Presentation Overview

I. The Problem
II. The Causes
III. The Impact
IV. The Solutions
   A. Case Study 1: Hospital Association Collaboration Solution
   B. Case Study 2: Internal Hospital Solution
   C. Case Study 3: Community Collaboration Solution
   D. Case Study 4: Payer Partnership Solution
V. The Future
VI. Summary
The Problem
The Problem

- Hospitals, nationally and in Tennessee, have been challenged by a shortage of psychiatric beds, access to services and gaps in service coordination.
- This has resulted in EDs overcrowded with psychiatric and substance use patients, and excessive holds for these patients.
- The problem is reaching crisis proportion, with recent studies revealing transfers taking as long as 2 to 10 days.
The Problem

Behavioral Health ED Utilization and Boarding is Reaching Epidemic Proportions

The National Perspective

One in eight, or nearly 12 million of the 95 million hospital emergency department visits, were for mental health disorders, substance use or both.

- About 41% led to a hospital stay, 2.5 times the rate of hospitalizations for other conditions.

- Behavioral Health visits to EDs are increasing at the rate of 9% a year, often due to budget reductions in public “safety net” community Behavioral Health providers.

- Behavioral Health services delivered through the ED require more than twice the time as the average medical protocol offered in the same setting.

Source: Agency for Healthcare Research & Quality Statistics 2010 (Reporting 2007 data)
The Problem

Behavioral Health ED Utilization and Boarding is Reaching Epidemic Proportions (cont’d)

- BH patients are likely to use the ED on multiple occasions and to have multiple hospitalizations, compared to patients without psychiatric disorders.

- Nearly half of EDs report operating at or above capacity, and 9 out of 10 hospitals report holding or “boarding” admitted patients in the ED while they await inpatient beds.

The Problem

Behavioral Health ED Utilization and Boarding is Reaching Epidemic Proportions (cont’d)

- Of these, 63.7% were related to mental health problems, 24.4% involved substance use disorders and 11.9% involved co-occurring psychiatric and substance use disorders.

- Among ED visits involving mental health and substance use disorders, 42.7% were for mood disorders, 26.1% for anxiety disorders and 22.9% for alcohol-related conditions.

The Problem

Behavioral Health ED Utilization and Boarding is Reaching Epidemic Proportions - Tennessee Data

Number of Patients by Number of Hours Waiting for a Bed at a Regional Mental Health Institute

Source: TDMHSAS quarterly report: RMHI Referrals Subject to Delayed Admissions
## The Problem

Behavioral Health ED Utilization and Boarding is Reaching Epidemic Proportions

### TABLE 1 - 2014 Behavioral Health Claim Volumes and Estimated Costs by Payer

<table>
<thead>
<tr>
<th>Diagnosis Group</th>
<th>Payer</th>
<th>ED Only</th>
<th>IP (Inc ED)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Visits</td>
<td>%</td>
<td>Estimated Cost</td>
</tr>
<tr>
<td><strong>Behavioral Health Other Dx</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blue Cross</td>
<td>61,630</td>
<td>9.14%</td>
<td>$70,185,849</td>
</tr>
<tr>
<td>Commercial</td>
<td>52,913</td>
<td>7.84%</td>
<td>$61,251,001</td>
</tr>
<tr>
<td>Medically Indigent/Self Pay</td>
<td>179,388</td>
<td>26.59%</td>
<td>$145,720,440</td>
</tr>
<tr>
<td>Medicare</td>
<td>157,225</td>
<td>23.31%</td>
<td>$194,469,531</td>
</tr>
<tr>
<td>Other</td>
<td>34,848</td>
<td>5.17%</td>
<td>$31,672,123</td>
</tr>
<tr>
<td>TennCare/Medicaid</td>
<td>188,631</td>
<td>27.96%</td>
<td>$147,772,113</td>
</tr>
<tr>
<td>All Payers</td>
<td>674,635</td>
<td></td>
<td>$651,071,057</td>
</tr>
<tr>
<td><strong>Behavioral Health Primary Dx</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blue Cross</td>
<td>8,235</td>
<td>10.38%</td>
<td>$5,482,401</td>
</tr>
<tr>
<td>Commercial</td>
<td>7,229</td>
<td>9.11%</td>
<td>$5,038,020</td>
</tr>
<tr>
<td>Medically Indigent/self Pay</td>
<td>22,157</td>
<td>27.94%</td>
<td>$14,697,659</td>
</tr>
<tr>
<td>Medicare</td>
<td>17,737</td>
<td>22.36%</td>
<td>$13,688,383</td>
</tr>
<tr>
<td>Other</td>
<td>3,537</td>
<td>4.46%</td>
<td>$2,497,429</td>
</tr>
<tr>
<td>TennCare/Medicaid</td>
<td>20,420</td>
<td>25.75%</td>
<td>$12,380,962</td>
</tr>
<tr>
<td>All Payers</td>
<td>79,315</td>
<td></td>
<td>$53,784,854</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>753,950</td>
<td></td>
<td>704,855,911</td>
</tr>
</tbody>
</table>

