

November 2026

AI for youth mental health and substance use health: Considerations for service providers

Knowledge Institute
on Child and Youth Mental Health and Addictions

Acknowledgments:

Laura Zeibell, Lilli Green, Danielle Impey, Poppy Desclouds, Amy Porath-Eves, Christina Honeywell, Kathleen Pager

Suggested citation

Knowledge Institute on Child and Youth Mental Health and Addictions. (2026). AI for youth mental health and substance use health: Considerations for service providers. Knowledge Institute on Child and Youth Mental Health and Addictions.

For more information about this report, please contact info@cymha.ca

Funded by: Ontario

The views expressed herein are those of the Knowledge Institute and do not necessarily reflect those of the Province.

Table of Contents

About the AI series 4

AI basics: Definitions 5

AI at the service provider level 6

- Opportunities 6
- Some practical examples 11
- Considerations 13
- Practical suggestions 18

Moving forward 22

References 24

About the AI series

Artificial Intelligence (AI) is becoming increasingly relevant for everyday practice in the child and youth mental health and addictions sector (the sector). As AI becomes more integrated into our everyday life, it will be important to stay up to date and continually assess how it can be incorporated into our work. The sector will need to examine the potential for AI to create both beneficial and harmful changes in practice, services, and client concerns and outcomes.

This resource is the second in a series of three focused on exploring the use of AI.

- The first resource is a primer created for **leaders, decision makers, and all audiences** in the sector. It introduces new concepts related to AI use and offers an overview of opportunities, considerations, and practical suggestions.
- This second resource is for **agencies and service providers.** It explores the in-depth use of AI, including opportunities, considerations, and practical suggestions for sector service providers.
- The third resource in this series will focus on considerations for **young people and families**. It will explore the use of AI at an individual level — specifically, the potential impacts of AI on young people and families through the lens of the sector's services.

The content of this AI series is grounded in emerging evidence for all mental health and substance use health (MHSUH) service providers, and we encourage readers to share the information in this resource within their work with young people, families, and caregivers.

AI basics: Definitions

This section introduces key AI concepts and definitions that are referenced throughout this resource.

Artificial Intelligence (AI) is a broad term that describes software and technologies in computer science that mimic human intelligence (Sheth et al., 2023; Terra et al., 2023). AI can handle complex tasks such as decision-making, reasoning, problem-solving, speech recognition, pattern recognition, learning, and creating new things (Nuwasiima et al., 2024). Due to its ability to quickly process large amounts of information, AI can spot patterns in data and make predictions based on these patterns (Terra et al., 2023; Topol, 2019).

Machine learning uses statistics and algorithms, which are step-by-step instructions, sets of rules, and processes that tell a computer how to learn from data. Machine learning allows AI to improve its performance over time without needing more computer programming (LeCun et al., 2015). AI focuses on imitating human thinking processes, while machine learning focuses on continually improving speed, predictions, and accuracy through data-driven learning experiences within specific limits. Machine learning is shaped by the data it is trained on, so any biases in the data can be reflected and even amplified in a model's output, which emphasizes the need for careful, responsible training (Chen et al., 2023; Verma, 2019).

Predictive AI uses machine learning, statistics, and algorithms to analyze user data and recognize patterns, anticipate behaviours, and forecast outcomes (Marshall et al., 2025).

AI at the service provider level

AI can help agencies and service providers operate more efficiently by promoting consistent practices and improving quality of care. Opportunities can include streamlining administrative tasks and paperwork, supporting service providers with decision-making, enhancing the accuracy and consistency of assessments and diagnoses, personalizing interventions, monitoring progress, predicting recurrence, and extending services beyond the office.

AI is being used directly by the public to support mental health. Emerging polling data demonstrates that 1 in 7 people living in Canada have used AI for mental health support, with young people ages 16 to 24 being the most likely age group (MHCC, 2026). Additionally, 17% of youth living in Canada have reported using ChatGPT for mental health advice (Kids Help Phone, 2025).

