

# A Preliminary Investigation of Wait Times for Child and Adolescent Mental Health Services in Canada

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## Abstract

**Objectives:** The objectives of this study were to: 1) describe wait times at agencies providing child and adolescent mental health services (CAMHS) in Canada; and 2) determine whether agency and waiting list characteristics are associated with wait times for different clinical priority levels. **Method:** A web-based survey was distributed to 379 agencies providing CAMHS in Canada. The survey contained questions about agency characteristics, waiting list characteristics and agency wait times. Pearson's correlations were used to determine the bivariate relationship between agency and waiting list characteristics and wait times.

**Results:** The response rate was 30.6% (n=116). Only 8.6% of agencies reported no waiting lists for their programs or services. Estimated mean wait times for initial assessment decreased with increasing levels of clinical priority. However, the ranges of wait times at each clinical priority level were substantial. In addition, only 31.4% of agencies reported being "mostly" or "always" able to meet the Canadian Psychiatric Association's wait time benchmark for scheduled care for psychiatric services. Wait times were positively correlated with size of the waiting list for those considered at lower clinical priority. **Conclusions:** The findings confirm concerns about the prevalence of wait times for CAMHS in Canada, and also note marked variability. Though shorter wait times for higher priority children and youth is appropriate, current practice does not meet proposed standards of care as they relate to wait times. Future research should determine the impact of service reform efforts on reducing wait times for children with differing clinical priority levels.

**Key words:** waiting lists, mental health services, child, adolescent

## Résumé

**Objectifs:** 1) évaluer le temps d'attente dans les organismes qui offrent des services de santé mentale aux enfants et aux adolescents au Canada; 2) déterminer si le type d'organisme et les caractéristiques des listes d'attente sont fonction des priorités cliniques. **Méthodologie:** trois cent soixante dix-neuf organismes offrant des services de santé mentale pour enfants et adolescents ont répondu à un sondage sur le Web. Les questions portaient sur les caractéristiques des organismes, les listes d'attente et le temps d'attente. La relation à deux dimensions entre les caractéristiques de l'organisme, les listes d'attente et le temps d'attente a été calculée par corrélation de Pearson. **Résultats:** le taux de réponse était de 30,6 % (n = 116). Seulement 8,6 % des organismes ont répondu qu'il n'y avait pas de liste d'attente pour avoir accès à leurs programmes ou services. L'attente moyenne pour une évaluation initiale était d'autant moins longue que la priorité clinique était grande. Toutefois, l'attente relative à chaque priorité clinique était grande. En outre, seulement 31,4 % des organismes ont déclaré respecter «la plupart du temps» ou «toujours» la norme de l'Association des psychiatres du Canada sur le temps d'attente pour les services psychiatriques réguliers. La corrélation entre le temps d'attente et la longueur de la liste d'attente pour les services non prioritaires au niveau clinique était positive. **Conclusion:** les résultats confirment que le délai d'accès aux services psychiatriques pour enfants et adolescents pose un problème et font apparaître des écarts importants. Bien que l'attente soit moins longue pour les soins prioritaires, comme il se doit, la pratique actuelle ne respecte pas les normes relatives au temps d'attente. Les travaux de recherche à venir devront définir les changements qui permettront de réduire l'attente lorsque les soins ne sont pas prioritaires.

**Mots clés:** liste d'attente, services de santé mentale, enfant, adolescent

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It is estimated that 14% of children (approximately 1.1 million) in Canada, experience clinically important mental disorders (Waddell, C., Offord, D. R., Shepherd, C. A., Hua, J. M., & McEwan, K., 2002). Unfortunately, more than 75% of these children do not receive specialized treatment services (Waddell, C., McEwan, K., Shepherd, C. A., Offord, D. R., & Hua, J. M., 2005). One commonly perceived barrier to accessing Child and Adolescent Mental Health Services (CAMHS) is long wait times (Owens, P. L., Hoagwood, K., Horwitz, S. M., Leaf, P. J., Poduska, J. M., Kellam, S. G., et al., 2002; Tarico, V. S., Low, B. P., Trupin, E., & Forsyth-Stephens, A., 1989). Timely access to services may be critical to successful treatment of children with mental disorders and extended waits may have deleterious effects on a child's well-being. At an individual level, long wait times may result in prolongation of physical and emotional distress and social dysfunction at home, at school, and in the community (Brown, S. A., Parker, J. D., & Godding, P. R., 2002). Furthermore, when access to treatment is delayed, there may be an increased risk of decompensation and suicide (Williams, M. E., Latta, J., & Conversano, P., 2008). At a systems level, long wait times result in increased rates of non-attendance (Gallucci, G., Swartz, W., & Hackerman, F., 2005; Folkins, C., Hersch, P., & Dahlen, D., 1980; Grunebaum, M., Lubert, P., Callahan, M., Leon, A. C., Olfson, M., & Portera, L., 1996; Ronald, F. C., Kourany, M. D., Garber, J., & Tornusciolo, G., 1990), leading to reduced efficiency of CAMHS.

