



A Kids Come First Health Team Initiative

1Call1Click.ca:

Connecting Children, Youth, and Families to the Care They Need

May 31, 2021 to December 31, 2023

A Transformational Coordinated Access, Navigation, and Clinical Services to
Support Mental Health, Addictions, and Substance Use Health



it's ok ... we're here to help



Vision

Children and youth and families will get the right care, when they need it, so they can be themselves

Mission

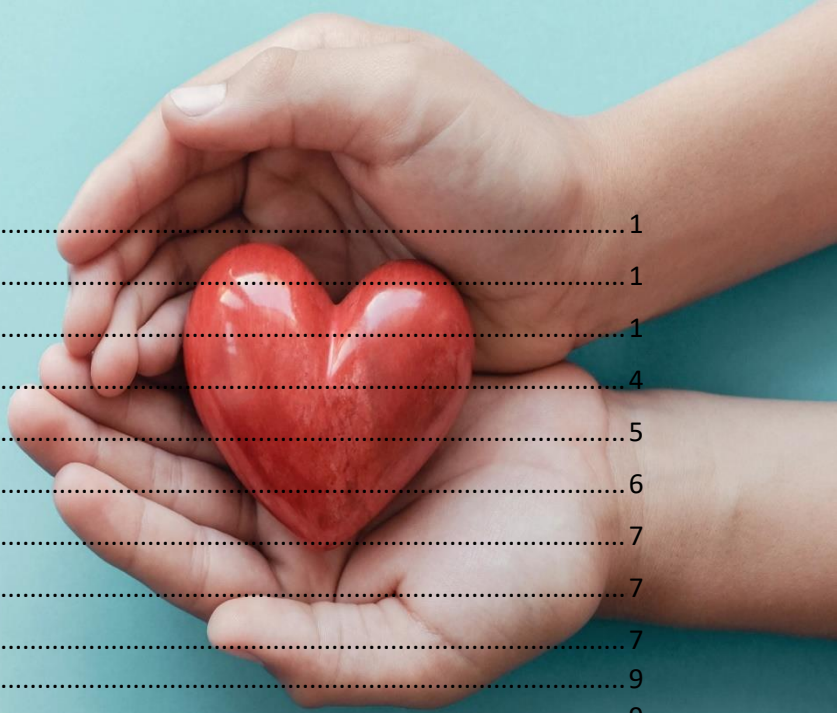
To provide supportive, coordinated access and navigation services in a way that integrates the exceptional, trusted, and safe care for mental health and addiction offered by Kids Come First Health Team organizations in the Eastern region of Ontario Health.

Values

- Every day matters in a young life and for those who care for them
- We respect everyone's experience
- We share the load
- We reach people where they are
- We hear, accept, support and navigate
- We are compassionate and expert

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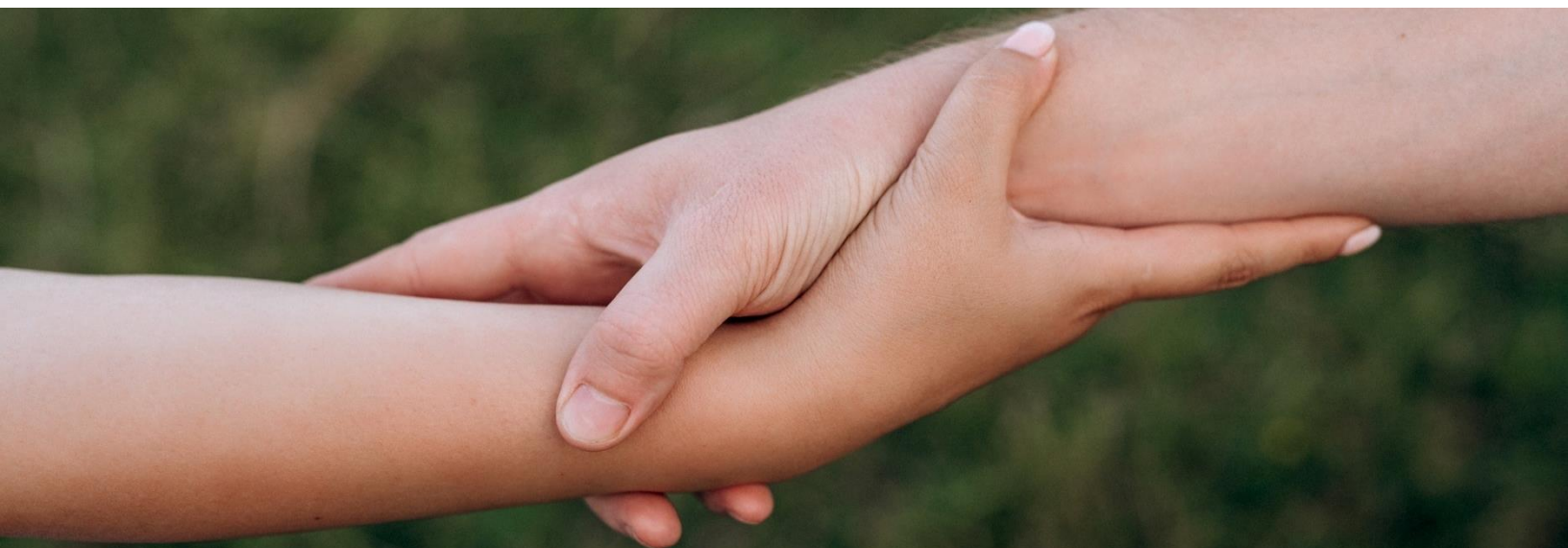
We recognize the history, strengths and diversity of First Nations, Inuit and Métis communities. The land known as Ontario is covered by 46 treaties and other agreements and we operate throughout the many traditional territories relevant to these agreements. We are located on the traditional unceded territory of the Anishinaabe Algonquin Nation. We are committed to engaging respectfully with Indigenous children, young people and families within and across nations.

The work described in their report would not have been possible without the effort of a great many people. We would like to extend our deepest appreciation to our Steering Committee members for their ongoing leadership and dedication to 1Call1Click.ca. The planning, implementation, and operations of 1Call1Click.ca have benefited significantly at every stage from the leadership of our youth and family members who have steered our conversations to focus on what matters most. We are grateful to all of the 1Call1Click.ca staff, whose dedication to finding the right care for children, youth, and their families is inspiring. We are also grateful to the many partner organizations and individuals who helped organize and facilitate engaging conversations and sessions to assist with our ongoing operations. Last, but far from least, we extend our heartfelt thanks to the many service providers and stakeholders who continue to give their time and have shared their expertise throughout the first years of operations and continued planning.

This work would not have been possible without the support of CHEO, the CHEO Research Institute, and the Knowledge Institute on Child and Youth Mental Health and Addictions. We are grateful to CIHR for providing funding toward this work. We also thank Mental Health Research Canada for their work on the short report and its distribution.

Report prepared by: Dr. Scott Robson, Paula Cloutier, & Dr. Mario Cappelli

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Executive Summary

1Call1Click.ca is a service designed to help children, youth and their families connect to the Mental Health, Addictions, and Substance Use Healthcare (MHASUH) they need. 1Call1Click.ca opened its doors on May 31, 2021, and by the end of 2023 had connected with over 18,000 children youth and their families from Eastern Ontario, helping them find the MHASUH they need.

In this document, we summarize the challenges that led to the creation of 1Call1Click.ca, the goals and operations of the service, and the outcomes of the service operations through to the end of 2023. We conclude with an overall discussion of the service and the extent to which it is achieving its goals and how it might continue to do so into the future.

The primary findings from this report are that 1Call1Click.ca appears to be doing well at reaching some marginalized populations, particularly for income, gender, and racial background. An examination of outcomes from the screening tools being used by 1Call1Click.ca indicates that they are aligning well with the Level of Need outcomes and the challenges endorsed by clients. The majority of clients fell between the ages of 7 and 15 years. Nearly $\frac{3}{4}$ of clients report 2 or more MHASUH challenges when they contact 1Call1Click.ca, and over 60% of clients indicate that they are struggling with anxiety, nearly twice as frequent as the second most frequent challenge, Depression (31.9%). Most urgently, the need for child and youth MHASUH services are significant and growing; nearly 75% of clients are assessed as having moderate or higher levels of need and the service had a nearly 40% increase in intakes during the second year of operation.



Introduction

Overview

Identifying and addressing the MHASUH needs of children and youth is critical. Worldwide, it is estimated that between 11-15% of adolescents have a mental health disorder, and over a third of these challenges will begin before the age of 14 (Polanczyk, Salum, Sugaya, Caye, & Rohde, 2015; Solmi et al, 2021). In Canada, 38% of people with MHASUH challenges say that the symptoms started before the age of 15 (CIHI, 2019; Moroz, Moroz, D'Angelo, 2020).

Evidence suggests that the COVID-19 pandemic has been particularly detrimental to the mental health of children and youth, especially those with pre-existing mental health concerns. The prevalence of youth mental health and substance use challenges is on the rise in Canada, a challenge exacerbated by the effects of the COVID-19 pandemic (Craig, Ames, Bondi, & Pepler, 2023; Gaderman et al, 2021; Wiens et al, 2020). It is critical that our MHASUH systems adapt, especially given long-standing challenges of having insufficient services to meet the needs of children and youth with MHASUH concerns.

To respond effectively, MHASUH services need timely information about the needs of children and youth. However, there is a lack of comprehensive datasets that capture such information across the system of care. IC/ES (formerly the Institute for Clinical Evaluative Sciences) data is not comprehensive enough to measure trends in demands for MHASUH services as there has been minimal capture of non-physician community-based services, where most MHASUH treatment occurs. Further, while community-based MHASUH services capture data about their own clients, there is a lack of integration across the system to determine and respond to population-based needs. Accessible real-world, real-time data about child and youth MHASUH service needs is desperately needed.

The challenge of finding child and youth MHASUH service

There are many barriers to accessing mental health and addictions care for children and youth. In a large urban center, there may be many resources available to help with a variety of challenges, but determining which resource to engage is challenging, particularly for people who do not yet have diagnoses or a primary care provider to assist them. A recent American study estimated that half of the children and youth who were assessed with a treatable mental health disorder did not receive treatment for that disorder from a mental health professional (Whitney & Peterson, 2019). For people in lower population rural regions, there may not be resources available specific to their needs, as there are fewer trained mental healthcare workers to meet the demand in these areas (CIHI, 2019).

An additional barrier is the complexity of the systems of care. The challenge of navigating this system is magnified by the experience of caring for someone with a mental health challenge, while potentially facing an MHASUH challenge of your own, or both. The most common barriers to accessing MHASUH care among Canadians who feel their MHASUH needs are not being met were related to factors including not knowing where to go, being too busy, or not being able to pay for services (Statistics Canada, 2018). In the Ottawa region alone, there are dozens of community agencies and resources available for children and youth struggling with MHASUH challenges. The existence of so many resources is promising, but even though a resource well suited to a person's needs may exist, it may be a challenge for them to identify that resource from all those available and connect with them.

Not only are these systems complicated for patients, maintaining up-to-date knowledge of these agencies, the services they provide, their wait-times, and their admission criteria is difficult even for primary care providers. As many as 80% of Canadians rely on their family physician to manage MHASUH care, but less than a quarter of family physicians report feeling well prepared for addressing mental health or addictions care (CIHI, 2019; Moroz, Moroz, D'Angelo, 2020). Many physicians, particularly in rural areas, are not aware of the resources available to them for the treatment of MHASUH challenges (Cloutier, Cappelli, Glennie & Keresztese, 2008).

Research has shown that having someone to help with the navigation of the mental health system can be effective in reducing barriers to access and in increasing the exposure to treatment (Godoy et al, 2019; Petts, Mclain, Azad, Shahidullah, 2021).



Equity of access

Social determinants of mental health are those non-medical economic, social, and cultural circumstances that are linked to the prevalence and severity of mental health challenges (Lund et al, 2018). Not only are these sociocultural factors linked to the frequency of MHASUH challenges, they can also delay or prevent access to care. For instance, several studies have found that people experience more difficulty in accessing mental health care based on factors including language, racial background, gender, sexual orientation, and level of income (de Moissac & Bowen, 2018; Faber, Osman, Williams, 2023; Hafeez, Zeshan, Tahir, Jahan, & Naveed, 2017; Slaunwhite, 2015; Wilson & Cariola, 2019). Not only do these factors often make it more difficult to connect with care, many of them are also associated with higher frequencies of MHA challenges. For instance, LGBTQ2S+ youth are at much higher risk for challenges including depression and suicide (Wilson & Cariola, 2019). To address these needs, a healthcare system needs to remove the barriers between people and the care they require. It has been proposed that using data to measure level of need, as well as sociocultural factors including age, racial background, income level and gender are important steps in increasing access and equity (Alegria, Nakash, & NeMoyer, 2018).

Improving data and responsivity

A recent report suggests that as many as 200,000 children with serious mental health needs in Ontario have no contact with mental health services at all (CMHO, 2020). But even after a child, youth, or their family have found their way through these barriers and towards the care they require, they are still met by a system overwhelmed by need. Current wait times for child and youth mental health care in Ontario can be as long as 2.5 years, averaging over 2 months for counselling and 3 months for intensive treatment, and these times are increasing as the need for care grows (CMHO, 2020). To make the best use of the resources available, the system needs to be responsive to the needs of the community. Current, comprehensive, and accurate data on the MHASUH needs of the community is needed, so that care provider and policy makers can shift resources and efforts to where they are needed most.

However, there has not been a comprehensive dataset capturing the MHASUH services needs of children, youth, and their families across Ontario. IC/ES captures the hospital-based MHASUH care and the ambulatory physician services that are provided to Ontarians, but this is not a comprehensive enough dataset to capture the entirety of the need. For instance, the IC/ES dataset does not capture non-physician community-based services where most MHASUH treatment takes place. These agencies collect their own data, but there has been a lack of integration across these agencies that would be needed to determine and respond to community needs collectively. With up-to-date, integrated, and accurate information to answer questions about who needs care, when it is needed, and what type and intensity of care are most necessary, we can adapt the system to meet those needs, and even begin to build projections of what future needs may be.

Development of 1Call1Click.ca

The Kids Come First Health Team includes over 60 organizations, nearly 1100 physicians, and many more staff and family and youth representatives, all working together to improve healthcare in our region since 2019. They know that infants, children and youth are not the same as adults, having their own specific needs and challenges. Kids Come First is committed to connecting infants, children and youth to the care they need.

1Call1Click.ca is the flagship program of the Kids Come First Health Team. 1Call1Click.ca was launched on May 31, 2021, and was designed specifically to make it easier for children, youth, and families across Eastern Ontario to find the MHASUH that's right for them, when they need it. Accessible by phone, self-schedule on the website or by referral. 1Call1Click.ca is a regional coordinated access and navigation system for accessing community- and hospital-based MHASUH services across Eastern Ontario. Those seeking care can contact the service, describe themselves, their needs and goals to an intake worker, and be connected directly to the service best suited to their needs right away.



Our goal is to inform the child and youth MHASUH community on how to best tailor the delivery of services. Through its routine intake assessment, 1Call1Click.ca is the only initiative of its kind to capture real-time data on community and hospital-based MHASUH service needs. As a regional coordinated access and navigation system for accessing care, the service also provides a unique view into the demand for child and youth MHASUH the acuity of the need, and the nature of the challenges faced. By working with its more than 25 community and hospital providers, the Kids Come First Health Team can use this data to forecast and tailor MHASUH services. While 1Call1Click.ca is a strong step in the direction of providing a novel and more comprehensive picture of the need in the community, as captured by hospital and community partners, the story told by this information is not complete. School mental health services, and privately funded MHASUH partners are not included within this dataset.

