transform the Austin State Hospital (ASH) Campus

- 1. Replace the existing outmoded adult hospital with a new state-of-the-art facility.
 - a. Appropriate at least \$285M to replace the hospital during the 86th Legislative session.
 - b. Identify funding to update and maintain the ASH Child and Adolescent units.
 - c. Have HHSC fund a team to relocate long-stay individuals to better placements.
- 2. Improve ASH operations.
 - c. Develop a plan to transfer management of ASH operations to an academic partner.
 - d. Increase ASH operating budget to offer locally competitive employee salaries.
- 3. Change the ASH reporting structure.
 - e. Move ASH governance and fiduciary oversight to an independent hospital board.
- 4. Initiate a brain health platform on the ASH campus and beyond.
 - f. Have HHSC release an RFI to identify partners to build a mental health care continuum.
 - g. Have HHSC fund a campus oversight team to lead campus development.

Optimize the Use of Community Psychiatric Beds in the Region

- 1. Expand the community psychiatric bed-purchasing program (CPB).
 - a. Increase CPB funding to LMHAs by at least 10% (~\$1.7 million for 200-250 annual admissions).
- 2. Expand CPB to provide short-term competency restorations.
 - b. Fund a pilot program to expand CPB programs for short-term competency restorations.

Redesign Competency Restoration Programs and Processes

- 1. Establish consistent competency standards and assessments across all courts.
 - a. Ask the Judicial Commission on Mental Health (JCMH) to convene a workgroup to develop statewide competency standards, assessments and workflows.
- 2. Establish a formal 60-day inpatient competency restoration limit.
 - b. Change 46B statutes to set time expectations and a formal 60-day cap on competency restoration processes to disentangle clinical care and legal decisionmaking.
- 3. Create a regional competency restoration team to work across venues.
 - c. Fund a regional competency restoration team to work across venues.

Increase Residential Care and Supported Housing Capacity

- 1. Foster better use of the HCBS-AMH 1915(i) State Plan Amendment program.
 - a. Have HHSC fund a regional work group to eliminate perceived and real barriers to better use of HCBS-AMH 1915(i) funding to expand supported housing.
- 2. Finance expansion of evidence-based residential care and supported housing.
 - b. Have HHSC develop a comprehensive plan for expanding residential care, supported housing, and home health capacity in the state (including ASH Service Area).

One perpetual belief about paying for mental health care is that it is 'too expensive'; inherent in this notion is the myth that if we do not pay for mental health care, there are no costs. However, mental health expenses occur regardless of the systems we do or do not provide to address them;

with well-designed care systems, these costs can be quantified and designated to improve care as efficiently and effectively as possible. More importantly, an established continuum of care is specifically designed to decrease the human suffering associated with these illnesses. We believe that investment in new public psychiatric hospitals is a great step in the evolution of how we care for Texans. Doing so can lead Texas to the forefront of public mental health as a national leader in how best to advance brain health.

Part 1: Overview and Background

Overview and Background

Mental disorders, including substance use disorders (SUD), are perhaps the most misunderstood and stigmatized medical conditions affecting humankind. These conditions are now widely recognized as brain-based illnesses. Through our qualitative research, we learned that the term "brain health" does not hold the same stigma that "mental health" does, and the commonly used term "behavioral health" is misleading and poorly understood by the public. "Brain health" appropriately expresses these illnesses as the medical conditions they are, rather than just sets of behaviors that are often misunderstood. However, since the term "mental health" is more commonly used, in this document, we interchangeably use both "brain" and "mental" health to continue to advance toward less stigmatizing terminology.

With these considerations in mind, Texans deserve the best brain health care available, regardless of an individual's specific socioeconomic resources. To achieve this vision, investments in our public mental health care must be thoughtfully leveraged to optimize outcomes. Texas is investing in its public and private brain health institutions and treatment programs to anchor the research, training and service delivery necessary to meet this goal. This report is part of that investment, focused on mental health care delivery in the Austin State Hospital (ASH) Service Area.

The Texas public psychiatric hospital system is facing multiple issues including wait lists, increasing forensic (justice-involved) demand, aging facilities, operating inefficiencies, staff turnover and hiring challenges. Despite efforts to close service gaps, the delivery of brain health care remains fragmented; at a structural level, it continues to relegate our state's most pressing mental health needs to an outdated system that separates brain health from the rest of medical care, and individuals from their communities. Texas excessively relies on jails, emergency departments, crisis management, and outdated state hospitals to deliver brain health care. The

"...we interchangeably use both "brain" and "mental" health to continue to advance toward less stigmatizing terminology." intersection between the mental health and legal systems is fraught with inefficiencies, delays, unnecessary expenses and suboptimal outcomes, inadequately serving both individuals seeking care and the court systems. However, with the current investments, evidence-based models, and deliberate and informed planning, Texas can become a national leader in public brain health care, as it is in many other areas.

One defining step toward this vision occurred in 2013 when the Department of State Health Services (DSHS), which operated the state hospitals at that time, requisitioned a 10-year study by CannonDesign ("the Cannon Report") of the state psychiatric service infrastructure. This report supported observations in the previous paragraph and made a number of recommendations based on a goal to provide Texans the right care at the right place at the right time. One recommendation was the need to replace several state hospitals that have fallen into such disrepair that total replacement is more cost-effective than renovation and is necessary to develop facilities specifically designed for modern-day care. The Cannon Report estimated the inpatient capacity to capture unmet needs, system backlogs and expected population growth. The 85thTexas Legislature responded robustly to this report by appropriating significant funds, leading to construction projects planned or underway in Rusk, Houston, Austin, Kerrville and San Antonio. The Cannon Report also highlighted a number of equally if not more important system changes that could impact the design of state inpatient facilities and improve access to and quality of mental health care. Several of these recommendations are specifically relevant to needs in Central Texas that will be addressed in this report including:

- 1. In addition to building public inpatient facilities, the Cannon Report proposed better use of private psychiatric hospitals closer to where people needing services live. It suggested shifting short-term acute inpatient care to Local Mental Health Authorities (LMHAs) and community and private psychiatric hospitals. Health and Human Services Commission (HHSC) adopted this approach but expansion is needed to allow state hospitals to focus on providing long-term subacute and residential care for persons with complex needs that cannot be obtained elsewhere.
- 2. The Cannon Report emphasized expanding use of alternatives to hospitalization whenever clinically possible to improve clinical outcomes, decrease costs, improve hospital throughput and hence increase inpatient capacity.
- 3. The Cannon Report recommended building an infrastructure integrated into existing and expanded community ambulatory and inpatient medical and substance abuse resources, include Federally Qualified Health Centers (FQHCs), LMHAs, and other health care facilities. This approach emphasizes embedding brain health back into the general delivery of medical care, as discussed in the opening paragraph of this report.
- 4. The Cannon Report recommended improving the structure of forensic pathways to reduce waitlists for mental health care within the criminal justice system and decrease time to initiating treatment. Opportunities to build on recent Texas statutory changes permitting alternatives to inpatient competency restoration open the door for these improvements.

- 5. The Cannon Report recognized that the designs of existing state hospitals impede efforts to support modern mental health care recommendations and delivery. New hospitals must incorporate advances in psychiatric hospital design (e.g., single occupancy rooms) to enhance care.
- 6. Finally, the Cannon Report emphasized the need to increase workforce development, to build both quantity and quality of professionals providing mental health care.

The full Cannon Report is provided as <u>Appendix 1</u>. Importantly, these recommendations require HHSC to expand meaningful partnerships with private, public and academic entities. These considerations are central to many of our recommendations. Our proposal, then used the Cannon Report both as a starting point and to contextualize our recommendations.

In parallel with work leading to the Cannon Report, the Texas Legislature created within HHSC the position of Associate Commissioner for Mental Health Coordination, which led to development of a Behavioral Heath Strategic Plan ("Strategic Plan") to initiate mental health care transformation. Consistent with Cannon Report recommendations, the Strategic Plan set a vision "to ensure that Texas has a unified approach to the delivery of behavioral health services that allows all Texans to have access to care at the right time and place." The Strategic Plan set a goal to create measurable improvements in coordination across different mental health and substance use disorder agencies. This goal of the Strategic Plan aims to improve awareness of and access to mental health and substance use disorder services, so that people suffering from these conditions are less likely to become involved in the criminal justice system, die from comorbid conditions earlier than the general population, or require, especially extended, inpatient psychiatric hospitalizations. To achieve this vision, the Strategic Plan proposed short and long-term approaches to fill a number of gaps in the current mental health care continuum, several of which are particularly relevant to redesigning the care within the ASH Service Area, including:

- 1. improving access to the least restrictive, evidence-based mental health services, including substance use disorder services;
- 2. improving access to timely mental health and substance use disorder treatment (including to individuals waiting in jails);
- 3. expanding access to supportive housing; and
- 4. decreasing shortages within the mental health workforce.

The entire Strategic Plan, and a recent update, can be found online (BHSP) (BHSPupdate). Again, this current report used the Strategic Plan to frame our recommendations.

In response to these needs, the 85th Texas legislature invested significantly to advance the mental health care of its citizens. This current ASH project specifically arose from a \$300M investment described in Budget (SB1) Rider 147 "for the planning of new construction projects at the state hospitals and other state-funded inpatient mental health facilities in current and future biennia." Specifically, Rider 147 requested from HHSC a "comprehensive inpatient mental health plan for the replacement or significant repair of state hospitals or other state-funded inpatient mental health facilities to expand inpatient mental health capacity over the next three biennia" (HHSC's "A Comprehensive Plan for State-Funded Inpatient Mental Health Services" is provided in Appendix 2). Additional legislative intent toward implementing hospital redesign is described in Riders 145 and 147; specifically, the Legislature encouraged academic/public partnerships with HHSC in order to "develop a master plan for the design of neuropsychiatric health care delivery systems in the area served by each facility" (riders are included in Appendix 3). This specific charge previously arose from a DSHS special report in September of 2016 that emphasized the value of leveraging the expertise of academia toward improving mental health care in Texas universities (AcademicPartnerships). When possible, the development of this recommendation, which includes a master plan was to "be led by the public or private entity with which HHSC has partnered." With these Legislative mandates in mind, HHSC approached Dell Medical School (DMS) of the University of Texas at Austin to lead the redesign of the Austin State Hospital (ASH) and the delivery of mental health services in the ASH Service Area. Dell Medical School was the natural partner for this project given its location in Austin and its commitment to improve community health. Together, then, DMS and HHSC partnered to tackle this important task with \$15.5M to complete preplanning and construction planning phases of this project.

"...a new facility is a critical and necessary first step, this step alone will not produce the optimal mental health care system for the people of the ASH Service Area." As we describe in this report, the ASH campus is the right place to begin the integration necessary to realize the Texas vision of a revitalized, optimally funded high-quality mental health care system. As identified in the Cannon Report and prioritized in HHSC's Comprehensive Plan, the ASH facility is sorely in need of replacement, providing a unique opportunity to change how psychiatric care is delivered throughout the ASH Service Area. Moreover, this Service Area

includes collaborative regional leadership among LMHA, hospital districts and other safety-net hospitals, legislative leaders, community business and philanthropic leaders, HHSC, and the new Dell Medical School. Consequently, in this document we propose the initiation of the ASH Brain Health System Redesign that would establish a continuum of inpatient and outpatient brain health services anchored on the ASH campus to drive improvements in full partnership with

existing mental health and substance use disorder treatment systems throughout Central Texas. We provide specific plans to replace outmoded ASH buildings with a modern inpatient facility

Key Points – Overview and Background:

- Austin State Hospital has aged past the point of restoration and must be replaced.
- This replacement provides a unique opportunity to evaluate and improve mental health service delivery across the ASH Service Area.
- The proposed plan builds from prior investments and work by the state.
- Dell Medical School contracted with HHSC to convene these planning processes.

and operationalize the broader redesign of the care continuum within this Service Area. Importantly, we emphasize that although replacing ASH with a new facility is a critical and necessary first step, this step alone will not produce the optimal mental health care system for the people of the ASH Service Area. Therefore, additional recommendations are provided that identify a broader approach toward this important goal as an integral part of the mission of the Texas Statewide Behavioral Health Strategic Plan. The remainder of this report describes these recommendations

Approach

Prior to the 85th Texas Legislative Session, a number of key stakeholders in Austin were actively collaborating toward improving the mental health care system in Travis County. With the support of the legislature, from this core group we quickly organized a working team for the Preplanning Components of the ASH Service Area redesign (i.e., this report) in order to meet the legislative goals previously discussed. Specifically, we established a Steering Committee to drive the Preplanning Process, comprised of regional stakeholders and led by Dell Medical School's Associate Vice President, Regional Mental Health (Steve Strakowski, M.D.). The membership of the Steering Committee is provided in Table 1 and detailed in the initial Steering Committee Charter (Appendix 4). Please note that changes in personnel occurred after the initial charter was signed to accommodate new considerations with the planning process.

Table 1. ASH Brain Health System Redesign Preplanning Steering Committee

- Health Institution: Committee Chair Steve Strakowski, M.D., Associate Vice President, Dell Medical School (DMS)
- Health & Human Services Commission: Tim Bray, MA, JD, Associate Commissioner, State Hospitals
- <u>Local Mental Health Authority</u>: David Evans, CEO Integral Care (Travis), Andrea Richardson, Executive Director Bluebonnet Trails (Bastrop, Burnet, Caldwell, Fayette, Gonzales, Guadalupe, Lee and Williamson)
- Healthcare District: Mike Geeslin, CEO Central Health (Travis)
- University of Texas System: David Lakey, M.D., Vice Chancellor for Health Affairs
- <u>Texas Hospital Association</u>: Sara González, Vice President of Advocacy/Public Policy
- <u>Texas Organization of Rural & Community Hospitals</u>: Scott Briner, CEO, Sweeny Community Hospital Development (Brazoria)
- Law Enforcement: Sheriff Dennis Wilson (Limestone)
- <u>Peer/Family Representative</u>: Karen Ranus, Executive Director, NAMI Austin (Travis), Jason Johnson (Kerr)
- <u>Internal Design Consultant</u>: Beto López, Managing Director, Design Institute for Health (DMS)
- <u>Ex Officio</u>: Jim Baker M.D., MBA (DMS), Sandy Hentges Guzman (Office of Senator Kirk Watson), Octavio Martinez M.D. (Hogg Foundation), Lisa Owens (Central Health), Katherine Jones (DMS), C. Martin Harris, M.D., MBA (DMS)

One of the first actions of the Steering Committee was to develop a list of core principles to drive the Preplanning and Planning processes. These principles are:

- 1. Taking excellent care of people is always the first priority in planning with a goal to provide the right care at the right time in the right place.
- 2. The best evidence-based models for care are embedded in the design.
- 3. The ASH Campus will serve as a platform for brain health care innovation and delivery across the Service Area.
- 4. Collaboration among academic, public and private partners will be central to the design.
- 5. The redesign will eliminate over-reliance on jails, hospitals and emergency departments.

- 6. Programs and facilities will be designed in which cost reflects the right level of care.
- 7. The design will improve operational efficiencies in the ASH Service Area.

Throughout the process, the Steering Committee committed to collaboration, transparency, inclusivity and engagement across as much of the Service Area and as many stakeholders as possible. To accomplish this commitment, a planning cascade was created that extended from the Steering Committee as illustrated in Figure 1. A complete list of all of the participants in these various subcommittees and workgroups, as well as a number of other individuals, who were consulted formally or informally, provided in <u>Appendix 5</u>.

Upon release of funding from the Legislative Budget Board (LBB) and Governor Greg Abbott to HHSC, the Preplanning contract between HHSC and DMS was completed effective February 1, 2018. Preplanning Staff were hired and the formal work was initiated. Following the procurement processes of the University of Texas, the Meadows Mental Health Policy Institute (MMHPI) was subcontracted on March 21, 2018 to provide critical data gathering and analytic resources and Page Southerland Page, Inc. (Page/) on June 18, 2018 to create the ASH campus Master Plan (Appendix 6). Specific components and processes followed during Preplanning are outlined in a Gantt chart (Appendix 7). Given the very tight timeline after funding was provided to DMS (10 months), rigorous adherence to the timeline was necessary to ensure that all work was completed for the 86th Legislative session. The remainder of the report is the output of this approach and these processes.

Key Points – Approach:

- HHSC contracted with DMS to lead a redesign process for the ASH Campus and Service Area.
- A wide range of stakeholders from the region actively contributed to plan development.
- Planning was guided by several principles, with improving the care of people being the first of those.

Figure 1. Preplanning Structure for ASH Brain Health System Redesign



Part 2: Current State

Current State: Austin State Hospital and Its Service Area

The first step toward redesigning the ASH Brain Health System was to define the current state of mental health care, starting with the ASH inpatient facility as a major focus, and then extending across the Service Area. To achieve this goal, we worked closely with HHSC, multiple regional stakeholders, and Meadows Mental Health Policy Institute (MMHPI) that provided significant data gathering and analytic services.

The Austin State Hospital

The Austin State Hospital was established as the State Lunatic Asylum in 1856 by an act of the 6th Texas Legislature and began caring for patients in 1861. It was renamed the Austin State Hospital in 1925. Austin State Hospital has a long history of caring for Texans struggling with mental illness. At times in its history, ASH was a cutting-edge provider of mental health care. However, following decades of deferred maintenance, the poor quality of the buildings makes delivering modern care difficult and only possible through heroic efforts of a committed staff. The Cannon Report in 2014 determined that 49% of the buildings on the ASH campus were in "poor" or "critical" condition, and they have not improved since. Consequently, renovation is simply not an option and replacement is necessary.

ASH Capacity

Austin State Hospital has physical capacity for up to 299 inpatient beds and an operational budget for up to 263 beds; for FY18 it operated at 252 beds. These beds are often provided with multiple individuals to a room (as many as four), contrary to current clinical recommendations of one person per room. The beds can be categorized as described in Table 2. In the past few years, pressure for more

"The Cannon Report in 2014 determined that 49% of the buildings on the ASH campus were in "poor" or "critical" condition..."

adult beds, particularly for 'forensic' patients, has necessitated shifting Specialty Unit capacity to accommodate this need.

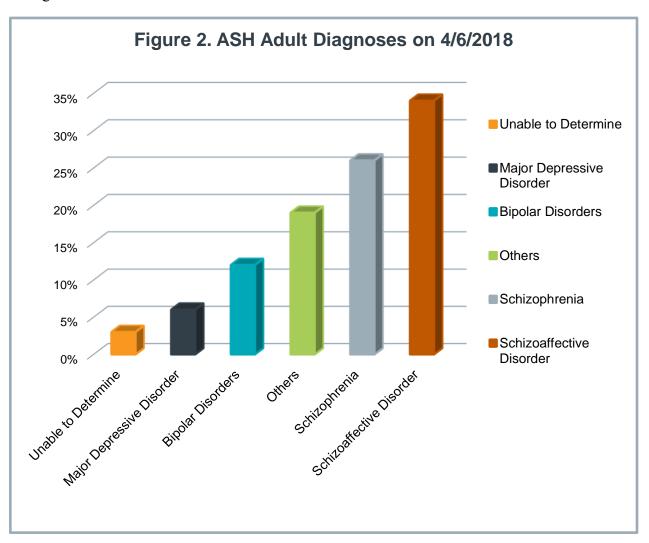
Table 2. Average Daily Census (ADC) and Average Length Of Stay (ALOS) at ASH by Year and Admission Type							
Admission		ADC, #		ALOS, days			
Year	Туре	Youth	Adult*	Specialty	Youth	Adult	Specialty
EV 2016	Civil	20	116	37	49	45	565
FY 2016	Forensic	0	81	0	48	79	0
FY 2017	Civil	18	107	36	47	81	793
F1 2017	Forensic	0	96	0	45	91	0
FY 2018	Civil	21	95	32	53	81	779
F1 2010	Forensic	0	100	0	52	105	0
Average	Civil	20	106	35	49	63	704
	Forensic	0	92	0	48	90	0

Austin State Hospital provides care for patients of all ages, although primarily it serves young and middle-aged adults with severe and persistent mental illnesses such as schizophrenia or bipolar disorder (Figure 2). Individuals needing care are typically referred to ASH from jails (by criminal court order),LMHAs, emergency departments, probate courts and other hospitals; the latter are people whose current episode of care cannot be completed with the short-term stabilization approach typical of most private psychiatric facilities. Consequently, in addition to other functions, ASH serves as a safety net for treatment unresponsive individuals. Austin State Hospital only rarely provides direct admissions (i.e., walk-ins), and it is not well designed for

"...inpatient capacity is often interpreted simply as the number of available patient beds, in fact it is heavily dependent on the rate beds can be turned...beds in ASH turn only 3.7 times/year."

essentially all of the time. Although inpatient capacity is often interpreted simply as the number of available patient beds, in fact it is heavily dependent on the rate beds can be turned, i.e., how long a specific individual stays in the hospital before the bed can be reused. Table 2 provides the average length of stay (ALOS) for people in each of the key subcategories. In the past 6 years, the ALOS for an individual discharged from ASH has increased from around 30 days to those listed

in Table 2. This change reflects both an increasing number of 'forensic' individuals with legal charges (who stay longer) and a dramatic increase in how long 'civil' (without legal charges) patients are staying (see Appendix 8 for details). Based on these ALOS, beds in ASH turn only 3.7 times/year. Consequently, discharging patients less than every four months, on average, decreases capacity for new admissions and access to care. In part, this slow turn rate reflects a significant number of individuals (approximately 70) who effectively reside long-term at Austin State Hospital. If the long-stay individuals are excluded, the bed turn rate is faster, but still infrequent (4.7 turns/year) and involves fewer available beds. This slow turn rate has created forensic and civil waitlists of 75 and 20 people/day respectively. Approximately two-thirds of the forensic waitlist is in Travis County, and no more than six people on any other waitlist throughout the Service Area.



