Strategies used to manage service demand for child and adolescent mental health services in Canada

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Background

Wait times in child mental health:

• 12% experience functionally impairing psychiatric disorders.[1]

• Up to 75% don’t receive mental health services.[2]

• Access to care may be impeded by long wait times.[3-6]

• Excessive wait times may contribute to increased risk for suicide or hospitalization.[7]
What are agencies doing?

Mental Health:
• Collaboration with other service providers [8]
• Brief self-help intervention [9]
• Quality improvement model: [7]
  - Centralized intake
  - Regular team meetings
  - Weekly monitoring of patients on the waitlist

Other medical disorders:
• Greater use of paraprofessionals [10]
• Offering services at non-traditional times and sites [10]
Problem

• The strategies used by child and adolescent mental health agencies in Canada to manage service demands remains unknown.

• The relationship of those strategies to wait times and benchmarks has not yet been investigated.
Objectives

1. Identify the strategies to manage service demands used by child and adolescent mental health services (CAMHS) agencies;

2. Determine whether types of strategies used are related to (a) wait times and (b) extent of meeting Canadian Psychiatric Association (CPA) wait time benchmarks;

3. Investigate relationships between types of strategies used and agency characteristics.
Sample

- No single sampling frame was possible, due to the high degree of variability in the organization of CAMHS across Canada.

- In total, 379 child and adolescent mental health agencies across Canada were invited by email to participate.
The Survey

• Informed by a qualitative research phase:
  ▪ Open-ended interviews with researchers, providers and administrators across Canada to identify current practices.

• Components of the final survey included:
  1. Agency characteristics
  2. Details on wait times
  3. List of strategies to manage demand for services
Analyses

- 41 individual strategies from survey were classified in 1 or more clusters independently by both investigators. Final 5 clusters:

1. **Upstream/ Pre-waitlist:** Ex: Centralizing the intake process.

2. **Specific Management:** Ex: Conducting regular team meetings to triage and plan for patients on the waitlist

3. **External Resources:** Ex: Referring or redirecting families to other agencies and providers.

4. **Organization of Treatment:** Ex: Offering services at non-traditional sites (e.g. schools, home, primary care offices)

5. **Restrictions** Ex: Restricting services to certain diagnostic groups (e.g., Eating disorders)
Analyses - continued

- Spearman’s rank correlations ($\rho; \alpha=0.01$) were used to determine the relationship between:

1. Types of strategies used and agencies’ ability to meet CPA benchmarks;

2. Types of strategies used and wait times by clinical severity levels;

3. Types of strategies used and agency characteristics.
Results

Overview:
• 113 agencies returned adequately completed surveys (29.8%).
• The mean number of strategies used was 21.4 (S.D. = 5.6, Range = 0-36).
• Only 1 agency reported not using any of the strategies.

Most commonly endorsed strategies:
• 91% reported Collaborating with other agencies/providers in treatment and follow-up.
• 88% reported Referring families to self-help resources.
• 86% reported Providing a rapid response for patients who may deteriorate while on the waitlist.
## Results – CPA Benchmarks

Extent of use of different cluster of strategies and agencies’ ability to meet Canadian Psychiatric Association (CPA) wait time benchmarks

<table>
<thead>
<tr>
<th>Strategy Category</th>
<th>Emergent care $\rho$</th>
<th>Urgent care $\rho$</th>
<th>Scheduled care $\rho$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upstream/ Pre-waitlist</td>
<td>0.22</td>
<td>0.36*</td>
<td>0.12</td>
</tr>
<tr>
<td>Specific management of waitlist</td>
<td>0.06</td>
<td>-0.05</td>
<td>-0.13</td>
</tr>
<tr>
<td>External Resources</td>
<td>0.01</td>
<td>0.04</td>
<td>0.03</td>
</tr>
<tr>
<td>Organization of Treatment</td>
<td>0.18</td>
<td>0.05</td>
<td>0.03</td>
</tr>
<tr>
<td>Restrictions</td>
<td>-0.13</td>
<td>-0.17</td>
<td>-0.02</td>
</tr>
</tbody>
</table>

* $p<0.01$
Results – Wait Times

Extent of use of different cluster of strategies and estimated wait times

<table>
<thead>
<tr>
<th>Strategy Category</th>
<th>Low ρ</th>
<th>Moderate ρ</th>
<th>High ρ</th>
<th>Extremely High ρ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upstream/ Pre-waitlist</td>
<td>0.03</td>
<td>-0.03</td>
<td>-0.10</td>
<td>-0.15</td>
</tr>
<tr>
<td>Specific management of waitlist</td>
<td>0.16</td>
<td>0.16</td>
<td>0.13</td>
<td>0.04</td>
</tr>
<tr>
<td>External Resources</td>
<td>0.06</td>
<td>0.01</td>
<td>0.07</td>
<td>-0.02</td>
</tr>
<tr>
<td>Organization of Treatment</td>
<td>-0.02</td>
<td>-0.05</td>
<td>-0.13</td>
<td>-0.20</td>
</tr>
<tr>
<td>Restrictions</td>
<td>0.13</td>
<td>0.14</td>
<td>0.20</td>
<td>0.06</td>
</tr>
</tbody>
</table>
Results – Agency Characteristics

Extent of use of different clusters of strategies and agency characteristics

<table>
<thead>
<tr>
<th>Strategy Category</th>
<th>FTE clinical staff ρ</th>
<th>Children admitted ρ</th>
<th>Children on waitlist ρ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upstream/ Pre-waitlist</td>
<td>-0.10</td>
<td>-0.15</td>
<td>0.03</td>
</tr>
<tr>
<td>Specific management of waitlist</td>
<td>0.22</td>
<td>0.23</td>
<td><strong>0.29</strong>*</td>
</tr>
<tr>
<td>External Resources</td>
<td>0.08</td>
<td>0.05</td>
<td>0.06</td>
</tr>
<tr>
<td>Treatment Organization</td>
<td>0.05</td>
<td>0.09</td>
<td><strong>0.26</strong>*</td>
</tr>
<tr>
<td>Restrictions</td>
<td><strong>0.31</strong>*</td>
<td><strong>0.34</strong>*</td>
<td></td>
</tr>
</tbody>
</table>

* p<0.01
Discussion

- Using more Upstream/Pre-waitlist strategies was related to meeting CPA benchmarks for urgent care, which supports the need for prioritization of patients by clinical severity level.\textsuperscript{[13,6]}

- The relationship between having more children on a waitlist and a greater # of restriction strategies used may reflect the application of restriction strategies in response to large numbers on the wait list.
Limitations

- Cross-sectional study
- Use of self-reported agency estimates as measures of wait times and benchmark attainment.
- Low response rate
- Difficulty in identifying a nationally representative sample of child and adolescent mental health services agencies in Canada.
Conclusions

• Multiple strategies were endorsed by many agencies, but very few demonstrated relationships to wait time variables.

• Rigorous evaluation of commonly used service strategies are required to determine whether any positive impacts are being obtained by such efforts.

Graphic by: Sergio Roberto Bichara
References


Acknowledgements