Results from the South Dakota Health Survey
Overview

• Why the interest in South Dakota?
• Survey design
• Key findings
  – Statewide
  – County
  – Special Populations
  – Interviews with South Dakotans
Why the South Dakota Health Survey?

- SD and other rural states face many challenges in meeting healthcare needs of rural and underserved communities
- Mental illness and substance use conditions are leading causes of disability in the U.S.
- Surveillance of these conditions is limited
- Data are needed to plan and implement effective services

Project Goals:

- Assess prevalence of health conditions, use of and access to care, and key barriers to access
- Gather high quality state wide data on mental health and substance use needs in South Dakota
- Use data to inform decision-making and service delivery models
Study Design

• Health needs assessment survey
  – Domains: Prevalence of health conditions, Access to care, Utilization of care, Health insurance & medical costs, Health behaviors & lifestyle, Adverse childhood experiences, Social support, Demographics

• Phase 1: Mail and phone data collection
  – Representative stratified random sample of 17,000 households with oversampling in rural counties and American Indian communities
  – Mail survey with phone follow-up

• Phase 2: In-person data collection
  – Non-respondent households in tribal communities
  – Homeless individuals in Rapid City and Sioux Falls
  – Immigrant and refugee individuals in Sioux Falls
  – Housing insecure individuals (i.e. “couch surfers” and “doubled-up” families identified through household surveys)
Survey Collection

- Total household sample: 16,001
- Total household responses: 7,686
  - Mail: 6,620
  - Phone: 312
  - Online: 314
  - In-person: 440
- Total Response rate: 48%
- Supplemental samples
  - Immigrant/refugee: 100
  - Homeless: 301
  - Housing insecure: 117
- Total Surveys Completed: 8,204
Results: Participant Characteristics

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>SD Health Survey (Weighted %)</th>
<th>SD Census Population</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18-34</td>
<td>30.3%</td>
<td>30.8%</td>
</tr>
<tr>
<td>35-64</td>
<td>50.6%</td>
<td>49.6%</td>
</tr>
<tr>
<td>65 and older</td>
<td>19.1%</td>
<td>19.6%</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>42.6%</td>
<td>49.8%</td>
</tr>
<tr>
<td>Female</td>
<td>57.4%</td>
<td>50.2%</td>
</tr>
<tr>
<td><strong>Race/Ethnicity</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hispanic or Latino</td>
<td>1.0%</td>
<td>3.2%</td>
</tr>
<tr>
<td>Non-Hispanic White</td>
<td>88.7%</td>
<td>83.4%</td>
</tr>
<tr>
<td>American Indian</td>
<td>9.3%</td>
<td>10.5%</td>
</tr>
<tr>
<td>Other</td>
<td>1.0%</td>
<td>4.0%</td>
</tr>
<tr>
<td><strong>Geography</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Urban</td>
<td>44.4%</td>
<td>39.1%</td>
</tr>
<tr>
<td>Rural</td>
<td>33.3%</td>
<td>34.2%</td>
</tr>
<tr>
<td>Isolated</td>
<td>17.6%</td>
<td>26.6%</td>
</tr>
<tr>
<td>Reservation</td>
<td>4.7%</td>
<td>N/A</td>
</tr>
</tbody>
</table>
Results: Key Findings Overview

• Statewide
• County-level variation
• Variation by population
• Perceived need for care
Statewide View
Prevalence & Access
Prevalence: Mental Health Screens

Participants who screened positive for a condition using standardized mental health screening tools

- Depression
- Anxiety
- Post Traumatic Stress Disorder (PTSD)

* Significantly different from urban population, adjusted for age and sex (P<0.05)
Prevalence: Self-Reported Behavioral Health Diagnosis

Participants who were ever told by a doctor that they had a certain condition

- Depression
- Anxiety
- PTSD
- Bipolar disorder
- Addiction issues
- Other MH Condition

* Significantly different from urban population, adjusted for age and gender (P<0.05)
Prevalence: Alcohol Use (AUDIT-C)

* Significantly different from urban population, adjusted for age and sex (P<0.05)
Access to Primary Care Provider

Participants who have one person they think of as their personal doctor or health care provider

77.42% 78.60% 81.60% 74.20%* 48.30%*

- Statewide
- Urban
- Rural
- Isolated
- Reservation

* Significantly different from urban population, adjusted for age and sex (P<0.05)
Hospital Utilization for Mental Health and Substance Use

Respondents reported one or more hospital emergency room visit or inpatient stay for mental health or substance use within the last 12 months.

* Significantly different from urban population, adjusted for age and sex (P<0.05)
Statewide Prevalence of Emergency Room Use Due to a Substance Use Condition

1 or More ER Visit for SU | Study-wide Average: 1%

- Counties with >7% prevalence:
  - Corson: 10%
  - Buffalo: 6%
  - Bennett: 8%

- Counties with 6% - 7% prevalence:
  - Meade: 6%

- Counties with 3% - 5% prevalence:
  - Pennington: 3%

- Counties with <3% prevalence:
  - Campell
  - McPherson
  - Walworth
  - Edmunds
  - Potter
  - Faulk
  - Spink
  - Clark
  - Codington
  - Hamlin
  - Deuel
  - Grant
  - Roberts
  - Day
  - Brown
  - Marshall
  - Rogers
  - Lawrence
  - Butte
  - Lawrence
  - Madison
  - Haakon
  - Stanley
  - Hughes
  - Sully
  - Hyde
  - Hand
  - Beadle
  - Jerauld
  - Brule
  - Aurora
  - Dav.  
  - Hanson
  - McCook
  - Minnehaha
  - Douglas
  - Charles Mix
  - Hutchinson
  - Turner
  - Lincoln
  - Clay
  - Union
  - Bon Homme
  - Yankton
  - Clay
  - Union
  - Bon Homme
  - Yankton

- Counties Not Participating in Study:
  - Custer
  - Shannon
  - Fall River
  - Jackson
  - Lyman
  - Brule
  - Aurora
  - Dav.
  - Hanson
  - McCook
  - Minnehaha
  - Douglas
  - Charles Mix
  - Hutchinson
  - Turner
  - Lincoln
  - Clay
  - Union
  - Bon Homme
  - Yankton
Main Reasons for Going Without Needed Mental Health Care

Top reasons for going without care among participants who needed but did not receive mental health care.