"...essentially [70 people] live at the hospital irrespective of clinical need... effectively taking those beds off-line for new admissions." The number of individuals experiencing extended (>365 days) and brief (<10 days) stays are illustrated in Table 3. These data highlight several key aspects of ASH function. First, ASH is rarely used as a short-term, acute stabilization hospital. Less than 10% of ASH discharges in recent years occurred after hospital stays of less than 10 days. Second, due to a myriad of barriers to discharge, as noted a

significant number of ASH beds function as residential care, in which individuals essentially live at the hospital irrespective of clinical need. At this time, this latter function includes nearly 70 people, effectively taking those beds off-line for new admissions. These individuals have an ALOS approaching 3 years (and growing). Therefore, the true capacity for new admissions is reduced to only approximately 155 adult beds. Finally, ASH is substantially serving forensic patients, i.e. individuals with legal charges needing competency restoration to stand trial.

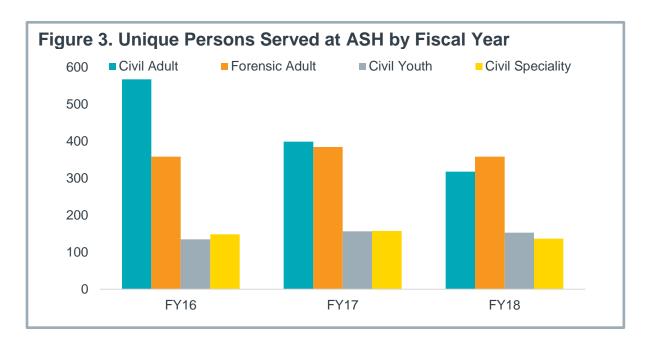
Competency restoration is a legal term referring to the ability of a person to understand and participate in criminal court proceedings; it may or may not correlate with the individual's clinical needs. Details about competency restoration and recommendations to change these processes are provided later in this report.

The increasing pressure on capacity for competency restoration suggests at times that ASH functions as an extension of the legal system rather than as a health care provider. The percentage of patients with legal charges at ASH has increased from 41% in FY16 to 51% in FY18, and it continues to rise. This increase is not unique to ASH, but is true across all of the state's public inpatient facilities. Currently, the legal system dictates when individuals with legal charges can be discharged, so that they often remain hospitalized longer than deemed clinically necessary by ASH staff. For example, in a recent analysis, the

Table 3. FY18 Extended & Brief Stays			
Civil	365+ days, N	<10 days, N	
18-64 yrs	33	33	
65+ yrs	12	0	
Forensic			
18-64 yrs	17	0	
Voluntary			
<17 yrs	1	7	
18-64 yrs	2	24	
65+ yrs	2	0	
Total	67	64	

ASH leadership determined that 41% of the forensic bed days occurred after individuals were either determined competent to stand trial or not likely to regain competency (<u>Appendix 8</u>). In general, competency restoration can be completed within 60 days (and typically in less than 3

weeks; (Austin State Hospital, 2018), which is inconsistent with the current 'forensic' length of stay of 92 days. Illustrating this point, in the first quarter of 2018, individuals remaining in ASH after needing additional competency restoration contributed 4,039 days of hospitalization; these days could have alternatively accommodated over 60 additional people needing care in that interval (based upon a 60-day length of stay). Unfortunately, some individuals stay in the hospital longer than they would in jail under conviction for their charge, even though there is clear evidence that competency can be safely restored in the community (Mikolajewski et al., 2017).



In addition to these general adult beds, ASH operates a 30-bed child and adolescent psychiatric services (CAPS) with an average daily census of 20 individuals. These youth rarely have accompanying legal charges and stay in the hospital for shorter periods than adults (Table 2). Unlike adults, ASH does not report a significant regional waitlist for admission into this unit, as most children and adolescents are treated in private psychiatric facilities through Community Psychiatric Bed (CPB) funding with the LMHAs or insurance, including Medicaid or CHIP. The

CAPS unit is located separately from the main ASH campus (across 45th street) and the building has been rated as FCI=0.24 (fair condition). The typical patients are 10-year-old children and 16-year-old adolescents with diagnoses of mood, adjustment and/or cognitive disorders. However, these youth are often dually diagnosed with a mental illness plus, e.g., substance use disorder or

"...competency restoration can be completed within 60 days (and typically in less than 3 weeks."

intellectual developmental disabilities (IDD). Generally, these young individuals are eligible for Texas Medicaid, so private placements closer to the child's home are a better option when available. Nonetheless, some of these youth need longer treatment than Medicaid will pay for at a private facility, leading to an ASH referral. Residential Treatment Centers (RTC), including the Waco Center for Youth and several private facilities in the Service Area, also contribute to inpatient care for adolescents. Additional details re: CAPS in the region are provided in Appendix 9.

The campus also operates a Specialty Adult unit with a capacity of 72 beds although many of these beds have been shifted to manage general adults as noted previously. These individuals have significantly longer lengths of stay than do the other units (Table 2), related to barriers to placement into less restrictive settings. In contrast to the general adult units, there is no waitlist for admissions to the Specialty Unit. Additionally, only rarely do these individuals have ongoing legal charges. Although a mix of individuals occupy this unit, the typical person has an average age of 47 years with diagnoses of schizoaffective disorder, schizophrenia or bipolar disorder and often a comorbid diagnosis of, e.g., IDD. Many of these individuals are eligible for Texas Medicaid or Medicare so could be better served in other private or public facilities, particularly those specializing in long-term residential care, if barriers to discharge could be eliminated.

During the last several years, the total number of individuals treated annually at ASH has steadily declined, due to increasing lengths of stay for admitted individuals. The trend of these data are illustrated in Figure 3. During FY18, ASH treated approximately 1000 unique individuals. If lengths of stay continue to increase, this number will continue to decline.

ASH Operations

The State Hospital System within HHSC manages all of the state hospitals including Austin State Hospital. Health and Human Services Commission employs approximately 60,000 people, of which ASH employees represent less than 2%. Although only a small fraction of HHSC, the work performed by ASH is impactful and must be effective and efficient to support the needs of the 75 counties it serves.

As stated earlier, a committed staff provides the best quality of care possible to those served within Austin State Hospital. From qualitative research completed through observations of an

"...as many as four people might occupy a single small room."

adult psychiatric unit in ASH and several interviews with ASH providers, the deteriorating building impairs operation (<u>Appendix 10</u>). Within the adult psychiatric units, our team found limited private space for people receiving care to engage with their providers; this

challenge left staff and patients feeling as though they were being watched all the time, and certainly challenges privacy rules with care delivery. Despite being large buildings on a large campus, the outmoded design limits functional space and places for individuals' who are stressed or agitated to retreat (as noted previously, as many as four people might occupy a single small room). These experiences negatively impact patient engagement and satisfaction even when good quality care is provided. Limited areas to retreat increase the risk of violence for patients and staff.

HHSC reports quarterly on their nine hospitals' performance within the State Hospital System 2018 Management plan (<u>Appendix 11</u>). This document contains measures of financial



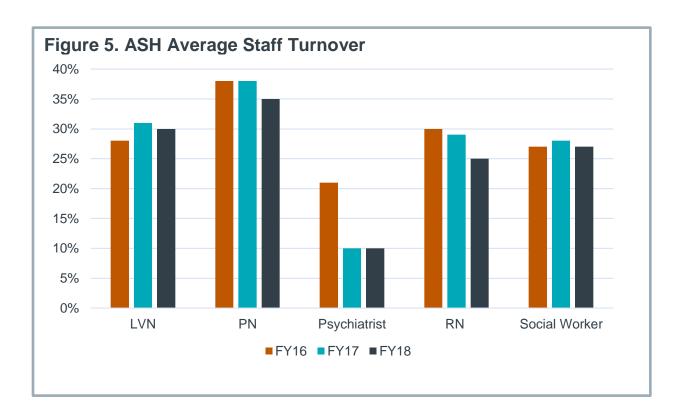
indicators, clinical quality, and access. Datasets are reported to the LBB to indicate how well each hospital is operating; however, the report is 202 pages long with so many metrics that it is unclear how hospital leadership is expected to focus on continuous quality improvement in any specific area. This large number of metrics with limited prioritization is the opposite approach to how better health care systems manage continuous quality improvement. One of the metrics measured is the Mental Health Statistics Improvement Project (MHSIP) NRI Inpatient Consumer Survey to gather patient satisfaction ratings. Health Human Services Commission set a goal to receive 25% participation across all state hospitals. This goal is very conservative, particularly for individuals receiving care for the extended duration of a state hospital, and yet is achieved at ASH only 18% of the time, placing it among the two lowest of all of the Texas State Hospitals (Appendix 11, p. 60). When individuals do complete the survey, they provide an average score of 3.45 out of 5 on the MHSIP NRI Inpatient Consumer Survey, again the second lowest among the state hospitals (Appendix 11, p. 61). Although ASH historically also failed to meet the annual patient grievance score of less than 3/1,000 bed days, during the last 2 years, ASH staff have significantly improved this rating, so is now performing at or better than the benchmark (Appendix 11, p. 65).

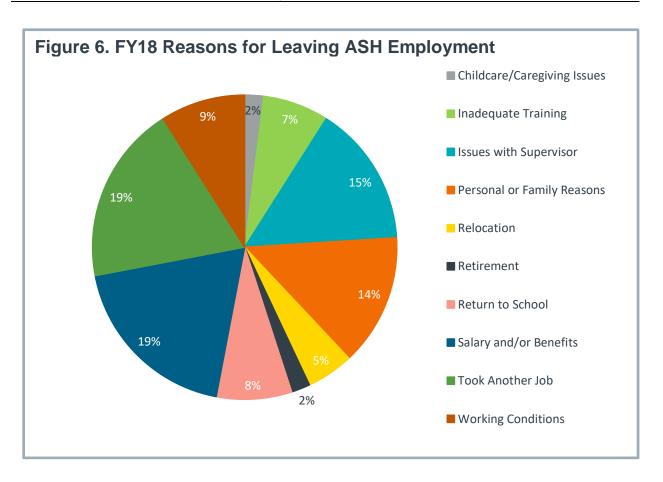
Two important clinical quality measures in psychiatric facilities are the rates of restraint and seclusion. The <u>American Psychiatric Nurses Association (APNA)</u> set a goal for all restraints and seclusion to be eliminated. The use of these practices are traumatic to the person receiving

services and to the staff applying the restraints. Nationally, restraints and seclusions have been linked to as many as 150 deaths annually as well as staff injury, time off and turnover (SAMHSA). Over the last few years, ASH has had the second highest rate of use of restraints among Texas State Hospitals (31.1/1,000 bed days), although this rate is improving during the past year (Figure 4). Seclusion is used relatively infrequently at ASH, in part due to limitations of the physical plant.

The Center for Medicare and Medicaid (CMS), publishes the Inpatient Psychiatric Facility Quality Reporting Program that shares rates on restraints for 1653 psychiatric facilities (CMSReport). In 2016, ASH reported their annual hours of restraint use per 1000 patient beds as 0.63 hours. In comparison to other hospitals, 83% were less than .49 hours and 26% had 0 hours in restraints.

The quarterly report does not provide an employee satisfaction rating. Employee satisfaction is strongly linked to patient satisfaction. However, there is a high turnover rate for staff. Figure 5 illustrates the annual turnover rate for staff of FY17 – FY18Q2. High staff turnover negatively influences morale, operations and team *esprit de corp*. Outside the Operational Plan, HHSC does collect satisfaction ratings from staff at their exit interviews (Figure 6). The most common reasons included issues with supervisors, dissatisfaction with salary/benefits and better opportunities. As discussed in the Workforce section of this report, ASH salaries are lower than the Austin community standard.





ASH Costs

Health and Human Services Commission reports the daily cost of a bed at ASH as \$567; in comparison, an average private bed daily cost approaches \$1,000. However, in the HHSC calculation, not all benefits or the central infrastructure expenses are loaded into this cost estimate, as they are with private hospital bed calculations. When full central and benefits costs are included (as per the industry norm), the actual *per diem* bed cost is \$752. When contracting

with community hospitals across the state, the average purchased Community Psychiatric Bed (CPB) negotiated rate (i.e., what the government pays) averages \$627; this rate averages \$703 in the ASH Service Area. Medicaid pays \$529. These variable rates reflect the typical disconnects between true costs and payment structures in health care in general that confound planning for expenses of inpatient psychiatric care. The higher fully-

"...residing for a year at ASH costs approximately \$275,000 whereas in a residential care facility the same person's care would cost approximately \$55,000."

loaded costs in a private facility reflect the rapid stabilization function they provide. Specifically, the work flow in a private, short-term hospital in which the goal is acute stabilization and rapid discharge back into ambulatory care (usually with admissions lasting less than 10 days), requires daily physician rounds, admissions and discharges 7 days/week, with immediate attention to discharge planning upon admission, and close collaboration with ambulatory resources. Austin State Hospital is not designed by either staffing or workflow for short-term acute stabilization

For example, treatment teams round with the physician less than weekly, discharge planning can be delayed, especially in

Table 4. FY17 Expenditures		
Personnel (Sal & Wages)	\$37,156,222	
Other Personnel Costs	\$1,585,225	
Professional Fees & Services	\$1,962,800	
Fuels & Lubricants	\$39,787	
Consumable Supplies	\$469,342	
Utilities	\$1,211,877	
Travel - In State & Out	\$4,162	
Rent - Machine & Other	\$460,461	
Other Operating Expense	\$6,461,831	
Agency Payroll Contribution	\$316,645	
Client Services	\$89,140	
Food	\$1,107,566	
	\$50,865,057.84	

forensic cases, and the hospital is not equipped for weekend or evening discharges. Regardless, after negotiations, the per diem cost at ASH is similar to that of a private facility.

The daily cost at ASH exceeds that of a typical longer-stay residential care facility (approximately \$150/day), even though nearly one-quarter of ASH beds are used in this manner. This observation means that the annual cost of care is much higher in ASH than it might be in a more appropriate setting for these individuals. For example, an individual residing for a year at ASH costs approximately \$275,000 whereas in a residential care facility the same person's care would cost approximately \$55,000. Moreover, the latter would provide more appropriate care as it would be designed for the specific residential need. The ASH workflow and cost structure suggests that it is optimally designed for medium-term (e.g., up to 60 days) subacute care. Several factors contribute to bed-day costs being relatively high based upon existing ASH services: 1) the hospital is performing functions for which it is not optimally designed either structurally or by workflow; 2) additional staffing and overhead are needed to provide good clinical care in a facility long-past its ability to support such care; 3) the burdensome riskaversive requirements of a state bureaucracy adds inefficiencies and embedded costs; and 4) the needs of increasing numbers of forensic patients adds costs compared to civil patient care. As noted, there are overhead costs buried in the large HHSC bureaucracy that are consequently difficult to identify and manage. These diverse factors hamper developing efficient and effective clinical workflows to advance new patient care models. With the new building designed for the care ASH is actually providing, HHSC will be better positioned to optimize workflow and staffing to manage costs within its current complex bureaucratic structure.

In the last several fiscal years, ASH's total annual operating budget has been \$51M (Table 4) with approximately \$5M in annual patient collections (e.g., Medicare, Medicaid). There is another \$18M in benefits and HHSC central allocations. Most expenditures are in personnel (\$37M), and the listed costs do not include benefits as they are managed separately in HHSC (although still exist). Current staffing includes 22 Psychiatrists, 12 Psychologists, 130 Nurses, 29 Social Workers, 334 Psychiatric Nurse Assistants, 10 Security Officers and 368 other staff. Based upon the current bed-day costs previously discussed, this budget can support approximately 263 operational beds per year. This limitation ultimately places a cap on the size of a new facility in the absence of additional operational funding, greater operational efficiencies, or redesign of the service system in which ASH resides. These considerations are discussed in more detail later in this report.

Key Points – ASH Current State:

- The Austin State Hospital must be replaced.
- In FY18 ASH operated at 252 beds including 30 beds for youth. It is always at full capacity.
- The structure and workflow of the hospital better supports long-term subacute care than acute stabilization or residential care.
- Approximately 70 individuals essentially live at the hospital, taking those beds "offline."
- The average ASH bed turns over less than 4 times per year.
- ASH increasingly serves individuals with legal charges admitted for competency restoration; their average length of stay exceeds what is expected for this function.
- The daily cost of a bed at ASH is higher than a number of alternative treatment options that are likely more appropriate for many of the individuals currently being treated there.
- The complex HHSC infrastructure impacts ASH management and performance.
- Approximately 95 people each day are waiting in jails or elsewhere for a bed at ASH.

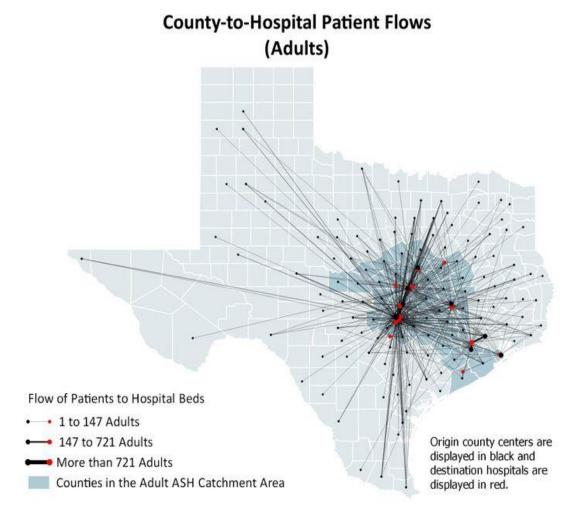
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Part 3: Austin State Hospital Service Area

The Austin State Hospital Service Area

Although ASH receives referrals from throughout the state (Figure 7), it primarily serves a defined catchment area (Figure 8). Fifteen counties typically provide over 70% of the total number of referrals to ASH at any given point in time (Table 5), including counties that contain state-supported inpatient facilities (Bexar, Harris). Additional details are provided in Appendix 12.

Figure 7. Adult Referrals to ASH from Across Texas



As noted previously, waitlists for admission to ASH have developed for individuals requiring both forensic (criminal courts, jails) and civil (probate courts, other hospitals) care. In the ASH service area, approximately 95 people are on waitlists each day. Although people needing ASH admission can occupy emergency rooms or other healthcare facilities, most

"Fifteen counties typically provide over 70% of the total number of referrals to ASH..."

of these individuals (n=75) are 'forensic'; consequently, they are waiting for transfer from a jail in which they may be receiving minimal psychiatric care. In particular, rural jails have significant problems identifying psychiatric support. These delays, then, extend people's illnesses, contributing to poor clinical outcomes, in addition to increasing local (jails) and state

Table 5. Top 15 counties of origin for ASH patients, 3-year annual average

289
101
83
54
50
48
37
29
25
24
18
18
16
11
10
10

(hospitals) taxpayer costs (Albert et al., 2017; Melle et al., 2008). In the ASH Service Area, about 2/3 of these individuals are waitlisted within Travis County with the rest scattered among the remaining counties (typically less than 6 individuals at any other site). County level distributions of forensic and non-forensic waitlists can be reviewed in Appendix 12. In the "Statement of Need and Recommendations" section of this report, we address potential solutions to eliminate these waitlists.