Source: Cleave, M. THA Claims Data, 2014
# The Problem

*Behavioral Health ED Utilization and Boarding is Reaching Epidemic Proportions*

## TABLE 2 - 2014 Behavioral Health Claim Volumes and Estimated Costs By Top 6 Other Dx

<table>
<thead>
<tr>
<th>Diagnosis Groups</th>
<th>Behavioral Health Diagnosis in the Other Diagnosis fields</th>
<th>Visits</th>
<th>%</th>
<th>Estimated Cost</th>
<th>%</th>
<th>Admissions</th>
<th>%</th>
<th>Estimated Cost</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top 6 - Behavioral Health Other Dx</td>
<td><strong>TOBACCO USE DISORDER (BEGIN 1994)</strong></td>
<td>416,293</td>
<td>64.06%</td>
<td>$335,649,273</td>
<td>54.40%</td>
<td>86,300</td>
<td>33.13%</td>
<td>$892,966,030</td>
<td>34.95%</td>
</tr>
<tr>
<td></td>
<td><strong>ANXIETY STATE NOS</strong></td>
<td>75,711</td>
<td>11.65%</td>
<td>$85,916,922</td>
<td>13.92%</td>
<td>41,927</td>
<td>16.09%</td>
<td>$405,803,293</td>
<td>15.88%</td>
</tr>
<tr>
<td></td>
<td><strong>DEPRESSIVE DISORDER NEC</strong></td>
<td>51,086</td>
<td>7.86%</td>
<td>$62,066,642</td>
<td>10.06%</td>
<td>47,064</td>
<td>18.07%</td>
<td>$472,393,310</td>
<td>18.49%</td>
</tr>
<tr>
<td></td>
<td><strong>Demen NOS W/O Behv Dstrb (BEGIN 2011)</strong></td>
<td>13,504</td>
<td>2.08%</td>
<td>$19,323,108</td>
<td>3.13%</td>
<td>25,873</td>
<td>9.93%</td>
<td>$197,363,153</td>
<td>7.72%</td>
</tr>
<tr>
<td></td>
<td><strong>Manic-Depressive Nos</strong></td>
<td>21,386</td>
<td>3.29%</td>
<td>$21,456,165</td>
<td>3.48%</td>
<td>8,788</td>
<td>3.37%</td>
<td>$77,965,406</td>
<td>3.05%</td>
</tr>
<tr>
<td></td>
<td><strong>Alcohol Abuse-Unspec</strong></td>
<td>11,716</td>
<td>1.80%</td>
<td>$18,683,215</td>
<td>3.03%</td>
<td>4,645</td>
<td>1.78%</td>
<td>$46,200,673</td>
<td>1.81%</td>
</tr>
<tr>
<td><strong>Top 6 SubTotal</strong></td>
<td></td>
<td>589,696</td>
<td></td>
<td>543,095,325</td>
<td></td>
<td>214,597</td>
<td></td>
<td>2,555,062,934</td>
<td></td>
</tr>
<tr>
<td><strong>Grand Total (ALL Other Dx Groups)</strong></td>
<td></td>
<td>649,886</td>
<td></td>
<td>617,056,555</td>
<td></td>
<td>260,509</td>
<td></td>
<td>2,555,062,934</td>
<td></td>
</tr>
</tbody>
</table>