While several opportunities for AI in MHSUH care exist, there are also considerations to keep in mind. This resource contains a list of opportunities, considerations, practical suggestions, and steps to move forward for service providers in the sector on AI use in child and youth MHSUH care. You can use the links provided at the start of each section to quickly find more information on a sub-topic you want to learn more about.

Opportunities

The following section offers a list of opportunities for AI in child and youth MHSUH care, including:

- Increased efficiency in administrative workflow and clinical support
- Supporting personalized, informed, and accurate care through precision mental health data
- Support human resource gaps through connection between digital and provider-based care

Increase efficiency in workflow and clinical support

AI can free up time for service providers, reduce service costs through automation, and streamline routine administrative and clinical tasks (Olawade et al., 2024). AI tools can automate time-consuming tasks such as charting and documentation. They can summarize collected data, transcribe sessions using voice recognition, and generate progress notes to help save providers' time (Sadeh-Sharvit et al., 2023; Tierney et al., 2024). Although research evaluating AI in real-world clinical settings is still emerging, AI technologies may be used for a wide range of tasks to help agencies:

- Manage appointment scheduling and data entry (Nuwasiima et al., 2024; Terra et al., 2023).
- Collect client information, triage, and provide educational resources to clients (Singh et al., 2024).
- Create real-time notes, assist with treatment planning, strengthen case management, and monitor treatment outcomes (Cabrera et al., 2023; Medina & Andrade, 2024; Nuwasiima et al., 2024).
- Administer and score questionnaires, screening, and assessment tools (Garriga et al., 2022; Nuwasiima et al., 2024; Terra et al., 2023).
- Detect workflow inefficiencies, modernize outdated electronic systems, and enhance billing processes (Singh et al., 2024).
- Provide consistently structured session notes that help summarize key points, organize information, and streamline record-keeping (Singh et al., 2024).



The Kingston Health Sciences Centre introduced an AI-assisted triage system in its Mental Health and Addiction Care program. One component of its Online Psychotherapy Tool uses machine learning to assess each client's needs and recommend the appropriate level of care. If someone is in a crisis, the system immediately flags them for urgent intervention (Ontario Hospital Association, 2023). Between 2023 and 2024, the system reduced appointment wait times by more than 50%.

The National Health Service in England has introduced an AI self-referral tool in the referral and assessment process for mental health care. The tool reduced assessment times by approximately 12 minutes, shortened wait times, lowered dropout rates, and improved recovery rates (Rollwage et al., 2023).

Support personalized, informed, and accurate care through precision mental health data

Precision Child and Youth Mental Health (PCYMH) offers an alternative, more personalized approach to care that fits a young person's unique needs, including tailored treatment plans based on personal and precise data (Bickman, 2020; Bickman et al., 2016; Ng & Weisz, 2016). AI can be integrated into the PCYMH data cycle (see Figure 2) to help create treatment plans that are more specific and aim to understand the whole young person (Olawade et al., 2024). This section provides an overview of how AI can optimize collected client data, while the practical suggestions section offers next steps for preparing service providers to reflect and make informed decisions about AI use in MHSUH care.

Figure 1. Precision mental health data lifecycle



Machine learning uses statistics and algorithms, which are step-by-step instructions, sets of rules, and processes that tell a computer how to learn from data and improve its speed, accuracy, and predictions over time.

Collect

In addition to the use of AI scribes that support provider note-taking (see Increase efficiency in workflow and clinical support), AI can enhance data collection through wearable technology, such as smart watches and rings (Balconi et al., 2024; Goldfine et al., 2020) and gather insights from unconventional sources, such as social media platforms (Korjian & Gibson, 2022; Nilsen et al., 2022). Wearable technology that continuously tracks physical biomarkers, such as GPS-based movements, body temperature, sleep patterns, and heart rate, can collect data for digital phenotyping. AI can analyze this continuous and passively tracked data to detect early signs of symptom onset or recurrence of MHSUH concerns (Balconi et al., 2024; Goldfine et al., 2020; Singh et al., 2024). AI can also draw insights from places like social media, where client-generated content can provide rich insights into complex human feelings, behaviours, and preferences that were previously inaccessible, offering new and valuable opportunities to better understand individuals and inform care (Grové, 2019; Korjian & Gibson, 2022; Nilsen et al., 2022; Salas-Zárate et al., 2022).