Inpatient Facility Utilization

In addition to ASH, there are several private psychiatric inpatient facilities distributed throughout the service area (Figure 8). Currently there are nearly 1,000 beds distributed among more than 20 facilities (see Appendix 12). They admit and treat more than 12,000 individuals annually. In contrast to ASH, which is always at full capacity, these facilities are usually less than 70% full.

With consideration of a typical maximum capacity of 85% (the industry standard for short-term units), there are approximately 150 short-term acute care psychiatric beds available every day in the ASH Service Area. Inpatient psychiatric bed use in 2015 resulted in over \$219 million in patient charges at ASH-area community hospitals. We estimate that hospitals received less than \$87 million in payments for these charges (39%). Some payers, such as Medicaid, provide low

More than 106 Psychiatric Beds

reimbursement rates. In other cases, individuals treated did not have insurance coverage or income to cover hospital fees, so become hospital "write-offs." These charges and payments are available by payer type in Appendix 12. Unfortunately, these low reimbursement rates disincentivize health systems from participating in psychiatric care, contributing in part to the shortage of access to brain health treatment.

San Bell (F) Schleicher Menard KU Sutton Kimble Gillespie Hardin Edwards Kendall Verde Real Comal Uvalde Medina Matagorda Hospital locations have been slightly adjusted for visibility. Psychiatric Bed Capacity (2016) Counties **Unknown Capacity** Counties in the ASH Catchment Area - Adult, Adolescent, and Child 1 to 50 Psychiatric Beds Counties in the ASH Catchment Area - Adolescent and Child Counties in the ASH Catchment Area - Child 51 to 106 Psychiatric Beds

Texas Counties Not in the ASH Catchment Area

Figure 8. ASH Service Area including hospitals (see Table 6 for codes).

Oceans Behavioral Hospital of Lufkin

Scott & White Medical Center Temple

Parkview Regional Hospital

Seton Shoal Creek Hospital

Texas NeuroRehab Center

Westpark Springs

Rock Springs

Rock Prairie Behavioral Health

Oceans Behavioral Hospital of San Marcos

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Map Label	Hospital Name	2016 Average Daily Psychiatr Bed Utilization	ic Bed Capacity
Α	Aspire Hospital	19	28
В	Austin Lakes Hospital	45	58
С	Austin Oaks Hospital	55	80
D	Austin State Hospital	257	299
Е	Baptist Hospitals of Southeast Texas	38	50
F	Cedar Crest Hospital	63	80
G	Central Texas Medical Center	Not Reported	13
Н	Cross Creek Hospital	47	65
I	DePaul Center	21	Not Reported
J	Devereux Texas Treatment Network	29	48
K	Georgetown Behavioral Health Institute	67	106
L	Mainland Medical Center	20	Not Reported
М	Matagorda Regional Medical Center	7	12
N	Metroplex Hospital	12	43
0	Montgomery County Mental Health Treatment Facility	92	100
Р	Oakbend Medical Center	11	24

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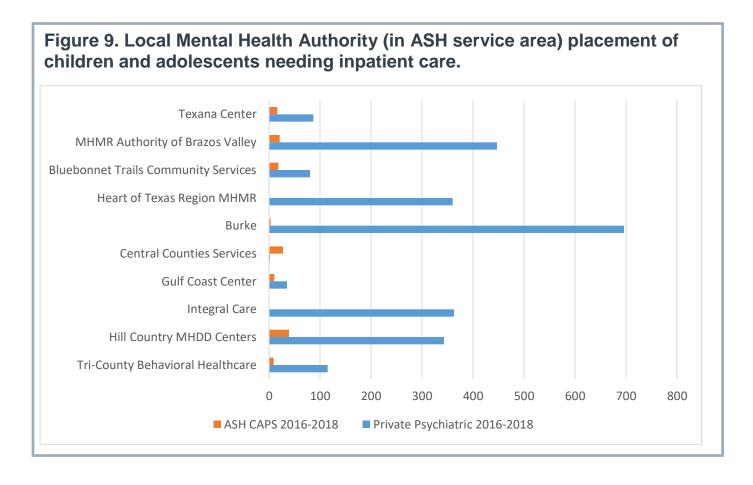
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72



Many of these community facilities already work with Local Mental Health Authorities to sell beds for public patients as an alternative to ASH for short-term acute stabilization. Specifically, in FY17, nearly \$17M was spent for Community Psychiatric Beds (CPBs) for uninsured patients who were treated within private facilities, paid for through LMHAs. The majority of child and adolescent psychiatric inpatient care throughout the service area – with both public and private payers – is provided by private hospitals (Figure 9) through these sources of funding which include: Community Psychiatric Bed funding, Psychiatric Emergency Service Center (PESC) funding, General Revenue Funding, and Medicaid 1115 Transformation Waiver Funding. Consequently, there are opportunities to expand the use of private hospital capacity to reduce waitlists in the jails and improve local access to care in the community. Although HHSC negotiated an average per diem payment for private hospitalizations statewide of \$627, in FY17 that payment was \$703 in the ASH Service Area and up to \$1000/day in urban areas. Nonetheless, although some of these per diem costs to HHSC are higher than a bed day at ASH (\$752), expanding access to private psychiatric beds using public funding ultimately provides better care by placing individuals needing short-term stabilization in a facility designed for that provision. Therefore, services are provided at a lower total cost of admission due to a significantly shorter length of stay, and usually closer to the person's home. In other words, on

balance, despite the higher unit (per diem) cost to HHSC, with the significantly shorter lengths of stay in private facilities and more rapid transition back into ambulatory care, it is less expensive to manage the episode of care in the community than in a state hospital. For example, a 10-day inpatient stay in a purchased bed in a community costs \$7030 compared with \$45,120 for 60 days in ASH. Using more purchased community beds also opens state beds for individuals whose illness cannot be stabilized in a short-term venue. This approach was recommended by the Cannon Report, as previously noted. Barriers to this approach (e.g. limited LMHAs funds for PPB) will need to be addressed to increase utilization of private hospital solutions, which are addressed later in this report.

Skilled Nursing Facility (SNF) Utilization

Key Points – ASH Service Area: Inpatient facilities.

- The Austin State Hospital (ASH) serves 38 counties for adults and 75 counties for children and adolescents, although 15 counties provide 70% of its admissions.
- More than 20 private psychiatric facilities are also in the Service Area and typically have capacity available, up to 150 available beds daily.
- Private facilities are better designed for shortterm acute stabilization so that, despite higher per diem costs, the overall admission is more effective, shorter and less expensive than one at ASH.
- Unused private psychiatric facility capacity offers an opportunity for improved and local access to care.
- Expanded mental health support to skilled nursing facilities provide a potential opportunity to eliminate the need for geriatric care within ASH.

Of the 3.7 million adults living in the ASH Service Area, 549,308 people are 65 and older; although Texas is a relatively young state, this number is expected to grow by 38% by 2025. According to Meadows Mental Health Policy Institute prevalence data, 8,400 individuals aged 65+ have a serious mental illness. ASH currently is certified for 100 geriatric/specialty beds, although as noted, much of the Specialty Unit capacity has shifted to manage the increasing number of younger adults with legal charges. Consequently, in FY18, ASH's geriatric annual daily census was 11 and there is no waitlist for services to this population. In part, this low use reflects the other, typically more appropriate, treatment opportunities outside the public system.

In particular, skilled nursing facilities (SNFs) often provide long-term residential care for people with chronic conditions of severe and persistent mental illness, in addition to Alzheimer's disease and other dementias. Specifically, there are 219 SNFs in the Service Area and most of them accept both Medicare and Medicaid. Together, these facilities provide approximately 24,000 beds. These facilities are best designed for managing typical conditions of aging, e.g., declining physical and cognitive health, although nonetheless manage severe and persistent

mental illness as well. Their presence could provide an opportunity to embed mental health support through telehealth or other mechanisms to expand this capacity, thereby eliminating the need to care for older individuals within a state psychiatric hospital.

"...most psychiatric patients can be managed for most of their illness course within outpatient settings..."

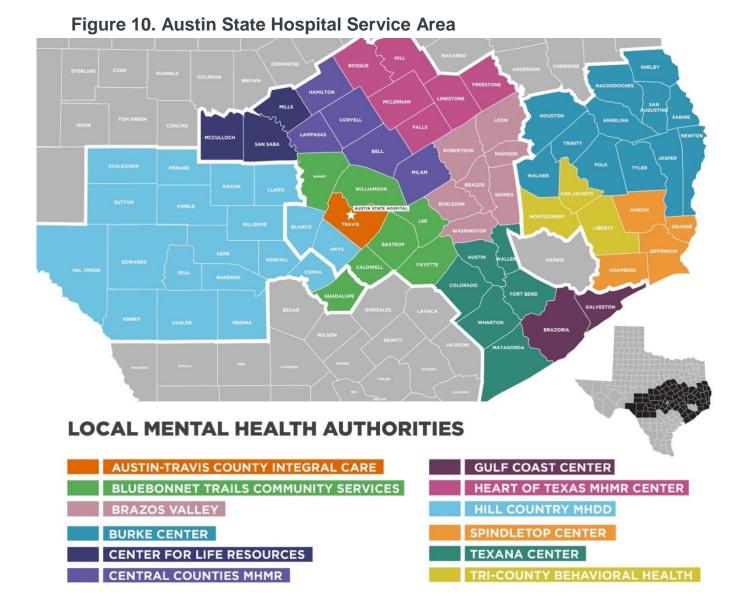
Outpatient Service Utilization

The function and performance of ASH depends heavily upon the care system within which it operates. As described earlier, 'hospital capacity' is heavily dependent upon how rapidly the beds 'turn;' optimizing bed turns depends on alternatives to hospitalization to provide care options (e.g., outpatient competency restoration) and on changes in both how people are admitted to and discharged from ASH. Most of the public mental healthcare within the ASH Service Area is provided, managed or funded by Local Mental Health Authorities operating within this region. Specifically, 12 LMHAs operate in full or in part within the ASH Service Area; the geographic distribution of these organizations are illustrated in Figure 10. Specific patient volumes and costs for these LMHAs within the ASH Service Area are listed in Table 7. Importantly, the LMHAs are operationally entirely separate from the state inpatient system, so that incentives between these two major components of public mental health care are not always aligned, as will be discussed later in this report.

The LMHAs provide a broad array of services that are outlined in Tables 8 (adult) and Table 9 (children and adolescents). These services provide both acute and long-term outpatient care to manage brain health disorders across the region. In fact, most psychiatric patients can be managed for most of their illness course within outpatient settings as evidenced by the much greater number receiving these services each year (over 80,000) compared to those being hospitalized (1,000). These services vary across different LMHAs and counties creating care delivery gaps that are uneven across the state, particularly in less populated, rural counties. The bulk of patients served by LMHAs are individuals with severe and persistent mental illnesses

such as schizophrenia, schizoaffective disorder, major depression and bipolar disorder. Although a number of other individuals also receive services based upon the severity of their disability and income; additional details regarding the service array, costs and people provided care within specific services are provided in <u>Appendix 12</u>. The types of patients served in the LMHAs and ASH are similar.

In addition to these direct care delivery services, the LMHAs play a critical role advancing school safety. HHSC has developed a school safety plan following events in Santa Fe (school safety). The safety plan builds upon Mental Health First Aid programs provided by the LMHAs. Since FY14 through FY18Q3, 25,318 school districts have been trained and 18,973 community members have been trained (MHFA Report).



30

Table 7. Number of individuals served and total costs by LMHA within the ASH Service Area (Costs in \$millions)

	· ·	ASIT Service Area (Costs III \$11111110115)							
LMHA	Adults		Adolescents		Children		Total		
	#Served	Cost	#Served	Cost	#Served	Cost	#Served	Cost	
Integral Care	23,532	\$15.2	4,293	\$3.0	2,358	\$1.5	30,183	\$19.7	
Bluebonnet Trail Community Services	8,025	\$5.9	4,310	\$1.8	4,059	\$1.4	16,394	\$9.1	
Hill Country Community MHDD	1,902	\$1.7	816	\$0.6	1,159	\$1.1	3,877	\$3.4	
Central Counties Center	6,730	\$5.0	968	\$0.6	1,674	\$0.7	9,372	\$6.3	
Heart of Texas Region	9,837	\$7.7	3,329	\$1.2	2,262	\$0.9	15,428	\$9.8	
Brazos Valley	5,457	\$2.8	559	\$0.3	353	\$0.2	6,369	\$3.3	
Center for Life Resources	842	\$0.3	209	\$0.05	172	\$0.04	1,223	\$0.4	
Texana Center	8,530	\$4.2	1,447	\$0.9	1,466	\$0.8	11,443	\$5.9	
Gulf Coast Center	15,608	\$7.2	1,319	\$1.0	1,326	\$0.9	18,253	\$9.1	
TriCounty Behavioral Health	n/a	n/a	2,581	\$1.5	2,870	\$1.2	5,451	\$2.7	
Spindletop Center	n/a	n/a	3,058	\$1.4	5,207	\$2.2	8,265	\$3.6	
Burke Center	n/a	n/a	3,568	\$1.2	4,261	\$1.4	7,829	\$2.6	
TOTALS	80,463	\$50.00	26,457	\$13.55	27,167	\$12.34	134,087	\$75.90	

LMHA Waitlist Data

InFY18, LMHAs received extra funding from the state to support efforts to decrease their waitlists, and this effort has largely been successful. Of the nine LMHAs that provide adult services within the ASH Service Area, none currently have waitlists for general adult services. However, some individuals are receiving less than optimal clinical services due to staffing and funding limitations relative to specialized service demand (Table 10). Specifically, four of the LMHAs within the ASH Service Area have a waitlist for adults receiving care at a lower level than recommended. Among the 12 LMHAs serving children and adolescents, the waitlists for services is even lower than adults. No child or adolescent is waiting for services, although nine are receiving services below the recommended level (8 at Bluebonnet, 1 at Spindletop).

These data suggest that the LMHAs used the additional funding to close outpatient service gaps within the ASH Service Area. Discussions with the LMHAs within our work groups suggest that most are at or near

Table 8. Evidence- Based LMHA Adult Services	%Counties w/Service
Mobile Crisis Outreach Team	100%
24/7 Crisis Hotline	100%
Assertive Community Treatment (ACT)	92%
Peer Support	71%
Supported Housing	47%
Forensic Assertive Community Treatment (FACT)	32%
Integrated Dual Disorders Treatment (IDDT)	32%
IDD Crisis Response Teams	29%
Individual Placement and Support (IPS)	24%
First Episode Psychosis Care	21%
Outpatient Competency Restoration Program	18%
Assisted Outpatient Treatment (AOT)	16%
Psychiatric Advance Directives	3%

capacity with current funding and staffing levels and some are struggling to provide specialized services as noted. These limitations disincentivize taking more discharges from ASH and reinforce the lack of integration between ASH and the ambulatory care system. Moreover, as noted in the previous section, as well as Tables 8 and 9, not all LMHAs provide the same breadth of services. Additionally, a number of limitations on the types of diagnoses and level of severity

of individuals who receive services ensures a continued unmet need in these counties as discussed in Appendix 12 and the "Epidemiological Considerations" of this report. Consequently, in order to optimize the performances of (and investments in) new inpatient facilities throughout the state, including ASH, it will be critical to continue to advance ambulatory services delivered by the LMHAs.

Crisis and Emergency Service Utilization

Perhaps the most visible part of the mental health continuum occurs around crisis management, when major

Table O. Fridayas Based	0/00001:00
Table 9. Evidence-Based	%Counties
LMHA Child & Adolescent	w/Service
Services	
24/7 Crisis Hotline	100%
Family Partner Program	93%
High-Fidelity Wraparound Services Coordination	89%
Mobile Crisis Outreach Team	85%
YES Waiver	80%
IDD Crisis Response Teams	65%
In-Home Respite: Children & Adolescents	45%
First Episode Psychosis Care	24%
Dialectic Behavioral Therapy (DBT) for youth	12%
Intensive In-Home Child and Adolescent Psychiatric Services (IICAPS)	11%
ACT for Transition-Age Youth	9%
Functional Family Therapy (FFT)	9%
Multisystemic Therapy (MST)	9%
Warm Line	7%
Keeping Parents Supported and Training (KEEP)	7%
Multidimentional Family Therapy (MDFT)	3%
Connecticut School-Based Diversion Initiative	1%

psychiatric conditions either first express or relapse into acute episodes of behavioral dysregulation. Crisis intervention is focused primarily on assessing individuals for safety to themselves and others and then providing disposition to additional care, that includes both inpatient and outpatient services. These services also provide short-term (typically less than 48 hours) stabilization in lieu of hospitalizations. Additionally, it is often within the context of an illness exacerbation and crisis that affected individuals intersect with the legal system, either because they have broken a law or because the police were called to help manage a crisis. Much, if not most, of

this care is initially provided by general hospital emergency departments or within jails, although some counties also provide psychiatric urgent care, crisis stabilization or respite services independent of those venues. It is during crises that people struggling with mental illnesses are often most visible to the rest of society and hence crisis management is often the primary or entire focus of local mental health investment and service development. However, crisis services are only part of a continuum of care. Moreover, crisis services are among the most expensive available and their use could often have been avoided if

Table 10. LMHA ASH Service Area Adult Waitlist FY18Q3					
LMHA	Any services	Recommended services			
Integral Care	0	179			
Bluebonnet	0	12			
Hill Country Community	0	0			
Central Counties Center	0	41			
Heart of Texas Region	0	0			
Brazos Valley	0	50			
Center for Life Resources	0	30			
Texana Center	0	0			
Gulf Coast Center	0	0			
Total	0	312			

services to alleviate or prevent illness exacerbations were more readily accessible.

Table 11. Emergency department visits and charges in ASH Service Area FY16					
	Mental Health visits	Substance use visits	Mental health charges	Substance use charges	
Adults	21,804	14,277	\$80,371,146	\$66,753,764	
Adolescents	3,273	966	\$10,275,443	\$3,745,941	
Children	958	16	\$2,234,901	\$52,659	
TOTALS	26,035	15,259	92,881,490	70,552,364	

Within the ASH Service Area, more than 75 hospital emergency departments manage more than 26,000 visits annually that involve psychiatric disorders, and another 15,000 visits for substance use disorders (Table 11). This number includes more than 5,000 visits involving children and adolescents. Expenses related to these visits exceed \$150M annually. From these visits, more than 7,000 adult, 2,000 adolescent, and 500 child psychiatric hospitalizations occur each year, with less than 3% of these directed to ASH, typically around 200 referrals per year with <20

being children or adolescents. Additional details are provided in Appendix 13. This rate of hospital admission from emergency visits (nearly 40%), is higher than expected from reports nationally, particularly for individuals without schizophrenia (NCHS Brief 215). Often these admissions occur because there are inadequate next day or other transitional outpatient services, respite programs or crisis centers that would have been a better choice for disposition, both clinically and financially. These options are relatively limited in the Service

"...there are inadequate next day or other transitional outpatient services, respite programs or crisis centers that would have been a better choice..."

Area, although have slowly begun to proliferate (see Table 12). Most jails and many emergency departments do not have easy access to psychiatric support leading to delays in care in the former and often excessive use of inpatient facilities for both. These limitations are particularly pronounced in rural counties, but even in urban areas the available psychiatric support can be limited (e.g., Travis county recently lost their only psychiatrist available to the local jail).

Table 12. Crisis services available in ASH Service Area, FY17					
Other Services	Primary Funding	Beds	People Served		
Crisis Stabilization Unit	General Revenue, Other	28	1,069		
Peer Crisis Residential Unit	DSRIP	6	84		
Crisis Residential Unit	DSRIP, Local Funding, General Revenue	73	1,342		
Psychiatric Emergency Center	General Revenue	2	4,356		
Crisis Respite	DSRIP and General Revenue	99	1,349		
Extended Observation Unit	DSRIP, General Revenue, Local Funding	26	2,138		
Crisis Telehealth Provider	DSRIP, General Revenue, Local Funding	N/A	7,212		
IDD Crisis Response	General Revenue	N/A	429		

Key Points – ASH Service Area, Crisis and Emergency Service Utilization

- Over 75 hospitals provide 25,000 psychiatric emergency visits annually in the Service Area.
- These visits account for nearly 10,000 hospital admissions per year, with about 200 going to ASH.
- The rate of hospitalizations out of emergency departments is higher than expected, likely reflecting the lack of alternative treatment options, particularly in rural areas.
- Alternative crisis interventions outside jails and emergency departments are proliferating, but not yet adequate to meet demand.