In Canada and elsewhere, the literature on mental health wait times is limited; few studies explicitly examine CAMHS wait times. The Western Canada Waiting List Project highlighted children's mental health as one of five clinical areas with long wait times in Canadian health centres (Noseworthy, T. W., McGurran, J. J., Hadorn, D. C., and the Steering Committee of the Western Canada Waiting List Project, 2003). As part of this initiative, a standardized priority criteria tool was developed (Smith, D. H. & Hadorn, D. C., 2002). However, specific information on wait times has not been reported. A study of child psychiatry in Ontario monitored supply for child psychiatry services but did not address demand (Steele, M. M., Veitch, & Wolfe, V., 1999). In contrast, a study in Quebec did provide wait time estimates for child mental health evaluations, noting variation by region and service type, although not by patient severity level (Breton, J. J., Plante, M. A., & St-Georges, M., 2005).

The lack of data on wait times for CAMHS in Canada impedes our understanding of the current state of the system and leaves us uncertain as to the success of initiatives aimed at reducing waiting lists. The objectives of this study were to: 1) describe the characteristics of waiting lists and wait times at CAMHS in Canada; and 2) determine if agency and waiting

list characteristics are associated with wait times for different clinical priority levels.

## Method

### **Sample and Procedures**

There is no single comprehensive sampling frame for CAMHS in Canada from which a representative sample can be derived. This is partly a function of the organization of CAMHS varying across provinces and the multiple jurisdictions within provinces that provide some aspects of mental health services (e.g., health, social services, mental health, education), which may be further divided into public and private providers and agencies.

Given the absence of an ideal sampling frame, there was some variability in our approach across provinces and we were only able to sample from certain divisions. One key approach was to target health regions given the existence of this common administrative unit across most provinces and which contain some of the CAMHS. Provincial level contacts responsible for the CAMHS component within the regional health systems were requested to electronically forward the study survey to the key CAMHS contacts in each region. This approach was taken in all provinces except Ontario and Quebec. Of note, in most situations the provincial contacts were unwilling or reluctant to provide their electronic distribution list for CAMHS contacts resulting in the study team relying on the provincial contact sending out the survey invitations and reminders.

The health region approach was not used in Ontario. At the time of the survey there was not a clear health regionalization that captured mental health services in Ontario. However, Child Mental Health Ontario (CMHO), a provincial level association whose membership contained the largest number of agencies providing CAMHS in Ontario, agreed to distribute the survey to its membership.

In Quebec, the provincial contact under the Ministry of Health and Social Services was willing to release direct key contact information for two system levels which contain agencies providing CAMHS: hospitals, including academic health centres, and local community service centres (CLSCs).

One contact was identified for each of the three territories.

Two additional targets were recommended in an attempt to capture some of the sectors that would be missed with the above approach. As the mental health services of the major academic pediatric health centres may be missed in the approach described above, contacts within the membership of the Canadian Association of Pediatric Health Centres were also surveyed. As well, it was recommended that the relatively new, at the time, CAMHS units of the Ministry of

Children and Family Development in British Columbia be surveyed. In each of the above sampling approaches, the web-based survey, to be described below, was provided to the regional contact who had an email distribution list for the target group. An invitation email was prepared and given to the regional contact to distribute to the key contacts providing CAMHS in their jurisdiction. Embedded in the email text was the web-address for the survey. In addition, a PDF copy of the survey was attached to the email, which the recipient could use as a working copy or fax back instead of completing the web-based survey. The regional contact was asked to distribute the survey to the key contacts on three different occasions, with an approximate one month interval between distributions. The two reminders were blanket distributed, i.e., not just to non-responders as survey response was anonymous. In the case of Quebec, the research team was able to distribute the survey directly to the target group and ensure that the three mailings occurred. In addition, a hard copy was sent by mail to all the Quebec key contacts with a return envelope as an additional option; a strategy that was not employed in the other provinces given lack of access to contact information.

Sawtooth Software survey software (SSI Web, [www.sawtoothsoftware.com/products/ssiweb/](http://www.sawtoothsoftware.com/products/ssiweb/)) was used to manage the web-based survey.