Source: Cleaver, M. THA Claims Data, 2014
The Problem
Behavioral Health ED Utilization and Boarding is Reaching Epidemic Proportions (cont’d)

TABLE 3 - 2014 Behavioral Health Claim Volumes and Estimated Costs by Top 9 Primary Dx

<table>
<thead>
<tr>
<th>Diagnosis Group</th>
<th>Diagnosis</th>
<th>ED Only</th>
<th>IP (Inc ED)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Visits</td>
<td>%</td>
<td>Estimated Cost</td>
</tr>
<tr>
<td>Top 9 - Behavioral Health Primary Dx</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ANXIETY STATE NOS</td>
<td>16,464</td>
<td>25%</td>
<td>$7,990,698</td>
</tr>
<tr>
<td>DEPRESSIVE DISORDER NEC</td>
<td>8,472</td>
<td>13%</td>
<td>$5,096,269</td>
</tr>
<tr>
<td>ALCOHOL ABUSE-UNSPEC</td>
<td>8,267</td>
<td>13%</td>
<td>$6,679,514</td>
</tr>
<tr>
<td>PSYCHOSIS NOS</td>
<td>4,633</td>
<td>7.16%</td>
<td>$4,558,245</td>
</tr>
<tr>
<td>RECUR DEPR PSYCH-SEVERE</td>
<td>34</td>
<td>0.05%</td>
<td>$61,773</td>
</tr>
<tr>
<td>SCHIZOAFFECTIVE-UNSPEC</td>
<td>224</td>
<td>0.35%</td>
<td>$152,182</td>
</tr>
<tr>
<td>AFFECTIVE PSYCHOSIS NOS</td>
<td>211</td>
<td>0.33%</td>
<td>$139,205</td>
</tr>
<tr>
<td>DEMEN NOS W BEHAV DISTRB (BEGIN 2011)</td>
<td>282</td>
<td>0%</td>
<td>$1,526,511</td>
</tr>
<tr>
<td>REC DEPR PSYCH-PSYCHOTIC</td>
<td>12</td>
<td>0%</td>
<td>$11,070</td>
</tr>
<tr>
<td><strong>Top 9 Subtotal</strong></td>
<td>38,599</td>
<td></td>
<td>26,215,467</td>
</tr>
<tr>
<td><strong>Grand Total (ALL Diagnoses)</strong></td>
<td>64,685</td>
<td></td>
<td>44,512,306</td>
</tr>
</tbody>
</table>

Source: Cleave, M. THA Claims Data, 2014

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The Problem

Behavioral Health ED Utilization and Boarding is Reaching Epidemic Proportions (cont’d)

**TABLE 4 - 2014 Behavioral Health Diagnoses - Uninsured Patients Only Listed in Any Diagnostic Field**

<table>
<thead>
<tr>
<th>Claim Type</th>
<th>Behavioral Health Diagnosis Listed in any Diagnosis Field</th>
<th>Payer Type</th>
<th>Number of Claims</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emergency Department</td>
<td>Nonpsychotic Mental Disorder</td>
<td>Self Pay</td>
<td>178,309</td>
</tr>
<tr>
<td></td>
<td>Nonpsychotic Mental Disorder</td>
<td>Medically Indigent, Free Care</td>
<td>7,734</td>
</tr>
<tr>
<td></td>
<td>Psychoses</td>
<td>Self Pay</td>
<td>14,484</td>
</tr>
<tr>
<td></td>
<td>Psychoses</td>
<td>Medically Indigent, Free Care</td>
<td>1,018</td>
</tr>
<tr>
<td>Inpatient</td>
<td>Nonpsychotic Mental Disorder</td>
<td>Self Pay</td>
<td>22,961</td>
</tr>
<tr>
<td></td>
<td>Nonpsychotic Mental Disorder</td>
<td>Medically Indigent, Free Care</td>
<td>1,630</td>
</tr>
<tr>
<td></td>
<td>Psychoses</td>
<td>Self Pay</td>
<td>5,245</td>
</tr>
<tr>
<td></td>
<td>Psychoses</td>
<td>Medically Indigent, Free Care</td>
<td>1,586</td>
</tr>
</tbody>
</table>