Part 4: Courts and Jails as Providers of Mental Health Care

Courts and Jails as Providers of Mental Health Care

Managing Adults in Jails

Police and sheriff departments are often frontline managers of mental health crises within the ASH Service Area, as well as throughout the state and nation. Consequently, local and county jails must care for people with mental health conditions while processing legal charges. These charges frequently stem directly from behaviors involving the person's mental illness or in the process of trying to getting them into care (e.g., pushing a police officer as she tries to wrestle the individual into a squad car to get them to an emergency room, producing an assault charge). Treatment Advocacy Center reports that state prisons hold more people with mental illnesses than hospitals; the ASH Service Area contains 46 state prison units, 4 private prisons, and 72 jails. The area also has 195 specialty courts and over 150 criminal courts, although only 7 mental health courts.

The jails in the ASH Service Area manage individuals with mental illness who are deemed incompetent to stand trial following procedures in Article 46B. This population includes individuals charged with both misdemeanors and felonies. Individuals charged with one of the 13 legislatively mandated offenses are placed in maximum-security psychiatric units for competency restoration; they do not come to ASH. In 2018, 322 individuals were admitted to ASH directly from criminal courts or jails under 46B processes. Additionally, as discussed previously in this report, approximately 75 people with mental illness await referrals from jails to ASH for inpatient competency restoration at any given time. In many circumstances, inadequate mental health support within the jails delays or creates discontinuity in the delivery of psychiatric care, so these same individuals are often not receiving adequate treatment. These impediments extend the episode of illness and suffering for the person with mental illness while also limiting the ability of legal personnel to provide assistance and process criminal charges.

Juvenile Detention Centers and Juvenile Justice Courts

Juvenile detention centers and justice courts generally serve youth, ages 10–17 years old. All youth who enter a juvenile detention facility for short-term probation or longer-term residency are screened for mental health conditions using the Child and Adolescent Needs and Strengths (CANS) tool. The Hogg Foundation for Mental Health estimates that 70% of youth in the juvenile justice system have mental health conditions; this percentage is over three times larger than the 20% of youth with mental health conditions in the general population. Of note, Travis County offers the Collaborative Opportunities for Positive Experiences (COPE), a juvenile justice deferred prosecution program that serves youth from age 10 - 17 who have a mental health diagnosis that has contributed to the commission of a juvenile offense. COPE diverts young offenders from court proceedings and criminal involvement by providing mental health services, community linkage and treatment for the juvenile and family through community collaborations.

While in pre- or post-adjudication residency at a Texas Juvenile Justice Department (TJJD) facility, youth receive their mental health services through TJJD. In 2015, the Legislative Budget Board (LBB) estimated that each youth in a residential facility costs, on average, \$437 per day. This cost far exceeds average daily costs for youth on parole (\$32 per day) or youth on probation (\$5 per day). It also exceeds

"...70% of youth in the juvenile justice system have mental health conditions..."

standard intensive outpatient care (\$75 per day). For FY16 and FY17, the Texas Legislature appropriated approximately \$85 million to TJJD for behavioral health purposes; this funding stream is entirely separate from funds managed by HHSC for other parts of the care continuum, complicating referrals. Occasionally, a youth may be transferred to ASH Child and Adolescent Program Services (CAPS) for court-mandated medication administration if it cannot be delivered in the detention center (although this referral occurs rarely).

For both adults and youth, there are also significant costs associated with the transportation and detention in the justice system of individuals with mental illnesses, as illustrated in Table 13 that is updated from a prior report by the Meadows Mental Health Policy Institute (MMHPI (2015)). A better-integrated system could shift some of these expenses toward alternative, more effective uses. We discuss in the "Statement of Needs and Recommendations" section of this report the potential impact on waitlists if bed turnover at ASH is accelerated.

Table 13. Areas of Cost for Unmet Needs for the ASH Service Region - 2015

Areas of Cost for Unmet Needs (Rounded)	ASH Region
Jail Costs for Adults with Mental Illness	\$87,150,000
Mental Health Court Costs for Adults with Mental Illness	\$3,200,000
Probation Costs for Adults with Mental Illness	\$1,250,000
Sheriff, Police, and Other 911 Response Costs	\$8,200,000
Adjudication, Probation, and Confinement Costs for Youth with SED	\$64,600,000

Competency Restoration

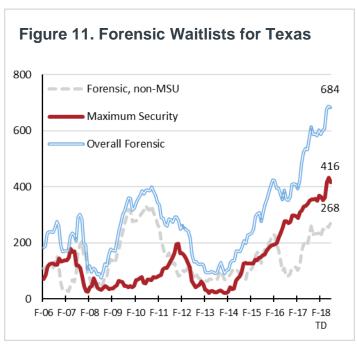
Texas Code of Criminal Procedures Article 46B defines a person as incompetent (1) if he or she does not have sufficient ability to consult with an attorney with reasonable and rational understanding or (2) if the person does not have a rational and reasonable understanding of the proceedings against him or her. "Competency restoration" refers to the educational process of assisting people with mental illness who are facing legal charges to participate in their own defense by enabling them to understand the court process and the charges against them. It is typically assumed that competency restoration is synonymous with symptom improvement; in fact, although somewhat associated, they are relatively independent processes. Many patients with even marked symptoms are still able to understand and participate in legal proceedings and paradoxically, some with less severe or few symptoms are not. Clinical improvement is a medical process whereas competency restoration is an educational process.

Under Article 46B.071(a), Texas Code of Criminal Procedure, when a defendant is found to be incompetent to stand trial, the court will (1) release the defendant on bail and order the defendant to participate in an outpatient competency restoration program or (2) commit the defendant to a state hospital or a jail-based competency restoration program for competency restoration

"Clinical improvement is a medical process whereas competency restoration is an educational process." services. In the absence of sufficient outpatient and jail-based competency restoration programs, inpatient hospitalization is the default even when not necessary from a clinical perspective. In fact, hospitalizing an individual for competency restoration when clinically they could be treated in an alternative venue violates their rights to receive psychiatric treatment in the least restrictive

environment. Because state hospitals, in particular, lack adequate space and resources, defendants are then placed on waitlists until a forensic bed becomes available as noted. Long waits in jail waiting for hospital admission appears to violate an individual's right to a speedy trial. Figure 11 illustrates the growth in Texas generally in these waitlists over the past several years.

Determining competency for a child or youth defendant differs from that for adults, in both the language and sought outcome of the initial evaluation. Texas Family Code Title 3 Chapter 55 defines a child or youth in juvenile court as unfit to proceed if he or she, due to a serious mental illness or intellectual disability, lacks capacity to understand the proceedings in a juvenile court or to assist in his or her own defense. Furthermore, the child or youth shall not be subjected to discretionary transfer to criminal court, adjudication, disposition, or modification of disposition as long as incapacity endures.



Historically, competency restoration was not

permitted outside of an inpatient setting. However, Texas law now permits competency restoration in jail and in community settings. Texas currently has 12 outpatient competency restoration programs administered by the LMHAs. The Austin State Hospital Service Area has four such programs to accommodate the growing need of the forensic population. The first program began in 2008, two programs were added in 2012, and the fourth program began in 2013. However, despite the emergence of these programs, waitlists for competency restoration services continue to be lengthy. According to the Meadows Mental Health Policy Institute, data from June 2018 showed that of the 792 individuals on waiting lists for state hospitals, the vast majority was waiting for forensic beds. These include 428 people on the maximum-security unit

"...Texas law now permits competency restoration in jail and in community settings." (MSU) waiting list, with an average wait of 164 days (ASH does not contain an MSU). Another 258 people were on the forensic non-MSU waiting list, with an average wait of 31 days. People on these forensic waitlists may be housed in jail for weeks or months without receiving proper mental health treatment.

Then, once admitted to a state hospital bed, the competency restoration process adds dramatically to the length of stay – on average, 105 days in the Austin State Hospital. In contrast, in urban centers, lengths of stay to stabilize psychiatric symptoms typically average below six days. As noted in the discussion of ASH performance, in general, competency restoration can be completed within 60 days (and typically in less than 3 weeks (Gillis et al., 2016)).

State law requires that people found incompetent and charged with one of 13 specific crimes (e.g., murder, kidnapping, indecency with a child) must be confined in a maximum-security unit (MSU). When

Table 14. Typical Competency Restoration at ASH				
Service	Time (Days)	Cost		
Arrest & booking	1	\$145		
Assessment	7	\$1,015		
Assessment Results (46B)	10	\$1,450		
Waitlist	31	\$4,495		
Inpatient Stay (ASH)	72	\$54,144		
Reassessed	20	\$15,040		
TOTAL	141	\$76,289		

a bed opens at an MSU, the person will be transferred from the county jail to the MSU. Once the individual arrives at the MSU, the Dangerousness Review Board must conduct a hearing; however, that process takes significant time. The requirement that people must be committed to the MSU based solely on their charge (rather than clinical condition), combined with lengthy delays in accessing a bed, adds to the jail waitlists, intensifying stress on local jails and their staff, as well as the individual waiting for a hospital bed to become available. Re-evaluating whether some of these individuals could be managed outside MSUs might assist these waitlists; however, even if this decision was made today, non-MSU options are also not available until ASH (and other state hospitals) capacity is increased.

Table 15. Outpatient Competency Restoration					
Service Time (Days) Cost					
Arrest & booking	1	\$145			
Concurrent FACT	(90)	\$4,050			
Concurrent IOP	140	\$10,500			
TOTAL	141	\$14,695			

Competency Restoration Costs

Inpatient competency restoration is expensive. As described in Table 14 for a 'typical' individual, the total expense exceeds \$75,000. Some of these costs are driven by maintaining individuals in higher levels of care (e.g. hospitalization) than

Table 16. Mixed Competency Restoration Pathway (private
hospital bed purchased plus outpatient services).

Service	Time (Days)	Cost
Arrest & Booking	1	\$145
Inpatient Stay (Private)	10	\$7,030
Concurrent FACT*	(60)	\$2,700
Concurrent Intensive Outpatient	130	\$9,750
TOTAL	141	\$19,625

*FACT (Forensic Assertive Community Treatment)

clinically indicated due to legal rather than clinical discharge decisions. Inpatient competency restoration is the current default approach in the ASH Service Area, although alternative

pathways that are used both in Texas and other states provide less expensive and more clinically effective alternatives. In the waitlist period in jail, clinical care may be delayed. Table 15 provides an alternative pathway based on an intensive outpatient (IOP) competency restoration with a concurrent embedded FACT (Forensic Assertive Community Treatment) team. We stretched the duration of the calculation to be equivalent to the inpatient example, even though it likely would be shorter and transition to even less expensive standard outpatient care. In this case, the individual would have to be determined safe in the

community for himself and others, but then otherwise could proceed through the competency restoration process to allow legal charges to be adjudicated or dismissed as with any other defendant. As noted in Table 15, the cost of this approach is almost five times less expensive than the default ASH inpatient approach and clinical care begins immediately. The ASH Service Area has, unfortunately, limited FACT programs (32% of the LMHAS, see "Outpatient Service Utilization" section of this report). As a second alternative example, Table 16 portrays use of a private-hospital purchased rapid-stabilization inpatient stay prior to essentially the same pathway illustrated in Table 15. Even with this inpatient component, the overall approach is 2/3 less expensive than the state-hospital-based approach, and again care begins immediately. A number of other alternative models can be developed in which individuals receive care more quickly at less cost. These approaches could save millions of dollars in the ASH Service Area. For example, if only half of the 386 individuals who underwent competency restoration during a typical recent year were evenly alternatively managed between these other two pathways, more than \$10M would have been saved. References for Tables 14 – 16 can be found in Appendix 14.

Currently, there is a conflation between legal and clinical pathways in people undergoing competency restoration to prepare to stand trial. Ultimately, separating these processes to permit

clinical care to occur in the least restrictive, most appropriate setting possible while concurrently providing the educational processes for competency restoration suggests these processes should be separated. Namely, statute changes as necessary to permit wider use of alternative pathways that assign clinical design making within healthcare systems and legal designs (e.g. competency) within legal systems would improve both clinical and legal outcomes while ultimately reducing costs. Recommendations to that end are discussed in the "Statements of Need and Recommendations" section of this report.

Involuntary Civil Commitment

In addition to the competency restoration component of the legal process, Texas law provides an evaluation and treatment alternative referred to as "Involuntary Civil Commitment." This civil procedure is a last resort for people who are not able to care for themselves or are at imminent risk of harm to themselves or others. In Texas, the civil commitment process is initiated by a peace officer who believes that (1) a person has a mental illness; (2) because of the mental illness, the person poses a serious risk to self or others unless immediately restrained; and (3) there is insufficient time to obtain a warrant. The person is transported to the nearest inpatient facility or a mental health facility that the Local Mental Health Authority believes is appropriate in the absence of an inpatient facility. In addition to initiating the process by a peace officer, Texas law also provides that an individual can petition a court to issue a warrant for the person's detention based on the applicant's belief that the person is a risk to self or others and providing specific evidence of behavior, threats, acts, or attempts illustrating risk. If the court issues a warrant, the person is transferred by a police officer to a facility.

Once detained, the person can be held for observation for up to 48 hours (or if a weekend or holiday intervenes, through 4:00 p.m. of the following business day). The person must be examined by a physician within 12 hours, and the physician must certify to the facility that the person has a mental illness and is a risk to self or others, providing evidence in support of that opinion. A person detained for observation is entitled to a probable cause hearing within 72 hours of the initial detention. The evaluation results are then presented to the probate court/magistrate in the form of a medical certification recommending further confinement. The court may grant an Order of Protective Custody to extend the person's confinement pending further hearings on extended commitment. For the person to be held further, a final hearing must be set within 14 days of the initial application and be held within 30 days of that filing. This more formal hearing requires at least two medical certificates. The person may be ordered into treatment, not to exceed 90 days, at the end of the hearing.

Finally, the law permits the court to order extended mental health services after a hearing. However, this order can only be entered for someone who has received court-ordered inpatient services under a civil or criminal court order for at least 60 days in the prior 12 months or 60 days of court-ordered outpatient services during the preceding 60 days. Extended treatment can be ordered for no longer than 12 months. In each of these situations, commitment requires a finding that the person has a mental illness. In addition to this finding, there must be evidence of a recent act or continuing pattern of behavior that "tends to confirm" the likelihood of serious harm to self or others or that causes the person to be unable to meet basic needs such that commitment is necessary.

In addition to waitlists for admission for competency restoration, there are waitlists for people awaiting civil admission to a state hospital, although these tend to be quite a bit smaller (typically about 20 people per day). Additionally, some individuals in competency restoration may be better served by dropping charges and transferring into the civil commitment process. Alternative pathways through the intersection between the legal and mental health care systems could significantly improve effectiveness and efficiencies of both sets of processes.

Key Points – ASH Service Area: Courts and Jails

- Waitlists in jails delay both treatment and timely resolution of legal charges for Texas residents.
- Competency restoration procedures are overly complex and conflate clinical need for treatment with inability to participate in legal decision making.
- There are limited competency restoration programs outside ASH in the Service Area, even though statutes now support these alternatives.
- Alternative competency restoration pathways could provide better clinical and legal outcomes at a substantially reduced cost.

Part 5: Mental Health Workforce in ASH Service Area

Mental Health Workforce in ASH Service Area

A diverse and skilled mental health workforce is an essential element of a well-functioning public mental health system. Building larger hospitals and adding more psychiatric beds provides no value if the workforce and operational budgets supporting those beds is not similarly increased. While this capability is important for both community-based services through Local Mental Health Authorities (LMHAs) and community hospitals, it also affects the operations of the Austin State Hospital. Workforce shortages in critical positions such as psychiatrists, nurses, pharmacists, and psychiatric nursing assistants (PNA) have had a direct impact on bed availability because of licensing and accreditation standards. As noted in the "Current State: The Austin State Hospital" section of this report, ASH experiences significant turnover in these positions. In fact, ASH functioning is currently below capacity for both the number of available beds (299) and, until recently, the number of funded beds (263 in FY19), specifically because of workforce shortages.

Table 17. Mental Health Professionals Licensed in ASH Service Area					
Profession	Total Licensed	ASH Average Salary	Austin Average Salary		
Advanced Practice Registered Nurse	3,718	N/A	\$121,021		
Licensed Clinical Social Worker	2,612	\$55,635	\$66,814		
Licensed Professional Counselor	6,077	\$55,635	\$62,850		
Psychiatrists	555	\$210,235	\$218,698		
Psychologists	1,318	\$72,954	\$85,289		
Total	14,280				

^{*}ASH does not employ Advanced Practice Nurses.

Wages for mental health employees at ASH are lower than wages for comparable positions in the community, as illustrated in Table 17. This problem is one consequence of setting wages through a large state agency rather than based on local economies. Hiring is local and if a state facility cannot offer competitive wages based upon the locale (not a statewide average), then state hospitals, like ASH, struggle to compete for the best skill employees. Indeed, low wages, coupled with aged facilities, make it difficult to attract and retain high quality new employees in critical positions.

"Workforce shortages in critical positions such as psychiatrists, nurses, pharmacists, and psychiatric nursing assistants (PNA) have had a direct impact on bed availability..."

In the ASH Service Area, there are less than 15,000 licensed mental health professionals, including fewer than 600 psychiatrists (Table 17). The sufficiency of a mental health workforce is typically based on the rate of providers per unit population. For example, the necessary number of psychiatrists has been defined in a recent State of Texas report as one psychiatrist for every 4,000 people; less than one psychiatrist per 30,000 people is designated as a federal Health Professional Shortage Area. In the ASH Service Area, there is one psychiatrist for every 6,700 people (based upon a population of 3.7 million). While no county in the ASH Service Area met the 4,000 person per psychiatrist standard when last computed by the state, psychiatrists are unevenly distributed across the region and tend to cluster in high-density population centers. More populated areas (like Travis County) come closer to the recommended numbers, whereas

In the ASH Service Area, there are less than 15,000 licensed mental health professionals, including fewer than 600 psychiatrists many rural counties have little or no access to a psychiatrist. Many of these professionals working in private settings, and often do not accept insurance and do not serve indigent, uninsured, or underinsured (e.g. Medicaid, Medicare) people, compounding these shortages. Similar shortages exist across the ASH Service Area for other mental health specialties.

Multiple factors drive these shortages, but many of the counties served by ASH are rural, and rural counties struggle nationally to attract medical professionals of all types. In addition, licensing delays, particularly for psychologists moving into Texas, can significantly limit the availability of new professionals in the state. Similar delays for psychiatrists were addressed through development of expedited licensing during the last legislative session through <u>SB(85R) 674</u>. However, limited availability of psychiatrists remains common in most of the Service Area for LMHAs, community hospitals, and forensic

settings for many of these same reasons. While telehealth has significant potential, particularly in rural areas, this technology has yet to be broadly implemented. One recent barrier to telemedicine was removed when the legislature agreed to allow telemedicine to occur without requiring a person to an

In the ASH Service Area, there is one psychiatrist for every 6,700 people

initial in-person visit; for a state the size of Texas, this statutory change was critical for telemedicine and telehealth to be truly viable.

In light of the competition for a scarce mental health workforce in the ASH Service Area, and the severe negative impact when bed capacity is reduced from critical staff shortages, the Texas Health and Human Services Commission (HHSC) and ASH need to explore new strategies to recruit and retain critical staff. HHSC has been increasing its efforts to establish partnerships between state hospitals and academic institutions as one approach toward this issue.

A <u>2016 legislative report</u> on academic partnerships indicated that there are a number of potential workforce benefits of such collaborations, including:

- Improving staff recruitment and retention,
- Providing training and staff development,
- Integrating services though leveraging of existing resources and relationships,
- Increasing focus on best practices, and
- Enhancing service delivery through innovation.