How 1Call1Click.ca works

From launch until the end of 2023, 1Call1Click.ca has serviced over 18,475 clients through a variety of streams of care, including: Information only calls, service matching, family peer support, and Care Coordination. 1Call1Click.ca also includes a Mental Health and Addictions Nurse (MHAN) and Day Treatment Consultation Team (DTC). The service is available in both English and French to people under the age of 21 and live within the area of Ottawa and the surrounding counties of Lanark, Prescott Russell, Renfrew, Leeds & Grenville, and Stormont, Dundas, & Glengarry. For clients who are not able to speak French or English, interpretation is arranged. Anyone can connect with the service themselves by phone or through the website, or their parent or guardian can do so on their behalf. Physicians can also refer their patients, by the webform, by fax, or through Ocean eReferral or EpicCare Link.

1Call1Click.ca is open to calls between 9AM and 5PM Monday to Friday, and if a client calls during these hours they may choose to speak to an intake worker in that moment. If the client prefers, or if the connection is made outside of call-in hours, the call can be scheduled at their convenience between 8AM to 6PM Monday to Friday by a request over the phone or through the 1Call1Click.ca website.

Intake and screening tools

The primary way through which youth are connected to care is through an intake. The agencies have coordinated to match their intakes, so that once a client has shared their story and information, it will be applicable to the agency to which they are referred, meaning the client will not have to share this information a second time. When a client contacts 1Call1Click.ca, they are connected to an intake worker who listens to the client’s story, discusses the client’s needs and challenges with them, ascertains the client’s goals, and administers between 1 and 3 MHASUH screening tools, depending on the clients age and challenges. Intakes typically include a meeting lasting about 45 minutes followed by about 15 minutes of administrative work by the intake worker.

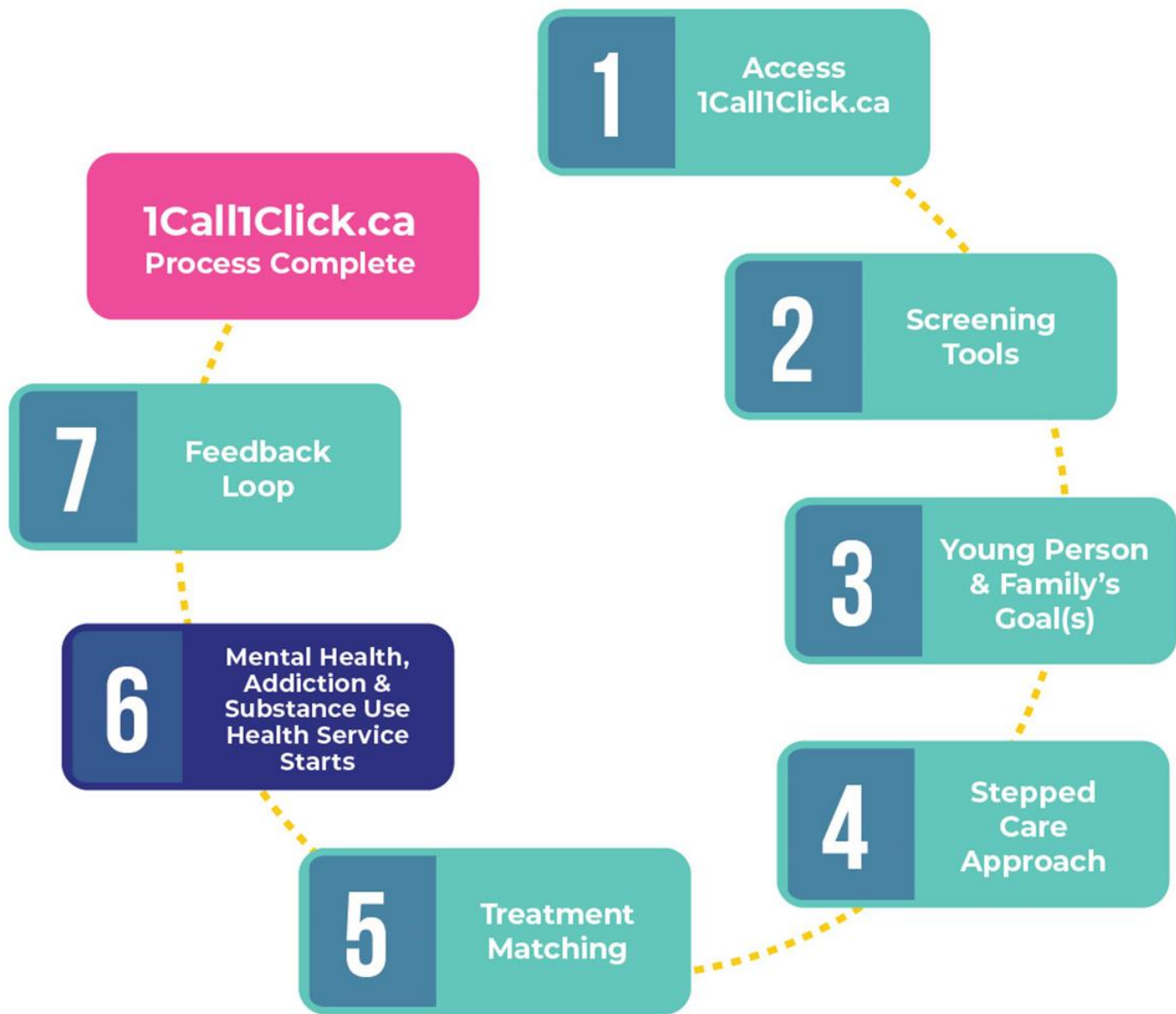


FIGURE 1. ILLUSTRATION OF THE CLIENT’S JOURNEY THROUGH THE 1CALL1CLICK.CA INTAKE PROCESS

HEADS-ED Under 6 and HEADS-ED 6 and Older

The HEADS-ED Under 6 and HEADS-ED 6 and Older are a pair of communimetric MHASUH screening tools (Cappelli et al, 2012; Cappelli et al, 2020; Polihronis et al, 2024). These tools were developed by Ottawa-based researchers but are used in primary care settings around the world. The HEADS-ED Under 6 is used in all 1Call1Click.ca intakes with clients before their sixth birthday, while the HEADS-ED 6 and Older is used in all intakes for clients 6 years of age and older. These tools are based on the HEADS mnemonic (Cohen et al., 1991) used in used in medical schools and the communimetric Child Assessment of Needs & Strengths (CANS) measure (Lyons, 2009). A healthcare provider can use these tools to lead a discussion of the client’s needs across several domains (see below).

The HEADS-ED Under 6

Home & caregivers
Eating & sleeping
Activities & peers
Development, speech/language/motor
Safety
Emotions, behaviours
Discharge or current resources

The HEADS-ED 6 and Older

Home
Education, employment
Activities & peers
Drugs & alcohol
Suicidality
Emotions, behaviours, thought disturbance
Discharge or current resources

FIGURE 2. THE DOMAINS FOR THE HEADS-ED UNDER 6 AND HEADS-ED UNDER 6

Each of these domains is then given a score of 0 (no action needed), 1 (Needs action but not immediate / moderate functional impairment), or 2 (Needs immediate action / severe functional impairment). At the end, the score for each domain is added together, providing a total score ranging from 0 to 14. More information on each of the HEADS-ED tools, as well as instructional videos, can be found at www.heads-ed.com/.

Ask Suicide-Screening Questions (ASQ)

Suicide is a global public health problem, identified as the second most frequent cause of death for youth and young adults in Canada (Statistics Canada, 2022). The ASQ is a brief youth-focused screening tool for suicidality, developed in an effort led by the National Institutes for Mental Health in recognition of the need to assess suicidality quickly and effectively (Horowitz et al, 2012). The questionnaire consists of 4 to 5 yes-or-no questions that combine to provide a level of suicide risk to the healthcare provider administering the screening test.

At 1Call1Click.ca, any clients who are assessed as having a score of 1 or 2 for suicidality on the HEADS-ED 6 and Older are assessed with the ASQ. More information about the ASQ can be found at <https://www.nimh.nih.gov/research/research-conducted-at-nimh/asq-toolkit-materials>

CRAFFT

The CRAFFT is a screening tool designed to assess substance use risk in adolescents (Knight et al, 1999). The CRAFFT consists of two parts. The first section, which is done during intakes with clients 12 and over, includes questions about the frequency of usage within the past year of various substances. If the client indicates that they have used substances within the last year, the second component is used.

The second component includes 6 yes-or-no questions, which form the basis of the acronym CRAFFT (Car, Relax, Alone, Forget, Family/Friends, Trouble). These questions assess the way that the client uses substances and the level of risk associated with that pattern of use. More information about the CRAFFT can be found at <https://crafft.org/>

Level of Need

The intake worker then designates the client a “Level of Need”, which guides the intake workers service recommendations and referrals. There are 5 levels of need, based on those laid out in the Ontario Government's Roadmap to Wellness (2020) and range in intensity from *General Population* to *Severe or Complex Needs*. The figure below describes each level of need, along with the recommended interventions at each level (though each level may also recommend the interventions recommended at lower levels of need).

General Population refers to largest group of people, who need the lowest level of intervention. People at this level of need may need to access some population-based health promotion and prevention supports or services. *Low Need* refers to those who need early interventions or self-management support. *Moderate Need* refers to people with moderate mental health and/or addictions needs. *Moderate to Severe Need* refers to people in need of specialized and intensive MHASUH services. *Severe or Complex Needs* is the highest level of need, for the lowest volume of people who need the most intense and highly specialized services.

1Call1Click.ca LEVELS OF NEED



Adapted by 1Call1Click.ca from work by the National Needs Based Planning Project (Rush, 2017) and the Ontario Provincial Road Map to Wellness.

FIGURE 3. DESCRIPTION OF THE LEVELS OF NEED ASSIGNED TO 1CALL1CLICK.CA CLIENTS

Referral

At the end of the intake, the intake worker will use the collected information and the stated goals of the client and their family to determine the most appropriate MHASUH resources. The intake worker will then directly connect the client to those resources where the partner agency will then reach out to the youth or family to book an appointment. The intake worker will discuss these details with the client and answer questions, and may also provide other resources, information, or other support to the client and their family to engage with while they wait for their appointment.

The information gathered during the intake is also shared directly with the agency or agencies to which the client has been referred. 1Call1Click.ca is partnered with over 25 community agencies, who have coordinated with each other and in partnership with 1Call1Click.ca to use the same screening tools for their intakes. While some agencies may require information in addition to that provided in the 1Call1Click.ca intake, the clients will not need to repeat the information they have already provided. This saves time, frustration, and limits the need for clients to describe challenges or experiences that may have been traumatic or painful more than once. These steps together combine to remove many of the barriers to access that have traditionally prevented many people from accessing the care they need.



Summary of other clinical services available through 1Call1Click.ca

Care Coordination for Complex/Acute MHASUH Needs

1Call1Click.ca offers Care Coordination to children, youth, and their families with complex/acute mental health, addiction, and substance use health needs. Candidates for Care Coordination are identified by intake workers during the screening process. Complex needs are understood to mean: Multiple intersecting needs that span health, mental health, addiction, and substance use health issues, leading to major challenges participating in society. Everyone with complex needs has a unique interaction between their health and social care needs and requires a personalized response from services.

Mental Health and Addictions Nursing (MHAN)

Mental Health and Addiction Nurses (MHAN), work in schools to support children and youth who are experiencing mental health, addictions and substance use health challenges. They provide early, short-term interventions, therapeutic strategies and psychoeducational support so that children and youth can thrive at school, remain in school or successfully transition back to school. They build trust with children and youth by respecting individuality, privacy and confidentiality.

Day Treatment Consultation Team

The clinical Day Treatment Consultation team (DTC) is part of the system of care for community-based day treatment programs for children and Youth. The DTC team operates under the umbrella of Kids Come First and 1Call1Click.ca so it is closely linked to the region's providers of mental health, addictions and substance use care, including school-based mental health and addictions nurses. In collaboration with Crossroads Children's Mental Health Centre, the Roberts/Smart Centre, The Royal and Children and Youth Mental Health Lead Agency, Youth Services Bureau, a single system of care for community-based day treatment programs for children and youth is formed. Referrals for this program are received from the Ottawa Carleton District School Board and the Ottawa Catholic School Board with the educational component of the program being offered through McHugh. The DTC team consists of psychiatry, social work, case coordination, occupational therapy, administrative support and child and youth counsellor (CYC) support.



Utilizing Data

The intake information is entered into EPIC, the Electronic Medical Records system used by CHEO. This means that the information is available immediately to the members of the client's care team, and to the agency to which the client has been referred, meaning that they will not need to repeat their story each time they connect with a new care provider.

The information is also aggregated into a set of 4 dashboards which are updated each day. These include an *Operations Dashboard* and an *Operation Fiscal Year Dashboard*, which provide broad information about the activity of the service, including monthly counts for clients by region, language, gender identity, level of need, or age group going back to the launch of the service or the beginning of the fiscal year, respectively. The *Clinical Dashboard* tabulates clinical information, including scores on the HEADS-ED Under 6 and HEADS-ED 6 and Older (including subdomains), the CRAFFT (Drugs & Alcohol Screener) or suicidality (ASQ), or presenting problems. The *Performance Metrics* Dashboard allows management to flag and follow-up on common data entry issues. This information is updated regularly, and available to leadership at 1Call1Click.ca and at the partner agencies.

This information is also utilized by the evaluation team, a group of administrators, scientists, clinicians, and researchers from the CHEO Research Institute and the Knowledge Institute on Child and Mental Health and Addictions. This team can perform more complex analyses with this data, provide clinical insight, describe trends, and use advanced statistical analysis to forecast future service needs.



Main Findings

Highlights

A summary of the findings are below, and the full data tables are available in *Appendix B*

- Over 2/3 of clients were between 7 and 15 years of age
- 71.3% of clients reported 2 or more problems during their call. The most common presenting problem was Anxiety, reported by 60.2% of clients overall, followed by Depression (31.9%), Aggression (22.6%), Inattention and Hyperactivity (20.6%), and Suicidal Ideation (19.0%).
- Over 59.4% of clients under 10 identified as male, while only 33.1% of clients over 10 and over identified as male.
- 1Call1Click.ca saw a nearly 40% increase in the number of intakes in its second year of operations
- Over three quarters of clients (76.9%) were rated as Moderate Needs or Higher

Number of Callers

1Call1Click.ca is available to clients between birth up to the age of 21 from Ottawa and the surrounding counties of Lanark, Prescott Russell, Renfrew, Leeds & Grenville, and Stormont, Dundas, & Glengarry. As of the 2021 Census, this area encompasses a population of over 1.53 million, approximately 347,000 of whom would fall within the age range served by 1Call1Click.ca. During the period launch to the end of 2023, 1Call1Click.ca conducted an intake with 9694 clients. The 2021 census indicates that nearly 366,000 people within the service area of 1Call1Click.ca are 0 to 21 years of age. In its second year of operations (June 2022 to May 2023), 1Call1Click.ca had a 37.9% increase in the number of intakes (4278) performed compared to the first year (3102).

Demographics of Callers

Age

Though 1Call1Click.ca serves clients ranging from the ages of birth to 21, the average client age is 12.2 and 41.7% of clients fall between the ages of 12 and 15 (See Appendix B). A recent large scale, worldwide meta-analysis found that over a third of people who will develop a mental health disorder will have done so before the age of 14 (Solmi et al, 2021). In the same meta-analysis (Solmi et al, 2021), 14.5 is the most common age of onset for mental health challenges, which falls between the two most common ages reported by 1Call1Click.ca clients, ages 15 (12.6%) and 14 (11.8%). That the ages of the 1Call1Click.ca clientele align closely with these trends is promising, as it suggests that people are finding the service and engaging with it early in the trajectory of their mental health challenges.

Gender

Over 54% of 1Call1Click.ca’s clients identified as female, and 39.6% identified as male. While this appears imbalanced on its face, it does not tell the full story. Specifically, most clients under 10 are male (59.4%), while a majority over 10 are female (60.2%). This is not unexpected, as other studies have noted such a gender divide, reporting more male than female children in need of services and more female than male adolescents (Haavik et al, 2017; Wesselhoeft et al 2014; Zahn-Waxler, Shirtcliffe, & Marceau, 2008).

