AUSTIN STATE HOSPITAL
Brain Health System Redesign

November 2018
ASH Brain Health System Redesign

- Introductions
- Overview
- DMS Approach
- Current System
  - Service Area Waitlist
  - Private Hospital Capacity
- Forensic Pathways
  - Primary Forensic Pathway to ASH
  - Alternative Forensic Pathways
  - Pathway Costs and Savings
Together, we can make Central Texas a national leader in mental health.

Legislature Approves ASH Redesign

- Texas legislature has been investing more in mental health for over a decade.
- Cannon Report identifies major infrastructure problems in state hospitals.
- Senate Watson ("10-in-10") sets mental health as a priority for Central Texas.
- Legislature asks HHSC to partner with academic institutions to lead redesign (UTA).
- Legislature invested $15.5M toward that end.
- Dell Medical School asked major stakeholders from across the ASH service area to lead transformation through a steering committee.
- The steering committee recognizes that local control and local solutions are critical to success.
- Input and support from LMHAs, local government, law enforcement, legal system, peer support stakeholders, local not-for-profit and local private providers is needed to make the vision happen.
Steering Committee

Health Institution – Dell Medical School: Steve Strakowski, MD (Chair)
Health & Human Services Commission (HHSC): Tim Bray
Local Mental Health Authority (LMHA): David Evans (IC, Travis), Andrea Richardson (BTCS, Williamson+)
Healthcare District: Mike Geeslin (Central Health)
UT Design Institute for Health: Beto López
UT System, Health Affairs: David Lakey, MD
Texas Hospital Association: Sara González
Texas Organization of Rural & Community Hospitals: Scott Briner
Law Enforcement: Sheriff Dennis Wilson (Limestone)
Peer/Family Representative: Karen Ranus (NAMI Austin), Jason Johnson
Ex Officio: Jim Baker MD, Sandy Guzman, Octavio Martinez MD, Lisa Owens, Katherine Jones, Martin Harris
Planning Structure

STEERING COMMITTEE (117 Members)

SUB COMMITTEES
- Campus Master Plan Subcommittee
- Integrated Service Design Subcommittee
- Facilities Planning
- Policy & Legislation Coordination Subcommittee
- Communications Subcommittee
- Finance Subcommittee
- Academic Integration Subcommittee

WORK GROUPS
- LMHA Workgroup
- Community General Hospital Work Group
- Health Districts & FQHCs Work Group & Population Health
- Peer/Family Work Group
- Law Enforcement Work Group
- Subspecialty Work Group
- IT Integration Work Group

ENGAGEMENT GROUPS
- Legal Engagement Group
- Historic Preservation Engagement Group
Planning Principles

1. **Persons Receiving Care**: the right care at the right time in the right place
2. The best evidence-based models for care
3. A platform for brain healthcare innovation and delivery across the service area
4. Collaboration among academic, public and private partners
5. Eliminate over-reliance on jails, hospitals and EDs
6. Programs and facilities in which cost reflects needed level of care
7. Improve operational efficiencies in the ASH service area
Current System
## Austin State Hospital

<table>
<thead>
<tr>
<th>Adult Psychiatric Services (APS)</th>
<th>Specialty Adult Services</th>
<th>Child and Adolescent Psychiatric Services (CAPS)</th>
</tr>
</thead>
</table>

**FY17 ASH with 299 total bed capacity**
Operating at (252-FY18) / (263-FY19) due to budget constraints and staffing.
County-to-Hospital Patient Flows (Adults)

Flow of Patients to Hospital Beds
- • 1 to 147 Adults
- • 147 to 721 Adults
- • More than 721 Adults

Origin county centers are displayed in black and destination hospitals are displayed in red.
Current ASH Waitlist

- **Assumptions:**
  - Adult daily census 175-195
    - Full x 3 years.
    - About 70 people live there.
  - Adult civil waitlist 20
  - Adult forensic waitlist 75
  - **Annual turn rate = 3.7**
  - Assume static wait list - Untrue

