Addressing Disparities through TCOM Strategies

Betty Walton & Wendy Harrold
12th TCOM Conference
Princeton, NJ
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Workshop Objectives

• Behavioral Health Disparities
• Theories of Change
• TCOM Activities
• New Outcome Performance Measure
• Developing Outcome Management Reports
• Monitoring Disparities
• Analyzing Results
Health Disparities
Health Disparity....

“particular type of health difference that is closely linked with social, economic, and/or environmental disadvantage. Health disparities adversely affect groups of people who have systematically experienced greater obstacles to health based on their racial or ethnic group; religion; socioeconomic status; gender; age; mental health; cognitive, sensory, or physical disability; sexual orientation or gender identity; geographic location; or other characteristics historically linked” (Health People, 2000)
Health Disparities

“... preventable differences in the burden of disease, injury, violence, or opportunities to achieve optimal health that are experienced by socially disadvantaged populations (CDC, 2008).

“Populations can be defined by factors such as race or ethnicity, gender, education or income, disability, geographic location (e.g., rural or urban), or sexual orientation.

Health disparities are inequitable and are directly related to the historical and current unequal distribution of social, political, economic, and environmental resources.”

“Health disparities result from multiple factors, including

• Poverty
• Environmental threats
• Inadequate access to health care
• Individual and behavioral factors
• Educational inequalities”
Behavioral Health Disparities

Significant behavioral health disparities exist in diverse communities across the US, including:

- Racial & ethnic groups
- LGBTQ populations
- People with disabilities
- Transition-age youth

Higher levels:
- of mental health and substance use disorders
- of suicide
- poverty
- domestic violence
- childhood & historical trauma
- involvement in foster care & juvenile justice

(SAMHSA, 2016)
Behavioral Health Disparities

Issues

• Lack of access to health care
• Lower or disrupted service use
• Poorer behavioral health outcomes

Related to

• Need for a diverse health care workforce
• Need for culturally & linguistically competent care & programs
• Lack of information

(SAMHSA, 2016)
IN Behavioral Health Workforce Capacity

5181 Licensed Behavioral Health Professionals

<table>
<thead>
<tr>
<th></th>
<th>Percent</th>
<th>Mean Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychiatrists</td>
<td>7%</td>
<td>55.0</td>
</tr>
<tr>
<td>APN</td>
<td>1%</td>
<td></td>
</tr>
<tr>
<td>Psychologists</td>
<td>21%</td>
<td>51.2</td>
</tr>
<tr>
<td>LMHP</td>
<td>71%</td>
<td>48.9</td>
</tr>
</tbody>
</table>

**Stagnant Capacity**

- demand for mental health services has and will continue to increase
- trends in mental health workforce supply have been stagnant over the past decade
- although a net increase in the number of active licenses among social workers, clinical social workers, marriage and family therapists, and mental health counselors from 2004 to 2012, the total number of these professionals practicing remained relatively constant.

(Maxey, 2014)
• 2014 Designated MHPSA (43 counties without practicing psychiatrists)

• Other counties could be designated MHPSA based on low-income and Medicaid eligible populations.

• Workforce Diversity. The demographics of the workforce do not reflect Indiana’s population. Indiana’s mental health workforce is primarily comprised of non-Hispanic (98%) and white (92%) professionals.

<table>
<thead>
<tr>
<th></th>
<th>Ratio of MHP: Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>All People</td>
<td>1: 500</td>
</tr>
<tr>
<td>White</td>
<td>1: 1155</td>
</tr>
<tr>
<td>African American</td>
<td>1: 3002</td>
</tr>
<tr>
<td>Asian/Pacific Islander</td>
<td>1: 919</td>
</tr>
<tr>
<td>Hispanic/Latino</td>
<td>1: 3783</td>
</tr>
</tbody>
</table>

(Maxey, 2014)
In the NEWS......

Access to BH Services:

Despite similar rates and severity of mental health and substance use disorders among minority youth, black and Latino children made 37-49% fewer visits to psychiatrists, respectively, than white children. Similarly, black and Latino children made 47% and 29% fewer visits to any MH professionals (Rutz,2016).