Predictive AI uses machine learning, statistics, and algorithms to analyze user data and recognize patterns, anticipate behaviours, and forecast outcomes.

Store

AI can help organize electronic records by automating the classification, extraction, indexing, and harmonization of data from multiple sources (clinical records, self-report measures, wearable devices, and other relevant sources of data; Stankovic, 2025). AI can help create data dictionaries, which can provide standardized descriptions and coding rules for each collected data set, helping to ensure that information is understood and used consistently across systems (Giancotti et al., 2026).

Analyze

Predictive AI models and algorithms can use machine learning to continuously analyze behaviours and symptoms to help providers better understand their clients through pattern recognition (Olawade et al., 2024). Clinical Decision Support Systems (CDSS) can use this pattern recognition to help providers detect depression, anxiety, substance use disorders, and other mental health disorders with greater precision to support providers with data-informed decision-making (D'Alfonso, 2019; Heinsch et al., 2019; Tutun et al., 2023; Wies et al., 2021). These systems can also manage complex cases, integrate data from electronic health records, and even predict the possibility of relapse or recurrence (Bertie et al., 2025; Dwyer et al., 2018; McCoy et al., 2018; Olawade et al., 2024; Terra et al., 2023).

Natural Language Processing (NLP) uses machine learning techniques to analyze language, pull out meaningful information, understand context, and communicate effectively through generated text or speech.

Use

By identifying trends in the patterns of client behaviours and symptoms, AI can use collected client data both at the point of care and for clinical service mapping (Lyeo et al., 2026). At the point of care, CDSS models can support data-informed conversations between providers and clients to help create personalized care plans (Lyeo et al., 2026). In clinical service mapping, predictive AI models can help organizations optimize the allocation of their resources, demonstrate program outcomes, inform the design and implementation of programs, and monitor client trends more effectively (Dawoodbhoy et al., 2021).

Learn

Machine learning can learn from a person's treatment history, preferences, symptoms, and feedback to adjust their care over time, spotting patterns in behaviours like stress triggers that help providers offer support for each person's unique strengths and challenges (Carreiro et al., 2021; Gual-Montolio et al., 2022). AI may become particularly useful for improving outcome monitoring and for evaluation, and to support long-term remission and recovery for care (Singh et al., 2024). Natural Language Processing (NLP) can enhance this analysis by identifying subtle behavioural patterns in electronic health records (Singh et al., 2024; see AI primer for definition). Identifying patterns can help detect early signs of stress (Mentis et al., 2024), cognitive decline (Penfold et al., 2022), and child maltreatment (Negriff et al., 2023), all of which are vital to mental health and well-being across the lifespan. In community settings, AI can create client summaries or dashboards and analyze data to help allocate resources more effectively and strategically (Dawoodbhoy et al., 2021; Thieme et al., 2023). AI can also detect early signs of a crisis and respond to changing care needs before a problem worsens (Olawade, 2024).

Deep learning uses machine learning to analyze multiple layers of information, learn complex patterns in data, and coordinate them to solve problems.

Some practical examples:

- Hamilton Health Sciences is conducting a study using AI to analyze the voices of young people in a McMaster Children's Hospital program through electronic health information collected and analyzed through deep learning to better understand their mental health needs.

- Ontario Shores is experimenting with a new AI tool to help predict treatment courses for clients diagnosed with schizophrenia spectrum disorders. Data is currently being collected on its effectiveness, with the hope to improve outcomes for clients and staff (Ontario Shores Communications and Public Affairs, 2025).

- Researchers at the Children's Hospital of Eastern Ontario Research Institute have demonstrated the effectiveness of using machine learning with data from electronic health records to predict mental health emergency department revisits with a 78% accuracy rate (Bians et al., 2025).