Source: Cleaver, M. THA Claims Data, 2014
The Problem

The Opiate Epidemic in TN and Nationally

National Data Indicates that the Following Groups are at Especially High Risk for Prescription Drug Abuse:

- Men ages 25 to 54 have the highest numbers of prescription drug overdoses and are about two times more likely to die from an overdose than women.
- In the United States, about 18 women die each day from prescription painkiller overdoses. For every one woman who dies, 30 more visit an emergency department for painkiller misuse or abuse.
The Problem
The Opiate Epidemic in TN and Nationally (cont’d)

National Data Indicates that the Following Groups are at Especially High Risk for Prescription Drug Abuse:
(cont’d)

- While rates are high in both urban and rural communities, people in rural counties are about twice as likely to overdose on prescription drugs as people in big cities.
- Nearly one in 12 high school seniors reported nonmedical use of Vicodin and one in 20 reported nonmedical use of OxyContin.
- One in eight active duty military personnel is a current user of illicit drugs or is misusing prescription drugs.
The Problem

The Opiate Epidemic in TN and Nationally (cont’d)

- By the CDC’s estimate, there are at least 1,074,813 Tennesseans, or about 1 in 6, misusing or abusing opioids or in treatment.

- In 2012, prescription opioids surpassed alcohol as the primary substance of abuse.*

- Tennesseans were more than three times more likely to identify prescription opioids as their primary substance of abuse than the national average.


*for people whose treatment was funded through the Tennessee Department of Mental Health and Substance Abuse Services.
The Problem

**Impact of Behavioral Health Co-Morbidities on Medicaid Costs**

- Asthma and/or COPD: $8,000
- Congestive Heart Failure: $9,488
- Coronary Heart Disease: $8,788
- Diabetes: $9,498
- Hypertension: $15,691

N=1,725

Source: Richard Louis, Consultant
Co-Occurring Disorders Exacerbate Mental Health Problems

**Depression is Commonly Present in Patients with Coronary Heart Disease (CHD)**

- Depression is $\approx 3$ times more common in patients after an acute myocardial infarction (AMI) than in the general community.
- Depression is also independently associated with increased cardiovascular morbidity and mortality.

The Problem

Co-Occurring Disorders Exacerbate Mental Health Problems (cont’d)

Smoking (both Marijuana and Tobacco) are Highly Associated with Increased Risk of COPD.

- Smokers who reported using both marijuana and tobacco were almost 2.5 times more likely than nonsmokers to have respiratory symptoms.
- This same group was nearly 3 times more likely than nonsmokers to have COPD as defined by Spirometric testing.

Source: Wan C. Tan, MB, Christine Lo, BSc, Alimee Jong, BSc, Li Xing, MSc, Mark J. FitzGerald, MB, William M. Vollmer, PhD, Sonia A. Buist, MD PhD, and Don D. Sin, MD PhD, for the Vancouver Burden of Obstructive Lung Disease (BOLD) Research Group. Marijuana and chronic obstructive lung disease: a population-based study.
The Problem

Co-Occurring Disorders Exacerbate Mental Health Problems (cont’d)

- Persons with major mental disorders lose 25 to 30 years of potential life in comparison with the general population due to premature cardiovascular mortality.

The Causes

According to the AHA, the Primary Reasons for Overcrowding in EDs by Patients with Mental Health and/or Substance Use are as Follows:

- Years of funding cuts to public mental health organizations
- The resulting loss of thousands of inpatient beds at state and county facilities
- Increased demand for services
- Barriers to access
The Causes

The Need is Increasing

- The need for Behavioral Health services at all levels, long and short-term, has grown dramatically over the last several years as a result of:
  - Increased stress and illness in the community due to economic conditions and aging Baby Boomers
  - Increased acuity and complexity of patients
  - Reduction of state hospital beds without sufficient, timely and comprehensive service replacement
  - Shutting down of community-based resources due to budget cuts
  - Increasing suicide rates
The Causes

Rising Suicide Rates

- Rates of suicide deaths are rising in the U.S. The rates jumped 24% from 1999 to 2014, from 10.5 to 13 per 100,000 people, according to an April 2016 report from the Centers for Disease Control and Prevention.