Additionally, LGBTQ2S+ youth are at a higher risk for mental health challenges than other youth, and yet also may face a barrier in seeking help due to perceived stigma. The most recent Canada-wide census (2021), for the first time, included questions regarding gender identity in addition to sex at birth across the population. This provides an opportunity to compare the gender diversity reported by clients to that described by the census, to examine the extent to which these distributions resemble each other (See Figure 4)¹.

There are some limitations to these comparisons that are worth noting. Specifically, census data discussing proportions of trans and non-binary individuals includes only individuals 15 years and older, whereas 1Call1Click.ca data includes clients from birth to age 21. Likewise, while there is overall census data for the proportions of trans (0.24%) and non-binary (0.19%) identifying people in the city of Ottawa, these proportions are not linked to data on specific ages (Statistics Canada, 2023). The census notes that transgender or non-binary identification nationwide is higher (0.8%) among of the youngest group reported (age 15 to 24), so it is likely that age–matched census results for the region would be higher, though even the proportions are at a lower level than seen in the 1Call1Click.ca data.

¹ For the purpose of comparison to census data, only responses corresponding to those available to census takers were included. 1Call1Click.ca includes responses includes options including “prefer not to answer”, “Agender”, “Other”, and “Two-Spirit”. Responses of “Trans Male” and “Trans Female” were combined to match the census category “Transgender”.

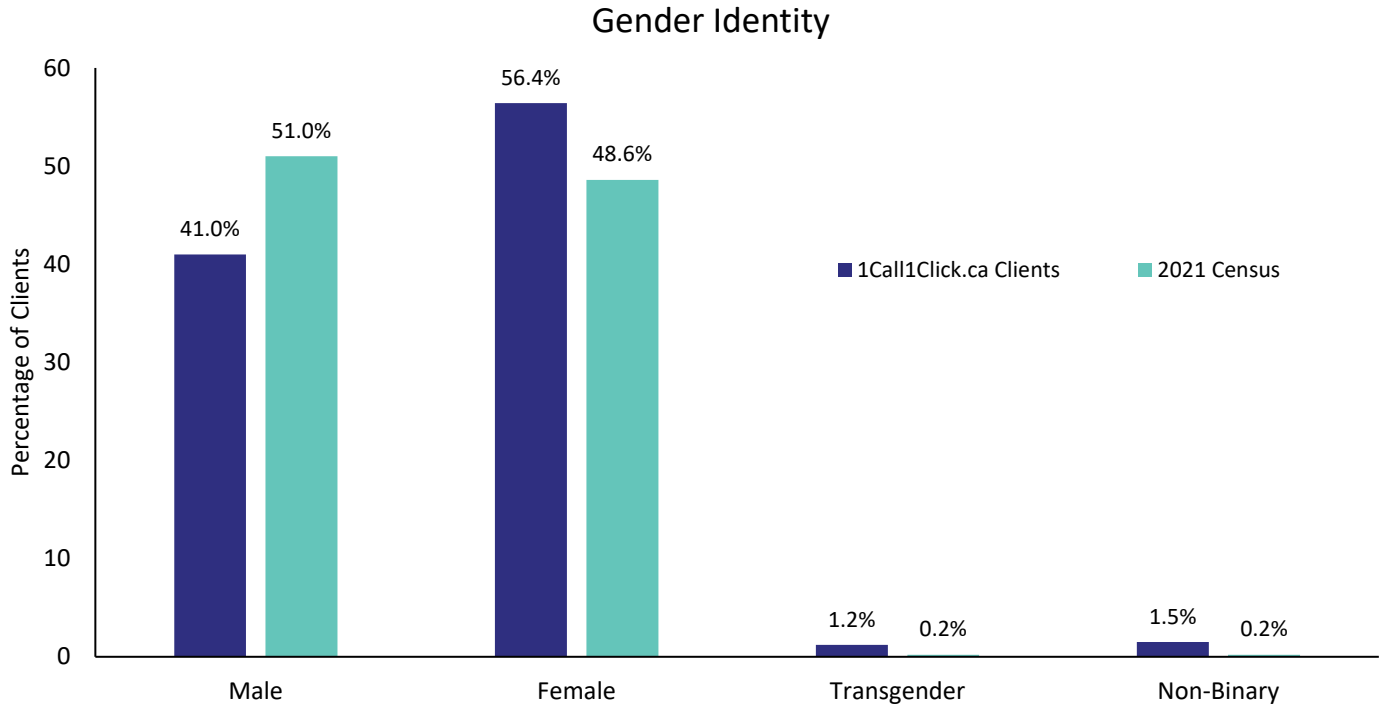


FIGURE 4. PROPORTIONS OF GENDER IDENTITIES AMONG 1CALL1CLICK.CA CLIENTS AND THE 2021 CENSUS.

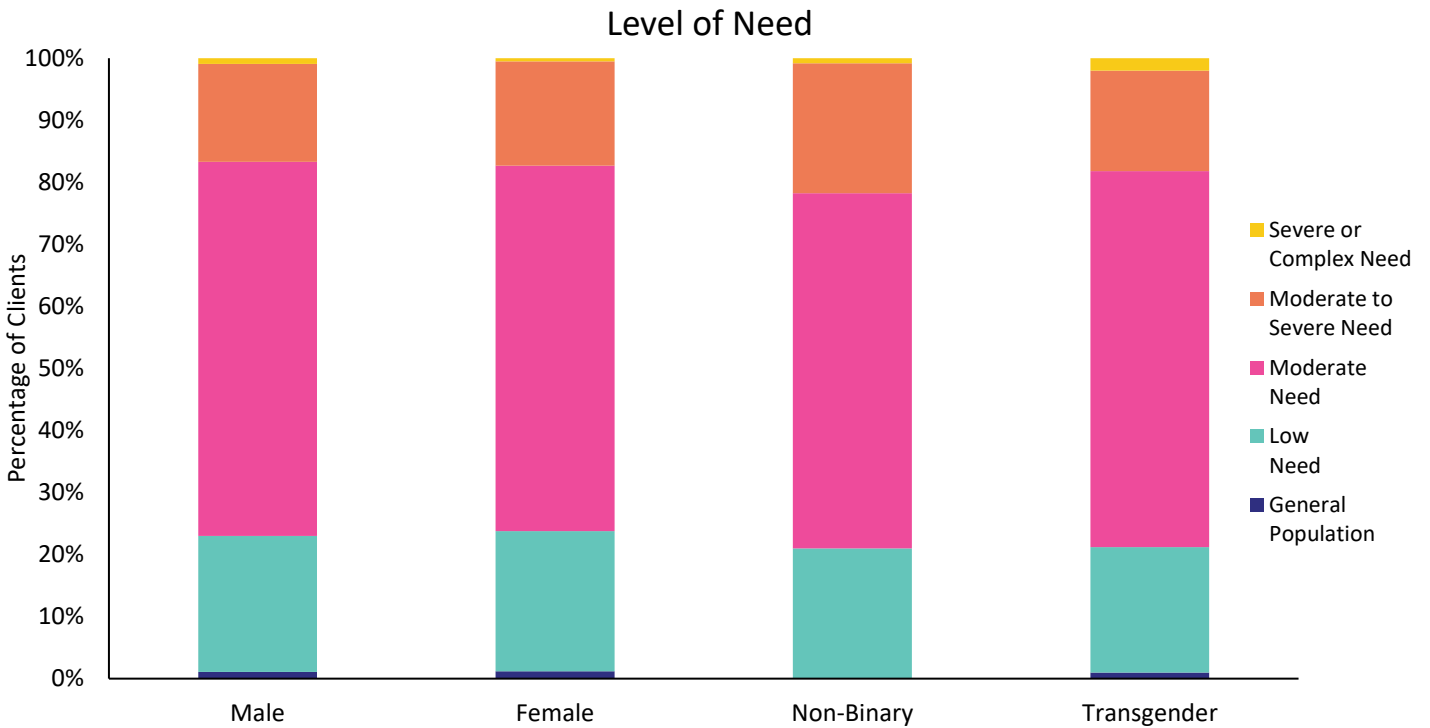


FIGURE 5. PROPORTIONS OF CLIENTS FOR GENDER IDENTITIES AVAILABLE ON THE 2021 CENSUS ASSIGNED TO EACH LEVEL OF NEED.

Statistical comparisons revealed a significant difference in the gender demographics of 1Call1Click.ca compared to census levels, with female (56.1%), gender fluid/non-binary (1.4%), and transgender clients (1.1%) overrepresented compared to the population levels (51%, 0.2%, & 0.2% respectively). Additionally, no differences were observed in level of need based on the gender identity, meaning that gender identity did not effect on the severity of the challenges faced by clients (Figure 5).

Income

One of the most common barriers to seeking MHASUH care in Canada is the cost (Faber, Osman, Williams, 2023; Moroz, Moroz, D’Angelo, 2020). Research has shown that there is income-based inequity in access to mental health services (Bartram, 2019). 1Call1Click.ca intake workers ask the family income of clients, which we compared to 2021 census results for the service area (Figure 6)². However, the census does not include response options such as “I don’t know” or “prefer not to answer”, responses chosen by over half (60.2%) of clients, so these options were not included. As the clients are children and youth, it is not unexpected that many did not have this information.

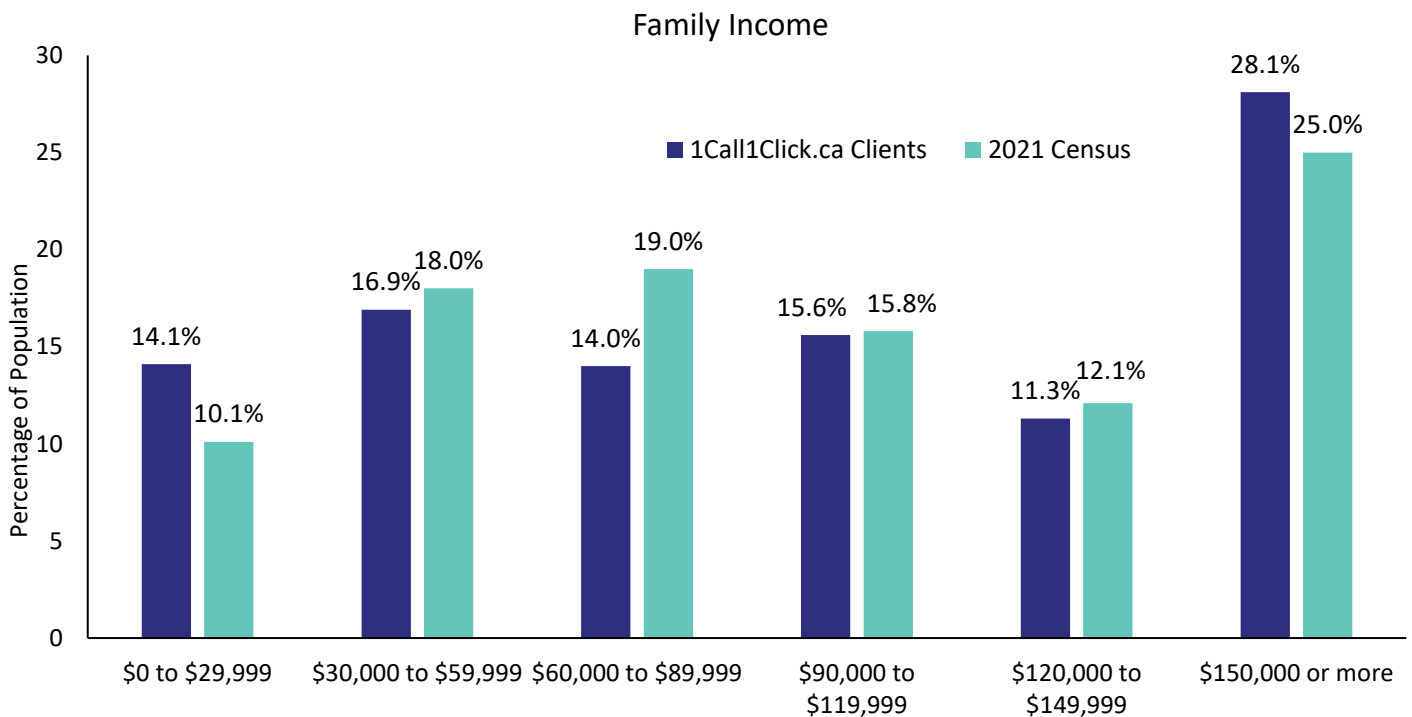


FIGURE 6. PROPORTIONS OF INCOME LEVELS AMONG 1CALL1CLICK.CA CLIENTS AND THE 2021 CENSUS

² The 2021 census includes more levels of income than does the intake process at 1Call1Click.ca, and so the census groupings were added together to match those to 1Call1Click.ca. In cases where the level boundaries did not match, the census category was divided proportionally, assuming an even distribution across that level.

In a comparison with census data, we found that the lowest income group (\$0 to \$29,999 annually), at 14.0% of the clientele, was over-represented compared to that level of income in the Ottawa population (9.1%). However, no associations were observed between level of need and income category (Figure 7).

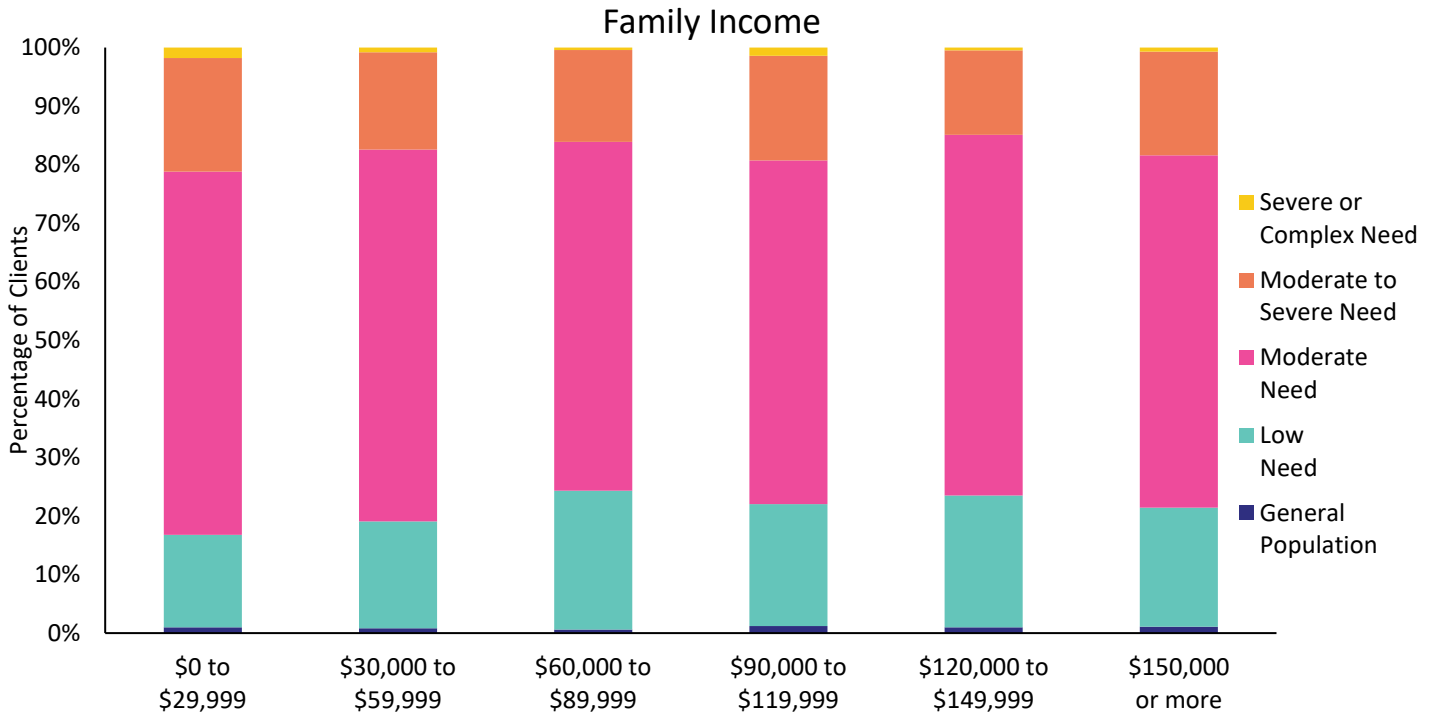


FIGURE 7. PROPORTIONS OF CLIENTS FOR INCOME LEVELS AVAILABLE ON THE 2021 CENSUS ASSIGNED TO EACH LEVEL OF NEED

Racial Background

Racialization is another barrier to finding care (Fante-Coleman & Jackson-Best, 2020; Kirmayer & Jarvis, 2019). A recent study found perceived systemic racism to be one of the major barriers to youth seeking MHASUH care in Ontario (Kourgiantakis et al, 2023). Systemic barriers, as well as mistrust of medical and mental health systems from historical mistreatment of minority groups can prevent people from seeking care (Benkert et al, 2020).