2006-2012 data
International Journal of Health Services
**Primary Household Language**

<table>
<thead>
<tr>
<th>Primary Household Language</th>
<th>Medicaid Member Children</th>
<th>% of All Medicaid Children</th>
<th>Medicaid MH Children</th>
<th>% of All MH Children</th>
<th>MH % of Medicaid Members</th>
<th>Avg. Annual MH Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>ENGLISH</td>
<td>664,006</td>
<td>89.77%</td>
<td>122,899</td>
<td>91.08%</td>
<td>18.5%</td>
</tr>
<tr>
<td>2</td>
<td>NA*</td>
<td>32,063</td>
<td>4.33%</td>
<td>9,551</td>
<td>7.08%</td>
<td>29.8%</td>
</tr>
<tr>
<td>3</td>
<td>SPANISH</td>
<td>35,991</td>
<td>4.87%</td>
<td>2,287</td>
<td>1.69%</td>
<td>6.4%</td>
</tr>
<tr>
<td>4</td>
<td>BURMESE</td>
<td>6,375</td>
<td>0.86%</td>
<td>141</td>
<td>0.10%</td>
<td>2.2%</td>
</tr>
<tr>
<td>5</td>
<td>ARABIC</td>
<td>683</td>
<td>0.09%</td>
<td>42</td>
<td>0.03%</td>
<td>6.1%</td>
</tr>
<tr>
<td>6</td>
<td>CHINESE</td>
<td>332</td>
<td>0.04%</td>
<td>7</td>
<td>0.01%</td>
<td>2.1%</td>
</tr>
<tr>
<td>7</td>
<td>SOMALIAN</td>
<td>83</td>
<td>0.01%</td>
<td>7</td>
<td>0.01%</td>
<td>8.4%</td>
</tr>
<tr>
<td>8</td>
<td>OTHER</td>
<td>71</td>
<td>0.01%</td>
<td>6</td>
<td>0.00%</td>
<td>8.5%</td>
</tr>
<tr>
<td>9</td>
<td>VIETNAMESE</td>
<td>41</td>
<td>0.01%</td>
<td>1</td>
<td>0.00%</td>
<td>2.4%</td>
</tr>
<tr>
<td>10</td>
<td>RUSSIAN</td>
<td>26</td>
<td>0.00%</td>
<td></td>
<td>0.00%</td>
<td>0.0%</td>
</tr>
<tr>
<td>11</td>
<td>FRENCH</td>
<td>18</td>
<td>0.00%</td>
<td></td>
<td>0.00%</td>
<td>0.0%</td>
</tr>
<tr>
<td>12</td>
<td>JAPANESE</td>
<td>4</td>
<td>0.00%</td>
<td>1</td>
<td>0.00%</td>
<td>25.0%</td>
</tr>
<tr>
<td>13</td>
<td>POLISH</td>
<td>1</td>
<td>0.00%</td>
<td></td>
<td>0.00%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>739,694</td>
<td>100.0%</td>
<td>134,942</td>
<td>100.0%</td>
<td>18.2%</td>
</tr>
</tbody>
</table>

*NA (Not Available) are those with no Primary Household language in the data, 77% of which are Receiving Adoption Assistance and 18% of which are Title IVE foster children, with 7% miscellaneous other aid categories

(VanDyke, 2016)
## Race & Ethnicity

<table>
<thead>
<tr>
<th>Race &amp; Ethnicity</th>
<th>DARMHA (DMHA, 2016)</th>
<th>Medicaid Members (VanDyke, 2016)</th>
<th>State (US Census, 2015)</th>
<th>Behavioral Health Workforce, n=5311 (Sheff et al., 2014)</th>
</tr>
</thead>
<tbody>
<tr>
<td>African America</td>
<td>14.83%</td>
<td>16.26%</td>
<td>9.6%</td>
<td>3.71%</td>
</tr>
<tr>
<td>Asian/Pacific Islander</td>
<td>0.70%</td>
<td>0.38%</td>
<td>2.2%</td>
<td>2.15%</td>
</tr>
<tr>
<td>Caucasian</td>
<td>77.83%</td>
<td>71.3%</td>
<td>80.0%</td>
<td>89.12%</td>
</tr>
<tr>
<td>Native America</td>
<td>0.49%</td>
<td>0.08%</td>
<td>0.4%</td>
<td>0.23%</td>
</tr>
<tr>
<td>Multi-racial</td>
<td>2.22%</td>
<td>3.64%</td>
<td>1.9%</td>
<td>0.81%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>6.37%</td>
<td>8.32%</td>
<td>6.7%</td>
<td>2.45%</td>
</tr>
</tbody>
</table>
Expected and Identified Prevalence Rates for Medicaid Members
Any Mental Illness (MI), Depression, Drugs, and Alcohol