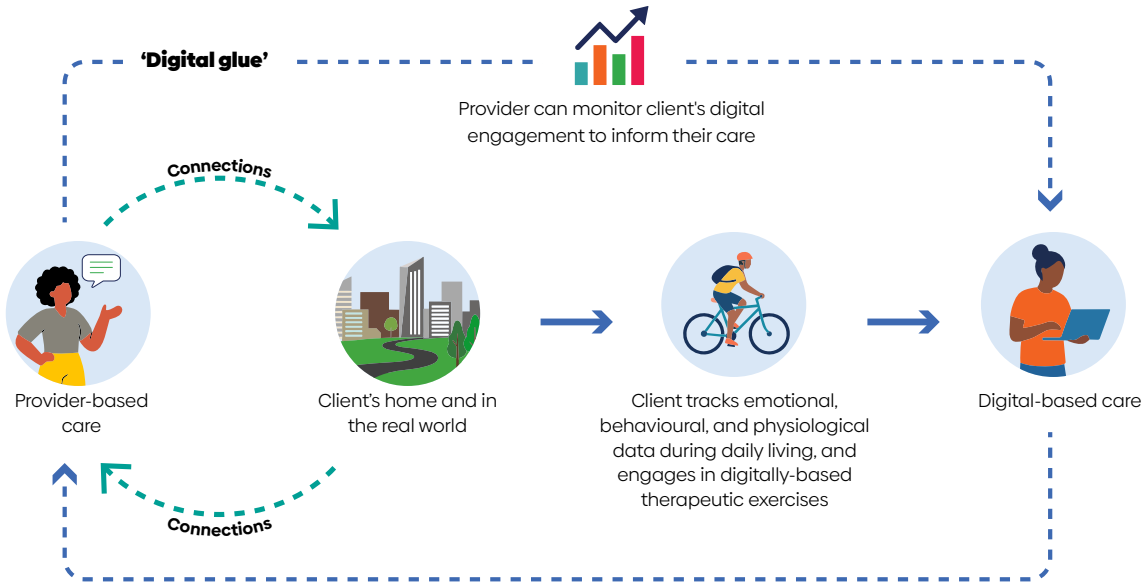
- Researchers found that a machine learning tool accurately predicted antidepressant treatment outcomes in children and adolescents, with up to 76% accuracy, based on symptom changes occurring within the first four to six weeks of care (Athreya et al., 2022).

- The Precision Child and Youth Mental Health (PCYMH) Collaboratory is a leading research centre committed to transforming child and youth mental health through groundbreaking research, innovative clinical care, early identification of mental health challenges, personalized interventions, and the effective sharing of knowledge to improve outcomes.

Support human resource gaps through connection between digital and provider-based care

AI-powered digital tools can help close long-standing gaps in care by expanding access to services via chatbots, avatars, and virtual therapists that offer 24/7 support to help overcome barriers of time, location, and cost (Fiske et al., 2019; Mehrotra et al., 2017; Olawade et al., 2024; Wies et al., 2021). These tools can be particularly useful for young people, who may face long and costly travel times to access centrally located MHSUH care (Lovejoy, 2019; Singh et al., 2024). AI digital tools can answer questions, guide clients through therapeutic exercises or homework, and maintain engagement during and after treatment to improve outcomes (Olawade et al., 2024). They can also monitor client engagement in activities for well-being and adjust the timing or frequency of in-person sessions to ensure care remains personalized and responsive (Bond et al., 2023). This seamless integration of digital and in-person care, often referred to as "digital glue," (see Figure 2) helps bridge the gap between self-managed tools and traditional services, creating a more cohesive support system (Bond et al., 2023). It allows clients to move seamlessly between online platforms and in-person care. By enhancing both access and provider capacity, AI can empower individuals to manage their MHSUH across multiple channels while improving the quality and reach of care.

Figure 2. The "digital glue" that integrates digital and in-person care. *Adapted from Bond et al. (2023)*



Wysa is a conversational AI agent that delivers Cognitive Behavioural Therapy (CBT) through conversations via a smartphone-based app (Malik et al., 2022). Evaluation findings with adults indicated that Wysa developed therapeutic relationships and supported clients' mental health at levels comparable to those achieved through human-based interventions (Malik et al., 2022).