Comparing the data for the 1Call1Click.ca clientele with the regional population data (Figure 8)³, there was a significant difference observed ($\chi^2[10, 9137] = 6770.5; p < .001$). The racial identity that differed most greatly from the population level were those who endorsed multiple racial identities, who were nearly 10 times more frequent (7.9% of total) in the client base of 1Call1Click.ca than in the

³ The census grouping “multiple visible minorities” is compared here to the number of 1Call1Click.ca clients who indicated more than one racial identity. Racial identities endorsed by fewer than 50 clients were not compared with the census data as groups of that size do not match the statistical test used, but these data can be found in Appendix B. For statistical reasons, clients who selected more than one racial background or racial backgrounds other than ‘White’ were combined into a single group (‘Racialized’) for level of need comparisons.

regional population as described by the census (0.8%). Clients who selected “other” as their background (1.3%) were over 4 times as common as expected based on population levels (0.3%). White identifying clients (75.9%) did not differ from expected levels based on the census (75.4%). An effect of racial background (Figure 9) was observed ($\chi^2[4] = 13.1$; $p = .01$), with white clients presenting at higher acuity levels than racialized individuals, however, this is a statistically miniscule effect ($w < 0.001$).

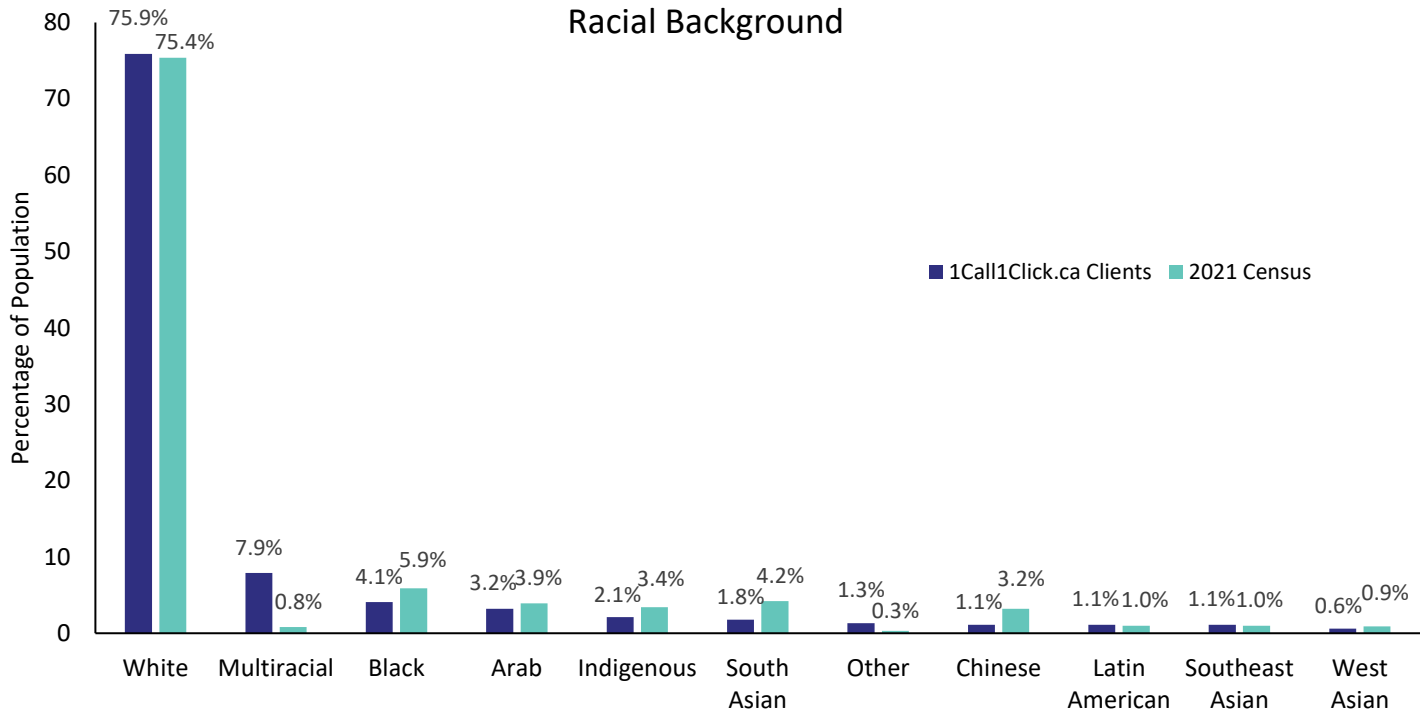


FIGURE 8. PROPORTIONS OF RACIAL BACKGROUNDS AMONG 1CALL1CLICK.CA CLIENTS AND THE 2021 CENSUS

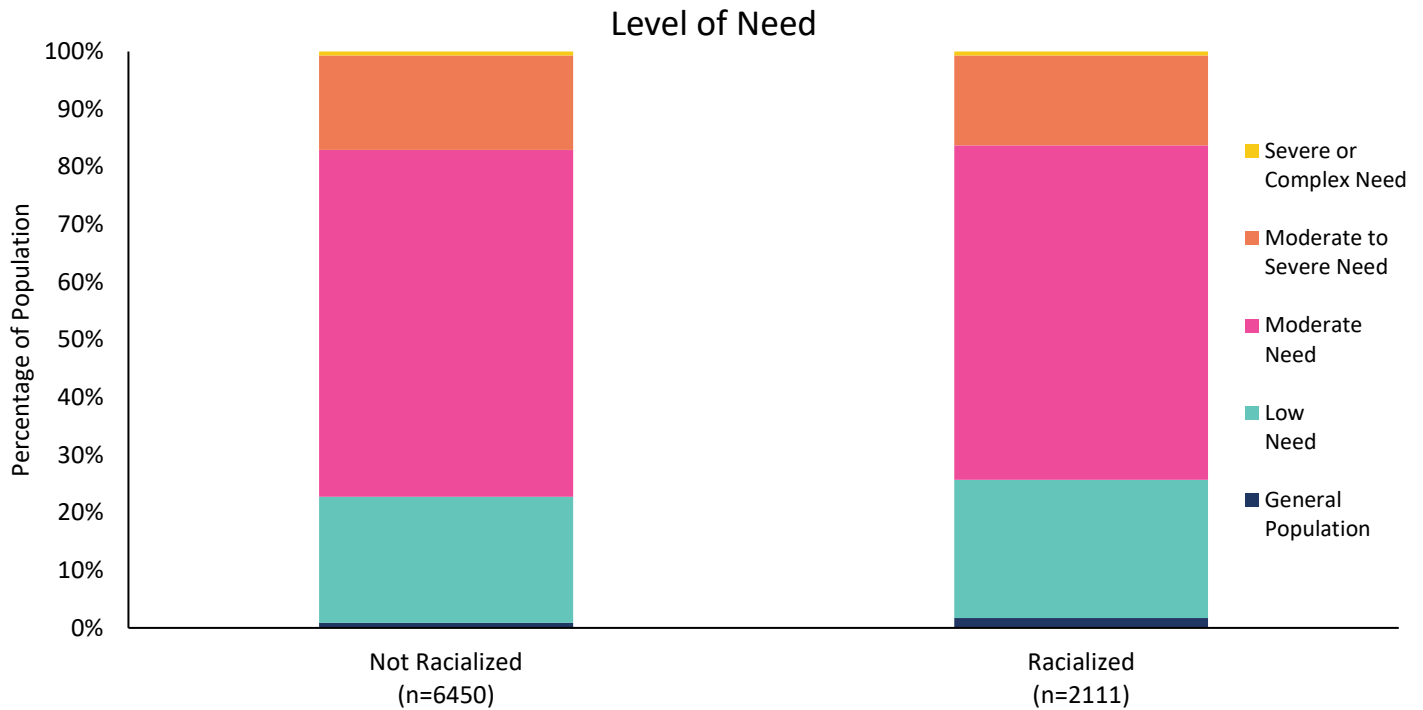


FIGURE 9. PROPORTIONS OF CLIENTS OF RACIALIZED AND NON-RACIALIZED CLIENTS ASSIGNED TO EACH LEVEL OF NEED

Infants, toddlers, and young children (birth up to 6th birthday)

Background Information

724 total Infants, toddlers, and young children (before their 6th birthday), approximately 7.5% of the total client population, were screened using the HEADS-ED Under 6. While a relatively small group, the needs and challenges faced by those under 6 are crucially different than those faced by from older children and adolescents.

The needs of this age group are different than those of older children, and 70% infants and children within this age group presented with 2 or more challenges. The primary challenges faced by this group are Aggression (49.6%), Anxiety (37.0%), Parent-Child Relationships (33.8%), and Attention/Hyperactivity (32.2%). This is in line with other sources, which suggest that ADHD, disruptive behavioural disorders, and anxiety are the most common to develop in early childhood (Gleason, Goldman, & Yogman, 2016).

Level of Need

Of those assessed with the HEADS-ED Under 6, the majority (65.1%) fell into the category of *Moderate Need*, while the second largest group (24.8%) was *Low Need*, meaning that over 90% of clients were *Moderate Need* or lower.

HEADS-ED Under 6

In using the HEADS-ED Under 6, the intake worker asks questions regarding 7 different domains, and assigns each domain a score ranging from 0 (No Action Needed) to 2 (Needs Immediate Action). This allows the intake worker to examine both the nature and the severity of the need across these domains, to help determine the type and intensity of resource to connect the infant or child with. While similar to the HEADS-ED 6 and Older, the HEADS-ED Under 6 differs in ways that reflect the different needs and challenges of the very young. For instance, it includes the domain “Eating & Sleeping” in place of “Education, Employment”, “Development, Speech/Language/Motor” rather than “Drugs & Alcohol”.

Looking at the breakdown of the HEADS-ED scores across domains (Figure 10), we see that the domain in which the highest level of intervention required is in “Discharge or Current Resources”. This domain measures the extent to which the client is already connected to mental health services that are meeting their needs at the time of the screening, so it is not unusual to find that this is elevated among a population of people who are calling in for help connecting to these resources. The domain “Emotions, Behaviours” is another in which high levels of high levels of action are being recommended. This also aligns well with the most prevalent presenting problems, which are primarily emotional and behavioural in nature (Aggression, Parent-Child Relationships, Attention/Hyperactivity, and Anxiety).

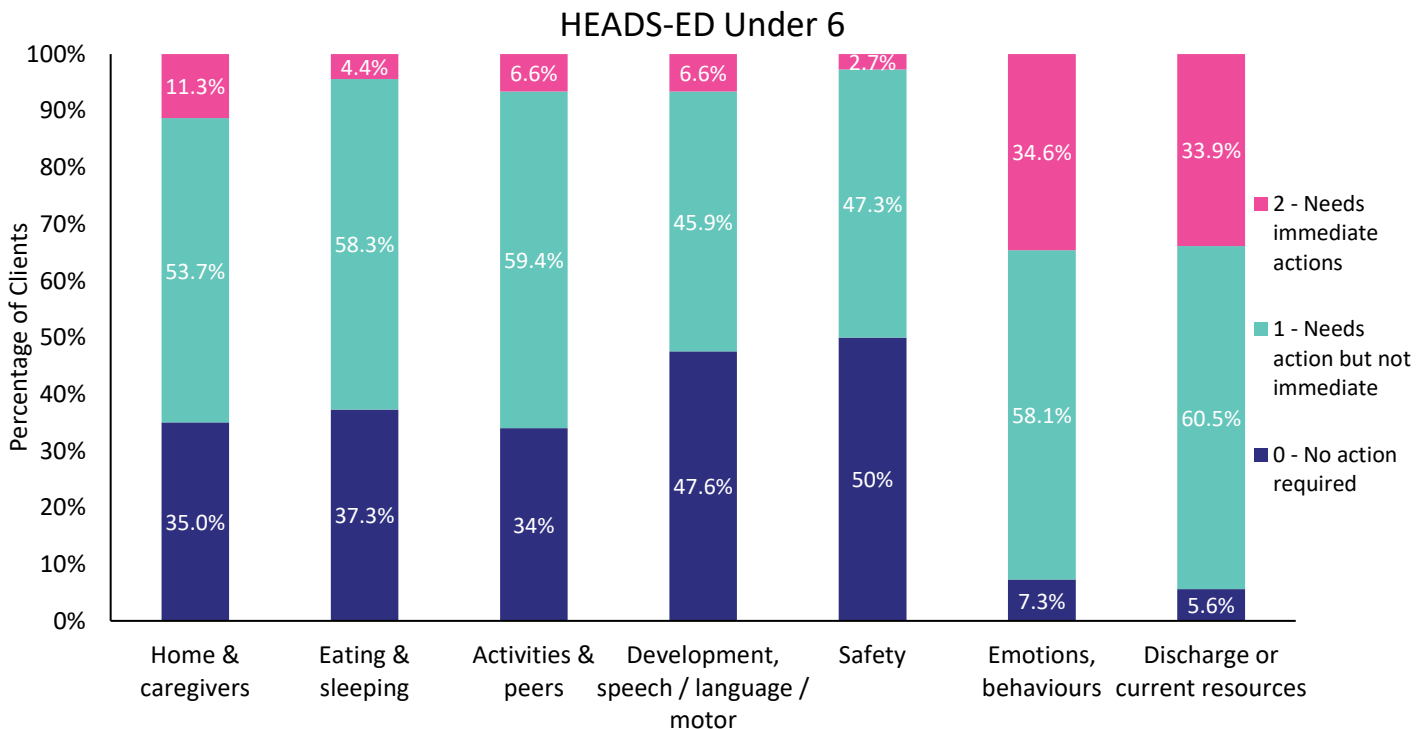


FIGURE 10. THE PROPORTION OF CLIENTS WHO WERE ASSIGNED A SCORE OF 0, 1, OR 2 ON EACH OF THE HEADS-ED UNDER 6 DOMAINS.

While scores higher than 0 in any domain of the HEADS-ED domains indicates a need for action in that area, the overall score (the sum of the individual domain scores) is also an important indicator. A total score of 6 or higher on the HEADS-ED Under 6 recommends a need for more intense or specialized intervention. Figure 11 indicates the average HEADS-ED Under 6 total scores (in black) at each assigned level of need, while the shaded circles indicate the frequency of a particular total score within the dataset. For example, in the *Low Need*, the circle the lines up with a score of 3, indicating that a total score of 3 is the most frequently observed HEADS-ED Under 6 total score within the *Low Need* group. Only the average total scores are shown for the highest and lowest levels of need, as the number of individuals within those groups are too small.