* Significantly different from urban population, adjusted for age and sex (P<0.05)
Receipt of All Needed Care by Insurance Type

Respondents who reported a perceived need for care and received all the care they needed

* Significant association based on Rao-Scott Chi-Square tests of association between those who reported insurance type compared to those who reported not having that insurance type (P<0.05)
Key Findings: Statewide Assessment

- Similar prevalence of mental health conditions across urban/rural/isolated areas
  - Higher in reservation areas
- Access problems in isolated and reservation communities
- High inpatient and ED utilization for mental health conditions
- Cost of care and insurance coverage associated with receipt of needed care
- Questions?
County View
Prevalence & Access: Finding Opportunities to Maximize Impact
Key Findings: Utilization & Access

• Access problems in isolated and reservation communities
  – 25.8% in isolated areas do not have a primary care provider
  – 51.7% in reservation areas do not have a primary care provider

• Low perceived need for mental health and substance use treatment
  – 98.9% report no perceived need for substance use treatment
  – 90.5% report no perceived need for mental health care

• High hospital utilization for mental health conditions
  – 11.2% statewide and 21% in reservation areas have been to the emergency room for mental health problems one or more times in the past year

• Uninsured are less likely to receive needed mental health care
  – Only 39% of uninsured received the mental health care they needed
Depression

PHQ-2 Depression Score | Study-wide Average: 6%

<5%  9% - 13%  Counties Not Participating in Study
5% - 8%  >13%
Any Drug Use*

*Includes past-year use of marijuana, Methamphetamines, prescription pain relievers without a prescription and other street drugs.

Any Drug Use - Past Year | Study-wide Average: 8%

[Map showing drug use percentages by county.]

Legend:
- <10%
- 10% - 20%
- 21% - 29%
- Counties Not Participating in Study
- >29%
Adverse Childhood Experiences 3+

ACE Score 3+ | Study-wide Average: 20%
Social Support

Participants’ score on a measure of five different dimensions of social support

* Significantly different from urban population, adjusted for demographic variables
All Mental Health Needs Met

Mental Health Needs Met | Study-wide Average: 64%
IDENTIFYING “HOTSPOTS”

States are big places – how do you begin to “smart target” your work where it will have the most impact?

High prevalence and low access are both bad, but the combination of those two things is especially bad.

We combined indicators of prevalence and access to find places where high need and low access overlap.

These may be opportunities for maximum impact.
MENTAL HEALTH HOTSPOTS: High Prevalence & High Unmet Need

High Unmet Mental Health Need and High Prevalence of Any Screened Mental Health Issues (Depression, Anxiety and PTSD)
Main Reasons for Going Without Mental Health Care

Top reasons for going without care among participants who needed but did not receive mental health care.

* Significantly different from urban population, adjusted for age and sex
SUBSTANCE USE HOTSPOTS:
High Use of Drugs + High Unmet Need for Care

High Unmet Substance Abuse Care Need and High Prevalence of Past Year Drug Use

[Map showing regions with high unmet need and high prevalence]
Main Reasons for Going Without Alcohol or Drug Use Treatment

Top reasons for going without care among participants who needed but did not receive alcohol or drug use treatment.

* Significantly different from urban population, adjusted for demographic variables
KEY FINDINGS: COUNTY-LEVEL VARIATION

County-level view shows pockets of variation:
- High mental health conditions: depression, anxiety, PTSD screens
- High drug use & alcohol misuse
- Indicators of poor access to care
- High rates of adverse childhood experiences

Differences were stark – in many cases the high counties were 3-4 times higher than the state average.

“Hotspot” counties were identified where prevalence is high and access to care is low. These may represent optimal points for maximum impact.

Questions?
AUDIT-C: Different Cut-points by Geographic Areas

* Significantly different from urban population, adjusted for age and sex
Statewide Prevalence of Problem Drinking among Females (3+ AUDIT-C Score)

Audit C Alcohol Use Females | Study-wide Average: 42%
Statewide Prevalence of Problem Drinking among Males (4+ AUDIT-C Score)

Audit C Alcohol Use Males | Study-wide Average: 42%
Statewide Prevalence of Highest Severity Alcohol Misuse (9+ AUDIT-C Score)

Audit 9+ | Study-wide Average: 2%

Map showing the prevalence of highest severity alcohol misuse across various counties in the state, with percentages ranging from <4% to >9%.
Alcohol Use: Binge Drinking

<table>
<thead>
<tr>
<th>Past Year Binge Drinking</th>
<th>SD Health Survey</th>
<th>BRFSS National*</th>
<th>BRFSS South Dakota*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>39.1%</td>
<td>16.9%</td>
<td>20.6%</td>
</tr>
</tbody>
</table>

| Heavy Drinking (over weekly limits) | 3.92% | 5% |

Past year binge drinking

*Centers for Disease Control and Prevention 2012 Behavioral Risk Factor Surveillance System
http://wwwn.cdc.gov/sortablestats/
Prevalence: Drug Use

Participants who used drugs within the past year

* Significantly different from urban population, adjusted for age and sex
Marijuana Use by Age

Participants who used marijuana within the past year

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Statewide</th>
<th>Urban</th>
<th>Rural</th>
<th>Isolated</th>
<th>Isolated</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-34</td>
<td>10%</td>
<td>15%</td>
<td>5%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>35-64</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>65+</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>
# National Comparisons: Drug Use

