Primary Purpose:
Investigators assessed the impact of three “clusters” of early intervention programs on consumers’ MHSA-defined mental health outcomes.

The three clusters of programs targeted the following populations:

**Cluster 1:** Children and youth displaying emotional disturbance as a result of trauma

**Cluster 2:** Youth, transition-age-youth, and younger adults with prodromal symptoms or experiencing first onset of psychosis

**Cluster 3:** Older adults experiencing early onset of depression or depressive symptoms

Background:
Twenty percent of funds from the MHSA are committed to Prevention and Early Intervention (PEI) programs. Primary MHSA goals for PEI are to prevent mental illness from becoming severe and disabling and improve timely access to mental health services for underserved populations. The intent of PEI is to shift California’s mental health system toward a recovery-oriented, “help-first” strategy and away from a crisis-oriented “fail-first” response to serious mental illness and its outcomes.

Methodology:
Four criteria were used to decide which programs to include in each cluster.

**Cluster Inclusion Criteria:**
1. **Early Intervention Programs:** Selected programs served individuals with early onset of a mental illness or emotional disturbance.
2. **PEI Funding:** Early intervention programs were at least partially funded by MHSA PEI funds.
3. **Consumer Population Defined by Clinical Assessment:** Consumers served by selected programs were shown via systematic assessment to have a “clinical level” of symptoms indicative of early onset of a mental illness or emotional disturbance.
4. **Program Components and Implementation:** Selected programs provided promising or evidence-based treatment components that were implemented with fidelity and shown in peer-reviewed research to be effective for each cluster’s specific target population.

The programs listed below met these inclusion criteria. Analyses were conducted to determine the impact of these programs on MHSA goals. Unless otherwise noted, *clinical significance* (i.e., movement from one clinical category to another) was used to interpret changes in outcomes.

**Programs Included in Each Cluster:**

**Cluster 1:** Trauma-Focused Cognitive Behavioral Therapy (TF-CBT) and Cognitive Behavioral Intervention for Trauma in Schools (CBITS) being implemented in 8 counties.

**Cluster 2:** Prevention and Recovery in Early Psychosis (PREP), Portland Identification and Early Referral (PIER), and Sacramento Early Diagnosis and Preventative Treatment (SacEDAPT) being implemented in 8 counties.

**Cluster 3:** the IMPACT program, Healthy IDEAS (Identifying Depression, Empowering Activities for Seniors), and Program to Encourage Active Living for Seniors (PEARLS) being implemented in 10 counties.

**Major Findings:**

**Cluster 1: Children and youth displaying emotional disturbance as a result of trauma**

Cluster 1 programs showed promising evidence of preventing mental illness from becoming more severe.

- TF-CBT participants showed clinically significant improvement in functioning on the Youth Outcomes Questionnaire (YOQ) and moved into the non-clinical range post-intervention.

### Percentage of Participants Showing Clinical Levels on Each Subscale of the YOQ Before and After the Intervention

<table>
<thead>
<tr>
<th>Subscale</th>
<th>Time 1</th>
<th>Time 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intrapersonal Distress</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Somatic Concerns</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interpersonal Relationship Difficulties</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Problems</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Behavioral Distress</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Critical Items</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Score</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Ns ranged from 3,181 to 10,856 at Time 1 and 3,179 to 12,050 at Time 2.*

- This pattern of improvement held across counties and underserved racial groups.
Cluster 1 programs also showed evidence of providing access to services for traditionally underserved demographic groups.

- Most Cluster 1 programs served various groups at rates proportional to each group's estimated need for service.

Cluster 2: Youth, transition-age-youth, and younger adults with prodromal symptoms or experiencing first onset of psychosis

Findings indicated that Cluster 2 programs may have helped prevent mental illness from becoming severe.

- For PREP, PIER, and SacEDAPT, findings showed reduced depression and improved functioning from pre- to post-intervention; however, findings did not meet clinical significance.