Source: Peterson, Andrea, “Researchers Study New Ways to Treat Suicide Risk” The Wall Street Journal, 2016 June 21 D4
The Causes

Rising Suicide Rates in Tennessee

- In any given day, three people in Tennessee die by suicide.
- As of 2014, suicide is the third-leading cause of death for young people (ages 10-19) in Tennessee, with one person in this age group lost to suicide every week.
- One person between the ages of 10-24 commits suicide every four days, and every day we lose at least one person over the age of 45 – midlife and older adults are actually at higher risk.

Source: www.tspn.org/sost
The Causes

Rising Suicide Rates in Tennessee

- Tennessee has the highest suicide rates in the U.S.
- The Volunteer State has a rate of 13.7 suicides per 100,000 people.

These figures were obtained from the Web-based Injury Statistics Query and Reporting System (WISQARS), an interactive database system maintained by the Centers for Disease Control and Prevention (CDC). WISQARS provide customized reports of injury-related data. These figures may differ from those in other TSPN rate charts, which were created using data from the Tennessee Department of Health.

What do the numbers mean?
The above chart gives the raw number of reported suicides for each year, while the other chart breaks the numbers down using rate per 100,000—a common statistical measure—to demonstrate relative frequency.

The Causes

*Rising Suicide Rates in Tennessee*

- According to the Teen Suicide Prevention Network, suicide remains the second-leading cause of death for children between the ages 10 and 19.

Sources: [www.tspn.org/sost](http://www.tspn.org/sost) | Teen Suicide Prevention Network
The Causes
Top Reasons Causing High Volume/Back-Up in EDs

- The ED is the first and last stop for many people due to:
  - Lack of insurance
  - Nowhere else to go (no housing)
  - Lack of community resources
  - Need for immediate medication
  - Co-morbid medical or psychiatric complications

- There are shortages of substance use treatment centers across the continuum of care (outpatient through inpatient, including community support services.)

- Community mental health services, outpatient services, and some hospital admissions departments do not accept patients in evenings or on weekends, forcing people to seek help in the ED and wait overnight for a referral.

Source: JDI New Jersey Acute System of Care Study- July 2010
The Causes

Top Reasons Causing High Volume/Back-Up in EDs (cont’d)

- Hard-to-place patients often reside in the ED for days or weeks until a bed is available.

- Well-meaning psychiatric patient protection laws have resulted in a bureaucratic and long screening process for involuntary patients.

- Family members are unaware of alternative sources of Behavioral Health care and/or are reluctant to seek help elsewhere due to stigma.

- Jails have hundreds of inmates waiting 12 hours or longer for placement, which has created safety, manpower and legal issues.

Source: JDI New Jersey Acute System of Care Study - July 2010
The Causes

Top Reasons Causing High Volume/Back-Up in EDs (cont’d)

Study of Psychiatric ED Patients Revealed:

- 58% did not follow up with aftercare recommendations and/or did not attend their scheduled or rescheduled initial outpatient appointment after discharge.
- Half the patients with depressed mood in one study wanted an intervention during the emergency department visit, and 25% wanted a timely referral to a mental health provider.

The Causes

Top Reasons Causing High Volume/Back-Up in EDs (cont’d)

**Barriers to Timely Access:**

- Having to wait several days/weeks for a primary care/psychiatric appointment, inconvenient office hours and physician workforce shortages.

- Difficulty in finding care on nights, weekends or holidays without going to hospital EDs.

The Impact
The Impact

Who Is Paying for Behavioral Health ED Treatment?

National Behavioral Health Billings Statistics

<table>
<thead>
<tr>
<th>Payer</th>
<th>% of BH ED Pop</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medicare</td>
<td>30.1%</td>
</tr>
<tr>
<td>Private Insurance</td>
<td>25.7%</td>
</tr>
<tr>
<td>Uninsured</td>
<td>20.6%</td>
</tr>
<tr>
<td>Medicaid</td>
<td>19.8%</td>
</tr>
</tbody>
</table>

- Half of all payments are made by Medicare and Medicaid.
- Hospitals are paying a substantial portion in uninsured care (one-fifth).
- Decreasing Behavioral Health utilization would present significant savings to all payers.