<table>
<thead>
<tr>
<th>Measure</th>
<th>SD Health Survey</th>
<th>National Comparison*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Past Year Marijuana Use</td>
<td>6.72% (18 or older)</td>
<td>12.5% (18 or older)</td>
</tr>
<tr>
<td>Past Year Non-medical Use of Prescription Pain Relievers</td>
<td>1.5% (18 or older)</td>
<td>4.2% (18 or older)</td>
</tr>
<tr>
<td>Past Year Methamphetamine Use</td>
<td>0.54% (18 or older)</td>
<td>0.5% (12 or older)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.8% (18-20)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.4% (21-25)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.8% (26-34)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.3% (35 or older)</td>
</tr>
<tr>
<td>Past Year Street Drug Use</td>
<td>Cocaine or crack: &lt;0.01%</td>
<td>Cocaine, including crack: 1.6%*</td>
</tr>
<tr>
<td></td>
<td>Bath salts: &lt;0.01%</td>
<td>Crack: 0.2%*</td>
</tr>
<tr>
<td></td>
<td>Inhalants: &lt;0.01%</td>
<td>Bath salts: not available</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Inhalants: 0.6%*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>*persons aged 12 or older</td>
</tr>
</tbody>
</table>

*2013 NSDUH Illicit Drug Use Tables (Prevalence Estimates): [http://www.samhsa.gov/data/sites/default/files/NSDUH-DetTabsPDFWHTML2013/Web/PDFW/NSDUH-DetTabsSect1peTabs64to68-2013.pdf](http://www.samhsa.gov/data/sites/default/files/NSDUH-DetTabsPDFWHTML2013/Web/PDFW/NSDUH-DetTabsSect1peTabs64to68-2013.pdf) Tables 1.68B, 1.58B, 1.1B-1.8A, Table 1.1B
## Discordance between Positive Screen and Perceived Need for Care

<table>
<thead>
<tr>
<th>Measure</th>
<th>Of those who screened positive, percent who perceived no need for care</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mental Health</td>
<td>63.84%</td>
<td>(56.02, 71.49)</td>
</tr>
<tr>
<td>Substance Use (lower severity alcohol use)</td>
<td>98.09%</td>
<td>(96.75, 98.99)</td>
</tr>
<tr>
<td>Substance Use (higher severity alcohol use)</td>
<td>97.21%</td>
<td>(95.42, 98.45)</td>
</tr>
<tr>
<td>Substance Use (highest severity alcohol use)</td>
<td>92.57%</td>
<td>(86.82, 96.36)</td>
</tr>
</tbody>
</table>
## National Comparisons: Need for Care

<table>
<thead>
<tr>
<th>Measure</th>
<th>SD Health Survey</th>
<th>National Comparison*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived need for substance use treatment</td>
<td>98.74%- No 1.27% -Yes</td>
<td>8.6% Needed treatment for drug or alcohol problem at specialty facility; 8.0% needed but did not receive treatment</td>
</tr>
<tr>
<td>Perceived a need for mental health care but did not receive all care needed</td>
<td>3.55%</td>
<td>4.6%</td>
</tr>
<tr>
<td>Self-reported Hospital Utilization for drug or alcohol problem</td>
<td>0.9% 1 or more ER visit for SU 0.44% 1 or more inpatient hospital visit for SU</td>
<td>Approximate estimates: 0.2% 1 or more ER visit for SU 0.35% 1 or more inpatient hospital visit for SU</td>
</tr>
<tr>
<td>Self-reported Hospital Utilization for mental health problem</td>
<td>11.35% 1 or more ER visit for MH 5.69% 1 or more inpatient for MH</td>
<td>Approximate estimates: 0.13% 1 or more inpatient for MH</td>
</tr>
</tbody>
</table>


2013 NSDUH Mental Health Detailed Tables [http://www.samhsa.gov/data/sites/default/files/2013MHDetTabs/NSDUH-MHDetTabs2013.htm#tab1.23B](http://www.samhsa.gov/data/sites/default/files/2013MHDetTabs/NSDUH-MHDetTabs2013.htm#tab1.23B) Table 1.36B, 1.30B
Selected Populations
Prevalence & Access
American Indian: Prevalence of Mental Health Conditions

Self-reported diagnoses of behavioral health conditions by American Indian race/ethnicity

- Depression: 25.7% American Indian, 16.2% Non-American Indian
- Anxiety: 29.1% American Indian, 16.6% Non-American Indian
- PTSD: 9.8% American Indian, 2.8% Non-American Indian
- Bipolar Disorder: 1.6% American Indian, 1.7% Non-American Indian
- Other Mental Health Condition: 1.2% American Indian, 2.7% Non-American Indian
American Indian: Adverse Childhood Experiences (ACEs)

Childhood experiences of abuse and neglect by American Indian race/ethnicity compared to non-American Indian respondents

*Significantly different from non-American Indian respondents (P<0.05)
American Indian: Adverse Childhood Experiences (ACEs)

Childhood experiences of abuse and neglect by American Indian race/ethnicity compared to non-American Indian respondents

<table>
<thead>
<tr>
<th>Experience</th>
<th>American Indian</th>
<th>Non-American Indian</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mother Treated Violently</td>
<td>23.8%*</td>
<td>5.3%</td>
</tr>
<tr>
<td>Household Substance Abuse</td>
<td>50.0%*</td>
<td></td>
</tr>
<tr>
<td>Household Mental Illness</td>
<td>24.4%*</td>
<td>13.9%</td>
</tr>
<tr>
<td>Parental Separation or Divorce</td>
<td>39.3%*</td>
<td>20.2%</td>
</tr>
<tr>
<td>Incarcerated Household Member</td>
<td>22.6%*</td>
<td>3.7%</td>
</tr>
</tbody>
</table>

*Significantly different from non-American Indian respondents \((P<0.05)\)
ACEs: Associations with Health Conditions

• Statewide, higher ACE Scores were associated with an increased likelihood of:
  – screening positive for depression, anxiety, or PTSD
  – reporting diagnoses of asthma, high blood pressure, heart disease, high cholesterol, and chronic obstructive pulmonary disease (COPD)