The Waypoint Centre for Mental Health Care is leading research to explore how AI can support safer care. Using three years of client data, machine learning, and natural language processing (NLP), the AI-enabled early warning system aims to identify risk patterns up to 72 hours in advance (Waypoint Research Institute, 2026). The early warning system is currently being piloted across selected units at the Waypoint Centre for Mental Health Care (Waypoint Research Institute, 2026).

Considerations

The following section offers a list of considerations for AI in child and youth MHSUH care.

- Responsible use of AI and the need for human oversight
- Informed consent and transparency in AI-assisted care
- Protecting sensitive AI-collected data
- Safeguarding against algorithmic biases
- Impacts on the client-therapist relationship

Responsible use of AI and the need for human oversight

As AI technology continues to advance, it should be viewed as a tool that supports, but does not replace, professional judgment. This is important because many MHSUH apps are not grounded in validated psychological models and often focus on specific disorders, which limits their broader impact (Shahsavar & Choudhury., 2025; Wüllner et al., 2024). AI tools can be tested on synthetic data (instead of client data) for privacy, accessibility, and cost. This makes their effectiveness outside of research settings uncertain because performance in a simulated scenario does not always translate to comparable outcomes in clinical practice. Additionally, AI is often implemented more quickly than it can be rigorously evaluated, prompting calls for a more responsible, cautious, and evidence-based approach, as well as the need for strong regulatory standards (Health Data for All of Us, 2025). Responsible use of AI by service providers includes:

- Using AI to inform decisions while remaining fully accountable for care quality, ethical standards, and treatment outcomes (Terra et al., 2023; Thai et al., 2023).
- Overseeing AI and retaining final decision-making authority to ensure the human element remains central (Asan et al., 2020; Thai et al., 2023).
- Being mindful of over-reliance on AI, as this can weaken critical thinking and harm therapeutic relationships, both of which are essential to effective care (Terra et al., 2023).

These principles are vital because AI continues to have important limitations. Currently, AI lacks self-awareness, moral reasoning, and cultural sensitivity, which limits its ability to interpret complex emotions and behaviours (Singh et al., 2024). AI tools have also demonstrated serious flaws, including the generation of harmful or inaccurate information (Singh et al., 2024; Thakkar et al., 2024). Machine learning is shaped by the data it is trained on, so any biases in the data can be reflected and even amplified in a model's output, which emphasizes the need for human oversight (Chen et al., 2023; Verma, 2019). AI also remains limited in managing emergencies or emotional crises, which highlights the importance of human involvement (Kretzschmar et al., 2019; Terra et al., 2023). Even though humans are not without flaws, combining human judgment with AI support can help strengthen and improve outcomes (Health Data for All of Us, 2025).

Informed consent and transparency in AI-assisted care

When integrating AI into care, especially for young people and their families, ensuring informed consent and transparency is foundational for ethical standards. Individuals must clearly understand how AI is used in their care, including what data is collected, how it is processed, and who can access it (Rigby, 2019; Thakkar et al., 2024). Equally important is transparency in how AI contributes to clinical decisions. To ensure accountability and trust, AI systems should be explainable and understandable to providers and clients (McCradden et al., 2023; Thakkar et al., 2024). Clear communication about AI's role in diagnosis, treatment planning, and outcomes empowers clients to make informed choices and strengthens the therapeutic alliance through shared understanding. Consent should be explicit, with clear and accessible options to opt out of AI-based interventions (Thai et al., 2023).

However, mental health concerns can sometimes affect a person's capacity to give valid consent, and consent may fluctuate over time. For instance, a young person might initially agree to passive AI monitoring but later lose decision-making capacity due to a decline in their mental health, making ongoing assessment of consent critical (Lovejoy, 2019). For more vulnerable clients who are unable to provide informed consent, extra safeguards need to be in place to protect their rights and well-being (Fiske et al., 2019). Together, a dynamic consent process, and transparent use of AI, form the ethical backbone of responsible, person-centered care.