(VanDyke, 2016)
Theory of Change

Maybe we should build a boat instead...
Theories of Change (strategies)

• **Affordable Care Act** – improved access to health insurance from 14% uninsured (2009) to 5% un (Annie E. Casey, 2015)

• **Mental Health Parity and Addiction Equity Act (2008)** – lax enforcement and little guidance for the public about the law itself or how to file a complaint (Gold, 2016)

• **National Network to Eliminate Disparities in Behavioral Health** (http://nned.net)

New process, reporting measures for behavioral health clinics:

• Includes: **Comprehensive Person-Centered and Family-Centered Diagnostic & Treatment Planning Evaluation within 60 days** (SAMHSA & CMS, 2016)

• **Using a data-informed quality improvement approach to address racial and ethnic disparities** (SAMHSA, 2016)

• **TCOM**
(SOC) Case Study (Anderson, 2016)

Background

• Incremental state & local SOC development (20 years)
• 2014 SOC Implementation Grant to develop state level infrastructure, based on SOC values, to support access to effect behavioral health services and support
• Qualitative case study of SOC Development

Recommendation

“Increase monitoring the access to (services) and remain responsive to disparities based on socio-economic factors, geography, gender, race, ethnicity, language, legal status”
Reducing Disparities

(CDC, 2011)

• “Reducing disparities requires .... leadership to engage a diverse array of stakeholders; facilitate coordination and alignment among federal departments, agencies, offices, and nonfederal partners; champion the implementation of effective policies and programs; and ensure accountability.”
TCOM activities to improve access & outcomes

• Use tools to help engage individuals and families
• Use results to help plan services & monitor progress
• Quality Improvement
• Link funding to Outcome Performance Measures
• Improve access to outcome management information
• Use administrative claims and outcome management data to monitor utilization (access) to services and outcomes

Integrate strategies into other system priorities and initiatives:

• System of Care for Children with Complex Behavioral Health Problems
• Medicaid state plan amendments to focus on unmet needs of specific populations of concern
• Monitor effectiveness of EBPs
• Focus on outcomes for populations of concern
Indiana’s Assessment Tools

• CANS – Child and Adolescent Needs and Strengths - Indiana utilizes 2 CANS Tools
  • Birth to 5 years (Contains 59 required questions and 41 extension module questions)
  • 5 – 17 years (Contains 66 required questions and 97 extension module questions) * Can be used up to 22 years old if developmentally appropriate

• ANSA – Adult Needs and Strengths Assessment
  • For 18 year olds and older (Contains 57 required questions and 70 extension module questions)
Indiana’s Users

- Indiana has 8,522 actively certified CANS individuals and 5,726 actively certified ANSA individuals.

- The Tools are used by:
  - Division of Mental Health and Addiction (DMHA) providers
  - Department of Child Services (DCS)
  - Providers that work with DCS, such as residential providers
Indiana’s Use of the CANS and ANSA

• Indiana behavioral health providers and child welfare staff use the tools for assessment and service planning.

• The DMHA uses the CANS and ANSA to determine recommend level of treatment, as an eligibility component for Medicaid Rehabilitation Option and the children and adult 1915i programs. In addition, DMHA uses the them to measure outcomes.