• This link is consistent with other research on general US population

• What is novel is high rate of ACEs in AI population
American Indian: Prevalence

Differences in prevalence between American Indian and non-American Indian participants based on screens for mental health, alcohol use, and adverse childhood experiences

<table>
<thead>
<tr>
<th>Variable</th>
<th>Non-American Indian</th>
<th>American Indian</th>
<th>Significance*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depression</td>
<td>5.14%</td>
<td>8.51%</td>
<td>0.02</td>
</tr>
<tr>
<td>Anxiety</td>
<td>7.40%</td>
<td>8.60%</td>
<td>0.49</td>
</tr>
<tr>
<td>PTSD</td>
<td>5.24%</td>
<td>13.34%</td>
<td>&lt;0.01</td>
</tr>
<tr>
<td>Alcohol Misuse</td>
<td>42.51%</td>
<td>42.65%</td>
<td>0.99</td>
</tr>
<tr>
<td>3 or more ACEs</td>
<td>17.40%</td>
<td>49.80%</td>
<td>&lt;0.01</td>
</tr>
</tbody>
</table>

*P-values calculated from Rao-Scott Chi-Square tests. Results have not been adjusted for confounding.
The American Indian population has a high prevalence of adverse childhood experiences (ACEs). The table below compares the prevalence of various ACEs between American Indians and non-Indians, along with the statistical significance of the differences:

<table>
<thead>
<tr>
<th></th>
<th>American Indian</th>
<th>Non-AI</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Abuse</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emotional Abuse</td>
<td>30.10%</td>
<td>17.41%</td>
<td>0.0008*</td>
</tr>
<tr>
<td>Physical Abuse</td>
<td>24.51%</td>
<td>12.31%</td>
<td>0.0002*</td>
</tr>
<tr>
<td>Sexual Abuse</td>
<td>15.53%</td>
<td>9.60%</td>
<td>0.0263*</td>
</tr>
<tr>
<td><strong>Neglect</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emotional Neglect</td>
<td>25.87%</td>
<td>14.00%</td>
<td>0.0005*</td>
</tr>
<tr>
<td>Physical Neglect</td>
<td>15.89%</td>
<td>2.78%</td>
<td>&lt;0.0001*</td>
</tr>
<tr>
<td><strong>Household Dysfunction</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mother Treated Violently</td>
<td>23.76%</td>
<td>5.31%</td>
<td>&lt;0.0001*</td>
</tr>
<tr>
<td>Household Substance Abuse</td>
<td>50.04%</td>
<td>21.49%</td>
<td>&lt;0.0001*</td>
</tr>
<tr>
<td>Household Mental Illness</td>
<td>24.36%</td>
<td>13.89%</td>
<td>0.0032*</td>
</tr>
<tr>
<td>Parental Separation or Divorce</td>
<td>39.34%</td>
<td>20.17%</td>
<td>&lt;0.0001*</td>
</tr>
<tr>
<td>Incarcerated Household Member</td>
<td>22.57%</td>
<td>3.73%</td>
<td>&lt;0.0001*</td>
</tr>
<tr>
<td><strong>Number of ACEs (Score)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>16.84%</td>
<td>50.02%</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>21.59%</td>
<td>23.02%</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>16.20%</td>
<td>9.60%</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>12.99%</td>
<td>6.09%</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>8.93%</td>
<td>4.24%</td>
<td></td>
</tr>
<tr>
<td>5 or more</td>
<td>23.45%</td>
<td>7.02%</td>
<td></td>
</tr>
</tbody>
</table>
Prevalence of ACEs is high for AIs in both Urban and Reservation areas.

<table>
<thead>
<tr>
<th></th>
<th>Urban AI</th>
<th>Reservation AI</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Abuse</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emotional Abuse</td>
<td>23.07%</td>
<td>34.52%</td>
<td>0.2582</td>
</tr>
<tr>
<td>Physical Abuse</td>
<td>23.06%</td>
<td>28.21%</td>
<td>0.5920</td>
</tr>
<tr>
<td>Sexual Abuse</td>
<td>11.26%</td>
<td>15.85%</td>
<td>0.5056</td>
</tr>
<tr>
<td><strong>Neglect</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emotional Neglect</td>
<td>17.66%</td>
<td>31.48%</td>
<td>0.1556</td>
</tr>
<tr>
<td>Physical Neglect</td>
<td>14.48%</td>
<td>18.83%</td>
<td>0.5958</td>
</tr>
<tr>
<td><strong>Household Dysfunction</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mother Treated Violently</td>
<td>28.55%</td>
<td>20.74%</td>
<td>0.4054</td>
</tr>
<tr>
<td>Household Substance Abuse</td>
<td>50.11%</td>
<td>51.84%</td>
<td>0.8787</td>
</tr>
<tr>
<td>Household Mental Illness</td>
<td>20.88%</td>
<td>31.18%</td>
<td>0.3093</td>
</tr>
<tr>
<td>Parental Separation or Divorce</td>
<td>63.72%</td>
<td>62.06%</td>
<td>0.8762</td>
</tr>
<tr>
<td>Incarcerated Household Member</td>
<td>25.06%</td>
<td>28.74%</td>
<td>0.7077</td>
</tr>
<tr>
<td><strong>Number of ACEs (Score)</strong></td>
<td></td>
<td></td>
<td>.4604</td>
</tr>
<tr>
<td>0</td>
<td>9.87%</td>
<td>16.69%</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>32.33%</td>
<td>16.89%</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>12.96%</td>
<td>18.54%</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>19.25%</td>
<td>13.76%</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>4.31%</td>
<td>5.87%</td>
<td></td>
</tr>
<tr>
<td>5 or more</td>
<td>21.28%</td>
<td>28.25%</td>
<td></td>
</tr>
</tbody>
</table>
# Associations between ACEs and Health Conditions by Race/Ethnicity