### **The Survey**

The survey was developed specifically for this study. The survey consisted of 3 core sections: 1) Agency Characteristics, 2) Characteristics of the Waiting List, and 3) Strategies to Manage Demand for Services. Item development was informed by findings from a preceding exploratory qualitative component of the study with key informants providing and/or knowledgeable about CAMHS in Canada. In addition, various drafts of the survey were reviewed by members of the Management and Partnership Committees of the larger research study which included researchers, providers and administrators in the CAMHS sector from different regions of Canada.

In all, there were 3 versions of the survey. The first version of the survey was piloted in Ontario. For the next survey group, several items were dropped based on the identification of problematic items by the Ontario survey respondents. In addition, some additional exploratory questions were added. However, core sections remained the same. The second version of the survey was used in all other provinces and territories except Quebec. A third shorter version, which again contained all the original core sections, was used in Quebec. This third version was translated from English to French and back-translated to English by two bilingual Quebecers familiar with CAMHS. The few minor differences between the

original and back translation were resolved with participation of a third bilingual staff member.

This report focuses on the first two sections of the survey. The first section of the survey requested information on the types of services the agency provides, the agency's geographical catchment area, the agency's caseload, and general agency and responder demographics. The second section of the survey requested information on the agency's experience with waiting lists. The questions in this section pertained to areas of longest delays, average wait times for initial assessment by clinical priority levels, and the number of children currently on a waiting list. Respondents were also asked about the agency's ability to meet the Canadian Psychiatric Association's wait time benchmarks for psychiatric illnesses (Canadian Psychiatric Association, 2010). Specifically, the survey asked questions on the extent to which the agency is able to meet the benchmark for emergent, urgent, and scheduled care.

### **Data Analysis**

Descriptive statistics and Pearson's correlations were determined using the Predictive Analytics Software (PASW) Statistics 18 software (IBM SPSS Statistics, [www.spss.com/statistics/](http://www.spss.com/statistics/)).

### **Results**

The overall response rate for the study was 30.6% (n=116). This ranged from 0% for one of the territories and one of the smaller provinces to 100% for one of the territories and one of the smaller provinces. The Ontario response rate was 44.0% (n=51) and Quebec was 28.4% (n=33). Respondent types included managers (79.3%), executive directors (12.9%), clinicians (5.2%), and others (2.6%).

Respondents indicated that their agencies served a broad range of different geographical catchment area types (Table 1). Screening, triage and/or referrals were the most common reported service followed by the provision of outpatient services. A broad range of agency sizes were represented.

Characteristics of the waiting lists are described in Table 2. Though the majority of respondents indicated waiting lists for some or all of their services, 8.6% (n=10) of respondents indicated no waiting list (Table 2). The longest waiting lists were for assessment and regularly scheduled treatments. Additional waiting list characteristics are described in Table 2.

Wait times for initial assessment by clinical priority level are summarized in Table 3. Wait times are substantially shorter with increasing clinical severity. However, variations at each clinical priority level are substantial.

In 2006, the Canadian Psychiatric Association proposed wait time benchmarks for patients with serious psychiatric

**Table 1. Characteristics of participating agencies**

Characteristic	Agencies (n=116) % (n)		
<b>Geographical catchment area<sup>a</sup></b>			
Major metropolitan (one million or more)	20.7	(24)	
Mid-sized metropolitan (250,000 to 999,999)	20.7	(24)	
Smaller metropolitan (50,000 to 249,999)	25.0	(29)	
Small city (20,000 to 49,999)	19.0	(22)	
Small town (2,500 to 19,999)	26.7	(31)	
Rural (2,499 or less)	19.0	(22)	
Northern (north of the 49 <sup>th</sup> parallel and the territories)	5.2	(6)	
<b>Services provided<sup>a</sup></b>			
Screening, triage, and/or referral services	89.7	(104)	
Outpatient services	88.8	(103)	
Community services	61.2	(71)	
Day treatment	56.9	(66)	
Home based services	42.2	(49)	
Residential care	33.6	(39)	
Inpatient beds	20.7	(24)	
Other	30.2	(35)	
	Mean (SD)	Minimum, Maximum	Median
FTE clinical staff	37.4 (59.4)	0 <sup>b</sup> , 487.0	15.0
# of children admitted in the last 12 months <sup>c</sup>	657.2 (807.9)	0 <sup>d</sup> , 5000.0	380.5
# of children admitted / FTE clinical staff <sup>e</sup>	29.0 (25.2)	0, 166.7	25.0
<sup>a</sup> Could indicate more than one response			
<sup>b</sup> Some agencies reported no FTE (this could reflect an agency which has less than 1.0 clinical FTE or who is not a direct employer of clinical staff such as through an entity that contracts services out)			
<sup>c</sup> Child received at least one appointment			
<sup>d</sup> Some agencies reported no admissions (this could reflect an agency that contracts services out)			
<sup>e</sup> n = 114 (2 missing)			

illnesses (Canadian Psychiatric Association, 2010). Table 4 summarizes the extent to which the responding agencies reported being able to meet these proposed benchmarks. Ability to meet benchmarks decreases with decreasing clinical severity.