• The DCS uses the CANS during the evaluation of every child and it determines recommended level behavioral health services and placement.
Using CANS & ANSA to Measure Outcomes

DMHA sets aside a portion of contracted providers allocation to pay for performance. The Measures are:

- Number of People Served
- Reassessments are completed
- Improvement in at least One Domain (for both open and closed episodes)
- Strength Development
- Community Integration (14 items that are indications of an individual’s recovery through integration in the community in which the individual lives)
Reliable Change over Time for Adults with Mental Health Problems
Statewide, Ages 26-35, n = 39,192, e = 46,175 as of 11/08/2016

Consumers: 39,192
Consumers w/Positive Change: 17,656
Percent Improved: 45.05%

<table>
<thead>
<tr>
<th></th>
<th>Functioning</th>
<th>Strengths</th>
<th>Behavioral Needs</th>
<th>Risks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive Change</td>
<td>8,706</td>
<td>5,485</td>
<td>9,048</td>
<td>5,952</td>
</tr>
<tr>
<td>Negative Change</td>
<td>6,701</td>
<td>9,700</td>
<td>5,490</td>
<td>3,952</td>
</tr>
<tr>
<td>No Change</td>
<td>30,758</td>
<td>30,977</td>
<td>31,621</td>
<td>36,254</td>
</tr>
</tbody>
</table>

Selected Filters: Statewide, T1=Baseline, T2=Latest, Age 26 to 35 years, SMI, Closed Episodes, DMHA Supported Consumer; Graph presents data from 01/22/2008 to 11/07/2016. This report measures change over time by using the average (mean) and reliability information to calculate statistically significant change in each CANS or ANSA domain (Improved, Maintained, or Worsened). The number and percentage of individuals who experienced reliable improvement over time is reported. Additionally, for each assessment domain, the number of individuals who experienced positive, negative, or no change is reported. n = number of individuals; e = number of episodes.
Reliable Change over Time for Children & Youth
Statewide, n = 93,931, e = 114,579 as of 11/09/2016

Consumers: 93,931
Consumers w/Positive Change: 57,866
Percent Improved: 61.60%

<table>
<thead>
<tr>
<th></th>
<th>Functioning</th>
<th>Strengths</th>
<th>Behavioral Needs</th>
<th>Risks</th>
<th>Caregiver</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive Change</td>
<td>35,229</td>
<td>15,956</td>
<td>26,928</td>
<td>23,287</td>
<td>20,179</td>
</tr>
<tr>
<td>Negative Change</td>
<td>16,980</td>
<td>27,829</td>
<td>15,684</td>
<td>17,349</td>
<td>18,333</td>
</tr>
<tr>
<td>No Change</td>
<td>62,342</td>
<td>70,753</td>
<td>71,918</td>
<td>73,890</td>
<td>74,158</td>
</tr>
</tbody>
</table>

Selected Filters: Statewide, T1=Baseline, T2=Latest, SED, Closed Episodes; Graph presents data from 04/03/1993 to 11/08/2016. This report measures change over time by using the average (mean) and reliability information to calculate statistically significant change in each CANS or ANSA domain (Improved, Maintained, or Worsened). The number and percentage of individuals who experienced reliable improvement over time is reported. Additionally, for each assessment domain, the number of individuals who experienced positive, negative, or no change is reported. n = number of individuals; e = number of episodes.
Revisions to DMHA’s Improvement in One Domain

• For five years, DMHA had been using the Improvement in One Domain measure utilizing the Reliable Change Index. Clinicians criticized this measure because they were seeing positive change with their consumers but the measure was not sensitive enough to pick up the change.

• DMHA added an additional step for this measure. Within improved domains that were less than the RCI, look for resolved Actionable Needs, scores of “2” or “3” in Time 1 and scores of “0” and “1” at Time 2. If there are resolved actionable needs within the domain, then record would count as improvement.
### Adult with MI - Not RCI Improvement