<table>
<thead>
<tr>
<th></th>
<th>Non-American Indian</th>
<th></th>
<th>American Indian</th>
<th></th>
<th>Interaction</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Odds Ratio</td>
<td>P-value</td>
<td>Odds Ratio</td>
<td>P-value</td>
<td>P-value</td>
</tr>
<tr>
<td><strong>Behavioral Health</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHQ-2 Depression</td>
<td>1.529</td>
<td>&lt;0.0001*</td>
<td>1.483</td>
<td>&lt;0.0001*</td>
<td>&lt;0.0001*</td>
</tr>
<tr>
<td>GAD-2 Anxiety</td>
<td>1.489</td>
<td>&lt;0.0001*</td>
<td>1.420</td>
<td>&lt;0.0001*</td>
<td>0.5242</td>
</tr>
<tr>
<td>PTSD</td>
<td>1.534</td>
<td>&lt;0.0001*</td>
<td>1.235</td>
<td>0.0576</td>
<td>0.0616</td>
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<tr>
<td>AUDIT-C alcohol use</td>
<td>1.072</td>
<td>0.0070*</td>
<td>0.983</td>
<td>0.8186</td>
<td>0.2670</td>
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<tr>
<td><strong>Self-reported chronic diseases</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diabetes</td>
<td>1.031</td>
<td>0.3789</td>
<td>0.889</td>
<td>0.1832</td>
<td>0.1159</td>
</tr>
<tr>
<td>Asthma</td>
<td>1.137</td>
<td>0.0008*</td>
<td>1.189</td>
<td>0.0376*</td>
<td>0.6450</td>
</tr>
<tr>
<td>High blood pressure</td>
<td>1.006</td>
<td>0.8165</td>
<td>1.045</td>
<td>0.5714</td>
<td>0.6331</td>
</tr>
<tr>
<td>Heart disease</td>
<td>0.925</td>
<td>0.0287*</td>
<td>1.283</td>
<td>0.0093*</td>
<td>0.0022*</td>
</tr>
<tr>
<td>High cholesterol</td>
<td>0.993</td>
<td>0.7719</td>
<td>0.896</td>
<td>0.2150</td>
<td>0.2682</td>
</tr>
<tr>
<td>COPD</td>
<td>1.102</td>
<td>0.0354*</td>
<td>1.369</td>
<td>0.0022*</td>
<td>0.0766</td>
</tr>
<tr>
<td>Cancer</td>
<td>1.009</td>
<td>0.7660</td>
<td>0.839</td>
<td>0.1097</td>
<td>0.3756</td>
</tr>
</tbody>
</table>
Key Findings: Homeless

- High rates of mental health conditions, alcohol misuse, drug use, and ACEs
- Considerable unmet need for care and access challenges

Homeless respondents who screened positive for mental health conditions, alcohol misuse and drug use

<table>
<thead>
<tr>
<th>Condition</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depression</td>
<td>29.3%</td>
</tr>
<tr>
<td>Anxiety</td>
<td>32.1%</td>
</tr>
<tr>
<td>PTSD</td>
<td>33.7%</td>
</tr>
<tr>
<td>Severe Alcohol Misuse</td>
<td>30.9%</td>
</tr>
<tr>
<td>Any Past Year Illegal Drug Use</td>
<td>34.6%</td>
</tr>
</tbody>
</table>
Key Findings: Housing Insecure

- High rates of mental health conditions and substance use
- High hospital utilization rates and health care access problems

Housing Insecure respondents who screened positive for mental health conditions, alcohol misuse and drug use

- Depression: 19.3%
- Anxiety: 25.7%
- PTSD: 19.5%
- Severe Alcohol Misuse: 22.6%
- Any Past Year Illegal Drug Use: 37.5%
Immigrant and Refugee

- High prevalence of some mental health conditions, low prevalence of health risk behaviors, and limited access to health care services

<table>
<thead>
<tr>
<th>Mental Health Condition</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depression</td>
<td>19.5%</td>
</tr>
<tr>
<td>Anxiety</td>
<td>21.4%</td>
</tr>
<tr>
<td>PTSD</td>
<td>5.6%</td>
</tr>
<tr>
<td>Severe Alcohol Misuse</td>
<td>4.6%</td>
</tr>
<tr>
<td>Any Past Year Illegal Drug Use</td>
<td>11.8%</td>
</tr>
</tbody>
</table>

Immigrant/refugee respondents who screened positive for mental health conditions, alcohol misuse and drug use.
Key Findings

• Substantial health disparities compared to non-American Indian respondents
  – High prevalence rates of mental health conditions
  – High rates of drug use and alcohol misuse, but also high rates of sobriety
  – Significantly elevated prevalence rates of adverse childhood experiences (ACEs)
  – Unmet need for care and limited access to health care services

• High rates of mental illness/drug use disorders in homeless/housing insecure

• Questions?
Sioux Falls Area Maps
Sioux Falls Prevalence of Depression

Sioux Falls | PHQ-2 Depression Score | Study-wide Average: 6%
Sioux Falls Prevalence of Anxiety

Sioux Falls | GAD-2 Anxiety | Study-wide Average: 8%

Map showing the prevalence of anxiety in different zip codes of Sioux Falls with percentage ranges:
- 57104: 12% (N: 58)
- 57107: 14% (N: 20)
- 57106: 10% (N: 127)
- 57105: 1% (N: 83)
- 57108: 2% (N: 53)
- 57110: 3% (N: 58)

Legend:
- <5%
- 5% - 9%
- 10% - 15%
- >15%
Sioux Falls Prevalence of PTSD

Sioux Falls | PTSD | Study-wide Average: 6%

- 57107 (N:20) 5%
- 57106 (N:127) 6%
- 57104 (N:58) 3%
- 57103 (N:118) 10%
- 57105 (N:83) 8%
- 57110 (N:58) 2%
- 57108 (N:53) 7%
Sioux Falls Prevalence of Problem Drinking

Sioux Falls | Audit-C Alcohol Abuse | Study-wide Average: 42%
Sioux Falls Prevalence of Problem Drinking among Females (3+ AUDIT-C Score)