<table>
<thead>
<tr>
<th>Number of Beds</th>
<th>Number of Months to Clear Waitlist</th>
</tr>
</thead>
<tbody>
<tr>
<td>215</td>
<td>12.1</td>
</tr>
<tr>
<td>230</td>
<td>5.5</td>
</tr>
<tr>
<td>240</td>
<td>3.6</td>
</tr>
<tr>
<td>250</td>
<td>2.4</td>
</tr>
<tr>
<td>290</td>
<td>0</td>
</tr>
</tbody>
</table>

Potential ASH Waitlist at >Turn

- **Assumptions**
  - Same but -
    - **Average turn rate = 6.4**
      - to be consistent with typical long-term acute care
      - & maximum effective CR duration

<table>
<thead>
<tr>
<th>Number of Beds</th>
<th>Number of Months to Clear Waitlist</th>
</tr>
</thead>
<tbody>
<tr>
<td>215</td>
<td>7.0</td>
</tr>
<tr>
<td>230</td>
<td>3.2</td>
</tr>
<tr>
<td>240</td>
<td>2.1</td>
</tr>
<tr>
<td>250</td>
<td>1.4</td>
</tr>
<tr>
<td>290</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Number of Beds</th>
<th>Number of Months to Clear Waitlist</th>
</tr>
</thead>
<tbody>
<tr>
<td>195</td>
<td>12.1</td>
</tr>
<tr>
<td>200</td>
<td>9.1</td>
</tr>
<tr>
<td>230</td>
<td>2.4</td>
</tr>
<tr>
<td>240</td>
<td>1.5</td>
</tr>
<tr>
<td>270</td>
<td>0</td>
</tr>
</tbody>
</table>
Increase Beds vs. Increase Bed Turn Rate Adults

![Graph showing the relationship between the number of beds and time to clear WL for different models and scenarios.]

- Increase Bed Model ADC 195
- Increase Bed Turn Rate Model ADC 195
- Increase Bed Model ADC 175
- Increase Bed Turn Rate Model ADC 175
Current Adult Needs: Alternative View

- Total Adult Population: 3,700,000
- Bed need based on 39 beds/100,000 population*
  - Adult Bed Need: 1443
- Current Available Adult Beds: 807
  - Private Beds: 612
  - State Beds: 195
- Additional Adult Beds Needed: 636
  - Assumes no change in processes.
  - This estimate is upper bound, but hints at unmet need outside the existing patient flow.

## Current Private Beds - Adults

<table>
<thead>
<tr>
<th>ASH Service Area Private Psych Beds</th>
<th>Bed Count*</th>
<th>Capacity*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austin Lakes Hospital</td>
<td>58</td>
<td>86%</td>
</tr>
<tr>
<td>Austin Oaks Hospital</td>
<td>60</td>
<td>70%</td>
</tr>
<tr>
<td>Cedar Crest Hospital</td>
<td>88</td>
<td>65%</td>
</tr>
<tr>
<td>Central Texas Medical Center</td>
<td>13</td>
<td>10%</td>
</tr>
<tr>
<td>Cross Creek Hospital</td>
<td>64</td>
<td>42%</td>
</tr>
<tr>
<td>Dell Children's – children only</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td>Georgetown Behavioral Healht Institute</td>
<td>58</td>
<td>33%</td>
</tr>
<tr>
<td>Devereux Texas Treatment Network – children only</td>
<td>NA</td>
<td>95%</td>
</tr>
<tr>
<td>Matagorda Regional Medical Center</td>
<td>12</td>
<td>83%</td>
</tr>
<tr>
<td>Metroplex Hospital</td>
<td>60</td>
<td>60%</td>
</tr>
<tr>
<td>Parkview Regional Hospital – geriatric only</td>
<td>NA</td>
<td>10%</td>
</tr>
<tr>
<td>Rock Prairie Behavioral Health</td>
<td>36</td>
<td>62%</td>
</tr>
<tr>
<td>Rock Springs</td>
<td>72</td>
<td>83%</td>
</tr>
<tr>
<td>Scott &amp; White Memorial Hospital</td>
<td>21</td>
<td>57%</td>
</tr>
<tr>
<td>Seton Shoal Creek</td>
<td>70</td>
<td></td>
</tr>
<tr>
<td>Texas NeuroRehab Center – adolescent/specialty only</td>
<td>NA</td>
<td>91%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>612</strong></td>
<td><strong>61%</strong></td>
</tr>
</tbody>
</table>