<table>
<thead>
<tr>
<th>Life Functioning Domain</th>
<th>Time 1 - 5/27/14</th>
<th>Time 2 - 5/20/15</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical/Medical</td>
<td>0 1 2 3</td>
<td>0 1 2 3</td>
</tr>
<tr>
<td>Family Functioning</td>
<td>0 1 2 3</td>
<td>0 1 2 3</td>
</tr>
<tr>
<td>Employment</td>
<td>NA 0 1 2 3</td>
<td>NA 0 1 2 3</td>
</tr>
<tr>
<td>Social Functioning</td>
<td>0 1 2 3</td>
<td>0 1 2 3</td>
</tr>
<tr>
<td>Recreational</td>
<td>0 1 2 3</td>
<td>0 1 2 3</td>
</tr>
<tr>
<td>Intellectual/Developmental</td>
<td>0 1 2 3</td>
<td>0 1 2 3</td>
</tr>
<tr>
<td>Sexuality</td>
<td>0 1 2 3</td>
<td>0 1 2 3</td>
</tr>
<tr>
<td>Independent Living Skills</td>
<td>0 1 2 3</td>
<td>0 1 2 3</td>
</tr>
<tr>
<td>Residential Stability</td>
<td>0 1 2 3</td>
<td>0 1 2 3</td>
</tr>
<tr>
<td>Legal</td>
<td>0 1 2 3</td>
<td>0 1 2 3</td>
</tr>
<tr>
<td>Sleep</td>
<td>0 1 2 3</td>
<td>0 1 2 3</td>
</tr>
<tr>
<td>Self-Care</td>
<td>0 1 2 3</td>
<td>0 1 2 3</td>
</tr>
<tr>
<td>Decision-Making (Judgment)</td>
<td>0 1 2 3</td>
<td>0 1 2 3</td>
</tr>
<tr>
<td>Involvement In Recovery</td>
<td>0 1 2 3</td>
<td>0 1 2 3</td>
</tr>
<tr>
<td>Transportation</td>
<td>0 1 2 3</td>
<td>0 1 2 3</td>
</tr>
<tr>
<td>Medication Involvement</td>
<td>0 1 2 3</td>
<td>0 1 2 3</td>
</tr>
<tr>
<td>Parental/Caregiver Role Functioning</td>
<td>NA 0 1 2 3</td>
<td>NA 0 1 2 3</td>
</tr>
</tbody>
</table>

Vocational/Career Module is required.
Improve accountability: Access to outcome management information

- Minimal Reporting Standards (Israel, 2015)
- Goal: Create access to outcome management information
- Included in response to state RFP for consultation & training
- Proposal accepted
- Subcontracted with IT partner
- Recruited report development workgroup

- Reviewed available resources, standards, and identified priorities
- Selected suite of reports for development & implementation
- Decision to build within existing IT framework
- Partnered with external programmers, state technology and policy team, IU, and community partners
Report Development Process

• Developed prototypes and explicit specifications
• Programmers built data warehouse from which to run reports and create access to relational database
• Adapted program to function well using state hardware and software.
• Ensured reasonable ‘run’ times
• Considered Security

• Created Data Warehouse in a Development Platform
• Transferred DW to ‘Production’ Site & scheduled automated updates
• Created Access at multiple levels:
  • Individual clinicians, caseworkers
  • Providers (Supervisors, Program Directors, Clinical Directors, Management)
• Testing by IU Team, FSSA, and Report Work
• Implementation
Introduced to Field

• Webinar with statewide partners to introduce plan & project
• During process, introduced planned reports to local implementation coaches (SuperUsers) in workshops
• When reports became available, began to run statewide and local agency reports & to share with state partners and SuperUsers
Considerations..

• Working with programmers: Clarifying meaning of information with focus on implementation and defining reports based on standards, intent, & database language, specifications
• Amending contracts and scope of work between partners & through state and university contracting systems
• Explaining/justifying technical deliverables to accountants - for potential auditors
• Developing knowledge regarding TCOM within IT partners
• Software limitations
• Sustaining IT and system support
• Security
Aggregate Reports

• Key Intervention Needs Over Time
• Resolved Needs (All Needs Items by Domain)
• Strength Development over Time
• Community Integration
• Reliable Improvement in One Domain

Filters

• Provider (Agency/Statewide)
• Report
• Tool (CANS 0-5, CANS 5-17, ANSA)
• Agreement Type
• Date Option
• DMHA Supported Consumer
• Episode Status (Open, Close, All)
• Gender
• Age Group
• Race
• Hispanic Ethnicity
• County
• EBP
Use of Reports to Monitor Disparities

MORE EXAMPLES
Selected Filters: Agency K, T2=Latest, T1=T2 - 120 days, Age 13 to 17 years, County X, All Agreement Types, Open Episodes, DMHA Supported Consumer; Graph presents data from 11/27/2012 to 10/31/2016.