Sioux Falls | Audit-C Alcohol Abuse Female | Study-wide Average: 42%
Sioux Falls Prevalence of Problem Drinking among Males (4+ AUDIT-C Score)

Sioux Falls | Audit-C Alcohol Abuse Male | Study-wide Average: 42%
Sioux Falls Prevalence of Severe Alcohol Misuse (6+ AUDIT-C Score)

Sioux Falls | Audit 6+ | Study-wide Average: 11%

Note: ZIP code 57107 is excluded from this map because there were not enough responses from the ZIP code to report this measure
Sioux Falls Highest Severity Alcohol Misuse (9+ AUDIT-C Score)

Sioux Falls| Audit 9+ | Study-wide Average: 2%
Sioux Falls Prevalence of Binge Drinking

Sioux Falls | Binge Drinking | Study-wide Average: 39%

Legend:
- <18%
- 18% - 26%
- 36% - 43%
- 43% - 49%
- >43%
Sioux Falls Prevalence of Any Substance Use in the Past Year

Sioux Falls | Any Drug Use-Past Year | Study-wide Average: 8%
Sioux Falls Prevalence of Marijuana Use in the Past Year

Sioux Falls | Marijuana Use | Study-wide Average: 7%

- 57104 (N:58): 26%
- 57106 (N:127): 12%
- 57107 (N:20): 0%
- 57108 (N:53): 0%
- 57109 (N:118): 8%
- 57110 (N:58): 4%

Legend:
- <10%
- 10% - 19%
- 20% - 28%
- >28%
Sioux Falls Prevalence of Unmet Medical Need

Sioux Falls | Unmet Medical Need | Study-wide Average: 9%

[Map showing prevalence of unmet medical need in different areas of Sioux Falls, with numerical values and color coding indicating percentages.]
Sioux Falls Prevalence of Unmet Mental Health Need

Sioux Falls | Unmet Mental Health Need | Study-wide Average: 3%

- 57107 (N:20) 5%
- 57104 (N:58) 7%
- 57106 (N:127) 2%
- 57105 (N:83) 3%
- 57103 (N:118) 5%
- 57110 (N:58) 2%
- 57108 (N:53) 0%

Legend:
- <4%
- 4% - 5%
- 6% - 9%
- > 9%

Community Mental Health Centers
Sioux Falls Prevalence of Emergency Room Use Due to a Mental Health Condition

Sioux Falls | 1 or More ER Visit for MH | Study-wide Average: 11%

Note: ZIP code 57107 is excluded from this map because there were not enough responses from the ZIP code to report this measure.
Sioux Falls Prevalence of Emergency Room Use Due to a Substance Use Condition

Sioux Falls | 1 or More ER Visit for SU | Study-wide Average: 1%

![Map of Sioux Falls showing prevalence of emergency room use due to substance use conditions. The map is color-coded with the following legend:
- Light yellow: <3%
- Orange: 3% - 5%
- Brown: >7%
- Red: 6% - 7%

Each area of the map is labeled with zip codes and the corresponding percentage of ER visits due to substance use conditions. The map shows that most areas have an prevalence of 0% or less.](image-url)
Sioux Falls Lack of Access to Primary Care Provider

Sioux Falls | No PCP | Study-wide Average: 23%

Note: ZIP code 57110 is excluded from this map because there were not enough responses from the ZIP code to report this measure
Sioux Falls Knowledge of Substance Use Treatment Options

Sioux Falls | Know Where to go for SA Care | Study-wide Average: 52%
Rapid City Prevalence of Depression

Rapid City | PHQ-2 Depression Score | Study-wide Average: 6%

Map showing the prevalence of depression in different areas of Rapid City with varying percentages colored in different shades.
Rapid City Prevalence of Anxiety

Rapid City | GAD-2 Anxiety | Study-wide Average: 8%

Map showing prevalence of anxiety by zip code in Rapid City, with the study-wide average being 8%. The map indicates varying percentages of anxiety across different areas.
Rapid City Prevalence of PTSD

Rapid City | PTSD | Study-wide Average: 6%
Rapid City Prevalence of Problem Drinking

Rapid City | Audit-C Alcohol Abuse | Study-wide Average: 42%
Rapid City Prevalence of Problem Drinking among Females (3+ AUDIT-C Score)

Rapid City | Audit-C Alcohol Abuse Female | Study-wide Average: 42%

- 57701 (N:205) 35%
- 57702 (N:200) 49%
- 57703 (N:72) 26%

Legend:
- <29%
- 29% - 41%
- 42% - 52%
- > 52%
Rapid City Prevalence of Problem Drinking among Males (4+ AUDIT-C Score)

Rapid City | Audit-C Alcohol Abuse Male | Study-wide Average: 42%

Note: ZIP code 57703 is excluded from this map because there were not enough responses from the ZIP code to report this measure.
Rapid City Prevalence of Severe Alcohol Misuse (6+ AUDIT-C Score)

Rapid City | Audit 6+ | Study-wide Average: 11%

57701
(N:205)
14%

57702
(N:200)
11%

57703
(N:72)
3%

<10%  
17% - 22%  
10% - 16%  
>22%
Rapid City Highest Severity Alcohol Misuse (9+ AUDIT-C Score)

Rapid City | Audit 9+ | Study-wide Average: 2%

- 57701 (N:205) 1%
  - 57702 (N:200) 2%
  - 57703 (N:72) 2%

Legend:
- <4%
- 7% -9%
- 4% - 6%
- >9%
Rapid City Prevalence of Binge Drinking

Rapid City | Binge Drinking | Study-wide Average: 39%

- 57701 (N:205) 47%
- 57702 (N:200) 34%
- 57703 (N:72) 22%

Legend:
- <18%
- 18% - 26%
- 36% - 43%
- > 43%
Rapid City Prevalence of Any Substance Use in the Past Year