Protecting sensitive AI-collected data

The rapid advancement of AI-integrated MHSUH care has outpaced the development of comprehensive regulatory frameworks (Chatterjee et al., 2025). MHSUH data is among the most sensitive health information, particularly for children and young people who are minors (Kretzschmar et al., 2019; Lovejoy, 2019). Service providers have a duty to safeguard personal health information collected through AI tools. To do this, they need to take steps to prevent unauthorized access, ensure that data is not stored in insecure or vulnerable servers, use proper anonymization, and manage parental consent (Kretzschmar et al., 2019; Lovejoy, 2019; Singh et al., 2024). Unlike regulated medical devices, many AI apps and tools lack consistent oversight, making them more vulnerable to cybersecurity threats and breaches that could compromise client confidentiality (Lovejoy, 2019; Olawade et al., 2024; Wang et al., 2022).

Privacy concerns can directly affect the quality of care. When young people or families do not trust that their data is secure, it can weaken therapeutic relationships and reduce willingness to engage with digital tools (Boonstra et al., 2018; Martinez-Martin & Kreitmair, 2018; Wies et al., 2021). This mistrust may be amplified by perceptions of excessive data collection and the rapid pace of technological change (Lee et al., 2021; Wies et al., 2021). Individual providers within agencies must be aware of the limitations and risks of AI tools as they relate to privacy and data protection, and advocate for secure, ethical practices that prioritize client confidentiality (Lovejoy, 2019; Olawade et al., 2024; Wang et al., 2022).

Safeguarding against algorithmic biases

AI systems are only as fair as the data they are trained on. AI algorithms that are transparent, fair, and regularly evaluated are crucial to prevent the reinforcement of existing inequalities. When that data contains biases — whether due to design, structure, or content — those biases can be reflected and even amplified in the system's decisions (Chen et al., 2019; Verma, 2019). In MHSUH contexts, biases can show up across many groups such as race, gender, socioeconomic status, and others. These biases can exacerbate existing health differences, creating unequal access to care, inappropriate treatment, and even misdiagnosis (Fiske et al., 2019; Johnson & Verdicchio, 2023; Olawade et al., 2024). This is particularly important when dealing with complex black box AI algorithms, text-data-trained machine learning models, limitations in training data, and poor generalizability of outcomes (Tornero-Costa et al., 2023). These issues can worsen health disparities, especially for underrepresented communities, who may face higher error rates and poorer outcomes (Agarwal et al., 2023; Nazer et al., 2023; Norori et al., 2021).



Black box AI algorithm is a computer program that can make decisions or predictions but is hard to understand how it works or why it gives a certain answer. It's called a "black box" because the steps it takes are hidden or too complex for people to easily see, understand, or explain.

Three distinct types of AI biases can exist (Core Solutions, 2024):

- Illegal bias – a model is designed or purposely used to discriminate against a specific group, which breaks human rights and anti-discrimination laws.
- Unfair bias – problematic preferences are embedded in a model that favours one group, such as a socioeconomic group or political viewpoint, over another. While not illegal, this bias undermines fairness and equality in decision-making.
- Inherent bias – arises from patterns and imbalances in the data that AI systems use to train and learn.

An example of unfair bias was found in an AI model used to predict an adult intensive care unit's mortality and psychiatric readmission, which showed the highest error rates for clients who are Black compared to other racial groups (Chen et al., 2019).

To safeguard against bias, AI systems used for MHSUH diagnosis should undergo rigorous validation and testing, like other traditional diagnostic tools (Thakkar et al., 2024). Additionally, developers need to diversify training datasets, routinely check AI systems for discriminatory outcomes, and build in transparency and accountability into the algorithm development process (Nazer et al., 2023; Olawade et al., 2024; Thakkar et al., 2024). When providers, AI developers, and those using AI-based MHSUH apps and platforms come together, this collaboration can help identify algorithmic bias, improve data collection, and build better AI models overall (Chen et al., 2019).



See our resource on Young people in the digital era: Understanding risks and promoting well-being for more information about digital harms and how to manage them.