This report presents a dashboard of the most frequently identified behavioral health symptoms or risks (plus adjustment to trauma) and the most frequently identified functional needs for this population. For each item, the first bar reports the percentage actionable needs (rated 2 or 3) at Time 1 (T1), and the second bar reports the percentage at Time 2 (T2). The numeric percentage reflects change from T1 to T2. n = number of individuals; e = number of episodes. For more information about CANS & ANSA and this report, visit https://dmha.fssa.in.gov/DARMHA/mainDocuments.
Key Interventions over Time for Children & Youth for Female Teens, Ages 13 to 17
Agency K, n = 90, e = 90 as of 11/02/2016

Selected Filters: Agency K, T2=Latest, T1=T2 - 120 days, Age 13 to 17 years, County X, All Agreement Types, Female, Open Episodes, DMHA Supported Consumer; Graph presents data from 11/27/2012 to 10/31/2016.
### Key Interventions over Time for Children & Youth
for Male Teens, Ages 13 to 17

Agency K, n = 78, e = 78 as of 11/02/2016

<table>
<thead>
<tr>
<th>Interventions</th>
<th>Percent of Episodes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impulsivity</td>
<td>0.0%</td>
</tr>
<tr>
<td>Depression</td>
<td>1.3%</td>
</tr>
<tr>
<td>Anxiety</td>
<td>-2.6%</td>
</tr>
<tr>
<td>Oppositional</td>
<td>-2.6%</td>
</tr>
<tr>
<td>Adjustment to Trauma</td>
<td>-3.9%</td>
</tr>
<tr>
<td>Anger Control</td>
<td>5.1%</td>
</tr>
<tr>
<td>Intentional Misbehavior</td>
<td>0.0%</td>
</tr>
<tr>
<td>Family</td>
<td>7.7%</td>
</tr>
<tr>
<td>School</td>
<td>2.6%</td>
</tr>
<tr>
<td>Social</td>
<td>2.6%</td>
</tr>
</tbody>
</table>

Selected Filters: Agency K, T2=Latest, T1=T2-120 days, Age 13-17, County X, All Agreement Types, Male, Open Episodes, DMHA Supported Consumer, Graph represents data from 2/25/2013 to 10/26/2016.
Key Interventions over Time for Children & Youth
for African American, Native American, Asian, & Pacific Islander Teens
Agency K, n = 19, e = 19 as of 11/02/2016

Selected filters: Agency K, T2=Latest, T1-T2 -120 days, Age 13 to 17, (African American, American Indian, Asian, Native Hawaiian, Pacific Islander, Other Single Race), (Not Hispanic/Latino), County X, All agreement types, Open Episodes, Graph represents data from 1/9/2015 to 10/20/2016.
Selected Filters: Agency K, T2=Latest, T1=T2 – 120 days, Age 13-17, (Caucasian), County X, All Agreement Types, Open Episodes, DMHA Supported Consumer, Graph presents data from 11/27/2012 to 10/31/2016.
Key Interventions over Time for Children & Youth for Hispanic/Latino Youth, Ages 13-17
Agency K, n = 13, e = 13 as of 11/08/2016

Selected filters: Agency K, T2=Latest, T1=T2 – 120 days, Ages 13 – 17, (Hispanic/Latino: Mexican, Cuban, Puerto Rican, Other Hispanic/Latino, Unknown Origin), County X, All Agreement Types, Open Episodes, DMHA Supported Consumer, Graph presents data from 10/10/2015 to 10/24/2016.
Comparing Percent of Youth with T1 Actionable Needs by Characteristics
Agency K, County X, n = 168 13-17 year olds

- Impulsivity
- Depression
- Anxiety
- Oppositional
- Trauma Adjustment
- Anger Control
- Intentional Misbehavior
- Family
- School
- Social
- Judgement

Legend:
- All
- Females
- Males
- Youth of Color
- Caucasian
- Hispanic
Comparison of Percentage of Change in Key Intervention Actionable Needs
Agency K, County X, n=168 Youth, Ages 13-17