Rapid City | Any Drug Use-Past Year | Study-wide Average: 8%

- 57701 (N: 205) 14%
- 57702 (N: 200) 6%
- 57703 (N: 72) 3%

Legend:
- <10%
- 10% - 20%
- 21% - 29%
- > 29%
Rapid City Prevalence of Marijuana Use in the Past Year

Rapid City | Marijuana Use | Study-wide Average: 7%
Rapid City Prevalence of Unmet Medical Need

Rapid City | Unmet Medical Need | Study-wide Average: 9%

- 57701 (N:205) 17%
- 57702 (N:200) 9%
- 57703 (N:72) 6%

Legend:
- <12%
- 12% - 23%
- 24% - 33%
- > 33%
Rapid City Prevalence of Unmet Mental Health Need

Rapid City | Unmet Mental Health Need | Study-wide Average: 3%
Rapid City Prevalence of Unmet Substance Use Need

Rapid City | Unmet Substance Abuse Need | Study-wide Average: 0%

- 57701 (N:205) 1%
- 57702 (N:200) 0%
- 57703 (N:72) 0%

Legend:
- <2%
- 2%
- 3%
- >3%

Accredited Substance Abuse Providers
Rapid City Prevalence of Emergency Room Use Due to a Mental Health Condition

Rapid City | 1 or More ER Visit for MH | Study-wide Average: 11%

- 57701 (N:205): 25%
- 57702 (N:200): 7%
- 57703 (N:72): 16%

Legend:
- <11%
- 11% - 18%
- 19% - 26%
- >26%
Rapid City Prevalence of Emergency Room Use Due to a Substance Use Condition

Rapid City | 1 or More ER Visit for SU | Study-wide Average: 1%
Rapid City Lack of Access to Primary Care Provider

Rapid City | No PCP | Study-wide Average: 23%
Rapid City Knowledge of Mental Health Treatment Options

Rapid City | Know Where to go for MH Care | Study-wide Average: 62%

57701 (N:205)
60%

57702 (N:200)
66%

57703 (N:72)
67%

Legends:
- <39%
- 53% - 64%
- 40% - 52%
- > 64%

Community Mental Health Center
Rapid City Knowledge of Substance Use Treatment Options

Rapid City | Know Where to go for SA Care | Study-wide Average: 52%

Legend:
- <35%
- 49% - 60%
- 35% - 48%
- > 60%
- Accredited Substance Abuse Provider
Rapid City Area Maps
Rapid City Prevalence of Anxiety

Rapid City | GAD-2 Anxiety | Study-wide Average: 8%
Rapid City Prevalence of PTSD

Rapid City | PTSD | Study-wide Average: 6%

- 57701 (N: 205) 13%
- 57702 (N: 200) 6%
- 57703 (N: 72) 6%

Legend:
- <6%
- 6% - 9%
- 10% - 15%
- >15%
Rapid City Prevalence of Problem Drinking

Rapid City | Audit-C Alcohol Abuse | Study-wide Average: 42%

Legend:
- <30%
- 30% - 40%
- 41% - 49%
- >49%
Rapid City Prevalence of Problem Drinking among Females (3+ AUDIT-C Score)

Rapid City | Audit-C Alcohol Abuse Female | Study-wide Average: 42%

- 57701 (N: 205) 35%
- 57702 (N: 200) 49%
- 57703 (N: 72) 26%

Legend:
- <29%
- 29% - 41%
- 42% - 52%
- > 52%
Rapid City Prevalence of Problem Drinking among Males (4+ AUDIT-C Score)

Rapid City | Audit-C Alcohol Abuse Male | Study-wide Average: 42%

Note: ZIP code 57703 is excluded from this map because there were not enough responses from the ZIP code to report this measure.
Rapid City Prevalence of Severe Alcohol Misuse (6+ AUDIT-C Score)

Rapid City | Audit 6+ | Study-wide Average: 11%

- 57701 (N:205) 14%
- 57702 (N:200) 11%
- 57703 (N:72) 3%

Legend:
- <10%
- 17% - 22%
- 10% - 16%
- >22%
Rapid City Highest Severity Alcohol Misuse (9+ AUDIT-C Score)

Rapid City | Audit 9+ | Study-wide Average: 2%
Rapid City Prevalence of Any Substance Use in the Past Year

Rapid City | Any Drug Use-Past Year | Study-wide Average: 8%

57701 (N:205) 14%
57702 (N:200) 6%
57703 (N:72) 3%
Rapid City Prevalence of Marijuana Use in the Past Year

Rapid City | Marijuana Use | Study-wide Average: 7%

- 57701 (N:205) 9%
- 57702 (N:200) 6%
- 57703 (N:72) 3%

Legend:
- <10%
- 10% - 19%
- 20% - 28%
- > 28%
Rapid City Prevalence of Unmet Medical Need

Rapid City | Unmet Medical Need | Study-wide Average: 9%

- 57701 (N:205) 17%
- 57702 (N:200) 9%
- 57703 (N:72) 6%

Legend:
- <12%
- 12% - 23%
- 24% - 33%
- > 33%
Rapid City Prevalence of Unmet Substance Use Need

Rapid City | Unmet Substance Abuse Need | Study-wide Average: 0%

- 57701 (N:205) 1%
- 57702 (N:200) 0%
- 57703 (N:72) 0%

Legend:
- <2%
- 2%
- 3%
- >3%
- Accredited Substance Abuse Providers
Rapid City Prevalence of Emergency Room Use Due to a Mental Health Condition

Rapid City | 1 or More ER Visit for MH | Study-wide Average: 11%

- 57701 (N:205) 25%
- 57702 (N:200) 7%
- 57703 (N:72) 16%

Legend:
- <11%
- 11% - 18%
- 19% - 26%
- >26%
Rapid City Prevalence of Emergency Room Use Due to a Substance Use Condition

Rapid City | 1 or More ER Visit for SU | Study-wide Average: 1%

Map showing prevalence of emergency room use due to substance use conditions in Rapid City, with different color codes indicating percentage ranges.
Rapid City Lack of Access to Primary Care Provider

