Preliminary Outcome Data on Impact of TCHATT on Depression Scores

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Analysis Approach

Population
• TCHATT Students who have taken PHQ-9A more than once
• Archived services only

Descriptive Statistics
• Demographics
• School and service characteristics

Within-Student Change
• Mean score change by level of severity at baseline
• Did students with mild to severe depression at baseline experience ≥5 improvement in score?
• Did students with baseline scores in the clinical range experience improvement to sub-clinical levels of depressive symptoms?
Data Sources

Trayt TCHATT Database
- Assessments (total PHQ-9A severity score, date completed)
- Referrals & Services (age, gender, race, ethnicity, school ID, reason TCHATT service was ended)
- Sessions (completed sessions, session dates)

Texas Education Agency (TEA)
- School locale designations (urban, suburb, small town, rural) from National Center for Education Statistics (NCES)
Descriptive Statistics

Demographic Characteristics of Students with Repeated PHQ-9A
(n=509)
Mean Score Change

All race and ethnic groups improved equally well

Greater improvement

Score Change

Hispanic  NH White  NH Black  NH Asian/PI  NH Other/Multi
Race & Ethnicity
Mean Score Change

All age and gender groups improved equally well
Students in all school locales improved equally well.
Mean Score Change

PHQ-9A score change by baseline score category

<table>
<thead>
<tr>
<th>Baseline Score Group</th>
<th>n</th>
<th>Baseline Score mean (SD)</th>
<th>Score Change Baseline to Last Assessment mean (SD)</th>
<th>Days Baseline to Last Assessment mean (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-4: No depression</td>
<td>88</td>
<td>2.3 (1.4)</td>
<td>-0.1 (2.7)</td>
<td>46.3 (29.9)</td>
</tr>
<tr>
<td>5-9: Mild</td>
<td>117</td>
<td>6.8 (1.4)</td>
<td>-2.3 (3.4)</td>
<td>59.9 (46.4)</td>
</tr>
<tr>
<td>10-14: Moderate</td>
<td>137</td>
<td>11.9 (1.4)</td>
<td>-4.3 (4.9)</td>
<td>57.5 (39.5)</td>
</tr>
<tr>
<td>15-19: Mod / Severe</td>
<td>117</td>
<td>16.9 (1.4)</td>
<td>-6.6 (6.0)</td>
<td>65.8 (48.6)</td>
</tr>
<tr>
<td>20-29: Severe</td>
<td>50</td>
<td>22.2 (1.7)</td>
<td>-6.0 (6.6)</td>
<td>60.0 (37.9)</td>
</tr>
<tr>
<td>All Students</td>
<td>509</td>
<td>11.2 (6.3)</td>
<td>-3.8 (5.3)</td>
<td>58.2 (42.2)</td>
</tr>
</tbody>
</table>
Mean Score Change

PHQ-9A score change by baseline score category

Clinical Threshold (10 pts)
Did Students Achieve Reliable Change?

Students with Improvement of 5 Points or Greater (RCI)

<table>
<thead>
<tr>
<th>Baseline Score Category</th>
<th>% Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mild (5-9) (n=117)</td>
<td>30.8%</td>
</tr>
<tr>
<td>Moderate (10-14) (n=137)</td>
<td>53.3%</td>
</tr>
<tr>
<td>Mod / Severe (15-19) (n=117)</td>
<td>59.0%</td>
</tr>
<tr>
<td>Severe (20+) (n=50)</td>
<td>50.0%</td>
</tr>
</tbody>
</table>
Did Students Achieve Clinically Meaningful Change?

Students with Mild or No Depression at Final Assessment

- Moderate (10-14) (n=137): 66.4%
- Mod / Severe (15-19) (n=117): 46.2%
- Severe (20 +) (n=50): 14.0%
Conclusions

• Participation in TCHATT resulted in a clinically significant reduction in depressive symptoms, particularly for those with more severe symptoms on entry to the program

• Treatment was equally effective for students of
  • All major racial and ethnic groups
  • Males and females
  • All age groups
  • Rural, Suburban and Urban areas

• Further analyses planned to look at anxiety, suicidal behavior and other major symptom groups
Conclusions

• These results are from a sub-sample of the over 13,000 students that have been treated in TCHATT
• Looks at the effect of the first 60 days of treatment
• Need to standardize assessment across TCHATT and look at a wider range of symptoms
Executive Summary

- 509 students with multiple PHQ-9A assessments of depressive symptoms through 10/31/2022
  - Demographics representative of state school population
- On average, PHQ-9A depression scores improved from baseline to the final assessment
- Outcomes improved equally across all subgroups of race, ethnicity, age, and gender
- More severe scores at baseline were associated with greater improvements over time