- All
- Females
- Males
- Youth of Color
- Caucasian
- Hispanic

- Impulsivity
- Depression
- Anxiety
- Oppositional
- Trauma Adjustment
- Anger Control
- Intentional Misbehavior
- Family
- School
- Social
- Judgement
Selected Filters: Agency K, T1=Baseline, T2=Latest, Age 13 to 17 years, County K, All Agreement Types, Open Episodes, DMHA Supported Consumer; Graph presents data from 08/14/2007 to 11/04/2016. This report measures change in usable strengths (rated 0 or 1) over time. It shows the percentage of usable strengths at Time 1 (T1) and Time 2 (T2). The numeric percentage reflects change from T1 to T2.
Reliable Change over Time for Children & Youth

Agency K, n = 173, e = 173 as of 11/08/2016

Consumers: 173
Consumers w/Positive Change: 120
Percent Improved: 69.36%

<table>
<thead>
<tr>
<th>Positive Change</th>
<th>Functioning</th>
<th>Strengths</th>
<th>Behavioral Health</th>
<th>Risks</th>
<th>Caregiver</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>58</td>
<td>25</td>
<td>24</td>
<td>55</td>
<td>30</td>
</tr>
<tr>
<td>Negative Change</td>
<td>44</td>
<td>33</td>
<td>43</td>
<td>42</td>
<td>37</td>
</tr>
<tr>
<td>No Change</td>
<td>71</td>
<td>115</td>
<td>106</td>
<td>76</td>
<td>106</td>
</tr>
</tbody>
</table>

Graph presents data from 08/14/2007 to 11/04/2016. This report measures change over time by using the average (mean) and reliability information to calculate statistically significant change in each CANS or ANSA domain (Improved, Maintained, or Worsened). The number and percentage of individuals who experienced reliable improvement over time is reported. Additionally, for each assessment domain, the number of individuals who experienced positive, negative, or no change is reported. n = number of individuals; e = number of episodes.
Key Interventions over Time for Adults with Mental Health Problems
For Transition Age Youth, Ages 18 to 25
Agency T, n = 807, e = 807 as of 11/08/2016

This report presents a dashboard of the most frequently identified behavioral health symptoms or risks (plus adjustment to trauma) and the most frequently identified functional needs for this population. For each item, the first bar reports the percentage actionable needs (rated 2 or 3) at Time 1 (T1), and the second bar reports the percentage at Time 2 (T2). The numeric percentage reflects change from T1 to T2. n = number of individuals; e = number of episodes.
Comparison of Key Intervention Actionable Needs for Transition Age Youth (18-25) with Mental Health Problems, Agency T

- Psychosis
- Impulse Control
- Depression
- Anxiety
- Interpersonal Problems
- Adjustment to Trauma
- Employment
- Social Functioning
- Recreation
- Decision Making
- Physical/Medical

- All
- Female
- Male
- Caucasian
- Youth of Color
- Hispanic/Latino
Comparison of Percentage of Change in Actionable Needs for Transition Age Youth (18-25) 
Agency T
Data Analysis

Logistic regression predicting resolved needs
How much do specific factors influence outcomes?

For adults who participated in behavioral health services, what factors are related to resolved treatment needs?

Population Sample, n = 47,692
Mean Age: 42.94, Range: 18 – 99
Gender: 54.8% Women
Residing in Rural Communities: 20,034 (42%)
DV: Resolved Treatment Needs 52%

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>African American</td>
<td>6,231</td>
</tr>
<tr>
<td>Asian</td>
<td>205</td>
</tr>
<tr>
<td>Caucasian</td>
<td>37,939</td>
</tr>
<tr>
<td>Native American</td>
<td>233</td>
</tr>
<tr>
<td>Hawaiian/Pacific Islander</td>
<td>555</td>
</tr>
<tr>
<td>Mixed</td>
<td>709</td>
</tr>
<tr>
<td>Hispanic/Latino</td>
<td>1,669</td>
</tr>
</tbody>
</table>
## Intercorrelations for Resolved Needs & Predictor Variables