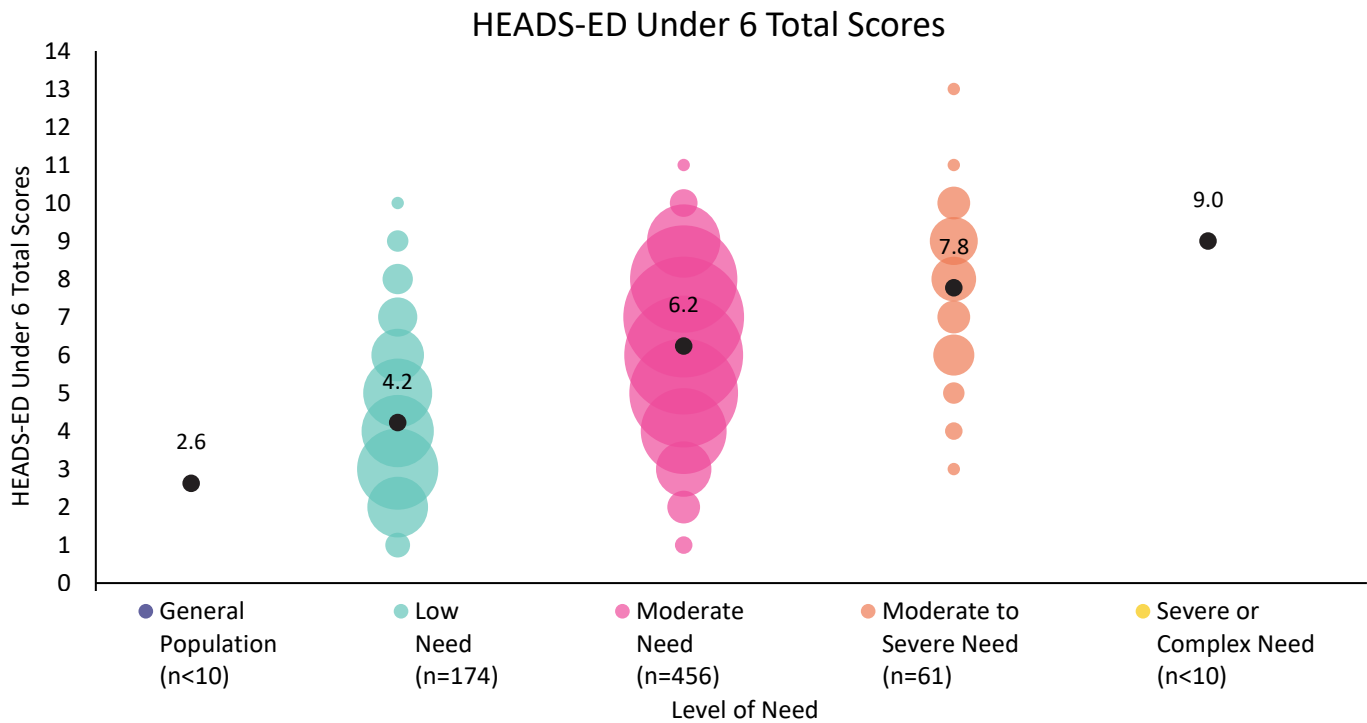


FIGURE 11. THE AVERAGE HEADS-ED UNDER 6 TOTAL SCORE AND THE DISTRIBUTION OF SCORES ACROSS EACH LEVEL OF NEED. EACH BUBBLE REPRESENTS PROPORTION OF CLIENTS AT THAT TOTAL SCORE (GROUPS <10 NOT INCLUDED).

Children, adolescents, and young adults (6 years to 21 years)

Background Information

The majority of those who had an intake fell between the ages of 6 and 21 years (92.7%). Each of these people were screened with the HEADS-ED Six and Older, and many were additionally screened using the ASQ or the CRAFFT depending on their age and challenges. Recent meta-analyses show that, for nearly half of people who report mental health challenges, the onset occurs before the age of 18, with 14.5 being the peak age (Solmi et al, 2022). Among this group, the most common challenges reported include Anxiety (62.1%), Depression (34.5%), Suicidal Ideation (20.5%), Aggression (20.4%), and Attention/Hyperactivity (19.6%).

Level of Need

The frequencies of the levels of need are similar to those observed in the Under 6 group (Figure 18). The most frequent is *Moderate Need* (59.2%), followed by *Low Need* (21.8%), then *Moderate to Severe Need* (17.1%). Though the distribution is similar, the severity is higher in the 6 and older population. *Moderate Need* is the largest group but makes up an 6% smaller proportion of the overall group, while *Moderate to Severe Need* is more than 8% higher than the under 6 group.

HEADS-ED 6 and Older

In the intake, the intake worker uses the HEADS-ED 6 and Older to guide an interview across seven MHASUH domains, and scores each of the domains from 0 (no action required) to 2 (immediate action required). The results observed in Figure 12 are similar to those observed in the HEADS-ED Under 6, in that the domains in which intervention is most frequently recommended are “Discharge or Current Resources” and “Emotions, Behaviours & Thought Disturbances”.

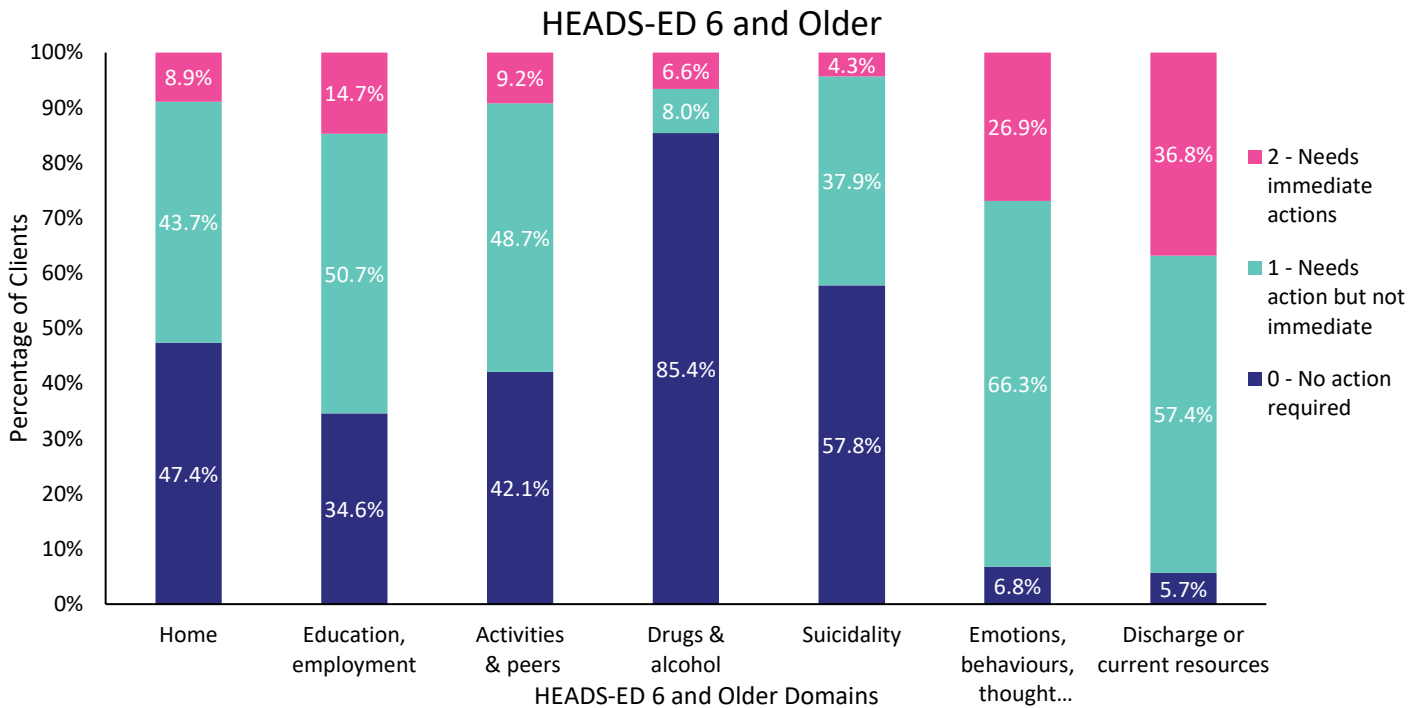


FIGURE 12. THE PROPORTION OF CLIENTS WHO WERE ASSIGNED A SCORE OF 0, 1, OR 2 ON EACH OF THE HEADS-ED 6 AND OLDER DOMAINS

The HEADS-ED total score is also instructive. A HEADS-ED 6 and Older total score of 8 or higher, or a Suicidality score of 2, recommends a specialized mental health consultation. If we look at the HEADS-ED 6 and Older total scores in relation to the level of need, there is a clear relationship (Figure 13). In the figure below, the average total scores for each level of need are shown in black, while the number of clients at each total score are represented through the size of the coloured bubbles.

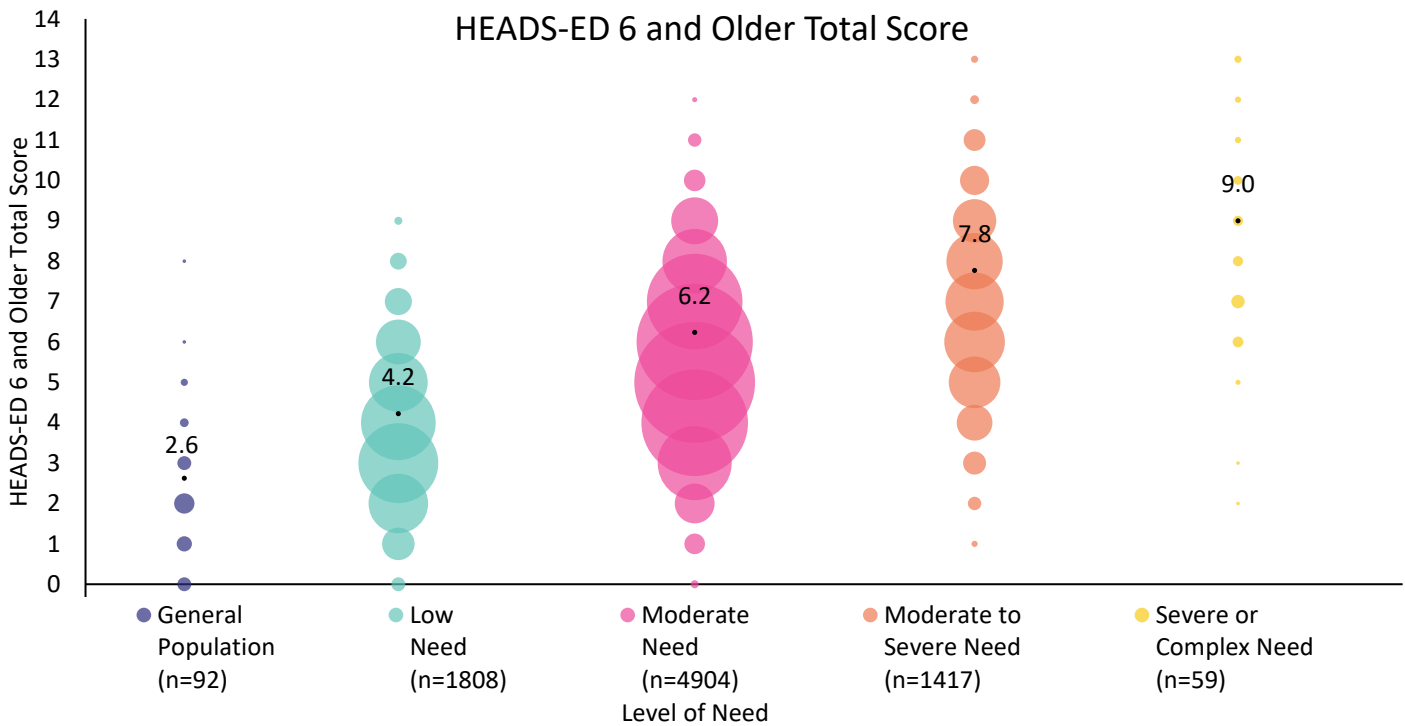


FIGURE 13. THE AVERAGE HEADS-ED 6 AND OLDER TOTAL SCORE AND THE DISTRIBUTION OF SCORES ACROSS EACH LEVEL OF NEED. EACH BUBBLE REPRESENTS A PROPORTION OF CLIENTS AT THE TOTAL SCORE FOR THAT BUBBLE.

ASQ

The Ask Suicide-Screening Questions (ASQ) are used to quickly assess suicide risk in youth and consists of 4 or 5 questions related to past and current suicidal ideation. If the clients indicate either that they have recently wished they were dead, have recently thought of killing themselves, recently felt that others would be better off if they were dead, or if they have ever made a suicide attempt, they are rated as having a “moderate risk” of suicide. These clients are asked if they are currently having thoughts of killing themselves, and if they answer “yes” are rated as “high risk”.

Of the clients in the 6 to 21 age range, 39.8% were assessed with the ASQ. 73.2% of those assessed using the ASQ were rated as moderate risk. By the criteria described above. 5.8% were rated as high risk, indicating that they were experiencing current suicidal ideation. In the Figure 14, we examine the ASQ results in comparison to the assigned levels of risk, with each segment representing the percentage of clients within that level of need at each level of risk according to the ASQ. We can see a

general trend here, where as the level of need increases, the proportion of clients needing assessment increases and the resulting risk level of those assessments increases as well.

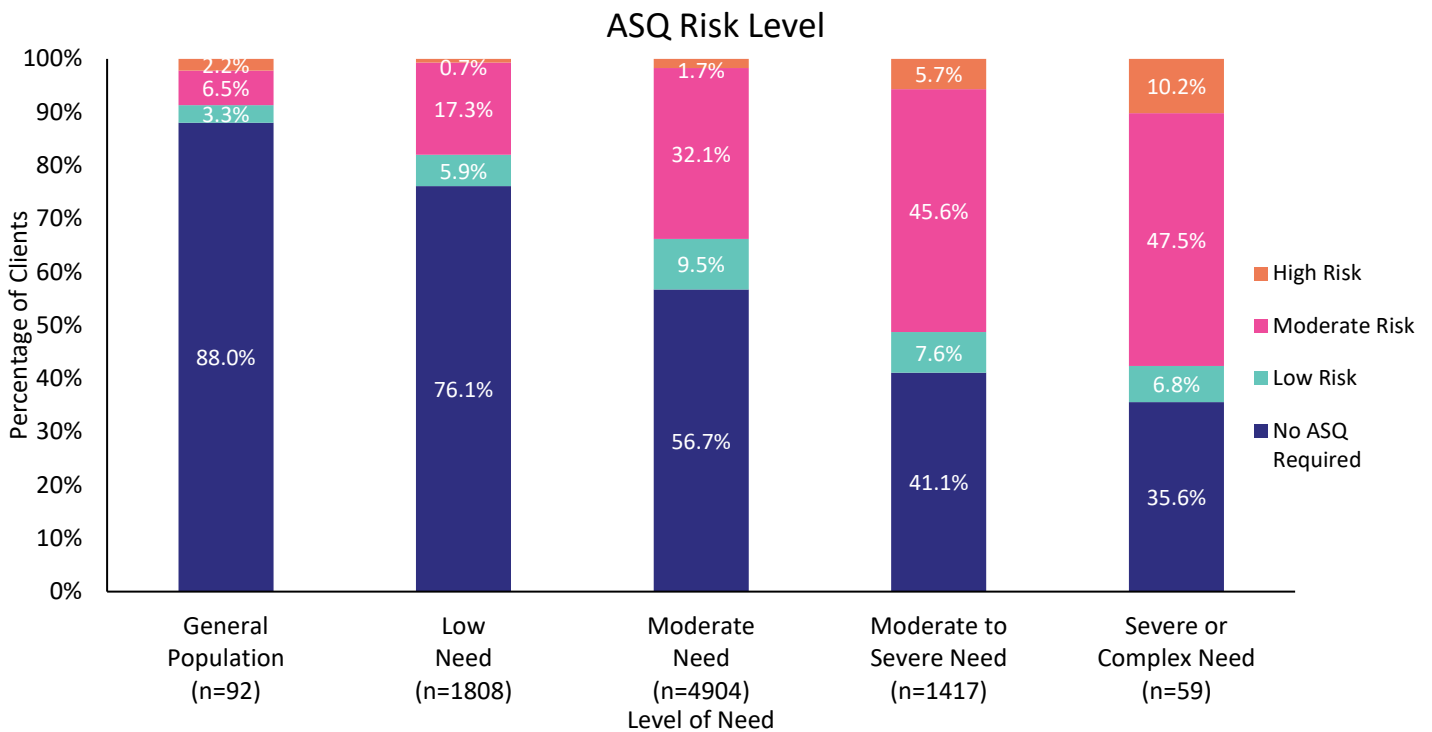


FIGURE 14. THE PROPORTION OF CLIENTS RECEIVING EACH ASQ OUTCOME FOR EACH LEVEL OF NEED

CRAFFT

The CRAFFT was used to screen for substance use for clients over the age of 12 for whom the intake worker deemed it necessary. The CRAFFT includes two parts, Part A & Part B. Part A of the CRAFFT is a set of questions about the frequency of use of alcohol, marijuana, vaping (including cigarette smoking), or “anything else to get high” over the past year. If the client does not indicate substance use, they are asked if they have ever ridden in a car driven by someone (including themselves) who had been using substances (the “CAR” question). If the client does indicate substance use, they are asked the entirety of Part B of the CRAFFT (including the CAR question).