*2018 bed count and capacity based on single snapshot day, June 2018.
Adults

• ‘Typical’ adults occupy most ASH beds
  • Half the patients are forensic competency restorations
    • Many of these are hospitalized past the point of likely benefit.
    • There is virtually no short-term acute care provided – > to community
    • Long-term subacute care and residential care.
  • To move people off waitlists in <6 months, ASH will need 220-240 adult beds
    • If nothing else changes.
    • If length of stay reduced, bed demand can be reduced (will need time....).
• DRAFT Recommendation(s):
  • create a **240 Adult bed** capacity inpatient facility.
  • Design primarily flexible subacute extended care predominantly.
  • Consider creating some of these ‘beds’ as long-term residential care.
Moving toward a solution

• One Possible ASH (if forced to recommend today):
  • 24 Child & Adolescent (leave as is for now).
  • 40 Geriatric/Specialty (?relocate longer-stay patients).
  • 240 Adult (between 200 – 240)
  • 280 Adult TOTAL replacement beds, but we are costing at 240 beds.
    • Operating $ provide some limitations
    • We think additional solutions will make 240 adult beds workable.

• Without increasing the beds within the service area.
  • Private hospitals operating at 61%.
  • There are ~152 private beds available for use.

• Will need to accommodate ~20% population growth in ~5 years
  • ?More inpatient buildings or better processes (or both)?
  • Spend more in process improvement than even larger inpatient facilities.
    • Recommendations will be developed as part of final report
Southwest

Benefits
- Central location
- Incorporates & highlights potential historic buildings 519 & 736
- Residential edge along Lamar
- No impact on HHSC
- Maximizes land for future grey boxes

Challenges
- Impact on maintenance and motor pool areas
- Impact on potential historic buildings 519, 524, 551, 538, 736
Campus Development Potential High-Density Development Scenario

- +/-1,500,000 GSF Footprint Area
- +/-350,000 GSF Hospital Footprint
- +/-1,150,000 GSF Other Development Footprint
- +/-4,000 Parking Spaces
- +/-1.25 FAR**

**Assuming 3-to-4 Level Facilities/Does not include north parcel

**IMAGE PRESENTED DURING WORK SESSION 3**
Potential Gray Boxes

- Peer Services
- Substance Use Detox/Rehabilitation Services
- MCOT / CIT
- Specialty Care Services
  - Geriatric
  - Child & Adolescent Services
  - IDD Services
- Housing Services
  - Recovery Housing (SUD)
  - Permanent Supportive Housing
- 24 Hr Crisis Center (The Herman Center)
- Veteran Services
- All-in-One OP/Ambulatory Care Center
  - OP Clinic
  - Day/PHP
  - Research
  - Private Pay
  - Education Center
- Primary Care Clinic
- Clubhouse
- Care Management
- Workforce Training Center
- Family House
Primary Forensic Pathway
### Current Path to ASH for SAM (46B)

1. **Sam is Arrested & Booked for Assault of a Police Officer**
   - Service: Arrest & booking
   - Time: 1 days
   - Cost: $145

2. **Sam is assessed and determined a 46B**
   - Service: Assessment
   - Time: 7 days
   - Cost: $1,015

3. **Assessment Results (46B)**
   - Service: Assessment Results (46B)
   - Time: 10 days
   - Cost: $1,450

4. **Waitlist**
   - Service: Waitlist
   - Time: 102 days
   - Cost: $14,790

5. **IPCR**
   - Service: IPCR
   - Time: 72 days
   - Cost: $40,824

6. **Reassessed**
   - Service: Reassessed
   - Time: 20 days
   - Cost: $11,340

---

**Total Cost**: $69,564

**Draft**: final calculations pending
Alternative Forensic Pathways (Examples)
## Private Hospital Alternative Path for SAM (46B)

### Sam is Arrested Assault of a Police Office

- **Sam is identified as a patient at Pre-Booking**
  - **Sam is**
    - Released (no charge)
    - Admitted to Private IP facility for 10 days
  - Sam is enrolled at LMHA for IOP
  - Sam is able to live independently with assistance from LMHA