Source: JDi New Jersey Acute System of Care Study- July 2010
The Impact

Negative Impact of Behavioral Health Patient
Overutilization of ED

- 60% of ED physicians polled believe the increase in ED visits by individuals with mental illnesses is causing:
  - Longer wait times
  - Increased patient frustration
  - Diminished capacity of hospital staff

The Solutions
The New Jersey Study Examined the Epidemic Numbers of Psychiatric and Substance Use (SU) Patients Seeking Treatment in Hospital Emergency Departments.

- JDi conducted a four-phase approach:
  
  **Phase 1:** Interviews with a cross-section of acute and inpatient psychiatric care providers across the state.

  **Phase 2:** Interviews with a sampling of key advocacy organizations, community-based providers, government representatives and other leaders instrumental to the Behavioral Health delivery system.

  **Phase 3:** Review of available data on the financial and community impact of emergency department over-utilization and potential cost saving opportunities.

  **Phase 4:** Identification of solutions, including examples of Best Practices on a local and national level.
The Solutions

Case Study 1: Hospital Association Collaboration

The following synopsizes the fundamental issues expressed by the majority of those interviewed:

- Most emergency departments are designed for physical versus Behavioral Health (mental health and substance use) emergencies.
- Behavioral Health patients held in emergency departments ("EDs") for inordinate periods of time actually get worse as a result of this experience.
- This phenomenon effects the entire community, not just those in psychiatric or substance use crisis.
- Emergency department physicians and staff are overwhelmed and frustrated by this situation.

The solutions cannot be piecemeal.

Rather, they must address the entire system from a new paradigm.

Source: JDI New Jersey Acute System of Care Study– July 2010
High ED Utilizers are Specific and Identifiable Populations

- **Elderly, especially nursing home residents.** Residents who act out are brought to crisis and often get caught in the mental health system for the first time. They either continue to cycle through repeatedly or are not accepted back to their places of residence.

- **Developmentally Disabled.** This population is also inappropriately brought to the ED due to various behavioral disturbances and shortages of other appropriate resources.

- **Forensic Patients.** Nationally, more than half of all prison and jail inmates, including 50% of state prisoners, were found to have a mental health problem.

- **Children.** The New Jersey “Zero Tolerance” Law, which was set up after Columbine, has resulted in many schools establishing policies which require children be sent to EDs for screening after any threatening comment or action, no matter the age or level of threat. Consequently, studies have shown that it is estimated that 80% of children seen in New Jersey emergency department crisis centers are released back into the community.
“The Mental Health System is Broken”

- Services are disjointed and not coordinated so that hours, referral criteria and procedures do not line up from one treatment facility to the next.
- Old legislation gets in the way of meeting the needs of the growing volume of complex and dually-diagnosed patients in crisis.
- Lower reimbursement to hospitals for providing inpatient psychiatric versus other types of medical services creates disincentives for BH service provision.

Source: JDI New Jersey Acute System of Care Study- July 2010
The Solutions
Case Study 1: Hospital Association Collaboration (cont’d)

*Where is it Broken and How can it be Fixed?*

- High risk, high ED utilizers need individualized solutions. For example, chronically mentally ill (“CMI”) patients discharged from state hospitals need psychosocial solutions in addition to medical care; including:
  - Housing
  - Social supports - family, friends, mentors, coaches
  - 24/7 counseling and support resources
  - Help with daily living - food prep, money management, job support, etc.
  - Accessible outpatient, medications management, mental and medical care

*The solution requires an integrated clinical and social model versus a medical model.*

Source: JDI New Jersey Acute System of Care Study- July 2010
“What is Integrated Care Delivery?

Integration is the communication, collaboration and coordination of care across treatment environments. The goals of integrated care are to:

— Respond to the complexity of each person the system serves
— Enable each person to achieve and sustain improved health and well-being
— Deliver care efficiently, effectively and reliably
— Organize a team of diverse professionals, volunteers and family members
— Deliver services in the community with a “medical home” (centralized point of data collection, treatment planning and care management)

Source: JDI New Jersey Acute System of Care Study– July 2010
The Solutions

Case Study 2: Internal Hospital Solution

Behavioral Health and Medical Integration Implemented in the ED

- Psych technicians in the ED
- Social Workers/Discharge Planners trained in Behavioral Health referral coordination
- Training for all ED staff around recognizing and responding appropriately to behavioral and SU clients
The Solutions

Case Study 2: Internal Hospital Solution

Behavioral Health and Medical Integration Implemented in the ED (cont’d)

✓ Train staff on how to de-escalate agitated patients
✓ Recognize warning signs
✓ Intervene versus ignore
✓ Avoid “making matters worse”
✓ Know when things are “getting out of hand” and when to get extra help

Reduce accidents, risk and liability
Governor-Appointed Task Force to Address Childhood Depression in Mississippi

- Three gulf counties in Mississippi had three times the national average of childhood depression post-Katrina.