Various Texas state hospitals have arranged affiliations with academic institutions, including research and training programs, staffing agreements, and, in one case, full operational control of a public psychiatric hospital. The latter involves the Harris County Psychiatric Center (HCPC). HCPC has existed for almost four decades, and it serves over 9,000 people per year. It is operated by The University of Texas Health Science Center at Houston (UTHealth; rather than as a department in HHSC), and it receives state funding through a contract with the LMHA – The Harris Center for Mental Health and IDD (The Harris Center). HCPC provides excellent care, as indicated by its award from the Joint Commission in 2016 as a Top Performer in Key Quality Measures. HCPC had a long evolution to reach its current performance, and it is also in the process of planning for new construction as part of the HHSC Comprehensive Plan for State-Funded Inpatient Mental Health Services (Appendix 2). Staffing shortages have not been a barrier to operations at HCPC. With this model, in which HHSC and the state contract with a health-system to manage a hospital, rather than owning all operations, improved effectiveness and efficiencies are possible. Additionally, this structure allows local salary adjustments to

attract a strong workforce. These considerations contributed to the final "Recommendations" of this report.

Key Points – ASH Service Area: Workforce

- Workforce instability has contributed to staffing issues at ASH and other state hospitals.
- There is an inadequate mental health workforce in the ASH Service Area and challenges recruiting the existing workforce into the public system.
- Academic partners may provide one approach toward strengthening the workforce, as demonstrated by successes observed with the Harris County Psychiatric Center.

Part 6: Epidemiologic Considerations

Epidemiologic Considerations

Rates of mental health disorders are entirely predictable in even modest-sized populations, as they are minimally impacted by race or ethnicity, and they tend to occur similarly across states, nations and cultures. Consequently, the potential unmet need in the ASH Service Area can be estimated based upon known rates of psychiatric conditions compared against current levels of treatment. Tables 18 and 19 provide estimated prevalence of serious mental illness (SMI) and

related conditions for the counties comprising the ASH Service Area. These data are also available at the county level in <u>Appendix 12</u>. To provide a sense of relative scale, we first report the population of these counties, then, because the state hospital disproportionately serves people living in poverty, we report the population living in households with incomes below 200% of the federal poverty level.

"mental health disorders...are minimally impacted by race or ethnicity, and they tend to occur similarly across states, nations and cultures."

The LMHAs provide outpatient services to people who have a diagnosed serious mental illness; however, LMHAs are not sufficiently funded to meet 100% of the potential demand for services. As illustrated in Appendix 12, the ASH service area is consists of approximately 600,000 people who have a need for mental health services. Of the 20% of people in the service area who need services an average of only 7.5% of people actively seek and receive care at their local LMHA. The US Census Bureau estimates that approximately one half of people in the US have employer sponsored insurance that covers mental health services. Unfortunately, there is a shortage of mental health providers, especially psychiatrists, who will take insurance, so that most psychiatric clinics in the Service Area have waitlists themselves (see "Workforce" section of this report). According to Milliman (2018) we estimate 250,000 people, including those with and without private insurance, in the ASH Service Area are either not receiving care or are unable to adequately access care in their community.

Based on diagnosis and past use of the emergency department and inpatient services, about 2,000 adults at any time are estimated to have the most intensive needs. These individuals tend to cycle frequently between hospitals, emergency rooms, community placements and, too often, adverse

conditions such as homelessness and contact with the judicial system. This level of illness severity equates with the most intensive level of community need in Texas, which qualifies the

person for the evidence-based model of Assertive Community Treatment (ACT). Additionally, we estimate another 2,000 adults who are primarily cycling between the correctional system and the community, in addition to using elevated levels of inpatient, emergency room, and other services. These individuals would qualify for Forensic Assertive Community Treatment (FACT), which can reduce both inpatient bed use and criminal justice involvement. Current capacity to meet these high-service need groups within the Service Area (654 individuals) provides less than 50% of the demand.

"...about 2,000 adults at any time are estimated to have the most intensive needs."

The most common diagnosis of adults and youth with serious mental illness is major depressive disorder that often is not addressed in public mental health program planning. The generally more severe disorders of bipolar, schizophrenia, and schizoaffective disorders, which are more common for patients at ASH and for people in the community in need of ACT and FACT services, are relatively less common in the ASH Service Area population. Major depression and the depressive phase of bipolar disorder are the most common conditions linked to suicide.

The future prevalence of these mental health conditions will be determined in part by early and effective community-based treatment, but largely by population growth in the counties served by the Austin State Hospital. Population projections are created by the Texas State Demographer for each county in Texas (TXPop). Table 19 summarizes adult population projections for the ASH Service Area. Projections to 2050, and for other age groups, are available at Appendix 12. Absent changes in other factors that influence mental health service needs, the growth in population will result in approximately the same increase in demand for services, including inpatient facility capacity.

Key Points – ASH Service Area: Epidemiological Considerations

- Nearly 600,000 individuals in the ASH Service Area are expected to need mental health services. The public mental health system only addresses a fraction of these needs.
- The Central Texas population is rapidly growing, which will further stress existing mental health services.
- The growing need cannot be managed simply by adding more hospital beds.

Table 18. Prevalence of adult mental health conditions in ASH Service Area						
Mental Health Condition – Adults	Prevalence					
Total Adult Population	3,700,000					
Population in Poverty	1,000,000					
Annual Prevalence of Mental Health Needs	580,000					
Mild	240,000					
Moderate	170,000					
Severe – Serious Mental Illness (SMI)	160,000					
SMI in Poverty	80,000					
Complex Needs without Forensic Need (ACT Level of Care)	2,000					
Complex Needs with Forensic Need (FACT Level of Care)	2,000					
Annual Prevalence of Specific Diagnoses						
Major Depressive Disorder	260,000					
Bipolar I Disorder	20,000					
Bipolar II Disorder	25,000					
Mania (symptoms that can occur as part of multiple disorders)	60,000					
Post-Traumatic Stress Disorder	130,000					
Schizophrenic Disorders	26,000					
First Episode Psychoses (FEP) Incidence – New Cases per Year	400					
Number of Deaths by Suicide in 2016	591					

Table 19. Adult Population Projections for the ASH Service Area – 2018 through 2030								
Year	Adults Ages 18 to 64		Older Adults Ages 65 to 84		All Adults Ages 18 and Older			
	Population	% Change from 2018	Population	% Change from 2018	Population	% Change from 2018		
2018	3,076,182	N/A	611,795	N/A	3,687,977	N/A		
2020	3,153,778	3%	674,549	10%	3,828,327	4%		
2025	3,339,134	9%	845,699	38%	4,184,833	13%		
2030	3,529,674	15%	1,011,526	65%	4,541,200	23%		

Part 7: Financing

Financing

Overview

The direct costs incurred by Texas governments (both state and local) to provide mental health care in the ASH Service Area include indirect costs to local systems (typically born by counties and local hospitals), direct expenditures for providing community mental health outpatient and inpatient services, and the operational costs for ASH.

The indirect costs to local systems accumulate largely from the local criminal justice and emergency services systems. These costs are substantial and real, as multiple systems must pay for services to community members whose mental health needs are not being met. Table 20 estimates the costs to communities in the ASH Service Area for unmet mental health needs in the criminal justice systems for youth and adults. These systems spend over \$300,000,000 annually on people with mental health disorders, who in nearly all cases could be better served in mental health settings in the communities. The table also summarizes costs incurred in emergency departments of local community hospitals, which are often ill equipped to address psychiatric needs of each individuals. Acknowledging these expenses (which are often ignored) more than doubles the cost to communities for managing mental health needs. Because these costs are not specifically managed as part of mental health care delivery, they are not optimized toward the care of people needing mental health services. It is often stated that mental health care is 'too expensive' to support; however, these significant indirect costs indicate that failing to fund adequate mental health services simply shifts the costs into different areas, where they

Table 20. Unmet Mental Health Needs Expenses for the ASH Service Area – 2015 and 2016	
Cost Related to Unmet Needs (Rounded)	ASH Region
Jail Costs for Adults with Mental Illness (2015)	\$85,000,000
Mental Health Court, Probation, and Law Enforcement / 911 Costs for Adults with Mental Illness (2015)	\$9,000,000
Adjudication, Probation, and Confinement Costs for Youth with Serious Emotional Disturbances (2015)	\$65,000,000
Emergency Room Costs – Mental Health (2016)	\$93,000,000
Emergency Room Costs – Substance Use Disorders (2016)	\$70,000,000

accumulate as poorly understood, difficult to manage and virtually impossible to leverage expenses to optimize care. As new models of care are developed, shifting costs across different areas to specific care pathways will be required to manage these expenses effectively.

Specific Factors Affecting Mental Health System Financing

Planning for ASH's future will need to include redesigning financing for both ASH operations and the Service Area's community systems that provide services and supports for people in need of mental health care. As these systems gain effectiveness, costs currently borne indirectly through other venues will be reduced. Moreover, the expenses are then more easily tracked and consequently managed, to ensure the dollars are optimally committed to brain health care.

Hospital Financing

The current state hospital system is financed through appropriations made by the Texas Legislature to the Health and Human Services Commission under a budget strategy specific to state hospitals. This financing includes a combination of state general revenue, federal funds, and third-party reimbursements (e.g., Medicaid). ASH receives approximately \$50M annually to fund operations. It is operated by HHSC employees on the ASH campus, and daily bed cost calculations typically only include direct costs on the campus. Excluded from ASH's calculations area wide array of centralized supports provided by HHSC across all state-run facilities (such as electronic health record costs) and the agency more broadly (such as employee benefits and legal costs). While the state hospital system is a large health care organization, it generally operates like the rest of HHSC, with the concomitant constraints of a state procurement agency, including inflexible standardized salaries (often below local market rates), hiring freezes, and many layers of approvals to get policy and operational decisions made. The state hospital system is relatively unique within HHSC as it operates 24 hours a day, seven days a week, 365 days a year to treat vulnerable patients, and it is required to provide a constitutional level of care

at all times. Its ability to be nimble in meeting patient needs is often hampered by its position in a large state bureaucracy. This system experiences high turnover rates, extended vacancies, and long lengths of stay for the people it serves, as previously reviewed throughout this report.

"...systems spend over \$150,000,000 annually on people with mental health disorders..." Funding for state hospitals has increasingly become dependent on state general revenue. The ability of State hospitals to receive disproportionate share funds and earn third party revenue

from private and public insurance has diminished over time as the population of people on forensic commitments has increased dramatically. People on forensic commitments are not eligible for reimbursement (e.g., Medicaid).

Costs per episode of care have increased over time. As detailed in <u>Appendix 8</u> and throughout several sections of this report, from FY15 to FY17, lengths of stay for civil (nonforensic) patients at ASH grew 80%, from 45 to 81 days on average. As a result, while costs

"In July 2018, 71 of 252
operating beds at ASH (over
one quarter of capacity) were
filled with people who had been
hospitalized at least one year,
with an average duration
approaching 3 years."

per day only increased 3.8% during that period (from \$654 to \$679), costs per episode of civil care (for people discharged) increased from \$29,430 to \$54,999 on average. Forensic episode costs for people discharged grew only 38% (from \$51,666 to \$71,295), but forensic lengths of stay started much higher (79 days) and in FY17 reached 105 days. Moreover, these costs are only for people discharged. A growing population at ASH (and other state hospitals) are people who stay longer than one year, and whose lengths of stay continue to increase. In a complex reporting decision, these lengths of stay are often not included in calculations unless the person is discharged (minimizing the actual time people are in ASH). In July 2018, 71 of 252 operating beds at ASH (over one quarter of capacity) were filled with people who had been hospitalized at least one year, with an average duration approaching 3 years. One person per year served at ASH costs tax payers approximately \$275,000.

Community Mental Health Financing

Funding for community mental health has changed dramatically over the last decade and particularly in the past five years. Strong community mental health services decrease utilization at ASH by intervening prior to need for crisis and inpatient care. Several funding streams have particular potential to reduce the use of ASH services over the short to medium term.

In recent years, the state legislature directed HHSC to purchase Community Psychiatric Beds (CPB) outside of state hospitals to reduce shorter-term acute stays at state hospitals, allowing LMHAs (or in some cases the state itself) to purchase beds closer to home for people who need short-term stabilization and community supports. In the ASH Service Area, LMHAs purchased

24,069 bed days (nearly 67 beds per day) with expenditures of \$16,746,965 in FY17. This purchasing strategy has provided some relief of the pressure on ASH to admit people elsewhere for shorter-term stabilization, and as reviewed in the "Current State: ASH Service Area" section of this report, there is substantial additional community inpatient capacity across the region that can be further utilized. Local hospitalization also reduces indirect costs (e.g., deputy's time driving people out of county to ASH). In addition, community hospitals are able under existing statute to provide non-MSU inpatient forensic competency restoration, although this service is rarely if ever used due to the risks to the hospital of accepting a patient they are not allowed to discharge without a writ from a judge. Statutory changes under SB(85R) 1326 created the framework to extend competency restoration programs more broadly (for example, jail-based competency restoration) and prioritized competency restoration in settings other than state hospitals, particularly for people charged with misdemeanors. Increased the bed purchasing program and changes to competency restoration are discussed in the "Statements of Need and Recommendations" section at the end of this report.

Additional community-based capacity to reduce demand on state hospitals for civil and forensic commitments can also be supported by two new funding streams established by the 85th Legislature in 2017. House Bill (85R) 13 established a \$10 million a year grant program available to LMHAs and other community providers to fill gaps in care. In addition, LMHAs are able to partner with counties and hospital districts to seek funding under the SB(85R) 292 grant program that specifically focuses on diverting people with mental illness from jails and emergency services and reducing waitlists of people in jails needing admission to a state hospital.

One additional funding stream for community supports that is particularly designed to provide home and community-based supports for people with long-term care needs is the 1915(i) Home and Community Based Services-Adult Mental Health (HCBS-AMH) State Plan Amendment program. The HCBS-AMH program has potential, but its implementation has been slowed by a variety of barriers. The HCBS-AMH program was specifically designed to assist long-term patients at state hospitals to transition to the community with extensive supports, and it has since been adapted to extend eligibility to people with frequent emergency department and jail use. This program can be used to fund development of small group living and other arrangements to support people who are not ready to live without other social support, even including locked facilities (in specialized situations that meet federal criteria) for people whose medical condition requires that level of security for their safety (though not for forensic reasons). Appendix 15 provides an analysis conducted by the Meadows Mental Health Policy Institute (MMHPI) that described the positive features of the program and identifies barriers to broader use that would need to be addressed to accelerate adoption in communities. One of those recommendations is to integrate this program into Medicaid managed care, in which funding for other long-term care

programs is available, including skilled nursing facilities for people who need that level of support. Better use of the 1915(i) HCBS-AMH program would allow people to move from state hospitals or other levels of care as their needs change over time.

One current source of funding for community services is in jeopardy, and must be addressed in the next year. Over the last six years, the Centers for Medicare and Medicaid Services (CMS) 1115 Waiver and its associated Delivery Systems Reform Incentives Program (DSRIP) brought an estimated \$500 million a year of DSRIP-funded community behavioral health services supports into communities across the state. Many of the services funded by DSRIP have been effective in diverting people in crisis away from jails and inpatient settings, including state hospitals, and into appropriate treatment. The DSRIP project funding is slated to phase out over the next two years, and the state is working with its Medicaid managed care plans to continue to pay for some of these services through value-based payment mechanisms. The state is also exploring other strategies to cover the costs of people without Medicaid who are served through these programs.

Finally, as noted, over \$300M is spent annually on indirect costs related to gaps in the mental health care continuum. As these gaps are filled, redirecting these indirect dollars to directly fund solutions will optimize the use of these resources toward the actual goal of improving mental health. In other words, opportunities to fund mental health care gaps exist in the dollars spent to inefficiently managing the gaps through non-care systems.

Key Points – ASH Service Area: Financing

- Underfunded gaps in mental health care in the ASH Service Area cost Texas over \$300M annually; better allocation of these dollars to direct mental health care would gain efficiencies and make care more effective in the community.
- Costs for an episode of care depend on both the costs per day and the length
 of care needed to resolve the episode; these costs are steadily increasing at
 ASH.
- Better use of 1915(i) HCBS-AMH funds might close some gaps in the care continuum.
- Medicaid 1115 Waiver funds have changed how they can be applied, putting at risk pilot programs that cannot be maintained even if successful

8

Part 8: Idealized Continuum

Idealized Brain Health System Blueprint

In this section of our report, we describe an idealized mental health care continuum or "blueprint." This blueprint attempts to create a vision of what brain health care could look like as it evolves within the public sector. Many of the components of the blueprint are already in place, being delivered effectively by the Local Mental Health Authorities; however, services are unevenly distributed, have limited access and there is often a lack of smooth transitions across different parts of the mental health system (see, e.g., "Current ASH: Outpatient Service

Utilization"). This blueprint was completed with consultation from the University of Texas at Austin Design Institute for Health and by working closely with our steering committees and stakeholders. The blueprint creates a substrate for developing a comprehensive vision for the care and support of people working toward recovery from mental illness.

"...to design the most effective inpatient facility on the ASH Campus, a systems approach considers the hospital within the context of a complete brain health continuum..."

Systems Design Approach

A system is composed of interconnected units of functionally related components. Systems design considers the whole instead of individual components in isolation. In order to design the most effective inpatient facility on the ASH Campus, a systems approach considers the hospital within the context of a complete brain health continuum, especially taking into consideration the people delivering and receiving the array of services being provided before and after an admission. This approach guides the evolution of the brain health system by creating a vision of an idealized experience for people receiving care.

Systems require all parts to be organized in a cohesive manner. A collection of services is not a system, until they are effectively integrated. Our vision for an ASH Brain Health System is organized from the perspective of the individual living with a mental health condition with the

Figure 12. Qualitative Fieldwork Key Considerations

- 1. Mental illness is lived through the process of recovery, not through quick fixes.
- 2. Individual people cannot be the only bridges to the continuity of care; the system cannot function only through the heroic efforts of single individuals struggling against an ineffective bureaucracy.
- 3. Not attending to people's needs except when in crisis is interpreted as a shortage of beds.
- 4. The opacity of how we care for people with mental illness leaves everyone in the dark; people do not understand the mental health care system and often do not seek help until a crisis occurs.
- 5. Anticipating and planning for relapse is a better (and less expensive) strategy than waiting for crisis.
- 6. Without a shared recovery plan, the revolving door of fragmented care erases individual progress.
- 7. Stigma and fear isolate people, when they most need connection and information.
- 8. The focus on security during crisis impedes the transition to the healing care necessary for recovery.

goal of helping each Texan reach optimal brain health and live his or her best life. This continuum illuminates opportunities for continuity between services at different phases of an individual's course toward recovery.

The ASH Brain Health System Redesign focuses on the needs of youth and adults with mental health conditions who may also be living with a co-occurring intellectual disability, substance use disorder or other medical illnesses. The System must also meet the needs of family members and caregivers who play an integral role in the lives of people living with mental health challenges. The individuals the System intends to serve may be living in the community, in jail, in foster care, or on parole or probation, so these various venues were considered in the design. Because one in five people experience a mental illness, and approximately half seek care, we estimate that nearly 600,000 people are living with mental health conditions and actively needing care in the ASH Service Area (see "Epidemiologic Considerations" section). Finally, the ideal System optimizes financing to provide the best outcomes at the best cost. Expanding the scope and access of the care continuum into an integrated Brain Health System fosters earlier intervention and less reliance on expensive crisis management programs and structures.

The idealized System and blueprint are largely informed by the Design Institute for Health's qualitative fieldwork and information gathering that are provided in <u>Appendix 10</u>. The qualitative study gathered data from primary sources which included persons living with mental health conditions, providers, caregivers and family members, sheriffs, judges, peers, and mental

health service administrators within the Austin State Hospital Service Area. Qualitative data were collected from inperson interviews, phone calls, round-table discussions, and on-site observations. The fieldwork synthesized findings into eight primary considerations, noting that consideration 1 is foundational to all the others (Figure 12); these have been edited from the original consultation to be clearer within the current context.

"Qualitative findings also identified a need for more effective integration with and access to care both before, during and after hospitalization, to maintain recovery following a mental health crisis."

The qualitative findings reinforce the opportunity, first identified by the Texas Statewide Behavioral Health Strategic Plan (BHSP) (BHSPupdate), to reorganize current mental health services into a true continuum of care and recovery. Specifically, the qualitative findings suggest a need for a shared interface between a person living with mental illness and their providers across the entire care continuum. Doing so empowers an individual to optimally participate in their care, thereby driving greater connectivity, coordination, and alignment among various services. Qualitative findings also identified a need for more effective integration with and access to care both before, during and after hospitalization, to maintain recovery following a mental health crisis. Fieldwork during the study identified perceptions about the service array and system that were at odds with what the system actually delivers (e.g., the belief that there was no capacity at ASH for more youth admissions, which is not correct). Opportunities for better communication and integration will help build a continuum of care that more efficiently and effectively meets the needs of people today and reduces the overall cost of caring for people with mental illness as the population of Texas continues to grow.