### Service Details

<table>
<thead>
<tr>
<th>Service</th>
<th>Time (Days)</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arrest</td>
<td>1</td>
<td>145</td>
</tr>
<tr>
<td>Identified as Patient</td>
<td>1</td>
<td>145</td>
</tr>
<tr>
<td>Private Hospital</td>
<td>10</td>
<td>5290</td>
</tr>
<tr>
<td>Enrolled in IOP</td>
<td>30</td>
<td>2250</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>$7,830</strong></td>
</tr>
</tbody>
</table>

### IP – ASH

- **Sam is admitted to ASH 3 for 30 days**
- **Sam is enrolled at LMHA for IOP**
- **Sam is able to live independently with assistance from LMHA**

### Service Details

<table>
<thead>
<tr>
<th>Service</th>
<th>Time (Days)</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arrest</td>
<td>1</td>
<td>145</td>
</tr>
<tr>
<td>Identified as Patient</td>
<td>1</td>
<td>145</td>
</tr>
<tr>
<td>Private Hospital</td>
<td>10</td>
<td>5290</td>
</tr>
<tr>
<td>IP – ASH</td>
<td>30</td>
<td>17010</td>
</tr>
<tr>
<td>LMHA IOP</td>
<td>30</td>
<td>2250</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>$24,840</strong></td>
</tr>
</tbody>
</table>

**Draft: final calculations pending**
<table>
<thead>
<tr>
<th>Service</th>
<th>Time (Days)</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>MCOT</td>
<td>1</td>
<td>145</td>
</tr>
<tr>
<td>ER</td>
<td>1</td>
<td>1265</td>
</tr>
<tr>
<td>Identified as LMHA Patient</td>
<td>-</td>
<td>0</td>
</tr>
<tr>
<td>Enrolled in FACT</td>
<td>365</td>
<td>16425</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$18,145</td>
</tr>
<tr>
<td>Service</td>
<td>Time (Days)</td>
<td>Cost</td>
</tr>
<tr>
<td>Arrest &amp; booking</td>
<td>1</td>
<td>145</td>
</tr>
<tr>
<td>Assessment</td>
<td>7</td>
<td>1015</td>
</tr>
<tr>
<td>Assessment Results (46B)</td>
<td>3</td>
<td>435</td>
</tr>
<tr>
<td>OPCR / IPCR</td>
<td>60</td>
<td>4,500 / 34,020</td>
</tr>
<tr>
<td>Therapeutic Housing</td>
<td>134</td>
<td>19,698</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$25,403 / 55,313</td>
</tr>
</tbody>
</table>

Draft: final calculations pending
## Pathway Costs

<table>
<thead>
<tr>
<th>Pathway</th>
<th>Total Cost/Patient</th>
<th>Annual Cost (all Patients)</th>
<th>Potential Annual Savings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current</td>
<td>$69,564</td>
<td>$26,851,704</td>
<td>-</td>
</tr>
<tr>
<td>Short stay/IOP</td>
<td>$7,830</td>
<td>$3,022,380</td>
<td>$23,829,324</td>
</tr>
<tr>
<td>Above+ extra sub-acute</td>
<td>$24,840</td>
<td>$9,588,240</td>
<td>$17,263,464</td>
</tr>
<tr>
<td>FACT</td>
<td>$18,145</td>
<td>$7,003,970</td>
<td>$19,847,734</td>
</tr>
<tr>
<td>Outpatient CR/housing</td>
<td>$25,403</td>
<td>$9,815,980</td>
<td>$17,035,724</td>
</tr>
<tr>
<td>Inpatient CR/housing</td>
<td>$55,313</td>
<td>$21,350,818</td>
<td>$5,500,886</td>
</tr>
</tbody>
</table>

**N.B.**

1. Alternative pathways require additional infrastructure ($), possible statute changes and changes in judges’ SOPs to implement successfully.
2. Alternative pathways will take time (years) to implement due to needed process and cultural changes.
3. These measures do NOT eliminate need for a replacement facility on ASH, but do provide opportunities to more effectively manage treatment and population growth over time.
4. These data are not yet finalized.
Discussion