Clients who have no substance use in the past year and answer “No” to the CAR question are scored as “Low Risk”. Those who have no substance use but answer “Yes” to the CAR question, or who have used substances but only answer “Yes” to one or fewer of the 6 questions in Part B, are rated as “Moderate Risk”, while those who have used substances in the past year and answer “Yes” to 2 or more questions in Part B are rated as “High Risk”.

In Figure 15, the results from the CRAFFT are compared across the levels of need as assigned by the intake workers. In the first figure, we can see that as the level of need increases, so too does the risk level assigned by the CRAFFT to those who were assessed with it.

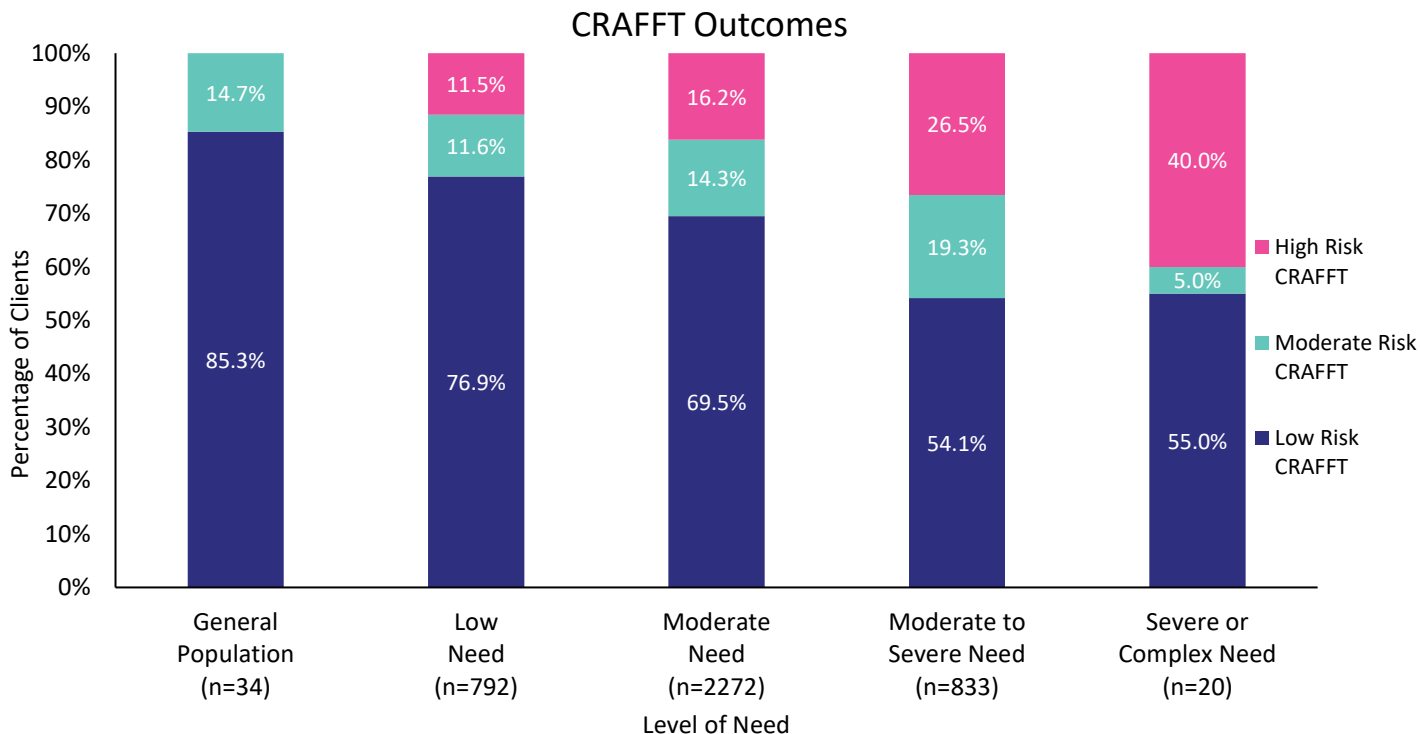


FIGURE 15. THE PROPORTION OF CLIENTS RECEIVING EACH CRAFFT OUTCOME FOR EACH LEVEL OF NEED

In the next two figures, we examine number of substances used (Figure 16) and the frequency of their use (Figure 17), as reported in the CRAFFT Part A. You can observe that the number of substances used and the frequency of that use increases along with the assigned level of need. In the *General Population* group, only alcohol use is endorsed, but at every other level marijuana and vaping are the most frequently used.

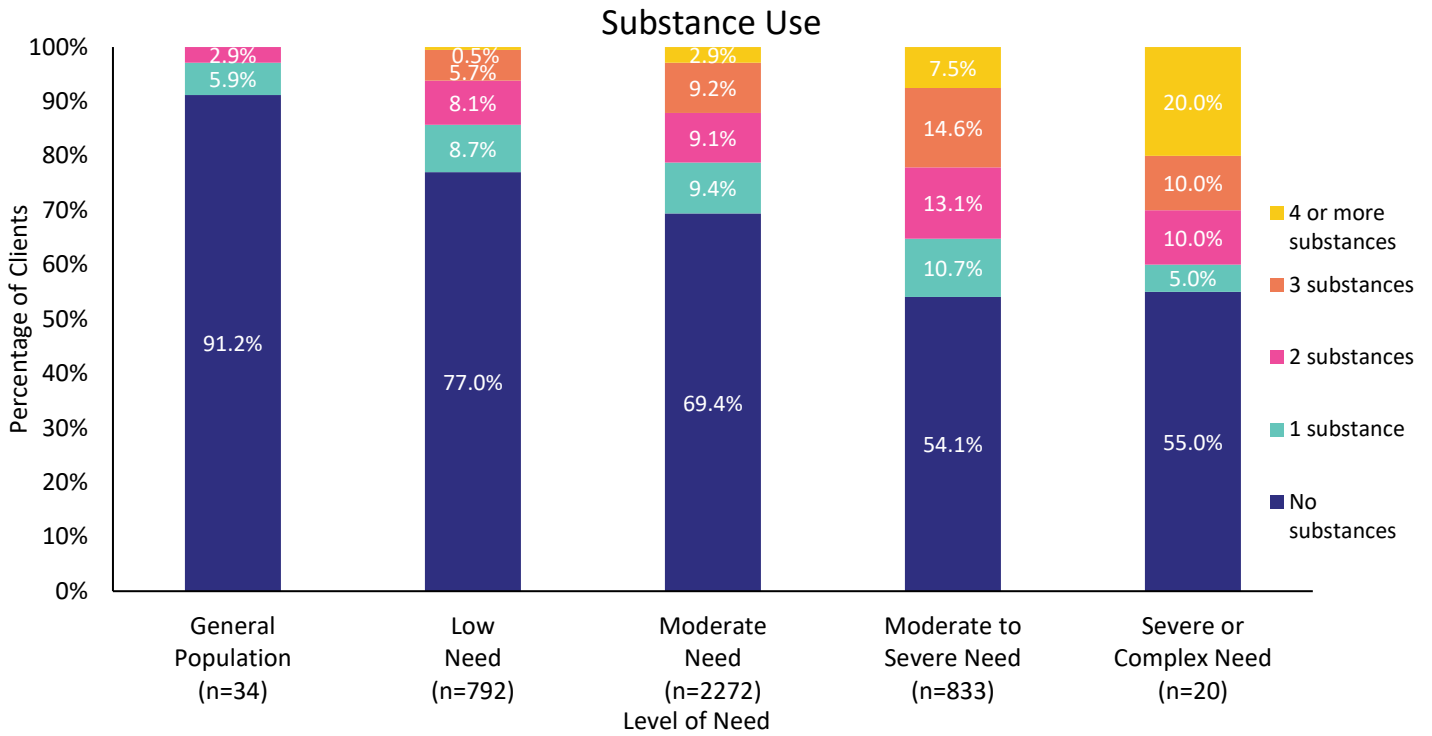


FIGURE 16. THE PROPORTION OF CLIENTS ENDORSING A NUMBER OF SUBSTANCES IN PART A OF THE CRAFFT AT EACH ASSIGNED LEVEL OF NEED.

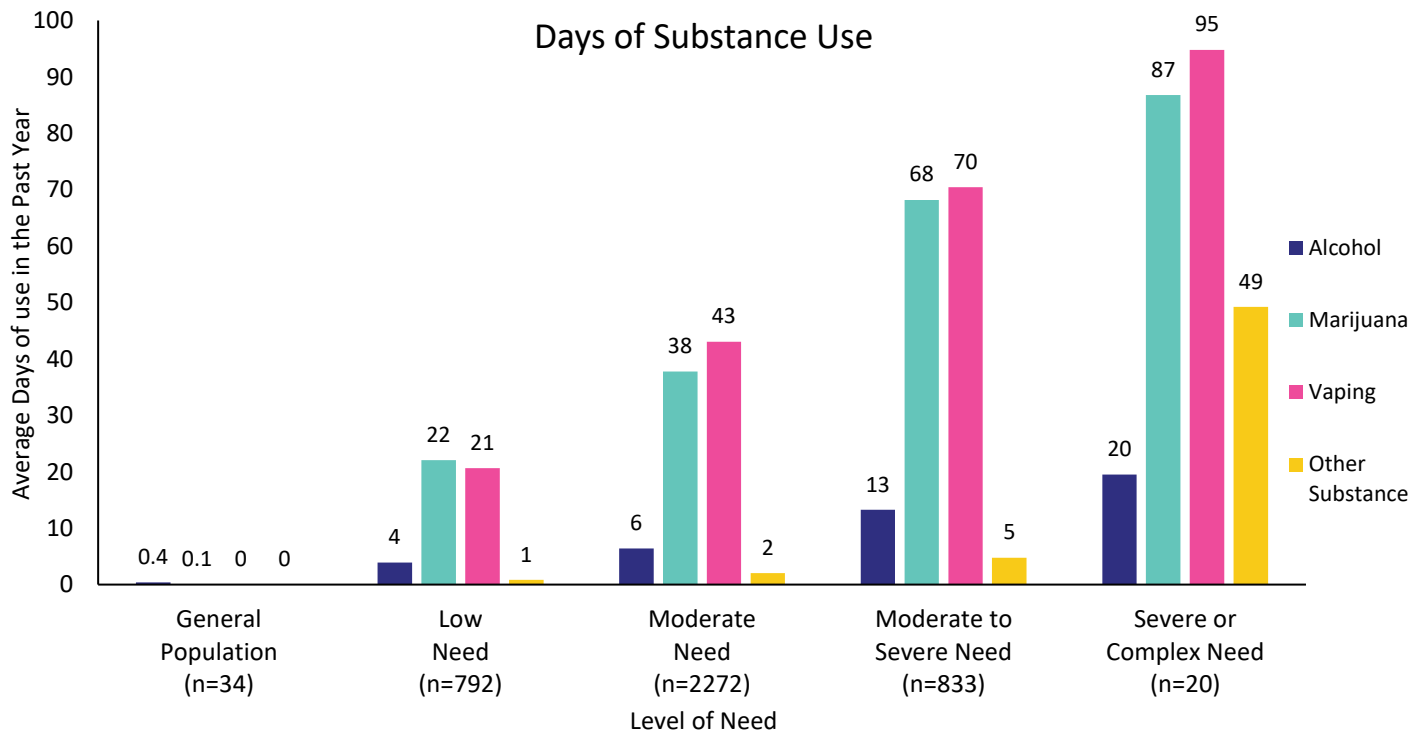


FIGURE 17. THE AVERAGE NUMBER OF DAYS IN THE PAST YEAR CLIENTS AT EACH LEVEL OF NEED ENDORSES USING EACH OF THE SUBSTANCES INQUIRED ABOUT IN THE CRAFFT PART A

Overall Needs and Acuity

Review of the intake data reveals that, overall, anxiety is the most common problem affecting youth in Ottawa and the surrounding area, being reported by 60.2% of all clients. Though the commonality of presenting problems shifted based on factors such as age and gender, anxiety remained among the most common across all subgroups. Depression (31.9%) and Aggression (22.5%) were the second and third most common presenting problems respectively.

Intake workers assigned a level of need to each of the clients from one of 5 possible levels, as seen in the figure below, ranging from *General Population* to *Severe or Complex Needs* (Figure 18). Of those clients who were assigned a level of need, *Moderate Need* was the most common overall (59.5%). This level of need recommends significant interventions, including medication, addictions treatment, crisis response, or case management. 76.9% of clients were assigned a level of need were designated at *Moderate Need* or higher, suggesting that there is a high level of MHASUH need in the youth of the community.

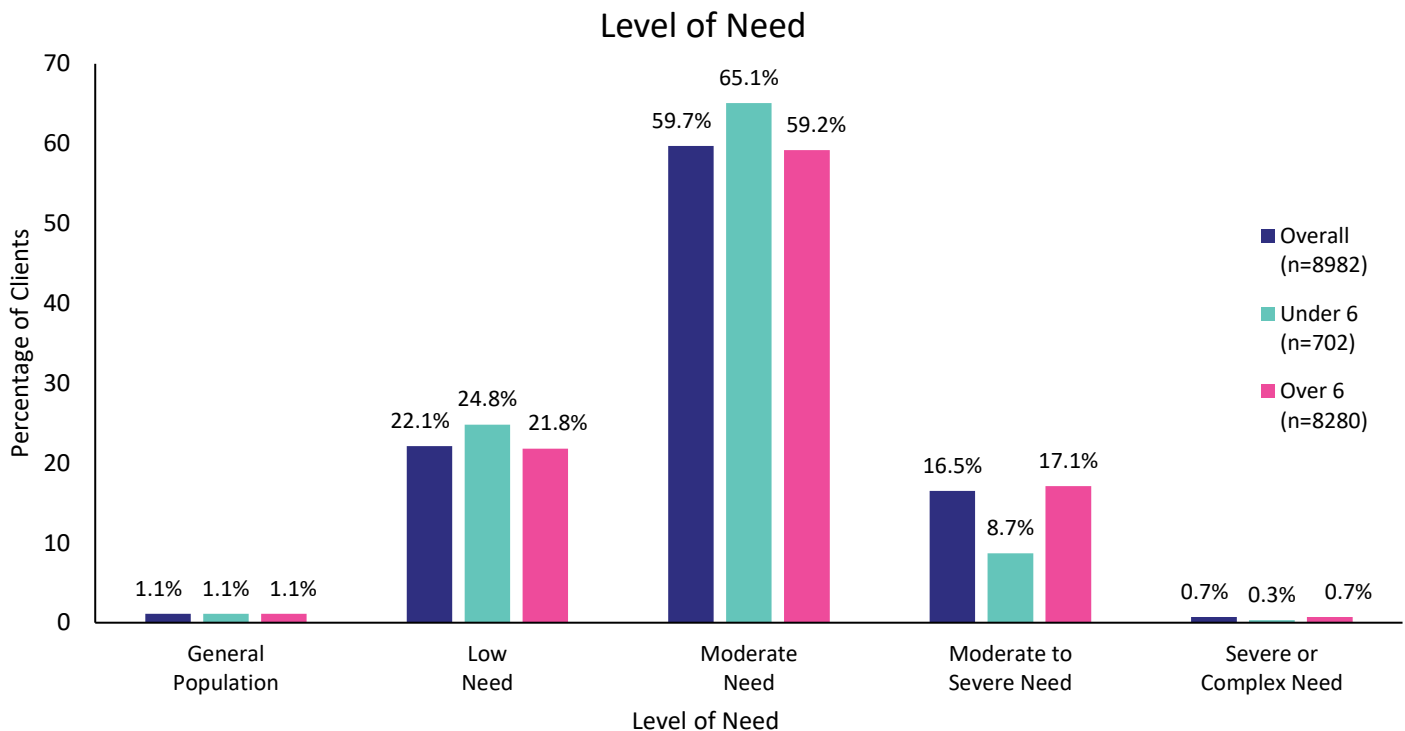


FIGURE 18. THE PROPORTIONS OF CLIENTS OVERALL AND WITHIN THE UNDER 6 AND 6 AND OLDER AGE RANGES ASSIGNED TO EACH LEVEL OF NEED

Recommendations & Referrals

Intake workers can select from 23 different types of intervention for each client, based on their requirements and level of need (Appendix B). About half of clients (50.5%) are recommended 2 or more interventions, and the most common of which is Counselling & Therapy, suggested to 69.8% of clients, followed by “Assessment and Treatment” (38.4%) and “Peer and Family Support” (21.9%).