ASH Brain Health System Blueprint

The Brain Health System Blueprint (Appendix 16) offers visual organizing principles of the key moments that shape how people experience brain health, defined by the needs of the individual rather than the services currently available (i.e. a person-centered, rather than provider-centered approach; Figure 13). This person-centered view of the system provides a foundation to expand integrated service delivery that addresses the six phases of needs expressed in the continuum. Based on the work of the Communication Strategy Subcommittee and their recommendations (Appendix 17), the names of the phases were developed collaboratively with our Peer and

Family Work Group to be empowering, inclusive, and stigma free, to describe a collaborative relationship between people living with brain health conditions and the array of services.

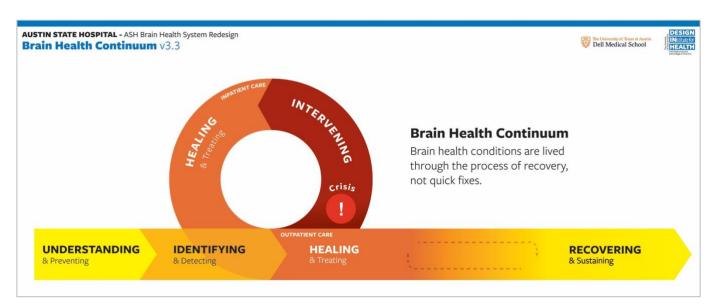
The horizontal portion of the continuum represents an idealized care approach for a person living with a brain health condition. The four horizontal phases occur in the community, i.e. "outpatient" setting, where costs of clinical care are lower, brain health is relatively stable, and the overall human experience is better.

"The Blueprint offers key moments that shape how people experience brain health, defined by the needs of the individual rather than the services currently available."

The loop taking a person off the ideal pathway occurs during a mental health crisis, which generally requires emergency intervention and inpatient hospital care; it may also include law enforcement, jails, and the judicial system. The crisis loop takes a person away from their daily routine to address the crisis, but ideally with the goal of the individual returning home with a plan of how to sustain their recovery in their community.

Based upon this pathway, we developed an idealized Brain Health Continuum Blueprint to illustrate a framework of services across six phases. The services are categorized as: 1) Communication, Education, Outreach and Care; 2) Digital Tools & Innovations; and 3) Evaluation & Metrics:

Figure 13. Schematic of the Brain Health Continuum



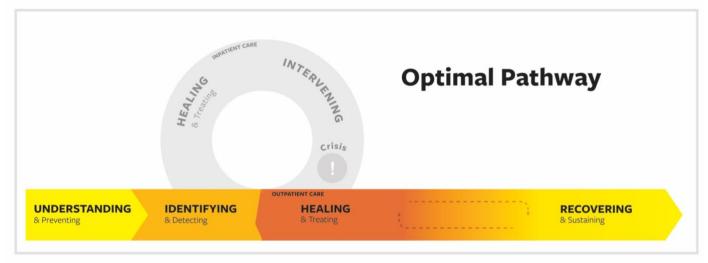




Figure 14: System Blueprint Overview

			OUTPATIENT CARE			
ontinuum of Care ly moments that shape how opple experience brain health, filined by the needs of the dividual rather than the services allable to them.	UNDERSTANDING & Preventing	IDENTIFYING & Detecting	HEALING & Treating	INTERVENING	INPATIENT CARE HEALING & Treating	RECOVERING & Sustaining
CATEGORIES Communication, Education, Outreach & Care	Campaigns Community Trainings Consistency through shared communication assets	Screenings Education & Communication Accessible Appointments Care Coordination	Community Meeting Spaces Social Services Integration Family and Caregiver Trainings Integrated Complex Care	Mental Health Hotline Mobile Crisis Outreach Team Brain Health Witness Crisis Communication Crisis Stabilization	Hospital Intake and Inpatient Care Plan Justice-Involved Psychiatric Evaluation Justice-Involved Competency Examination Communicate Care Plan Create Discharge Plan ASH TODAY	Family and Peer Support Reintegration Support and Life Skills Training Recovery Monitoring Continuity Across Inpatient & Community Providers Preventative Stabilization
Digital Tools & Innovations	Brain Health Resource: Conditions	Brain Health Resource: Provider and Support Registry Telehealth and Virtual Collaborations Shared Plan	Brain Health Resource: Evidenced-Based Treatment Resource Telehealth and Virtual Collaborations Shared Plan	Online Bed Registry Telehealth and Virtual Collaborations Shared Plan	Telehealth and Virtual Collaborations Shared Plan	Brain Health Resource: - Provider & Support Registry - Evidence-Based Practices Telehealth and Virtual Collaborations Shared Plan
Evaluation & Metrics	Evaluation of Early Detection & Outreach	Evaluation of Diagnostic Effectiveness	Evaluation of Evidence- Based Practice Measure Time to Treatment	Evaluation of Crisis Intervention Measure Time to Treatment	Evaluation of Competency Restoration Measure Experience and Quality of Care	Evaluation of Practices to Prevent Setbacks Measure Financial and Economic Impact

"...the Blueprint serves as a galvanizing vision for a future system that the collaborative entities across the ASH Service Area can realize together."

A schematic view of the System Blueprint
Overview is provided in Figure 14, with an easier
to read, detailed version in <u>Appendix 16</u>. The
Blueprint identifies the portion of the care
continuum that ASH delivers today, as well as the
expanded set of services that a future ASH
campus, including the new hospital, may deliver to
provide a platform for advancing expanded care
continuum across the entire Service Area. The
detailed view of the System Blueprint in <u>Appendix</u>

16 provides descriptions of the service intents. Of note, specific providers for these services are not prescribed based on existing roles, to open the possibility of new ways of thinking about provider roles and partnerships, especially among private, public, community, and academic entities. In this regard, the Blueprint serves as a galvanizing vision for a future system that the collaborative entities across the ASH Service Area can realize together. Although details are provided in Appendix 16, we provide a brief overview of the Blueprint here, based on the organizing categories (the horizontal list across the top of the blueprint).

Optimal Pathway

Services provided along all four phases of the optimal continuum are delivered from a wide range of community and outpatient providers (Figure 15). These entities are resources embedded in the daily lives of people across the ASH Service Area in order to integrate brain health understanding and prevention into their messages, services, and experiences.

UNDERSTANDING & Preventing

The optimal pathway begins with the need for people to be aware of brain health and mental illnesses, including prevention, risk factors, and where to find answers, care and support. Understanding and preventing applies to everyone living in the ASH Service Area, regardless of whether they have a mental health condition. Examples of services currently delivered across the ASH Service Area include Mental Health First Aid, NAMI Training, Person-Centered Recovery Training, and Outreach by Local Mental Health Authorities. The blueprint includes and expands these types of communication, education, and outreach examples with campaigns, community trainings, and shared communication assets that focus on brain health and wellness education and

campaigns that reduce stigma. State investments in these programs tend to be in the form of grants focused around specific topics (e.g., Mental Health First Aid to schools).

The blueprint recommends augmenting services in Understanding & Preventing by introducing a digital "Brain Health Resource" which could provide the community with access to current information on brain health, brain health care, and illnesses/conditions in a safe and secure manner. In subsequent phases of building out the ASH Campus (beyond the current biennium), this same digital tool is used to enable information, resources, and exchanges relevant to managing brain health and preventing illness.

The blueprint envisions a series of evaluation and metrics across each phase of the continuum. Understanding & Preventing areas to assess include early detection and outreach to approaches to reduce stigma around brain health conditions and to raise knowledge for how to identify and recognize people in need early in the course of illness (before crisis). The evaluation work then convenes and coordinates cross-institution studies to advance how to communicate brain health topics and awareness to a broad audience.

IDENTIFYING & Detecting

The optimal continuum continues with a person's need to address the early signs of a brain health condition with the help of an informed and trusted provider, including

Figure 15. Community & Outpatient Providers

- Clubhouses
- Donors
- Faith-based organizations
- Health & Human Services
- Housing organizations
- Local intellectual & developmental disabilities authorities
- Local brain health organizations
- Local Mental Health Authorities
- Managed care organizations
- Peer & family groups (certified peer specialists)
- Peer-run community organizations
- Primary care providers
- Private psychiatric care providers
- Public & private schools (school counselors, school nurses)
- Recovery coaches
- Recovery community organizations
- Social services organizations
- Statewide Behavioral Health Coordinating Council
- Substance use providers
- Universities and colleges
- Veteran organizations
- Workplace health & wellness
- Work training & employment organizations

diagnosis and connections to care. Examples of services currently delivered across the ASH

Service Area include screenings and diagnostic evaluations by LMHA's, private clinicians and emergency rooms. In addition, the blueprint integrates screenings into primary care across the community and in schools (secondary through higher education).

The blueprint envisions robust and consistent communication and education with each person about his or her brain health condition(s) along with care options and/or follow up testing, regardless of ability to pay. Within public outpatient care, accessible appointments that are convenient for a person, family member, caregiver, primary care provider or school to schedule advances the continuum of care. Through care coordination, shared information, and referrals, LMHAs help people navigate to recommended care and providers. A digital brain health resource offers a provider and support resources registry across the ASH Service Area that includes feedback, ratings, and outcomes-based scores. A trusted, expert entity conducts regular inventory and assessments of providers to maintain registry.

Evaluation and metrics in this phase focus on effectiveness of screening programs and of diagnostic tools. Improvements are accomplished by convening and coordinating cross-institution longitudinal studies with people providing and receiving care on how to better detect, diagnose, and communicate a diagnosis of a mental health condition.

HEALING & Treating (Outpatient Care)

The third phase of the optimal continuum articulates how trusted, trauma-informed providers and services support a care plan that improves and sustains an individual's health. Examples of services currently delivered include outpatient competency restoration programs, LMHA services, peer-run activities, substance use disorder programs, and adult and adolescent respite services. The blueprint enables scaling this work through community meeting spaces and social services integration.

The blueprint emphasizes the need for more in-depth family and caregiver trainings to occur in parallel and in coordination with the care a person is receiving; caregivers are key components of the healing environment, especially for youth. The blueprint emphasizes the opportunity for community providers, such as Federally Qualified Health Centers (FQHC), to integrate brain health care into primary care and complex care. A digital health resource is imagined that offers condition-specific evidence-based brain health rehabilitative and treatment practices (nationally and in the ASH Service Area). The resource is written in accessible language and is searchable by a person's level of motivation and engagement, location, preferences for in-person or video visits, insurance, and other factors. A number of these types of programs are in development nationally and in Texas, but have limited access. Telehealth and virtual collaborations begin at this phase and continue through the rest of the continuum, including the crisis loop. This

"The shared plan establishes and maintains a standard electronic interface/format for person-centered care and history that is common across providers (medical, brain health, therapists) and easy to access." technology equips the ASH Service Area providers with a secure forum to connect with a virtual panel of experts from an ASH telehealth center, and provide video visits to jails, schools, and emergency departments. Continued monitoring and development of technological solutions to overcome existing care shortages and barriers to access are central throughout future planning.

A shared person-centered recovery plan begins at this phase and continues through the rest of the continuum, including the crisis loop. The shared plan establishes and maintains a standard electronic interface/format for person-centered care and history that is common across providers (medical, brain health, therapists) and easy to access. This plan allows the person and caregivers to input updates, preferences, outcomes, and early indicators of relapse. The evaluation and metrics of this phase include monitoring the use of evidence-based models to connect a person with the most appropriate level of brain health care, especially during crisis.

RECOVERING & Sustaining

The final phase of the optimal continuum supports individuals as they build and maintain a routine that sustains mental health wellness, builds life skills, and actively manages the signs/symptoms of a brain health condition in order to live their best possible life. Examples of services currently delivered across the ASH Service Area include clubhouse services, adult and youth day programs, supported employment, supported housing and residential living programs.

During this phase, the focus of care is on sustaining recovery and on building longitudinal relationships that can quickly intervene at the first signs of a relapse, to prevent crisis. The blueprint emphasizes peer and family support, along with life and job skills training for the person living in recovery. Some of these services are built on the ASH campus to study and advance new best models for the entire Service Area and the state.

Evaluation and metrics in this phase focus on practices to prevent recurrence and sustain brain health. This phase recognizes the need to evaluate financial and economic impact of brain health and brain health care across of the ASH Service Area. The blueprint recommends measuring longitudinal performance on outcomes for public brain health services, including LMHAs, inpatient hospitals, and collaborations with private providers and justice-involved cases.

CRISIS LOOP: INTERVENING

This phase begins when a mental health crisis creates potential for imminent danger. Providers and services involved in this phase may include:

- First responders (EMT, Fire, Police)
- Local sheriffs and jails
- Mobile Crisis Outreach Teams (MCOT), Crisis Intervention Teams (CIT)
- Emergency Room providers
- Criminal & probate court judges & counselors
- Probation directors
- County court officials
- Contracted rehabilitative brain health providers
- Child protective organizations

Examples of services currently delivered for this phase includes crisis stabilization units, emergency department care, inpatient hospitalization, general hospitalization (for significant cooccurring medical illnesses), acute drug or alcohol detoxification, competency restoration and jail-based care support.

The blueprint emphasizes the need for an expanded mental health hotline that provides an easy to access, informed, single point-of-contact, multi-channel (mobile text, online chat, in person phone) 24/7 response center to consistently address emerging brain health events across Central Texas (or perhaps statewide). It coordinates the next level of care with an LMHA, the ASH, or a private psychiatric hospital. Expanded Mobile Crisis Outreach Teams are present throughout the region, supporting law enforcement to provide the best interventions in crisis. Trained peer support assists individuals entering the judicial system. Crisis communication educates each person about their brain health condition(s), and how those conditions evolve into a crisis, including any early warning signs and steps. More crises are averted by earlier intervention. An expanded network of 48 to 72 hour crisis stabilization units provides additional monitored management of an illness episode and then triages individuals to the next level of care. In partnership with local courts, the system prioritizes the use of these units over legal action whenever possible. The critical digital tool for intervening is an online bed registry that establishes and maintains an ASH Service Area registry of psychiatric intensive care beds accessible to the public that is updated at least every four hours. Ideally, telehealth, virtual collaborations, and the shared recovery plan are incorporated into crisis intervention. Evaluation

and metrics of crisis intervention include capacity and capability of state funded brain health crisis services across the ASH Service Area.

CRISIS LOOP: HEALING & Treating

(Inpatient Care)

This phase generally follows intervening, but may also arise from a crisis that is self-identified without intervention. This phase includes the Austin State Hospital and its core services. This phase addresses a person's engagement with coordinated inpatient care that includes treatment services, and support. Examples of providers and services involved in this phase may include:

- State hospital psychiatric care teams, administrators, staff and liaisons
- Contracted private hospitals psychiatric care teams, administrators, staff
- Health & Human Services Commission
- State contracted rehabilitative brain health providers
- Peer & Family Groups
- Recovery Coaches

The blueprint envisions an inpatient recovery plan that is informed by evidence-based best practices and integrated into ongoing outpatient care. For justice-involved persons receiving care, psychiatric evaluations and competency examinations are now managed separately within the inpatient experience, as described in the "Competency Restoration" Recommendations of this report. The discharge plan coordinates an individual's transfer to step-down care, residential options, or jail with Local Mental Health Authorities, ASH, and/or courts according to the person's care plan, ensuring that the incoming provider team is presented the specific discharge material and recovery plan to ensure continuity of care. Discharge plans assess and source social and medical services that enhance a truly integrated holistic recovery model. Although many of these components currently exist, operational improvements are developed in the integration with hospital admission and discharge. In the blueprint, the role of expanded telehealth provides a secure forum for a person and the ASH/inpatient providers to connect with community providers, family, caregivers from an ASH telehealth center to manage a large Service Area until more local community resources are established. The shared plan provides continuity of care across community, crisis, jails, emergency rooms and inpatient facilities.

Evaluation and metrics in this phase focus on re-integration back into outpatient care. Measurement of experience and quality of care collect feedback from public, providers and persons receiving care in the ASH Service Area around overall experience, quality of care, outcomes, time to reach outcomes, and understanding of care plan.

Key Points – Idealized Brain Health System Blueprint

- Idealized mental health care system is focused on individuals receiving care while supporting those providing care and managing crises.
- Various components of the continuum exist within public sector and function reasonably well under LMHAs, peace officers, and ASH, however there are still gaps with the system that can be addressed in the community.

Part 9: Statements of Need and Recommendations

Statements of Need and Recommendations

Based upon our review of the current state against an idealized Brain Health System described in the previous section, clear gaps in mental health services are evident within the Austin State Hospital (ASH) Service Area; many of these gaps typically exist elsewhere in Texas and frequently, nationally. As discussed throughout this report and particularly in the "Financing" section of this report, these gaps create expenses in a variety of other venues. Although these expenses are difficult to fully quantify, we conservatively estimate that they exceed \$300 million annually to local governments (particularly in justice and 911 systems) and hospitals (particularly in emergency departments). More importantly, by not being managed within a mental health care system, these expenses do not optimally benefit the people needing services. We recognize that it is not possible to close all gaps concurrently since solutions must be layered and implemented over time to optimize our care of people with mental illness while most effectively and efficiently using resources and investments. Nonetheless, we identified several opportunities within the context of the ASH Redesign to improve care delivery more broadly across the region. With these considerations in mind, we identified specific priority areas to address during this biennium in order to continue transforming our existing mental health care structures into an optimized brain health care continuum in the ASH Service Area, serving ultimately as a model for all of Texas. These recommendations are:

I. Transform the Austin State Hospital (ASH) Campus.

- 1. Replace the existing outmoded adult hospital with a new state-of-the-art facility.
- 2. Improve ASH operations.
- 3. Change the ASH reporting structure.
- 4. Initiate a brain health platform on the ASH campus and beyond.

II. Optimize the Use of Community Psychiatric Beds in the Region.

- 1. Expand the Community Psychiatric Bed-purchasing program (CPB).
- 2. Expand CPB to provide short-term competency restorations.

III. Redesign Competency Restoration Programs and Processes.

- 1. Engage the Judicial Commission on Mental Health (JCMH) to establish consistent competency standards and assessments across all courts.
- 2. Establish a formal 60-day inpatient competency restoration limit.

3. Create a regional competency restoration team to work across venues.

IV. Increase Residential Care and Supported Housing Capacity.

- 1. Foster better use of the HCBS-AMH 1915(i) State Plan Amendment program.
- 2. Finance expansion of evidence-based residential care and supported housing.

Details for each of these recommendations follow. The \$13M planning phase funding that has already been appropriated to the ASH Redesign is not part of the estimated project costs below.

I. Transform the Austin State Hospital Campus

Gap Addressed

After decades of deferred maintenance, the outmoded Austin State Hospital (ASH) has aged beyond repair. As described previously, the condition of the adult inpatient facility stresses the ability of clinical teams to provide evidence-based care for people whose needs cannot otherwise be met in the community. It does not meet many of today's recommended design features that optimize care delivery and decrease the risk of violence and other negative outcomes. Additionally, the ASH campus itself is replete with aged and dilapidated support structures similarly suffering from decades of minimal and inconsistent upkeep, many of which are also beyond renovation and simply sit empty serving as little more than potential liabilities to the state. Moreover, these buildings detract from optimal use of the campus as a platform to advance the health of people with mental illness throughout the region.

Solutions

1. Replace the existing outmoded adult hospital with a new state-of-the-art facility.

As identified in the Cannon Report (<u>Appendix 1</u>), prioritized by HHSC's "A Comprehensive Plan for State-Funded Inpatient Mental Health Services" (<u>Appendix 2</u>), and described in this report, the Austin State Hospital must be replaced. This replacement is the critical first step to transform the ASH Campus into a platform of a modern regional brain health care continuum.

As a starting point toward developing a Master Plan (Appendix 6) for the hospital and the campus, we identified key goals for the new adult inpatient facility to calculate capacity and cost

for the biennial budget. We also identified additional factors that must be addressed to optimize this significant investment. As described previously in "Current State: ASH and its Service Area", the annual operating budget for the inpatient facility is approximately \$50M and has been flat for several years. This budget does not include all costs of care as many are embedded in other budget lines across all state hospitals (e.g., electronic health record costs) or the agency more broadly (e.g., employee benefits). This budget staffs and operates 260 to 265 beds. Consequently, if the operating budget remains fixed, it sets an upper limit on the capacity of the new hospital. HHSC set this limit as a relatively fixed guideline on our planning.