Number of FTE clinical staff, number of children admitted, and children admitted/FTE clinical staff were not significantly correlated with wait times at any of the clinical priority levels (Table 5). However, a positive relationship was found between wait times and both number of children on the waiting list and number of children on the waiting list/FTE clinical staff at an agency at the lower levels of clinical priority, though not at the highest levels of clinical priority. This suggests that those at lower clinical priority levels may be more negatively impacted by waiting list size and density.

## Discussion

The findings of this study support the perception that substantial wait times are experienced at many agencies providing CAMHS in Canada, particularly for assessment and regularly scheduled treatment. The pattern identified whereby wait times are much shorter with increasing clinical priority levels suggests that substantial triage occurs within the service system. This pattern has been noted in the surgical procedures literature (Martin, D. K., Walton, N., & Singer, P. A., 2003; MacCormick, A. D., Collecutt, W. G., & Parry, B. R., 2003), however, a standard and explicit criterion for prioritization of all types of surgery is unclear. Less has been written about this pattern in the context of mental health services, although the benefits of triage have been noted (Brown, S. A., et al., 2002; Jones, E., Lucey, C., & Wadland, L., 2000). While desirable,

**Table 2. Characteristics of waiting lists at participating agencies**

Characteristic	Agencies (n=116) % (n)		
Waiting list experience for agency			
No waiting list	8.6 (10)		
Waiting list for one program/service	18.1 (21)		
Waiting list for some programs/services	45.7 (53)		
Waiting list for all programs/services	26.7 (31)		
Unknown	0.9 (1)		
Service activity with the longest delays <sup>a</sup>			
Regular scheduled treatment	43.4 (43)		
Assessment	43.4 (43)		
First contact	6.1 (6)		
Brief treatment while on waiting list	3.0 (3)		
Triage	2.0 (2)		
Screening	1.0 (1)		
Community education program while on waiting list	1.0 (1)		
Waiting list length compared to 12 months ago <sup>b</sup>			
Getting shorter	28.1 (32)		
Staying about the same	37.7 (43)		
Getting longer	34.2 (39)		
	Mean (SD)	Minimum, Maximum	Median
# of children on a waiting list for regular ongoing treatment	70.3 (92.5)	0, 449.0	35.0
# of children on a waiting list / FTE clinical staff	3.6 (5.3)	0, 30.0	2.0
<sup>a</sup> n=99 (17 missing); respondents rank ordered top 3, results only displayed for top choice			
<sup>b</sup> n=114 (2 missing)			

it also highlights the substantial wait likely to be experienced by those children with more routine mental health concerns. The findings also suggest that there is substantial variability in wait time experience across participating agencies.

The pattern of associations suggests that wait times are not necessarily a function of agency size, volume of children seen, or clinical density (i.e., # of children admitted/FTE clinical staff). The latter is somewhat surprising as studies suggest that an increase in human resources may alleviate wait times and waiting lists (Reid, G. J. & Brown, J. B., 2008). However, there was a relationship found between waiting list size and waiting list density (# of children on a waiting list/FTE clinical staff). A strong positive relationship was found between these variables and wait time for low and moderate priority situations. This relationship decreased with increasing clinical severity with no relationship found for wait times for children at the highest clinical priority level.

This may suggest that the triage system is able to disconnect the highest priority children from the impacts of waiting lists. This may be substantially influenced by the existence of additional mechanisms to address this population (e.g., emergency services) that may be accessed without having to go through the backed-up outpatient services. The corollary is that wait times for lower priority children are severely influenced by waiting list size and density. Of note, for these analyses, our measure was wait time to *assessment*. Whether this extends to wait time to *treatment* is unknown, particularly in those settings where these components are separated and where there may be additional wait post assessment and prior to treatment initiation.