Dashboard Rollout

The Dashboards became operational in November 2023. There are 4 dashboards that provide a variety of up-to-date information on service utilization, aggregated on a month-to-month basis. This information is available to 1Call1Click.ca administrators, and to agency leads, allowing them to observe trends, track needs, and plan for the future.

The *Operations Dashboard* contains aggregated information regarding the number of contacts and unique clients contacting 1Call1Click.ca and the number and types of referrals made. It also displays the aggregated values for some demographic features of the clients (age group, region, gender, language), and the assigned levels of need. The *Operations Fiscal Year* Dashboard contains much of the same information but linked to the fiscal year rather than the lifetime operation of the service. The *Clinical Dashboard* shows the distributions of the levels of need and presenting problems that people are contacting the service about over time. It also includes the overall distribution of ASQ risk scores and HEADS-ED Under 6, HEADS-ED 6 and Older, and CRAFFT total scores by level of need, as well as the full distribution of 0, 1, and 2 scores for each domain of both HEADS-ED tools. These dashboards have the capacity to be filtered by region to meet the needs of lead agency planning. The *Performance Metrics* dashboard tracks common data entry trouble areas for the purposes of monitoring and maintaining data quality.

Client Satisfaction

Shortly after a client is provided a referral, they are sent a link to participate in a satisfaction survey regarding their experience with 1Call1Click.ca. By the end of 2023, over 784 clients or their caregivers had completed the survey, 9.2% of those invited to participate (Figure 19).

The majority (79.2%) of clients said that they were satisfied overall with their experience at 1Call1Click.ca and (77.9%) agreed that they would recommend 1Call1Click.ca to a friend or loved one in need of MHASUH services. 83.2% said that they found 1Call1Click.ca easy to access and 78.8% indicated that they found the time it took for 1Call1Click.ca to provide them with a referral was reasonable.



If you examine the figure below, you will note that a large proportion of the clients who responded selected the “neither agree nor disagree” option when describing their experience with 1Call1Click.ca. The research team hoped to gain insight into people’s perceptions of only their experience with 1Call1Click.ca and not with the care that they received following, and so distributed the satisfaction survey shortly after the client intakes. As a result, most clients who filled out the survey would have received it prior to their first appointment with the agency to which they were referred. It is for this reason we believe that the “neither agree nor disagree” was selected so frequently, as clients were waiting to see how their treatment went before forming a judgement. This is reflected in that the highest proportions of these responses are given to questions about the resources provided.

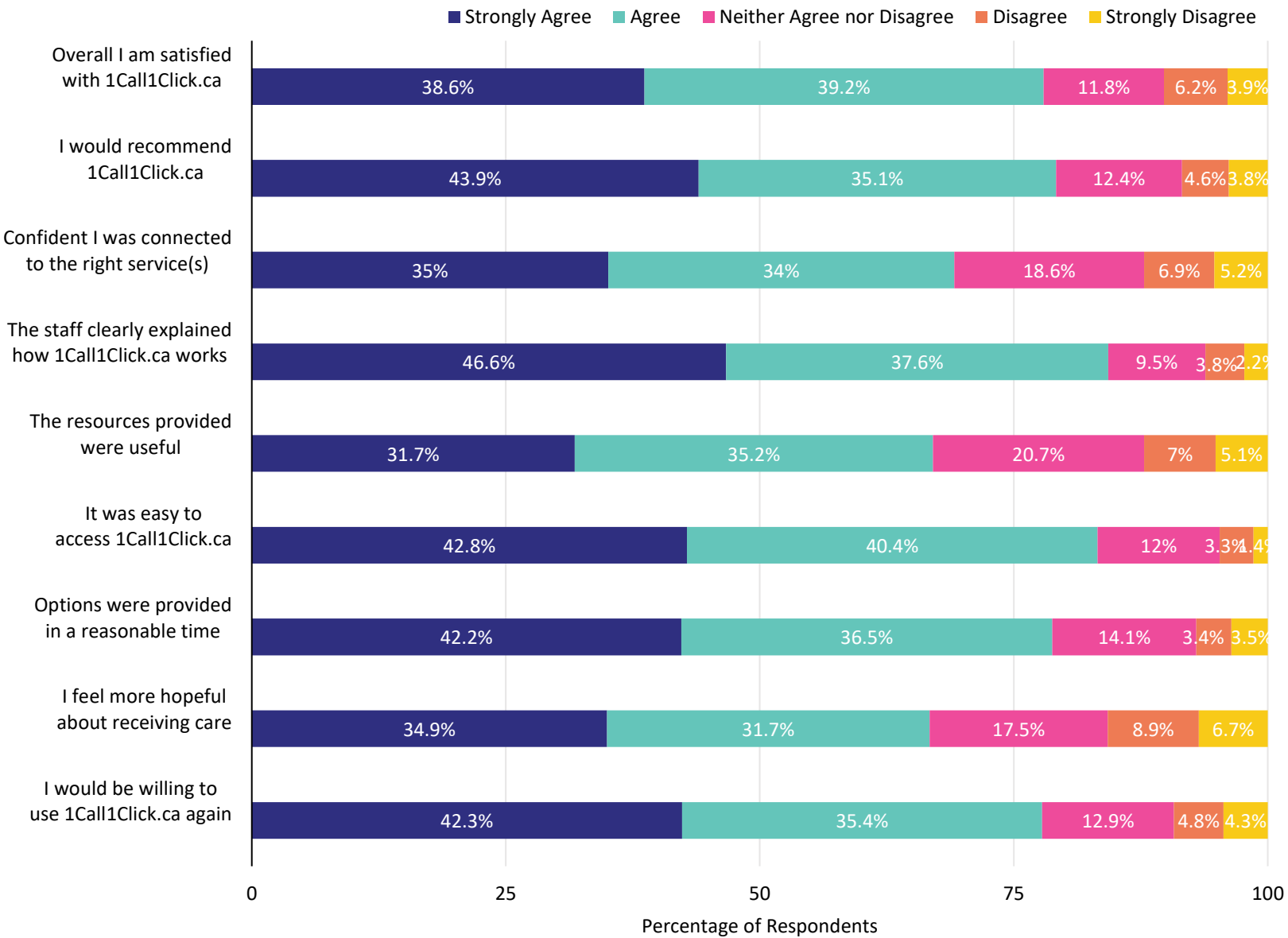


FIGURE 19. PROPORTION OF RESPONSES BY 1CALL1CLICK.CA CLIENTS TO EACH OF THE QUESTIONS ASKED IN THE SATISFACTION SURVEY

Forecasting

Data from the period from launch to end of September 2022 were used to train several mathematical forecasting models. Each of these was then tested against the actual data for the period of October 2022 to the end of December 2022. Of the models tested, the PROPHET model was the most successful at accurately predicting the daily number of intakes. PROPHET is a method of forecasting trends fit with yearly, weekly, and daily seasonality. It works best with datasets that have strong seasonal effects and several seasons of historical data.

When the dataset (to end of 2022) was used to project intakes for the first months of 2023, however, the actual number overshoot the projected number by over 30%, highlighting the growing need for services in the area. It is currently planned to perform these projections again including the data from 2023, as we expect that the inclusion of more seasons of data will lead to greater accuracy in the projections. As the accuracy of the projections improve, it will provide the management at 1Call1Click.ca and of the local agencies a large advantage, allowing them to see seasonal patterns and increasing their ability to accurately plan for the future.

Discussion of Findings

Ideally, it would be easy for infants, children, youth, and their families to connect to the MHASUH service as soon as they needed to. Unfortunately, the complexity of these challenges is such that, even when people know that help is needed, what kind of help and where to go for it are often difficult to ascertain. 1Call1Click.ca, as a service, is meant to assist with these challenges. The number of clients seen by the service suggests that there is a demand in the community for help connecting to the services people need. Fortunately, the data suggest that 1Call1Click.ca has succeeded in reaching populations of people who often face disproportionate barriers to accessing care, as we have observed individuals from these groups accessing the service in proportions similar to those of the service area.

One of the great strengths of 1Call1Click.ca is that, as a centralized hub through which people can be referred for MHASUH challenges, the service can provide a unique view into the needs of the service area. This data allows us to see not only the number of children and youth requiring MHASUH support, but also to learn about the nature and severity of that need, as well as the characteristics of those who need it. This type of detailed regional information was not available prior to the launch of 1Call1Click.ca, making it of great interest to parents, care providers, and policy makers.

The majority of clients are assigned to moderate or higher levels of need, and the need for services is growing rapidly. The number of intakes each month has increased by an average of 60% from the first year of operations to the second. Projections into 2023 were exceeded by the actual number of intakes by over 30%.

1Call1Click.ca can make the experience of navigating the MHASUH system of care easier for children, youth and their families than it has ever been in Southeastern Ontario. People no longer need to guess where they should go, and their primary care providers can direct their patients to 1Call1Click.ca rather than having to devote time they do not have to tracking the shifting landscape of care themselves. It can increase efficiency, by making sure that people are on the waitlist for the service that best meets their need the first time.

Appendices

Appendix A: Definitions & Acronyms

Communitric- a measurement theory that arises from communication theory and is designed for applications of measurement in information system applications, particularly as they apply to human service enterprises.

Level of Need- The level of intervention recommended for a clients MHASUH needs. This is based on an approach described in Ontario's Roadmap to Wellness to make it easier to link together healthcare providers across community, primary care, and acute care settings.

Presenting Problems- The challenges endorsed by clients as the reasons they are contacting the service.

Screening tool- a tool used to examine the possible presence of a particular problem. For the purposes of mental health, substance use, or addictions, these usually consist of questions carefully designed to determine whether a more thorough evaluation for a particular problem or disorder is warranted.

Social determinants of mental health- Non-medical economic, social, and cultural circumstances that are linked to the prevalence and severity of mental health challenges.

MHAN- Mental Health and Addictions Nurse

MHASUH- Mental Health, Addictions, and Substance Use Healthcare

*Appendix B: Full Data Tables⁴**Number of Intakes at 1Call1Click.ca Each Month of Operations*

Year	Month of Intake	Number of Clients (n=9694)	Percentage of Clients
2021	June	111	1.1%
	July	135	1.4%
	August	123	1.3%
	September	158	1.6%
	October	264	2.7%
	November	361	3.7%
	December	262	2.7%
2022	January	284	2.9%
	February	301	3.1%
	March	365	3.8%
	April	300	3.1%
	May	438	4.5%
	June	439	4.5%
	July	203	2.1%
	August	236	2.4%
	September	296	3.1%
	October	359	3.7%
	November	419	4.3%
	December	340	3.5%
2023	January	329	3.4%
	February	344	3.5%
	March	468	4.8%
	April	376	3.9%
	May	469	4.8%
	June	392	4.0%
	July	238	2.5%
	August	233	2.4%
	September	282	2.9%
	October	362	3.7%
	November	436	4.5%
	December	371	3.8%

⁴ To respect client privacy, any cell within the data tables in this section that would include fewer than 10 individuals are represented with a "<10" rather than a number.

Number of Clients by Age Group

Age in Years	Number of Clients (n=9692)	Percentage of Clients
0 to 2	84	0.8%
3 to 5	628	6.4%
6 to 8	1149	11.8%
9 to 11	1639	16.9%
12 to 14	2826	29.1%
15 to 17	3151	32.5%
18 to 21	215	2.2%

County of Residence and County Census Information

County of Residence	Number of Clients (n=9694)	Percentage of Clients	Population of County (2021 Census)	Percentage of Total Service Population	Number of youth (0 to 21) in county (2021 Census)	Percentage of youth in county who had an intake at 1Call1Click.ca
Lanark	196	2.2%	75,760	5.0%	16,266	1.2%
Leeds & Grenville	91	1%	104,070	6.9%	21,207	0.4%
Ottawa	6444	71.3%	1,017,449	67.2%	255,619	2.5%
Prescott & Russell	695	7.7%	95,639	6.3%	22,691	3.1%
Renfrew	611	6.8%	106,365	7.0%	24,195	2.5%
Stormont, Dundas & Glengarry	997	11%	114,637	7.6%	25,908	3.8%
Field Blank	641	6.8%				
Total	9694		1,515,077		365,886	2.6%

Overall Client Level of Need

Level of Need	Number of Clients (n=9694)	Percentage of Clients
General Population	100	1.0%
Low Need	1982	20.4%
Moderate Need	5361	55.3%
Moderate to Severe Need	1478	15.2%
Severe or Complex Need	61	0.6%
Not Categorized	712	7.3%

Client Levels of Education

Current Level of Education	Number of Clients	Percentage of Clients
Not Attending- Under 4	192	2.0%
Preschool	42	0.4%
Kindergarten	441	4.7%
Grade 1	349	3.7%
Grade 2	350	3.7%
Grade 3	442	4.7%
Grade 4	476	5.1%
Grade 5	526	5.6%
Grade 6	570	6.1%
Grade 7	748	8.0%
Grade 8	907	9.7%
Grade 9	1115	11.9%
Grade 10	1148	12.2%
Grade 11	1054	11.2%
Grade 12	673	7.2%
Not Attending- School Age	270	2.9%
Not Attending - Over 18	26	0.3%
Post-Secondary	61	0.6%
Client prefers not to answer	<10	<0.1%

Client Disability Status

Does the Client have a Disability?		
Response	Number of Clients (n=9694)	Percentage of Clients
No	6522	67.3%
Yes	2750	28.4%
Client prefers not to answer	131	1.4%
No response	291	3.0%

Types of Disability Endorsed by Clients

Disability	Number of Clients	Percentage of Total Clients (n=9694)	Percentage of Clients Endorsing Disability (n=2750)
Mental/psychological	1273	13.1%	46.3%
Learning	1135	11.7%	41.3%
Developmental	821	8.5%	29.9%
Mobility	78	0.8%	2.8%
Memory	61	0.6%	2.2%
Hearing	46	0.5%	1.7%
Pain	37	0.4%	1.3%
Seeing	29	0.3%	1.1%
Dexterity	17	0.2%	0.6%
Drug or alcohol dependence	12	0.1%	0.4%
Flexibility	9	0.1%	0.3%
None of the above	97	1.0%	3.5%