Rapid City | No PCP | Study-wide Average: 23%
Rapid City Knowledge of Mental Health Treatment Options

Rapid City | Know Where to go for MH Care | Study-wide Average: 62%
Rapid City Knowledge of Substance Use Treatment Options

Rapid City | Know Where to go for SA Care | Study-wide Average: 52%

Map showing the knowledge of substance use treatment options across different zip codes in Rapid City, with varying percentages and an indication of accredited substance abuse providers.
Interviews with South Dakotans
Rationale: Discordance in Perceived Need for Care vs. Screening Results

• Many survey participants screened positive for a behavioral health condition but did not identify a need for care.
  – Mental health: 12.2% of respondents screened positive, only 36.2% of these individuals perceived a need for care
  – Substance use: 42.3% of respondents screened positive, only 1.9% of those individuals perceived a need for care

• Follow-up interviews conducted with focused sample of 35 survey respondents to better understand what contributes to this discrepancy
Interview Method

• Three recruitment steps
  – Identify willing participants
  – Cluster participants on screening/perceived need
  – Recruit purposive sample

• 30-60 minute interviews conducted between July – November 2014

• Multidisciplinary team analyzed transcripts using content analysis framework
Interview Participant Characteristics (N = 35)

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>N (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age</strong></td>
<td></td>
</tr>
<tr>
<td>18-34</td>
<td>5 (14.3)</td>
</tr>
<tr>
<td>35-64</td>
<td>23 (65.7)</td>
</tr>
<tr>
<td>65 and older</td>
<td>7 (20.0)</td>
</tr>
<tr>
<td><strong>Female Gender</strong></td>
<td></td>
</tr>
<tr>
<td>21 (60.0)</td>
<td></td>
</tr>
<tr>
<td><strong>American Indian Race/Ethnicity</strong></td>
<td>10 (28.6)</td>
</tr>
<tr>
<td><strong>Geography</strong></td>
<td></td>
</tr>
<tr>
<td>Urban</td>
<td>6 (17.1)</td>
</tr>
<tr>
<td>Rural</td>
<td>11 (31.4)</td>
</tr>
<tr>
<td>Isolated</td>
<td>10 (28.6)</td>
</tr>
<tr>
<td>Reservation</td>
<td>8 (22.9)</td>
</tr>
<tr>
<td><strong>Screening Status</strong></td>
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</tr>
<tr>
<td>Mental Health only</td>
<td>18 (51.4)</td>
</tr>
<tr>
<td>Substance Abuse Only</td>
<td>9 (25.7)</td>
</tr>
<tr>
<td>Co-occurring</td>
<td>6 (17.1)</td>
</tr>
<tr>
<td>Negative Screen</td>
<td>2 (5.7)</td>
</tr>
</tbody>
</table>
Emergent Themes

Two broad constructs emerged as critical to understanding treatment gaps for mental health, alcohol and substance use:

1) How the “problem” was defined shaped an individual’s perceptions of need and

2) Tipping points that encouraged individuals to seek care.

Participants also shared ideas on how to bridge the treatment gap.
Key Theme: Defining Mental Health Conditions

• Many participants viewed mental health conditions as a normal part of life or a “personal problem” rather than diseases that could be treated.

“I got an ex-wife — something’s the matter with her, but that’s been that way forever and I don’t even know what it is. It’s just a personality quirk. It’s all right, just so long as the neighbors don’t find out. There’s a lot of people that way who have been brought up like me but just can’t cope with the real world.”
Key Theme: Defining Alcohol & Drug Use Problems

• Alcohol use started early and was viewed as normative
• Alcohol abuse was associated with harm of others, neglecting responsibilities, or getting into trouble with the law. Relative comparison factored in to perceptions.

“I think some of it is like, ‘Oh, I’ve never gotten in trouble with the law and when I do drink I’m at home...I’m not out and about, causing problems or going out and driving around.’ And like I say, I haven’t viewed it as a problem.”

• About half of participants viewed any use of drugs as abuse. Others only considered it abuse only if drug use interfered with an individual’s ability to function.
Key Themes: Tipping Points & Individual Willpower

- Coping with a mental health issue or maintaining sobriety was frequently viewed as the result of an individual’s willpower.
- Family, friends, and court-mandated treatment could play a role in suggesting needed treatment.
- Trigger for seeking care often related to a substantial life event (e.g., children).

“I’d seen my mom quit, and a few other family members quit drinking. I was the only one still making an ass out of myself. And then I had kids.”
Key Themes: Stigma and Denial

- Stigma was a prominent concern related to seeking mental health or substance use treatment

“When a barrier is] everybody knowing. [It’s a] small community. It doesn’t take long for word to get around. A matter of fact, if I take an ambulance run by the time I get back half the town knows about it – in detail. I mean it surprises the heck out of me how we can run to [larger city] and back which takes about 4-1/2 hours and I’ll get back and go to the grocery store and people will ask me ‘well, how’s so and so doing?’

- Denial was also viewed as factor that limited treatment seeking.
Participant Recommendations to Bridge the Treatment Gap

• Improve local access and quality of care
• Provide community education about behavioral health conditions, effectiveness of treatment, and how to get help
• Address contextual factors and systemic issues that can contribute to behavioral health conditions

“...if we had things that would be supportive of a healthy lifestyle – because when people go to treatment they come from that environment back into the old environment, and if there’s nothing there for support, you’re going to go right back in with your friends...If there was a support system that helped a person to continue to get outpatient treatment, help them get a job, if they needed some life skills to have that education there for them [this would help].”
Key Findings: Interviews

• Discordance between positive clinical screens and perceived treatment need (63.8% with mental health conditions; 98.1% with substance use needs)

• Discrepancy related to how conditions are defined; stigma and denial

• Treatment seeking encouraged by others, but seen as results of individual’s will power and often related to life events

• Participants noted community-based education and system-level interventions were needed in order for improvements in local access to be effective

• Questions?
Thank you