- JDi conducted a needs assessment to define solutions for addressing childhood depression in these three hard-hit counties.

- Formed a community collaborative of local medical health system with psychiatric services, local community mental health centers (CMHCs), Boys and Girls Clubs, United Way, schools and faith-based community representatives.
The Solutions
Case Study 3: Community Collaboration Solution (cont’d)

Four Key Findings and Actions

1. **Shortage of mental health professionals in state** –  
   **Solution:** Hospital system partnered with local universities to increase social work training and internship programs.

2. **Lack of community knowledge and professional knowledge of available mental health resources** –  
   **Solution:** Created community-wide website which indexed mental health providers by location, free mental health resources and mental health educations and support events.
Four Key Findings and Actions (cont’d)

3. **Low-income parents of depressed children did not have access or transportation to mental health resources** –
   **Solution:** Hospital and university placed trained social work interns in primary care clinics located in troubled school districts to provide mental health services.

4. **Lack of healthy afterschool activities for children of working parents** –
   **Solution:** Collaboration between Boys and Girls Clubs and United Way to create after-school education and fun programs. (Recommended not implemented.)
The Solutions

Case Study 4: Payer Partnership Solution (cont’d)

Targeted High Utilizer Elderly Population

Overall, nearly 40% of clients had 2 or more medical diagnoses and 15% had three or more medical diagnoses

Top 5 Medical Diagnoses:
1. Diabetes
2. High Blood Pressure
3. Obesity
4. Asthma
5. High Cholesterol

% of Clients with
- 1 Medical Diagnosis (32%)
- 2 Medical Diagnoses (24%)
- 3 Medical Diagnoses (8%)
- 4+ Medical Diagnoses (7%)
- No Condition Reported (29%)
The Solutions

Case Study 4: Payer Partnership Solution (cont’d)

Targeted High Utilizer Elderly Population (cont’d)

Results Pre and Post Program Implementation

1 Year Prior to Enrollment

After Enrollment

Clients enrolled as of June 30, 2012
The Solutions

Case Study 4: Payer Partnership Solution (cont’d)

Targeted High Utilizer Elderly Population (cont’d)

Results Pre and Post Program Implementation

Psych Hospital Days 1 Year Prior to Enrollment

Psych Hospital Days Since Enrollment

91% Decrease

602

52
Outcomes

- Demonstrated clinical and fiscal improvements in all areas of treatment:
  - 83% DECREASE in days hospitalized (acute care hospital)
  - 72% DECREASE in hospital admissions (psychiatric hospital)
  - 90% DECREASE in incarcerations
  - 85% DECREASE in homelessness
  - 79% INCREASE in education engagement
  - 314% INCREASE in employment engagement
The Future
The Future

**Technology is Shifting the Delivery of Care**

- Use of telemedicine – especially in rural areas
- App-based – SU treatment with built-in monitors
- Testing of 30,000 risk factors to predict imminent suicide
  - Brain scans, blood draw to identify biomarkers related to key risk factors
- Use of genomic testing for more accurate subscribing of medication
The Future

Primary Care Transformation:

Tennessee Health Links for TennCare members with significant Behavioral Health needs

- Objectives of the Tennessee Health Link program
  App-based – SU treatment with built-in monitors
    - **Comprehensive care management** (e.g., creating care coordination and treatment plans)
    - **Care coordination** (e.g., proactive outreach and follow up with primary care and Behavioral Health providers)
    - **Health promotion** (e.g., educating the patient and his/her family on independent living skills)
    - **Transitional care** (e.g., participating in the development of discharge plans)
    - **Patient and family support** (e.g., supporting adherence to behavioral and physical health treatment)
    - **Referral to social supports** (e.g., facilitating access to community supports including scheduling and follow through)

Source: Health Care Innovation Initiative; a Division of Tennessee Health Care Finance & Administration, pg 2.
The Future

“Virtual Medical Home”

Location: The Camden Coalition of Healthcare Providers, a community-based mobile service, was started in the City of Camden NJ in 2002.