One factor that substantially guided considerations for the adult hospital replacement has been the need to transfer people who require mental health care out of jails and other facilities more quickly to ASH; that is, eliminate the waiting lists that exist currently. As noted previously,

approximately 95 people daily are waiting for admission into ASH. Based on these considerations, we created a model to calculate the capacity of a new facility in order to clear the waitlists within six months of the new facility opening. To do so, we made two assumptions: 1) the waitlist is largely static (this assumption is largely true), and 2) the behavior of the system will not change with more beds becoming available (this assumption is probably false, and unfortunately what will change is very difficult to predict; we identify several other potential solutions in this section to manage that unpredictability). These assumptions were necessary for capacity calculations.

Table 21: Adult Bed Turn Rate without >365	
ADULT DAIL	Y CENSUS 155
Number of Beds	Number of Months to Clear Waitlist
185	5.5
195	3.5
210	1.9
220	1.2
250	0

ASH has operated in FY18 at a capacity of 252 beds with 28 beds allocated to care for children and adolescents. As noted previously, there is minimal pressure to create more inpatient capacity in the youth facility; additionally, unlike the adult facility, the child and adolescent building is FCI rated as 'fair,' so can reasonably continue to be used with some improvements provided. At the current level of use, the child and adolescent facility can probably function at 24 beds. Also, as noted, about 70 individuals essentially reside at ASH with lengths of stay more than one year (mean > 900 days), effectively taking these beds off-line. Subtracting these two groups leaves approximately 155 general adult beds that are currently used to move people needing care off the waitlists (these beds include both civil and forensic cases). The average bed turn rate for these beds is 4.7 turns/year. In other words, each of these 155 bed opens up about every 78 days. Table 21, then, illustrates how fast the waitlists can be cleared based upon these assumptions, current bed-turn rates and different numbers of general adult beds. These calculations suggest that a

minimum of 185 general adult beds (i.e., an increase in 30 general adult beds) is needed to clear the waitlists in <6 months. If we then add back the 70 long-stay individuals, the new facility requires 255 adult beds, which exceeds the current operating budget limitation noted previously (279 total beds when including a 24-bed child and adolescent unit). With these calculations in mind, we present three alternatives. In all three cases, we recommend leaving the child and adolescent facility where it is, with some minimal updating to be determined (<\$5 million), and staff it to a capacity of 24 beds while improving other youth care capabilities throughout the Service Area (see Appendix 9). The alternative solutions, then, are:

Option A: Build a 240 adult bed hospital.

This approach fits within the current ASH annual operating budget while bringing additional beds on line to address the existing waitlists; additionally, by contract, HHSC requested a minimum 240-bed solution and this approach was the assumed recommendation prior to initiating this report. The cost of building this facility includes \$246M for a 374,000 square foot, 2- or 3-story hospital and another \$37M to prepare the 15-acre site. To prepare this hospital for future additions of up to 48 more beds, an additional \$6.6M is estimated to build out the extra support space in the current design. The attached Master Plan provides additional details (Appendix 6).

However, this approach will not successfully empty the waitlist without decreasing and maintaining the number of long-stay (>365 days) individuals to less than 55 people, in order to keep 185 general adult beds available at all times to move people from waitlists. For every long-stay individual located to a better care solution in the community, 4 to 5 additional people can be accommodated annually (and even more with additional redesign components that we recommend). We propose achieving this aim by HHSC funding a team whose only job is to find alternative, more appropriate placements for these individuals; we estimate the cost of this team is \$300K annually (two social workers specializing in placement, some legal support and a part-time psychiatrist). Of note, 40% of

Option A: 240-bed adult hospital	
Component	Cost
Hospital	\$246M
Site Preparation	\$37M
Long-stay placement team	\$0.3M
Total	\$283M
(optional) Chassis prep to add up to 48 more beds	\$6.6M

these individuals are being held for competency restoration far beyond the recommended maximum of 60 days (see Competency Restoration discussion later in this section), so this goal might be accomplished simply by processing these individuals back into or out of the legal

system, e.g. by working with local jurisdictions to drop charges and to allow alternative placements. To get this launched, HHSC could charge the team with establishing individual patient reviews to pull together leaders and experts from the various care components to identify and remove barriers to allow better placement of long-stay individuals. These actions taken together could significantly reduce, but likely not eliminate, the total number of long-stay people at ASH until better options are available in the community. With the proposed team created, we expect this reduction to be accomplished while the hospital is being built.

Option B: Build a 216 to 240 adult bed hospital plus a 48 to 72 bed residential care unit.

Continuing to maintain people needing chronic, long-term care within an inpatient, rather than a residential, facility is inefficient, expensive and clinically ineffective. Consequently, an alternative solution is to build a replacement hospital AND move the majority of the people receiving long-term care to a residential care facility on the ASH campus. In this model, the cost of building a 240-bed hospital is the same, but more capacity is immediately created to more rapidly manage waitlists and provide capacity for growth. However, additional costs are incurred, estimated at \$15 to 45M to construct a 48 to 72 bed residential facility with an annual estimated operating budget of \$4 to 6M in addition to that for the inpatient facility). These costs likely would be managed through an LMHA, which would also own the operations of the

facility. This model improves on the first solution for capacity and moves toward a better care continuum on campus, although adds additional construction and operational costs. It eliminates the risk of the first solution that alternative placements for the long-stay individuals cannot be found, by building the alternative. A variation would be to build a smaller inpatient facility (namely 216 beds) with a 48-

Option B: 216 or 240 bed adult hospital + 48 or 72 bed residential facility	
Component	Cost
Hospital	\$234-246M
Site Preparation	\$39M
Residential facility	\$15-45M
Long-stay placement team	\$0.3M
Total	\$288-330M

bed residential facility, which would cost about the same as the previous 240 bed hospital, although could create operational savings.

A potential risk of this smaller facility is that it could be overwhelmed by existing needs prior to other care continuum improvements. Moreover, our HHSC contract required a 240-bed minimum hospital plan, and there are some stakeholders who might misperceive the smaller hospital as not increasing 'beds', even though with the residential facility, more capacity would

actually be created than the first option. Additional discussion regarding residential care and supported housing are provided later in this document. The Master Plan leaves space for a 2- to 3-story, 48 to 72 bed residential center to accommodate this solution.

Option C: Build a 264-adult bed (or larger) hospital.

This solution requires an increased operating budget to support 264 combined adult and youth beds representing an increased estimated annual operating expense of \$4 to 6M, over the current \$50M annually. As will be discussed later in this section and as presented in the Master Plan, current best-evidence standards recommending building in 24 bed increments to optimize staffing and therapeutic milieu, which guided this next iteration of capacity. The cost of this larger hospital is \$272M with \$39M in site clearing costs (\$311M total); a 288-bed hospital would cost an additional \$19M (\$330M total).

Of note, in preparing the Master Plan we considered the possibility of adding additional 24-bed units in later years, so we suggest leaving space on campus adjacent to the new hospital for that purpose. Regardless of which option is chosen, the hospital must be built. To this end, we developed a campus master plan that includes an initial estimate for building the new 240-bed

facility (Option a.) as well as describing potential longer-term use of the campus. The inpatient facility has a number of best-evidence design features to provide state-of-the-art psychiatric care upon its completion and for the decades that the building will provide services. These features are described in detail in the Master Plan, but we highlight a few examples here.

Option C: 264 to 288 bed adult hospital	
Component	Cost
Hospital	\$272-291M
Site Preparation	\$39M
Long-stay placement team	\$0.3M
Total	\$311-330M

a. Single occupancy rooms.

As referenced in the Master Plan, single occupancy rooms, contrasted with double or multiple occupancy rooms, provide the optimal therapeutic environment thereby decreasing time to clinical improvement and the risk of aggression and violence, keeping safer the people receiving and providing care. Most health care facilities are moving toward single-occupancy solutions and there is little chance that this trend will reverse in the future. Anticipating the use of this facility for many years, this design feature is critical to keep it consistent with evolving standards.

b. A treatment mall.

Centralized treatment capacity is strongly recommended in modern facilities. This treatment mall is located on the first floor and creates a more efficient and effective comprehensive care delivery structure. This approach prepares individuals receiving care for transition to outpatient settings while consolidating multidisciplinary care providers to create a more collaborative work environment.

c. Violence reduction.

The design of this hospital incorporates key features demonstrated to reduce the risk of aggression and violence toward people working and receiving care in the facility. These include:

- i. Efficient 24 bed units create smaller, more residential autonomous subunits housing 6 to8 patients.
- ii. Private bedrooms with *ensuite* bathrooms as noted.
- iii. Day rooms and lounges providing a range of seating and setting choices.
- iv. Views of nature and access to outdoors (especially porches and courtyards).
- v. Patient privacy (and control).

d. Functional efficiency.

The design of the hospital reduces staffing costs while facilitating work performance for support services through use of proximity and connectivity. This design feature allows for reallocation of scarce resources to direct care of people.

Additionally, as detailed in the Master Plan, there are several 'optional' expenses to consider as the facility is being financed and constructed. These include:

- a. Additional capacity built into the building with shared infrastructure to support the addition of 24 bed unit in the future to expand hospital capacity (\$6.6M as noted).
- b. Abatement and demolition of existing hospital buildings (\$8M) to clear sites for future continuum of care partnerships; some of these expenses could be borne by partners.
- c. Develop a Campus Square (\$3.6M) that provides a signature space to function as the heart of the campus, linking the new hospital with historic Building 501 "Old Main".

- d. Extension of North/South drive (\$3M) creates a central spine through the campus to improve ease of access to the new hospital and to provide a connective circulation amenity for linking future continuum of care partners.
- e. Replacement of electrical gear and building enclosure (\$11M) upgrades aged equipment and a deteriorating facility that currently acts as the electrical feed for the entire campus; a replacement will include a purposefully built facility for long-term use of the campus and likely operational savings with more modern energy equipment.

\$300M to replace the Austin State Hospital. Although we prepared a Master Plan based on the first option (240 bed hospital only), largely related to original HHSC requests and assumptions, we prefer option b (216 to 240 bed primary hospital with 48 to 72 separate residential care beds, \$288 to \$330M) as we believe it better reflects the ultimate needs of the Service Area. It also creates more and variable capacity. To accomplish this second choice, changes in campus operations would need to occur. Moreover, funding of a residential center, and its operations, would likely flow through a Local Mental Health Authority. Consequently, funding for this resource might proceed through a different mechanism. We are not in favor of the third option (264+ bed hospital), unless there is no plan to proceed with other recommended system changes so that over-reliance on inpatient capacity will still be necessary. The Master Plan and next phases of construction planning can be easily adapted to any of these options.

2. Improve ASH operations.

With a new facility comes an opportunity to alter the structure and culture of hospital operations; in fact, in the absence of these operational changes, many of the advantages of a new facility will be lost. As identified in the "Current State: ASH and its Service Area" section of this report, the hospital struggles with a number of operational issues including frequent staff and management turnovers, difficulty recruiting and retaining experienced clinicians, high rates of restraint relative to other state facilities, and poor rates of survey engagement based on patient satisfaction. Although some of these challenges will improve simply with a new facility, others would benefit from alternative approaches to hospital management.

A new facility is an opportune time to make a clean break from existing operations and redesign them. Several approaches to such a redesign could be considered including: 1) allowing HHSC to simply continue in its current iterative approach toward hospital operational improvement, 2) bringing in a temporary consulting team from outside HHSC to develop short- and long-term improvement plans that HHSC then implements, 3) partnering with

private hospital operational teams to bring their experience into running ASH, and/or 4) employing a local medical school to manage the hospital and its operations. Supporting this latter approach in general, Senator Jane Nelson recently introduced Senate Bill 63 (SB63) in which she proposes an academic consortium of Psychiatry Departments in Texas to improve the clinical care delivery, workforce development and research processes across the public mental health system. Academic leadership within the hospital and its operations brings the potential of continuously updating evidence-based care approaches, integrating with other components of the medical school's health system collaborations, developing research and educational programs that improve care and create employee development programs, thereby attracting and training a highly qualified workforce. Having Health Related Institutions (HRIs) assist with direct operations of new state hospitals might be an extension of the intent of Sen. Nelson's bill. This type of HRI involvement was an important component of the intent of the original bills that authorized funding and involvement of HRIs in the current planning.

A second relatively straightforward improvement would be to change the manner in which salaries for ASH staff are established so that they are competitive with the local market. In Austin, the current salary levels are below the city's averages; coupled with an aging facility, ASH therefore becomes a less desirable option for people seeking employment opportunities.

At this time, we recommend developing a plan to move the management of ASH and ultimately the ASH campus to an academic partner, providing the right incentives and risk protection to make doing so feasible. This model has been successful at the Harris County Psychiatric Center (HCPC) where, for example, competency restoration averages about 52 days with a restoration rate of 87%. The HCPC units receive between the 50th and 95th percentile on Press Ganey performance measures, and all physician positions are typically filled with a waitlist of graduating residents who want jobs there. It also generates a small margin (e.g., 1% to 2%) most years. As second recommendation, we recommend increasing ASH's operating budget to permit paying competitive salaries for ASH employees. This recommendation will likely require changes in HHSC operations to move away from statewide mandated salaries that ignore local market economics.

3. Change the ASH reporting structure.

The current mental health care system is not designed for smooth transitions among the various components of the mental health care continuum. An effective brain health care continuum requires strong collaboration and coordination among the stakeholders and providers of the various levels of service. This care coordination will not only provide better, evidence-based care "at the right place at the right time", but will also better use limited resources. Health systems that provide this type of population health care (e.g., Kaiser Permanente) are integrated to

incentivize placing people needing care at the most appropriate place within the system. Ideally, each of the levels of care benefit from efficient use of resources and provision of best practices across all of the components comprising the system. In contrast, ASH sits within a complex, siloed organizational structure that provides few incentives for any of the stakeholders to facilitate better inpatient utilization or collaboration across entities. State funding streams to ASH, Local Mental Health Authorities and the legal system are largely managed separately so that each entities' incentives are independent of the success of other components of these intersecting systems. Consequently, ASH clinicians report constant barriers to hospital discharge, ranging from an inability to override a court's order leaving the patient in the hospital for prolonged competency restoration to refusals to accept referrals into outpatient services. Leaders among the sheriffs, police, courts and LMHAs report essentially the same experiences in reverse when referring individuals into ASH.

Compounding this problem, ASH reports into a massive bureaucratic entity (HHSC) responsible for a myriad of loosely or unrelated functions including managing very large insurance products (Medicaid, CHIP), providing health related regulatory responsibilities, and overseeing statewide health care and other procurement; i.e. HHSC is a giant, mostly 8 am to 5 pm, mostly contract procurement and oversight agency. Inside of this giant bureaucracy, HHSC attempts to efficiently and effectively run a 24-hour, emergency-and-acute-care health services network, that functions completely differently than what is needed for regulatory or procurement processes. Ideally, the state hospitals would function more like one of HHSC's provider-agents than like HHSC (as is done in Houston at HCPC). The executive skills and administrative operational support needed for procurement and regulatory oversight are vastly different than those needed for hospital operations. Hiring processes, IT systems, legal oversight and clinical services are all different for a procurement agency than they are for a service-providing agency. For example, the latter must be able to adjust salaries to assure full staffing, bill for its services, and negotiate provider rates that are competitive with the local, not statewide, market. Local markets vary widely based on the size of the community, its desirability as a place to live, its job market and many other factors that preclude a statewide solution.

It is hard to imagine, then, how an effective health system can be managed within the sheer size and scope of HHSC's structure. To create the best mental health care system, ultimately alternative approaches are necessary. We recommend creating an independent hospital board that is given governance and fiduciary responsibility for ASH that includes appointed stakeholders tasked to improve incentives for system-wide collaboration. Stakeholders might include leaders of Service Area LMHAs, sheriffs, justices, leaders from peer organizations (e.g., NAMI) and people experienced with private health system management. HHSC, then, would do what it is designed to do; i.e. contract for services with this

regional state hospital board for services in a defined service area, similar to how it does with the LMHAs. The hospital board would be responsible for hospital performance and developing better regional cross-service care integration to truly move individuals needing care to the right place at the right level of care at the right time. While the new ASH facility is being built, there is an opportunity to address these changes, implementing them with the new facility opening.

4. Initiate a brain health platform on the ASH campus and beyond.

Our vision for the ASH campus transformation extends beyond simply replacing a hospital to creating a platform that establishes best practices for mental health across the entire continuum of care and the ASH Service Area. Specifically, after completing the first phase of transformation (building the new adult hospital and possibly some residential care), we propose a series of phases that remove existing outmoded and empty buildings and replace them with functional examples of additional components of a brain **health care continuum.** In most instances, we propose that components built on the campus are then leveraged through telehealth or new programs and facilities in other counties throughout the Service Area to build out a true regional care model. This model will depend on strong links with academic, public and private partners. As these components of the brain health care continuum are built on campus and across the Service Area, these improvements will lead to decreasing emphasis on expensive crisis and inpatient care to more efficient and effective outpatient and preventive mental health support, optimizing both the state's investment in mental health and the improved brain health of its citizens. For example, an additional 24 bed unit with the current bed-turn rate would treat approximately 110 individuals and cost \$6.5 million additional dollars to operate (and \$23 million to build); if instead these operating funds were spent on 3-month intensive outpatient programs, 8 times as many people (976 individuals) could be treated in the same period, diverted from inpatient care and likely experience better outcomes. The Phases of the transformation are detailed in the Master Plan, and are summarized here.

- **Phase 1.** Clear site and then build new hospital with a minimum of 240 adult beds.
- Phase 2. Remove old hospital buildings.
- **Phase 3.** Use old hospital sites for new brain health care components (with duplicates in other counties in the Service Area as appropriate). These could include, but are not limited to:
 - 1. Community- or privately-owned short-term acute stabilization hospital
 - 2. Residential care/supported housing
 - 3. LMHA intensive outpatient clinic or day hospitalization
 - 4. Substance use disorder treatment center
 - 5. Medical facility, e.g., FQHC
 - 6. Other components (please see Master Plan (<u>Appendix 6</u>) for additional examples)

Phase 4. Remove HHSC administrative offices to alternative locations to create campus space for additional components and brain health-related functions.

Other than Phase 1, which has an established timeframe based on funding appropriations we hope to obtain in the 86th Texas Legislature, the other Phases will occur over several years and legislative sessions. Many of these additional brain health components would be created in partnership with other public and private organizations that would provide substantial funding to build and operate the facilities and programs. To facilitate the use of the ASH Campus, we recommend that the state develop a program of business incentives, e.g. tax or land credits. Additionally, we recommend as a next step toward this longer-term campus transformation, that HHSC will soon release a Request for Information (RFI) to begin to identify these potential partners. Following that, we recommend appointment of and funding for a campus oversight team to develop specific partnerships, resources and recommendations to fulfill this strategic vision. With the right planning and incentives, the ASH campus can become a national model for the care of people struggling with mental health conditions.

Recommendations Summary: Transform the ASH Campus

- Legislative appropriation of at least \$300M to replace the hospital and perhaps build residential care.
- Identify funding to update and maintain the ASH Child and Adolescent unit.
- HHSC to fund a team to relocate long-stay individuals to better placements.
- Develop a plan to transfer management of ASH operations to an academic partner.
- Increase ASH operating budget to offer competitive employee salaries.
- Move ASH governance and fiduciary oversight to an independent hospital board outside of HHSC, with HHSC serving as a contracting agent to the board for ASH operations.
- HHSC to release an RFI to identify public and private partners to build out a mental health continuum of care platform on the ASH campus and across the Service Area.
- HHSC to fund a campus oversight team to lead campus development over the next several biennia.

II. Optimize the Use of Community Psychiatric Beds in the Region

Gap addressed

Even with the hospital replacement proposed in Section I, state hospitals, including ASH, are not well designed for short-term acute illness stabilization (i.e., admissions often needing less than a week). This type of care is better provided within a private acute care facility.