<table>
<thead>
<tr>
<th>Measure</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Resolved Needs</td>
<td>___</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 African American</td>
<td>.029***</td>
<td>___</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Asian</td>
<td>-.011**</td>
<td>-.025***</td>
<td>___</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 Rural County</td>
<td>-.107***</td>
<td>-.279***</td>
<td>-.040***</td>
<td>___</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 Sex</td>
<td>-.010*</td>
<td>-.027***</td>
<td>-.003</td>
<td>.032***</td>
<td>___</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 Age</td>
<td>-.061***</td>
<td>.044***</td>
<td>-.013**</td>
<td>-.049***</td>
<td>.088***</td>
<td>___</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 Personal Recovery</td>
<td>-.112***</td>
<td>.072***</td>
<td>.012**</td>
<td>-.046***</td>
<td>-.021***</td>
<td>.063***</td>
<td>___</td>
<td></td>
</tr>
<tr>
<td>8 Cultural Linguistic Challenges</td>
<td>.059***</td>
<td>.052***</td>
<td>178***</td>
<td>-.040***</td>
<td>-.025***</td>
<td>.003</td>
<td>.079***</td>
<td>___</td>
</tr>
</tbody>
</table>

**Note:** The table above shows the intercorrelations between resolved needs and predictor variables. The values represent the correlation coefficients, with *** indicating significance at the .001 level, ** at the .01 level, and * at the .05 level.
## Logistic Regression Predicting Resolved Treatment Needs

<table>
<thead>
<tr>
<th>Predictors</th>
<th>B</th>
<th>SE</th>
<th>Odds Ratio</th>
<th>p</th>
<th>95% CL</th>
</tr>
</thead>
<tbody>
<tr>
<td>African American</td>
<td>.191</td>
<td>.029</td>
<td>1.214</td>
<td>.000</td>
<td>[1.147, 1.285]</td>
</tr>
<tr>
<td>Asian</td>
<td>-.728</td>
<td>.148</td>
<td>.483</td>
<td>.000</td>
<td>[0.361, 0.645]</td>
</tr>
<tr>
<td>Rural</td>
<td>-.058</td>
<td>.020</td>
<td>.944</td>
<td>.003</td>
<td>[0.909, 0.981]</td>
</tr>
<tr>
<td>Sex</td>
<td>-.019</td>
<td>.019</td>
<td>.981</td>
<td>.298</td>
<td>[0.945, 1.017]</td>
</tr>
<tr>
<td>Age</td>
<td>-.008</td>
<td>.001</td>
<td>.992</td>
<td>.000</td>
<td>[0.995, 0.993]</td>
</tr>
<tr>
<td>Personal Recovery</td>
<td>-.391</td>
<td>.015</td>
<td>.676</td>
<td>.000</td>
<td>[0.656, 0.697]</td>
</tr>
<tr>
<td>Cultural Linguistic Challenges</td>
<td>.074</td>
<td>.005</td>
<td>1.076</td>
<td>.000</td>
<td>[1.066, 1.087]</td>
</tr>
<tr>
<td>Constant</td>
<td>1.042</td>
<td>.041</td>
<td>2.835</td>
<td>.000</td>
<td></td>
</tr>
</tbody>
</table>

$R^2 = .022$ (Cox & Snell), $0.030$ (Nagelkerke), $\chi^2(7)=1073.827, p < .000$. 
Discussion --- in this sample of adults

• African Americans were more likely to experience resolved treatment needs than were Caucasians.
• Resolved treatment needs were less likely for Asians than for Caucasians.
• Individuals living in rural communities were less likely to improve.
• No significant differences were found between women and men.
• Younger adults were more likely to improve than were older people.
• Personal recovery factors (strengths and positive recreational activities) predicted a higher likelihood of resolved needs.
• Identifying cultural and linguistic challenges increased the likelihood of resolved needs.
Routinely monitor differences in access and outcomes

• Make relevant information available.

• Support ad-hoc, comparative reports that identify differences in outcomes and significance (statistical and clinical).

• Share results and integrate into planning.

• Monitor progress.

TCOM QI Process
References


Gold, J. (2016, Oct.) *Federal panel calls for stricter enforcement of Mental Health Care Parity Law.* NPR


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