Purpose: To provide a “virtual medical home” comprised of a full array of outpatient medical and social support services. It is designed to help chronically ill high ED utilizers reduce unnecessary hospitalizations and ED visits, as well as to provide needed, appropriate, continuous and cost-efficient care in the method and place most comfortable for this population.

Philosophy: The most fragile populations are typically uninsured, illiterate, homeless and suffering from co-morbid medical and mental health issues and, therefore, tend to be highest ED utilizers. Rather than treating them in EDs, these clients are best served using a psychosocial, community-based model where a collaboration of community providers deliver face-to-face care and support, to collectively and creatively meet the needs of these individuals.

Program Model: Program success relies on creating a community task force or collaboration which includes representatives of all facets of the medical and psychiatric treatment and support continuum. Delivery system members form a team with the same objectives: to individualize and improve care delivery, monitor progress, and overcome treatment challenges collaboratively and creatively.

Benchmarks: A second objective of this program is to make better use of existing resources through coordination, collaboration, communication, and follow-up.
“Virtual Medical Home” (cont’d)

The Population

Collectively, these 35 high service utilizers accounted for 890 ED visits and 601 inpatient visits between 2002 and mid-2008, generating a total of $31.1 million in charges and $2.7 million in receipts (an 8.5% collection rate).

Key Components:

- Includes a multi-faceted outreach team (nurse, nurse practitioner, MD, therapist/social worker, and volunteers).
- Uses an electronic medical record system to coordinate care and monitor progress.
- Works in coordination with Federally Qualified Health Centers, PACT teams, local hospitals, insurers, homeless shelters, community agencies and volunteer groups.
- Built using alternative funding. In addition to some grant funding, the primary funding sources are Our Lady of Lourdes Medical Center, Virtua Health Systems, and Cooper University Hospital.
- Employs intensive care coordination and case management to link resources.

Source: JDI New Jersey Acute System of Care Study- July 2010
The Future

“Virtual Medical Home” (cont’d)

Results

As of October 2008, the Camden Care Management Project examined cost savings from 35 patients.

Charges Per Month of All Project Patients

<table>
<thead>
<tr>
<th>Before</th>
<th>After</th>
<th>Absolute Change</th>
<th>% Change</th>
</tr>
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<tbody>
<tr>
<td>$1,218,009</td>
<td>$531,203</td>
<td>-$686,807</td>
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</table>

Percent Reimbursement per Month of All Project Patients

<table>
<thead>
<tr>
<th>Before</th>
<th>After</th>
<th>Absolute Change</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.9%</td>
<td>10.5%</td>
<td>3.6%</td>
<td>51.9%</td>
</tr>
</tbody>
</table>

Source: JDI New Jersey Acute System of Care Study– July 2010
Summary:
Summary

High Risk, High ED Utilizers Need Comprehensive, Integrated and Individualized Solutions

- Indigent/TennCare patients need psychosocial solutions in addition to medical care, including:
  - Housing
  - Social supports - family, friends, mentors, coaches
  - 24/7 counseling and support resources
  - Help with daily living - food prep, money management, job support, etc.
  - Accessible outpatient, medications management, mental and medical care
Summary

“Virtual Medical Home”

After participating in the program, participants generated less than half the charges accrued in the previous 5 years. As well, the reimbursement rate increased over 50%.

Source: JDI New Jersey Acute System of Care Study- July 2010
Summary

The Key to Reducing ED Utilization by Behavioral Health Patients depends on an Integrated and Comprehensive Approach, including:

- Excellent Data and Targeted Solutions
- Community-Specific Initiatives
- Improved Community Resources and Coordination of Care
- Cross-training of ED Staff
- Competent, Compassionate Care-Providers
- Success is in the Details
- Building True Cooperation and Collaboration
- Start “at Home”