Presenting Problems for Clients by Age Group

Presenting Problem	All Clients (n=9692)	0 to 2 (n=84)	3 to 5 (n=628)	6 to 8 (n=1149)	9 to 11 (n=1639)	12 to 14 (n=2826)	15 to 17 (n=3151)	18 to 21 (n=215)
Aggression	2188 (22.5%)	30 (35.7%)	322 (51.2%)	547 (47.6%)	574 (35%)	434 (15.3%)	263 (8.3%)	18 (8.3%)
Anxiety	5839 (60.2%)	23 (27.3%)	241 (38.3%)	566 (49.2%)	991 (60.4%)	1784 (63.1%)	2068 (65.6%)	166 (77.2%)
Depression	3098 (31.9%)	<10	<10	57 (4.9%)	243 (14.8%)	1066 (37.7%)	1603 (50.8%)	121 (56.2%)
Eating Problems	893 (9.2%)	<10	52 (8.2%)	57 (4.9%)	91 (5.5%)	268 (9.4%)	398 (12.6%)	20 (9.3%)
Inattention and Impulsivity (ADHD)	1993 (20.5%)	15 (17.8%)	216 (34.3%)	467 (40.6%)	511 (31.1%)	434 (15.3%)	321 (10.1%)	29 (13.4%)
Learning Disabilities	678 (6.9%)	<10	36 (5.7%)	111 (9.6%)	144 (8.7%)	223 (7.8%)	143 (4.5%)	15 (6.9%)
Non-Suicidal Self-Injury (NSSI)	722 (7.4%)	<10	10 (1.5%)	30 (2.6%)	94 (5.7%)	290 (10.2%)	278 (8.8%)	20 (9.3%)
Obsessions and Compulsions	406 (4.1%)	<10	15 (2.3%)	34 (2.9%)	85 (5.1%)	138 (4.8%)	117 (3.7%)	15 (6.9%)
Parent-Child Relationships	1904 (19.6%)	23 (27.3%)	217 (34.5%)	294 (25.5%)	421 (25.6%)	500 (17.6%)	426 (13.5%)	23 (10.6%)
Sleep Problems	941 (9.7%)	16 (19%)	69 (10.9%)	73 (6.3%)	142 (8.6%)	273 (9.6%)	345 (10.9%)	23 (10.6%)
Stress and Trauma	1611 (16.6%)	<10	90 (14.3%)	192 (16.7%)	282 (17.2%)	465 (16.4%)	530 (16.8%)	46 (21.3%)
Somatization	136 (1.4%)	<10	<10	<10	10 (0.6%)	58 (2%)	55 (1.7%)	<10
Substance Use	311 (3.2%)	<10	<10	<10	<10	69 (2.4%)	214 (6.7%)	24 (11.1%)
Suicidal Ideation (SI)	1844 (19%)	<10	<10	61 (5.3%)	224 (13.6%)	676 (23.9%)	827 (26.2%)	54 (25.1%)
Thought disruption	625 (6.4%)	<10	18 (2.8%)	28 (2.4%)	80 (4.8%)	244 (8.6%)	237 (7.5%)	18 (8.3%)
Other	1221 (12.5%)	35 (41.6%)	139 (22.1%)	195 (16.9%)	230 (14%)	330 (11.6%)	269 (8.5%)	23 (10.6%)

Presenting Problems for Clients by Gender Identity

Presenting Problem	All Clients (n=9694)	Cis-Female (n=5286)	Cis-Male (n=3839)	Not Cis-Gendered (n=304)
Aggression	2188 (22.5%)	736 (13.9%)	1340 (34.9%)	27 (8.8%)
Anxiety	5839 (60.2%)	3537 (66.9%)	1968 (51.2%)	202 (66.4%)
Depression	3099 (31.9%)	2022 (38.2%)	836 (21.7%)	161 (52.9%)
Eating Problems	893 (9.2%)	645 (12.2%)	191 (4.9%)	30 (9.8%)
Inattention and Impulsivity (ADHD)	1994 (20.5%)	702 (13.2%)	1180 (30.7%)	51 (16.7%)
Learning Disabilities	679 (7.0%)	265 (5.0%)	385 (10%)	16 (5.2%)
Non-Suicidal Self- Injury (NSSI)	722 (7.4%)	501 (9.4%)	142 (3.6%)	49 (16.1%)
Obsessions and Compulsions	406 (4.1%)	210 (3.9.0%)	181 (4.7%)	<10
Parent-Child Relationships	1904 (19.6%)	963 (18.2.0%)	826 (21.5%)	46 (15.1%)
Sleep Problems	941 (9.7%)	530 (10%)	341 (8.8%)	42 (13.8%)
Somatization	136 (1.4%)	83 (1.5%)	39 (1.0%)	13 (4.2%)
Stress and Trauma	1611 (16.6%)	969 (18.3%)	539 (14%)	61 (20.0%)
Substance Use	312 (3.2%)	174 (3.2%)	118 (3%)	18 (5.9%)
Thought disruption	625 (6.4%)	349 (6.6%)	237 (6.1%)	27 (8.8%)
Suicidal Ideation (SI)	1845 (19%)	1186 (22.4%)	487 (12.6%)	113 (37.1%)
Other	1221 (12.5%)	531 (10%)	609 (15.8%)	45 (14.8%)

Frequencies of Recommendations of Service Types

Service Recommended	Number of Clients (n=9694)	Percentage of Clients
Counselling and Therapy (incl. Psychotherapy)	6772	69.8%
Assessment & Treatment	3729	38.4%
Peer and Family Support	2127	21.9%
Specialized Consultation	838	8.6%
Family Support	813	8.3%
Brief Intervention	585	6%
Crisis Response and Support	199	2%
Addictions Treatment	180	1.8%
Case Management	121	1.2%
Targeted Prevention	109	1.1%
Peer Support	93	0.9%
Prevention and promotion	80	0.8%
Child Youth intensive treatment	69	0.7%
Psychotherapy Services	49	0.5%
Crisis Response	48	0.4%
Supportive Housing	19	0.1%
Early Psychosis intervention	17	0.1%
Assertive Community Treatment	10	0.1%
Emergency & In-Patient Services	10	0.1%
Withdrawal Management	10	0.1%
Court Supports/Diversion	<10	<0.1%
Supported Employment	<10	<0.1%
Forensic Services	<10	<0.1%

Racial Background of Clients

Racial Background	Number of Clients (n=9425)	Percentage of Clients
Arab	293	3.0%
Black	372	3.8%
Chinese	101	1.0%
Filipino	17	0.1%
Indigenous	188	1.9%
Japanese	<10	<0.1%
Korean	20	0.2%
Latin American	98	1.0%
South Asian	164	1.6%
Southeast Asian	97	1.0%
West Asian	54	0.5%
White	6931	71.4%
Other	118	1.2%
Client prefers not to answer	136	1.4%
No Response	379	3.9%
Multiracial	721	7.4%
<i>Indigenous/White</i>	<i>165</i>	<i>1.7%</i>
<i>Black/White</i>	<i>168</i>	<i>1.7%</i>
<i>Latin American/White</i>	<i>59</i>	<i>0.6%</i>
<i>Chinese/White</i>	<i>44</i>	<i>0.4%</i>
<i>Arab/White</i>	<i>40</i>	<i>0.4%</i>
<i>South Asian/White</i>	<i>38</i>	<i>0.3%</i>
<i>Southeast Asian/White</i>	<i>31</i>	<i>0.3%</i>
<i>White/Other</i>	<i>24</i>	<i>0.2%</i>
<i>Filipino/White</i>	<i>17</i>	<i>0.1%</i>
<i>Japanese/White</i>	<i>17</i>	<i>0.1%</i>
<i>West Asian/White</i>	<i>13</i>	<i>0.1%</i>
<i>Other multiracial</i>	<i>104</i>	<i>1.0%</i>

Client Family Income

Income Level	Number of Clients (n=9694)	Percentage of Clients
\$0 to \$29,999	545	5.6%
\$30,000 to \$59,999	651	6.7%
\$60,000 to \$89,999	540	5.6%
\$90,000 to \$119,999	602	6.2%
\$120,000 to \$149,999	438	4.5%
\$150,000 or more	1084	11.2%
Client prefers not to answer	814	8.4%
Do not know	4022	41.5%
No response	998	10.3%

References

- Alegría, M., Nakash, O., & NeMoyer, A. (2018). Increasing equity in access to mental health care: a critical first step in improving service quality. *World Psychiatry, 17*(1), 43.
- Bartram, M. (2019). Income-based inequities in access to mental health services in Canada. *Canadian Journal of Public Health, 110*, 395-403.
- Benkert, R., Cuevas, A., Thompson, H. S., Dove-Medows, E., & Knuckles, D. (2019). Ubiquitous yet unclear: a systematic review of medical mistrust. *Behavioral Medicine, 45*(2), 86-101.
- Canadian Institute for Health Information. (2019) Health system resources for mental health and addictions care in Canada. Available at: <https://www.cihi.ca/sites/default/files/document/mental-health-chartbook-report-2019-en-web.pdf>. Accessed September 18, 2024
- Cappelli, M., Gray, C., Zemek, R., Cloutier, P., Kennedy, A., Glennie, E., Doucet, G., & Lyons, J. S. (2012). The HEADS-ED: a rapid mental health screening tool for pediatric patients in the emergency department. *Pediatrics, 130*(2), e321-e327.
- Cloutier, P., Cappelli, M., Glennie, J. E., & Keresztes, C. (2008). Mental health services for children and youth: a survey of physicians' knowledge, attitudes and use of telehealth services. *Journal of Telemedicine and Telecare, 14*(2), 98-101.
- Childrens Mental Health Ontario. (2020). *2020 Report on wait lists and wait times for child and youth mental health care in Ontario*. CMHO. <https://cmho.org/wp-content/uploads/CMHO-Report-WaitTimes-2020.pdf>
- Craig, S. G., Ames, M. E., Bondi, B. C., & Pepler, D. J. (2023). Canadian adolescents' mental health and substance use during the COVID-19 pandemic: Associations with COVID-19 stressors. *Canadian Journal of Behavioural Science/Revue canadienne des sciences du comportement, 55*(1), 46.
- de Moissac, D., & Bowen, S. (2019). Impact of language barriers on quality of care and patient safety for official language minority Francophones in Canada. *Journal of Patient Experience, 6*(1), 24-32.
- Faber, S. C., Osman, M., & Williams, M. T. (2023). Access to mental health care in Canada. *International Journal of Mental Health, 1*-23.
- Fante-Coleman, T., & Jackson-Best, F. (2020). Barriers and facilitators to accessing mental healthcare in Canada for black youth: A scoping review. *Adolescent Research Review, 5*(2), 115-136.
- Gadermann, A. C., Thomson, K. C., Richardson, C. G., Gagné, M., McAuliffe, C., Hirani, S., & Jenkins, E. (2021). Examining the impacts of the COVID-19 pandemic on family mental health in Canada: findings from a national cross-sectional study. *BMJ open, 11*(1), e042871.

Gleason MM, Goldson E, Yogman MW, AAP Council on Early Childhood. (2016) Addressing Early Childhood Emotional and Behavioral Problems. *Pediatrics*, 138(6):e20163025

Godoy, L., Hodgkinson, S., Robertson, H. A., Sham, E., Druskin, L., Wambach, C. G., L.S., & Long, M. (2019). Increasing mental health engagement from primary care: The potential role of family navigation. *Pediatrics*, 143(4).

Haavik, L., Joa, I., Hatloy, K., Stain, H. J., & Langeveld, J. (2017). Help seeking for mental health problems in an adolescent population: the effect of gender. *Journal of mental health*.

Hafeez, H., Zeshan, M., Tahir, M. A., Jahan, N., & Naveed, S. (2017). Health care disparities among lesbian, gay, bisexual, and transgender youth: A literature review. *Cureus*, 9(4), e1184.

Kirmayer, L. J., & Jarvis, G. E. (2019). Culturally responsive services as a path to equity in mental healthcare. *HealthcarePapers*, 18(2), 11-23.

Kourgiantakis, T., Markoulakis, R., Lee, E., Hussain, A., Lau, C., Ashcroft, R., Goldstein, A.L., Kodeeswaran, S., Williams, C.C., & Levitt, A. (2023). Access to mental health and addiction services for youth and their families in Ontario: perspectives of parents, youth, and service providers. *International Journal of Mental Health Systems*, 17(1), 1-15.,

Lund, C., Brooke-Sumner, C., Baingana, F., Baron, E. C., Breuer, E., Chandra, P., Haushofer, J., Herrman, H., Jordans, M., Kieling, C., Medina-Mora, M.E., Morgan, E., Omigbodun, O., Tol, W., Patel, V., & Saxena, S. (2018). Social determinants of mental disorders and the Sustainable Development Goals: a systematic review of reviews. *The Lancet Psychiatry*, 5(4), 357-369.

Moroz, N., Moroz, I., & D'Angelo, M. S. (2020, November). Mental health services in Canada: barriers and cost-effective solutions to increase access. In *Healthcare management forum* (Vol. 33, No. 6, pp. 282-287). Sage CA: Los Angeles, CA: SAGE Publications.

Petts, R. A., McClain, M. B., Azad, G., & Shahidullah, J. D. (2021). System navigation models to facilitate engagement in pediatric behavioral health services: A systematic review. *Families, Systems, & Health*, 39(4), 618.

Polanczyk, G. V., Salum, G. A., Sugaya, L. S., Caye, A., & Rohde, L. A. (2015). Annual research review: A meta-analysis of the worldwide prevalence of mental disorders in children and adolescents. *Journal of child psychology and psychiatry*, 56(3), 345-365.

Slaunwhite, A. K. (2015). The role of gender and income in predicting barriers to mental health care in Canada. *Community mental health journal*, 51, 621-627.

Solmi, M., Radua, J., Olivola, M., Croce, E., Soardo, L., Salazar de Pablo, G., Il Shin, J., Kirkbride, J.B., Jones, P., Kim, J.H., Kim, J.Y., Carvalho, A.F., Seeman, M.V., Correll, C.U., & Fusar-Poli, P. (2021). Age at onset of mental disorders worldwide: large-scale meta-analysis of 192 epidemiological studies. *Molecular psychiatry*, 27(1), 281-295.

Statistics Canada. (2018). *Mental health care needs, 2018*. Statistics Canada.
<https://www150.statcan.gc.ca/n1/pub/82-625-x/2019001/article/00011-eng.htm>

Statistics Canada. (2023). *Infographic 3. The largest proportions of transgender and non-binary people in large urban centres are observed on the Canadian east and west coasts* [Infographic]. <https://www150.statcan.gc.ca/n1/daily-quotidien/220427/g-b003-eng.htm>

Statistics Canada (2022) Canadian Vital Statistics - *Death Database. 2017-2019*. <https://www.canada.ca/en/public-health/services/publications/healthy-living/suicide-canada-key-statistics-infographic.html>

Statistics Canada (2023) (table). Census Profile. 2021 Census of Population. Statistics Canada Catalogue no. 98-316-X2021001. Ottawa. Released November 15, 2023.

<https://www12.statcan.gc.ca/census-recensement/2021/dp-pd/prof/index.cfm?Lang=E> (accessed January 31, 2024).

Statistics Canada. 2023. (table). Census Profile. 2021 Census of Population. Statistics Canada Catalogue no. 98-316-X2021001. Ottawa. Released November 15, 2023.

<https://www12.statcan.gc.ca/census-recensement/2021/dp-pd/prof/index.cfm?Lang=E> (accessed February 8, 2024).

Wesselhoeft, R., Pedersen, C. B., Mortensen, P. B., Mors, O., & Bilenberg, N. (2015). Gender–age interaction in incidence rates of childhood emotional disorders. *Psychological medicine*, 45(4), 829-839.

Wiens, K., Bhattarai, A., Pedram, P., Dores, A., Williams, J., Bulloch, A., & Patten, S. (2020). A growing need for youth mental health services in Canada: examining trends in youth mental health from 2011 to 2018. *Epidemiology and psychiatric sciences*, 29, e115.

Wilson, C., & Cariola, L. A. (2020). LGBTQI+ youth and mental health: A systematic review of qualitative research. *Adolescent Research Review*, 5, 187-211.

Zahn-Waxler, C., Shirtcliff, E. A., & Marceau, K. (2008). Disorders of childhood and adolescence: Gender and psychopathology. *Annu. Rev. Clin. Psychol.*, 4, 275-303.