Caution is suggested in interpreting and generalizing the findings from this preliminary investigation for several reasons. One, there was an overall low response rate and it is unknown to what extent the responding agencies represent typical



**Table 3. Wait times for initial assessment by clinical priority level**

Priority level	Wait time in days		
	Mean (SD)	Minimum, Maximum	Median
Low <sup>a</sup>	109.5 (100.7)	0, 365.0	90.0
Moderate <sup>b</sup>	75.8 (75.0)	0, 365.0	60.0
High <sup>c</sup>	29.4 (40.1)	0, 270.0	15.0
Extremely high <sup>d</sup>	3.4 (6.9)	0, 30.0	1.0

<sup>a</sup> E.g. Child who is avoiding group activities due to anxiety  
<sup>b</sup> E.g. Child who is failing school secondary to serious ADHD behaviour  
<sup>c</sup> E.g. Child who has been suspended from school for serious aggressive behaviour  
<sup>d</sup> E.g. Child who exhibits serious suicidal or homicidal behaviour

**Table 4. Participating agencies' ability to meet Canadian Psychiatric Association wait time benchmarks<sup>a</sup>**

Benchmark	Extent to which agencies are able to meet the benchmark				
	Never % (n)	Rarely % (n)	Sometimes % (n)	Mostly % (n)	Always % (n)
24 hour wait time for emergent care <sup>b</sup>	6.2 (6)	3.1 (3)	10.3 (10)	35.1 (34)	45.4 (44)
2 week wait time for urgent care <sup>c</sup>	4.9 (5)	10.8 (11)	20.6 (21)	34.3 (35)	29.4 (30)
1 month wait time for scheduled care <sup>c</sup>	10.8 (11)	33.3 (34)	24.5 (25)	20.6 (21)	10.8 (11)

<sup>a</sup> Canadian Psychiatric Association. Wait time benchmarks for patients with serious psychiatric illnesses. Wait Time Alliance [cited 2010 Feb 11]. Available from: <http://www.waittimealliance.ca/waittimes/CPA.pdf>.  
<sup>b</sup> n=97 (19 missing)  
<sup>c</sup> n=102 (14 missing)

agencies throughout CAMHS in Canada. However, there was a substantial mix of small and large agencies from across Canada. Second, questions in the survey were developed specifically for this study and have not been previously assessed as to their extent of reliability and validity. In particular, it is not known to what extent respondents' estimates of wait times are a function of actual wait times. The continued lack of standard definitions and variability in measures of wait time (Sanmartin, C., Shortt, S. E. D., Barer, M. L., Sheps, S., Lewis, S., & McDonald, P. W., 2000; Rotstein, D. L. & Alter, D. A., 2006) add to this problem. More rigorous data collection on wait times is required to more accurately quantify these dimensions. It should be highlighted that wait times are only one measure of access and do not measure other important factors of CAMHS such as safety, effectiveness, patient centeredness, timeliness, efficiency and the equitable nature of care (Committee on Quality Health Care in America, 2010).

## Conclusions

Timely access to care for CAMHS is a concern for many Canadians. This study aimed to begin addressing some of the gaps in knowledge concerning wait times for CAMHS in Canada. Strategies employed in an attempt to reduce wait times have been reviewed elsewhere and include such approaches as: centralizing the point of intake, monitoring and triage of patients on the waiting list, offering educational resources to patients and their parents, offering brief-time limited therapies to patients on the waiting list, expanding formal assessment and treatment services, offering group therapies versus individual therapies, and offering drop-in/walk-in clinics (McLennan, J. D., Perry, M., Waddell, C., & Lavis, J., 2008). To what extent these or other strategies actually reduce wait times is largely unknown. Rigorous evaluation of the impact of these and other health reform efforts are needed to determine to what extent they are aiding (or impeding) efforts to deliver more timely care.

**Table 5. Correlations between agency and waiting list characteristics and wait times by clinical priority level<sup>a</sup>**

	Wait times by clinical priority level			
	Low r	Moderate r	High r	Extremely high r
FTE clinical staff	0.042	0.020	0.157	-0.059
Children admitted <sup>b</sup>	-0.102	-0.117	-0.032	-0.084
Children admitted / FTE clinical staff	0.008	-0.076	-0.121	-0.117
# of children on waiting list <sup>c</sup>	0.351**	0.256**	0.183	-0.009
# of children on waiting list / FTE clinical staff	0.451**	0.511**	0.215*	0.155

<sup>a</sup> Wait times for initial assessment  
<sup>b</sup> Child received at least one appointment in the last 12 months  
<sup>c</sup> Children waiting for regular ongoing treatment  
\*  $P < 0.05$   
\*\*  $P < 0.001$

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