Solutions

1. Expand the Community Psychiatric Bed-purchasing program (CPB).

As described previously, although purchasing community psychiatric beds sometimes (but not always) may have a higher *per diem* expense than ASH, the alternative workflow design leads to significantly shorter lengths of stay, so that total episode costs are decreased. Additionally, the private workflow design optimizes outcomes. Moreover, although there is an admissions backlog into ASH, there are a number of community facilities with current capacity for short-term admissions, as described in the "ASH Service Area: Inpatient Facility Utilization" section of this report. The LMHAs use this resource now, but there are additional opportunities to expand this capability. Expanding community psychiatric bed purchasing could quickly meet some of the mental health needs within the ASH Service Area even while the new facility is being built. Currently, within the ASH Service Area, LMHAs purchase \$17M in CPB beds; a 10% increase could provide another 200 to 250 admissions/year, further allowing ASH to focus on the longer-term subacute and complex care it is best at providing, and thereby increasing its capacity. This relatively modest investment will take pressure off state hospital expansions, ultimately providing a less expensive solution that also provides better care.

2. Expand CPB program to provide short-term competency restorations.

As part of the expansion of the CPB program, we propose expanding inpatient competency restoration in community-based inpatient facilities to allow more rapid evaluation of individuals with mental health disorders facing legal charges who clinically require a short hospitalization. LMHAs have the statutory authority to use facilities other than the state

hospital for competency restoration. However, in order for this approach to work, statutory changes are required, in which the facility has the ability to discharge the individuals receiving care at the time doing so is clinically indicated, not as dictated by the court. Private facilities are not likely to agree to accept patients in which they cannot manage clinical care and hospital discharge decisions. The court would then determine at discharge whether the individual can be released on his/her own recognizance or instead must return to jail for legal processing. We recommend HHSC funding a pilot program with a provider in Travis County (where the majority of the forensic waitlist is located) to establish processes and costs for this program; this program might be able to be funded through SB292 appropriations. Additional changes to the competency restoration programs to accommodate this suggestion are discussed in the next section of this report.

Recommendations Summary: Optimize the Use of CPB in Region

- Increase CPB funding to LMHAs by at least 10% to increase capacity by 200 to 250 admissions/year.
- HHSC to fund a pilot program to expand CPB program for short-term competency restorations.

III. Redesign competency restoration programs and processes

Gap addressed

State-hospital inpatient competency restoration is not necessary for some or all of the competency restoration process in many cases. Although alternatives are available, they are underutilized and currently, processes for legal charge resolution and clinical care are unnecessarily conflated.

Although not every individual waiting for admission to ASH is referred from the legal system, 70% require criminal-court mandated competency restoration. These requirements put significant pressure on ASH and delay treatment and resolution of legal cases for the individuals involved. As discussed in the "Courts and Jails as Providers of Mental Health Care", a typical ASH-based competency restoration process costs more than \$75,000 and data from across the state suggest these costs often escalate even higher (e.g., \$130,000). However, alternative pathways, provided in that same section, demonstrate that by separating clinical care from the legal process of competency restoration, thereby assigning care only for the duration and level clinically needed, these costs can be reduced dramatically. For example, if an individual, instead of being waitlisted in jail to get into ASH, is quickly admitted for a short private inpatient stay followed by public intensive outpatient treatment, the cost falls less than \$15,000 for the episode. These alternative models have the potential to decrease costs of competency restoration millions of dollars just for the ASH Service Area. To do so, however, requires changes to the process.

Solutions

1. Engage the Judicial Commission on Mental Health to establish consistent competency standards and assessments across all courts.

Despite the increasing need for competency restoration, evidence-based assessments and approaches are inconsistently applied. Consequently, this inconsistency introduces wide variability in workflow so that results cannot be easily compared across venues; this variability also introduces inefficiencies, thereby increasing costs and producing uneven clinical and legal outcomes. Additionally, a lack of specific standards challenges interpretability of individual assessments for both the clinicians providing the service and the courts applying the results. We

recommend asking the Judicial Commission on Mental Health (JCMH) to convene a workgroup to develop statewide competency standards, assessments and workflows. We would expect this work group to arrive at a consensus based upon the competency restoration literature and best practices statewide within one year, so that improved processes can be implemented during the next biennium (and before the new hospital is completed). These practices could include:

- a. Improving and standardizing the screening and assessment processes for mental illness in the jails as recommended by Meadows Mental Health Policy Institute (Appendix 18).
- b. Reducing the statutory time allowed for competency examination (currently 30 days) by establishing new performance targets and maximum time limits for completion of accurate and reliable evaluations of competency to stand trial (7 and 14 days, respectively). Authorizing evaluations by telehealth and tele-legal could potentially support this effort.
- c. Establishing written standards and assessments for forensic evaluators, and using these standards to review their performance. The shortage in forensic psychiatrists might be addressed by determining whether formal forensic licensure is necessary for this function. An alternative might be Texas-specific certification for general psychiatrists.
- d. Creating a statewide telemedicine and pharmacy network to achieve a goal of protocoldriven medication initiation, using a standard formulary, for consenting individuals within 24 hours of booking. This network would be separate from, but work collaboratively with, the pilot competency restoration team proposed in solution 3 of this section.
- e. Establishing evidence-based, substance use screening and engagement programming to be delivered in jail, including the availability of evidence-based medication-assisted treatment (e.g., methadone, suboxone) to consenting individuals.
- f. Establishing written standards for the performance of the application of these new standards and develop incentives to support these programs.

Other components of a standardized program would be developed by the JCMH work group. These examples simply serve to frame the type of work that is needed.

2. Establish a formal 60-day inpatient competency restoration limit.

Existing data suggest that in the vast majority of cases, competency restoration can be achieved in less than 60 days (e.g., HCPC has an average forensic length of stay of 52 days, and research suggests 3 weeks is sufficient for misdemeanants), yet the average 'forensic' length of stay at ASH exceeds this recommendation by more than a month (Gillis et al., 2016, WSIPP, 2013, Steadman & Callahan, 2017). As discussed previously in this report, consistent with this observation an internal study at ASH found that over 41% of admission days for individuals hospitalized for competency restoration occurred after they had been either restored or deemed not likely to restore (Appendix 8). Delays in discharge infringe on these individual's rights to a speedy trial and place them in inpatient care that violates the standards to treat within the least restrictive setting, while incurring unnecessary costs to the state. With these thoughts in mind, we recommend the following statute changes to the competency restoration (46B) processes.

- a. Once competency is restored, within 5 business days the individual will be returned to the court for adjudication. The court would, at that time, and based upon the legal charges involved:
 - i. Drop all charges and allow the individual to proceed to the level of care clinically determined by his or her care team, including discharge to outpatient care or continued inpatient care either by conversion to a voluntary admission or to a civil commitment, or;
 - ii. Release the individual on his or her own recognizance with a trial date for legal adjudication, with ongoing care determined by clinical need, or;
 - iii. Return the individual to jail until trial with ongoing clinical care provided by the jail based upon clinical need.
- b. For individuals whose competency is not restored by 60 days, then within 5 business days, the court would:
 - i. Ask for a single 30-day extension (after which it must proceed to ii); and/or
 - ii. Drop all charges and the individual will be managed according to clinical need, or;
 - iii. Return the individual to jail until trial (and likely 46C proceedings) with ongoing clinical care provided by the jail based upon clinical need.

In both of these instances, the change from current procedures is that continued hospitalization and other clinical care is determined solely by **clinical need** rather than by **legal charges**.

This approach places clinical and legal decisions into the venues that each properly belongs. Doing so both protects the individual's legal rights to a fair and speedy trial while ensuring optimal clinical care in the least restrictive setting possible.

3. Create a regional competency restoration team to work across venues.

As described in the "Courts and Jails as Providers of Mental Health Care" section of this report, competency restoration is a legal process that involves educating individuals so that they can participate in their own legal defense; it is linked to clinical care in that some individuals require stabilization of their mental illness first to be able to benefit from the educational process. In current models in the ASH Service Area, these legal and clinical processes are conflated, to the detriment of both. With this in mind, we recommend any changes necessary to the 46B statutory language to support judges so they can allow competency restoration teams to work across any clinical venue (including ASH), community hospitals (as recommended in the previous section) or jail setting. The teams would be contacted and engaged whenever an individual is identified who needs competency restoration while they are being placed in the least restrictive clinical setting necessary (in some cases, this setting may be jail if they do not need inpatient care, but legally cannot be released). The team could be engaged in person or by 'tele-legal' means to support rural areas in which resources cannot support an in-person solution. The team would determine when competency is restored and the finding accepted by the court by statute to initiate the steps proposed previously.

One vehicle to finance these programs is SB 292. The competency restoration teams could work in tandem with existing clinical structures. For example, Integral Care in Travis County obtained funding to create a forensic assertive community treatment (FACT) team that, among its other functions, provides outpatient competency restoration and could have this new proposed team integrated into its programming. Additionally, expanding crisis capacity and interventions designed to sustain community tenure outside of ASH could reduce the need for involuntary civil commitment. More importantly, doing so might reduce reliance on ASH as a default acute care provider in cases that use involuntary civil commitment and for those people requiring extended care under Texas law. We recommend HHSC funding a pilot program to establish a regional competency restoration team and workflow within an ASH Service Area LMHA working with an academic partner.

Recommendations Summary: Redesign Competency Restoration Processes

- Ask the Judicial Commission on Mental Health (JCMH) to convene a workgroup to develop statewide competency standards, assessments and workflows.
- Change 46B statutes to set time expectations and a formal 60-day cap on competency restoration processes to disentangle clinical care and legal decision-making.
- Through SB292, HHSC to fund a regional competency restoration team created in partnership between an ASH Service Area LMHA and academic partner to provide competency restoration across venues.

IV. Increase residential care and supported housing capacity

Gap Addressed

As noted, over 25% of ASH's current capacity is filled by individuals staying in the hospital longer than a year and many of those significantly longer. Maintaining these individuals in a hospital setting is perhaps the least effective and most expensive approach toward meeting their needs. Alternative care settings are critically needed.

Solutions

1. Foster better use of the HCBS-AMH 1915(i) State Plan Amendment program.

As described in the "Financing" section of this report, the 1915(i) Home and Community Based Services – Adult Mental Health Program within the state's Medicaid plan was specifically developed to assist long-term state hospital residents to transition to the community. However, the program has encountered operational barriers described by the Meadows Mental Health Policy Institute in <u>Appendix 15</u>. In this biennium, we recommend creating a regional work

group, funded by HHSC that engages the relevant stakeholders to evaluate and overhaul the 1915(i) HCBS-AMH program so that community providers believe that it is financially and clinically viable as an alternative to ASH for long-term patients. As noted previously, Meadows Mental Health Policy Institute analyzed this program, and they provide a framework to address these barriers (Appendix 15). These proposals will need to consider older individuals who need complex medical and mental (including memory) support as well as younger individuals suffering from severe and persistent mental illnesses that cannot be safely released to their own care in the community based upon their illness.

2. Finance expansion of evidence-based residential care and supported housing.

Although these individuals remain hospitalized for many reasons, including some caught up unnecessarily in long-term competency restoration (as previously discussed), the major barrier to discharge is a lack of long-term residential care and supported housing options. Residential care refers to long-term care given to adults or children who stay in a residential setting rather than in their own home, family home or a hospital. There are various residential care options available, depending on the needs of the individual, including skilled nursing facilities and small community-based group homes. Supported housing encompasses a wider array of options. One example is a therapeutic housing facility in which the community itself, through self-help and mutual support, is the principal means for promoting recovery. Other examples include group homes, supported living residencies, and halfway houses. In these types of facilities attached staffing, such as a house manager, helps residents remember to attend appointments or take medications. Often residents of supported housing have a case manager employed by the Local Mental Health Authority. Home-health care can provide similar support for individuals who own a home. All of these approaches are specifically designed to provide long-term, chronic care and recovery support much less expensively and more effectively than an inpatient setting. There are both open and locked facilities that could meet a wide variety of these needs, and they are less expensive to build and operate than an inpatient setting. Increasing availability of both residential care and supported housing throughout the ASH Service Area would help LMHAs to manage the region's mental health needs much more efficiently than continuing to expand inpatient facilities; some individuals needing care might be referred to these facilities from short-term acute care settings and never need a long-term subacute inpatient admission at ASH.

A number of private and community organizations provide these types of services for older individuals suffering from Alzheimer's disease and other dementias. These facilities are typically only available to people with insurance or financial capacity to afford the residential care. This type of care, however, as well as private skilled nursing facilities, might provide relatively immediate alternatives for some individuals residing at ASH. There is considerable skilled

nursing capacity in the Service Area (see "Current State: Inpatient Facility Utilization" section). To do so, the state would need to provide either direct (e.g., CPB for long-term care) or indirect (e.g. tax credits) financial incentives to these community partners. Alternatively, the state might invest in building residential care or therapeutic housing that it manages through Local Mental Health Authorities. Based upon the \$4.6M needed to operate a 24-bed inpatient unit, it would support only 24 people residing for up to one year on the inpatient unit. In contrast, that same \$6.5M would support, at a minimum, 125 individuals in residential care and that many or more in supported housing (depending on the structure). Additionally, home health agencies specializing in brain health could support individuals in their homes; again, at this same expense, with 4 hours per day of home health support, over 200 individuals could be supported for a year.

With these considerations in mind, we recommend: 1) release the Request for Information referred to previously to include developing a residential care facility on the ASH campus as a test of partnering opportunities with either private companies or LMHAs; and 2) request HHSC develop a comprehensive proposal within the Office of Transformation to develop residential care, supported housing, and home health capacity for the state.

Recommendations Summary: Increase Residential Care and Supported Housing

- HHSC to fund a regional work group to eliminate perceived and real barriers to better use of 1915(i) HCBS-AMH funding to expand supported housing.
- HHSC to develop a comprehensive plan for expanding residential care, supported housing, and home health capacity in the state (including the ASH Service Area).

Caveats and Conclusions

With these changes, the ASH campus and its Service Area will be positioned to lead mental health care transformation throughout its region and serve as a model for Texas. However, these changes alone will not sufficiently prevent the proposed expansions from being quickly overwhelmed due to a number of factors within the region that will continue to increase demand for mental health services.

As reviewed in the "Epidemiologic Considerations" section of the review of the ASH Service Area, despite the large numbers of people already receiving care, there is a large unmet need for both inpatient and outpatient services. From an inpatient perspective, several groups nationally completed studies to determine the ideal number of psychiatric beds per a given population. Although these studies have a relatively wide range, in a recent review of studies (Appendix 19), the Treatment Advocacy Center suggested a best estimate of 39 psychiatric beds/100,000 adult residents could sufficiently meet inpatient needs in a typical state model of care. The ASH Service Area includes 3.7M people; based upon this metric, then, the ASH Service Area needs 1443 psychiatric beds. Currently the total number of psychiatric beds summing both ASH and private facilities totals approximately 1,000, or 443 beds below the predicted need. Obviously, increasing ASH by 30 or even 60 beds will not adequately address this need. Additional beds and hospital replacements are also being added in Rusk, Kerrville, San Antonio and Harris County, but none of these increases will sufficiently fulfill the need of each of the respective service areas. Consequently, based upon this work, even with increased numbers of psychiatric beds provided with state hospital replacements, additional pent-up demand is looming that will quickly overwhelm these new hospitals once the current status quo is disrupted by the addition of more beds.

Of note, studies like the one referenced here are based on existing mental health care continua. By providing more effective and efficient outpatient and other services, the need for psychiatric beds can be decreased. To manage this potential problem we recommend, first, continue to add replacement state hospital beds as planned at ASH and other facilities around the state, AND develop other incentives to attract more private psychiatric companies into Texas and community solutions (e.g. tax- and land-credits, continuing the SB292 and HB13 programs, and improving the HCBS-AMH 1915(i) State Plan Amendment program), AND continue to build out the care continuum, starting with the recommendations in this report for the ASH Service Area. In the absence of these changes, the new replacement hospitals will be overwhelmed within a few years and the current investment will have not been optimized.

A second consideration is that Central Texas includes some of the fastest growing cities in the country and recent estimates predict that the ASH Service Area population will increase 13% by 2025 and 23% by 2030. Rates of psychiatric illnesses are predictable across any large population, so increases in the numbers of people needing psychiatric care will directly scale with increases in population. Consequently, within the ASH Service Area, demand for brain health services will increase steadily. Again, continuing to build out the care continuum is critical to stay ahead of this growth. To gain the maximum benefit from the planned hospital investments, over the next several biennia we recommend that the state continue to find ways

to increase the continuum of mental health care, especially prior to acute crises, legal entanglements and need for hospitalization. Expanding residential care and supported housing, as previously discussed, is perhaps most immediately relevant for optimizing the hospital investment. However, other services needing expansion include short-term crisis and residential programs, Assertive Community Treatment (ACT) and Forensic (ACT) programs, coordinated specialty care for first-episodes of psychosis, intensive outpatient and partial hospitalization program, drug and alcohol use treatment programs, community-based program to support individuals with intellectual and developmental disabilities, peer-support programs, and routine ambulatory care and prevention. Greater investment in programs earlier in the course of illness severity are generally less expensive per person and decrease the need for expensive, resource intensive programs later.

Finally, one of the perpetual beliefs about paying for mental health care is that it is 'too expensive'; inherent in this notion is the myth that if we do not pay for mental health care, there are no costs. As described in the "Financing" section of this report, mental health costs occur regardless of the systems we do or do not provide to address them. However, with well-designed care systems these costs can be quantified and the spend can be optimally designed to improve care as efficiently and effectively as possible. In the absence of such a system, costs simply distribute across functions: from sheriffs transporting people for hours in their squad cars to people sitting for days in emergency departments at the highest room rate possible to people languishing in a state hospital awaiting competency restoration. Even more costs accumulate from unmanaged mental illnesses that include lost days at work, problems in schools, and increased use of other medical services. These costs are difficult to understand and quantify, additionally they then become virtually impossible to manage in the absence of a designed system of care. More importantly, an established continuum of care is specifically designed to decrease the human suffering associated with the illnesses, whereas the absence of such a system haphazardly spends the money, but does little to optimize an individual's recovery. We believe that investment in new public psychiatric hospitals is a great next step in the evolution of how we care for Texas citizens. Doing so can lead Texas to the forefront of public mental health becoming a national leader in how best to advance brain health. We hope this report helps support the decisions necessary to make this happen.

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Definitions

46B	A person deemed incompetent to stand trial, as per Texas Code of Criminal Procedures
ACT	Assertive Community Treatment
ADC	Average Daily Census
ALOS	Average Length of Stay
AOT	Assisted Outpatient Treatment
ASH	Austin State Hospital
Brain Health	Commonly referred to as mental health and refers to the ability to remember, learn, play, concentrate and maintain a clear, active mind without disturbances beyond the control of the person.
CAPS	Child and Adolescent Psychiatric Services
CIT	Crisis Intervention Team
CMS	Center for Medicare and Medicaid Services
СРВ	Community Psychiatric Bed
DBT	Dialectic Behavioral Therapy
DSHS	Department of State Health Services
DSRIP	Delivery System Reform Incentive Payment
EBD	Emotional and behavioral disorders
Esprit de Corps	Morale
FACT	Forensic Assertive Community Treatment

FFT	Functional Family therapy
FQHC	Federally Qualified Health Center
FY	Fiscal year - September 1 - August 31
НВ	House Bill
HHSC	Health and Human Service Commission
IDD	Intellectual and Developmental Delays
IDDT	Integrated Dual Disorders Treatment
IICAPS	Intensive In-Home Child and Adolescent Psychiatric Services
IOP	Intensive Outpatient
IP	Inpatient
IPS	Individual Placement and Support
KEEP	Keeping Parents Supported and Training
LMHA	Local Mental Health Authority
MCOT	Mobile Crisis Outreach Team
MDFT	Multisystem Family Therapy
ММНРІ	Meadows Mental Health Policy Institute
MST	Multisystem Therapy
MSU	Maximum Security Unit
N.B.	Nota bene, meaning "note well." Used to emphasize an important point.
PNA	Psychiatric Nurse Assistant
PESC	Psychiatric Emergency Service Center

RFI	Request for Information
RTC	Residential Treatment Centers
SB	Senate Bill
SMI	Serious Mental Illness
SNF	Skilled Nursing Facility
SUD	Substance Use Disorder
Telehealth	Electronic communication system utilized for physical and mental health evaluations
TJJD	Texas Juvenile Justice Department
Turn Rate	Rate at which patients discharge from the hospital
Waitlist	The amount of time a patient has to wait for admission to the Austin State Hospital
YES	Youth Empowerment Services