Participants' Reports of Depression and Functioning Before and After the Intervention

<table>
<thead>
<tr>
<th>Outcome/Scale</th>
<th>N</th>
<th>Before Intervention</th>
<th>After Intervention</th>
<th>Change Over Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depression: Patient Health Questionnaire (PHQ-9)</td>
<td>56</td>
<td>9.02</td>
<td>7.11</td>
<td>-1.91 Reduced Depression</td>
</tr>
<tr>
<td>Functioning: Global Assessment of Functioning (GAF)</td>
<td>167</td>
<td>42.87</td>
<td>47.51</td>
<td>4.63 Increased Functioning</td>
</tr>
</tbody>
</table>

For Cluster 2 programs, there was also evidence of reduced involvement in the justice system.

- Participants reported significantly fewer arrests following the intervention.

Number of Participants Reporting Arrests Prior to Intake and Between Intake and Follow-up

<table>
<thead>
<tr>
<th>Arrested</th>
<th>Before Intake</th>
<th>Between Intake and Follow-up</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>(18.5%)</td>
<td>3 (3.7%)</td>
</tr>
<tr>
<td>Not Arrested</td>
<td>66 (81.5%)</td>
<td>78 (96.3%)</td>
</tr>
</tbody>
</table>

*Statistically significant; p<.01.

There was also evidence of reduced school dropout, unemployment, and homelessness, but small sample sizes prevented definitive conclusions for these outcomes.

Cluster 2 programs showed some evidence of providing access to services for traditionally underserved demographic groups.

- Underserved racial/ethnic groups were served at rates proportional to each group's estimated need for service.

Cluster 3: Older adults experiencing early onset of depressive symptoms

Cluster 3 programs likely helped prevent mental illness from becoming more severe.

- IMPACT, PEARLS, and Healthy IDEAS participants showed clinically significant improvement in depression, anxiety, and functioning from pre- to post-intervention.

Participants' Reports of Depression, Anxiety and Functioning Before and After the Intervention

<table>
<thead>
<tr>
<th>Outcome/Scale</th>
<th>N</th>
<th>Before Intervention</th>
<th>After Intervention</th>
<th>Change Over Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depression: Patient Health Questionnaire (PHQ-9)</td>
<td>415</td>
<td>11.10</td>
<td>6.44</td>
<td>-4.66 Reduced Depression</td>
</tr>
<tr>
<td>Anxiety: Generalized Anxiety Disorder (GAD-7)</td>
<td>25</td>
<td>10.43</td>
<td>6.31</td>
<td>-4.22 Reduced Anxiety</td>
</tr>
<tr>
<td>Functioning: Global Assessment of Functioning (GAF)</td>
<td>16</td>
<td>57.16</td>
<td>68.36</td>
<td>11.20 Increased Functioning</td>
</tr>
</tbody>
</table>

Findings were mixed for providing access to services for traditionally underserved groups.

- Some counties provided services at rates that were proportional to each group's estimated need; Black participants were even served at rates greater than their estimated need in some counties.
- Other counties provided low rates of service to underserved groups (e.g., males and Hispanics were underserved).

Cluster 3 programs positively impacted suicide.

- Post-intervention, participants showed significant reductions in suicidal thoughts and behaviors.

Participants' Levels of Suicidal Thoughts and Behaviors Before and After the Intervention

<table>
<thead>
<tr>
<th>Outcome/Scale</th>
<th>N</th>
<th>Before Intervention</th>
<th>After Intervention</th>
<th>Change Over Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suicide: Patient Health Questionnaire (PHQ-9)</td>
<td>233</td>
<td>0.25</td>
<td>0.15</td>
<td>-0.09 Reduced Suicide</td>
</tr>
</tbody>
</table>

*Statistically significant; p<.05.

Principal Investigators:

University of California Los Angeles Center for Healthier Children, Families, and Communities; Trylon Associates.

Links to Study:


Cluster 2 Report: [http://www.mhsoac.ca.gov/meetings/docs/Meetings/2014/July/OAC_072414_5A_Cluster2.pdf](http://www.mhsoac.ca.gov/meetings/docs/Meetings/2014/July/OAC_072414_5A_Cluster2.pdf)


Implications:

Overall, these cluster evaluations indicate that early intervention programs are positively impacting consumers' mental health outcomes. For example, there is evidence that early intervention programs reduce the severity of symptoms of mental illness, and in most counties services are being offered at rates consistent with the needs of traditionally underserved groups. Future evaluations should prioritize larger sample sizes and interpretation of findings using both clinical and statistical significance.