Impacts on the client-therapist relationship

While AI can improve efficiency and support care, there are concerns that it may reduce or even replace face-to-face interactions, which are central to effective treatment (Luxton, 2016). The therapeutic alliance, which is built on empathy, trust, and human connection, is a critical part of healing. AI currently lacks these skills (Singh et al., 2024). Chatbots can simulate empathy using speech and language analysis, but their responses may still feel mechanical or superficial to some clients (Nuwasiima et al., 2024). Use of these AI tools can shift the dynamics between clients and providers, potentially leading to a loss of the "human touch" that many find essential (Thakkar et al., 2024). To preserve the integrity of care, it is essential to balance AI's efficiency with person-centred approaches that still focus on nurturing empathy and trust (Thai et al., 2023; Thakkar et al., 2024).

Practical suggestions

The following section offers a list of practical suggestions for service providers who may work with AI in child and youth MHSUH care.

- Increase AI literacy
- Upskill current providers and prepare students entering the workforce for AI
- Stay informed on regulation, standardization, and accessibility
- Test AI programs and collect ongoing feedback
- Collaborate with AI developers

Increase AI literacy

It is important to teach providers and clients about the potential considerations and risks associated with AI use. For many service providers, this may require additional training in digital and technical literacy to ensure they can confidently navigate and apply these tools in practice (MHCC, 2024). A "readiness assessment tool" can play a key role in this process. There are some emerging readiness assessment and compliance tools currently available (see Assessment | Mental Health and AI Field Guide and PHIPA Compliance for AI Tools – Ontario Healthcare Guide). Research suggests that these emerging readiness and compliance tools should include components related to safety, privacy, equity, effectiveness, engagement, and implementation (Stade et al., 2025). Continued efforts should prioritize safety-by-design principles, transparency, and protections against exploitative features, particularly for AI tools used by young people (MHCC, 2026). Equitable access must also be ensured by addressing the digital divide so that all people, regardless of income, geography, or digital literacy, can benefit from AI-based care (Bauer et al., 2017; Lovejoy, 2019; Wies et al., 2021). To be truly effective, readiness assessment tools should be free and widely promoted, easily accessible across platforms, and regularly updated to reflect the latest developments in AI for mental health care (MHCC, 2024). This ensures that providers stay informed and prepared to use emerging technologies responsibly and effectively.

To help support clients in building digital literacy, it is important to provide accessible education and guidance on navigating these technologies responsibly. MHCC's e-mental health toolkit is an example of digital literacy for e-mental health and includes a readiness assessment on page 92 (McGrath et al., 2018). For more information on this topic, refer to the Mental Health Commission of Canada's E-mental health strategy for Canada, which includes recommendations for readiness assessments, training, guidelines, and increased safety with the use of AI in mental health care. Also, you can stay updated with the MHCC's emerging AI strategy and check out their emerging evidence.



These tip sheets from the Knowledge Institute and Mental Health Research Canada provide best practices and recommendations to support safe, more responsible AI use for leaders and service providers.

- AI Tip Sheet
- Writing Good Prompts

Upskill current service providers and prepare students entering the workforce for AI

To support the ethical and effective use of AI in MHSUH care, current providers and future professionals need targeted, ongoing training. The Mental Health Commission of Canada recommends free or low-cost resources tailored to collaborative care (MHCC, 2024). Regulatory bodies can further support implementation by integrating AI education into professional development requirements and offering continuing education credits to service providers through programs such as the Digital and AI Mental Health Certificate offered by the Canadian Mental Health Association and the University Health Network's Artificial Intelligence in Health Care Certificate Program.

A major barrier to adopting AI is the lack of clinical training and implementation support, especially in publicly funded systems facing workforce shortages (Bond et al., 2023; Wisniewski et al., 2020). Similarly, post-secondary programs must evolve to include AI and digital health education. Many MHSUH curricula lack this content, leaving graduates underprepared for modern practice. Integrating skills for using AI into training programs can build foundational knowledge and promote responsible use of AI tools (Zhang et al., 2023). A shortage of qualified educators remains a challenge, but upskilling current providers is key to ensuring the workforce remains adaptable and future-ready for this technology (Zhang et al., 2023).

Some emerging educational opportunities related to AI in healthcare and mental health are available. However, training remains fragmented and primarily focused on foundational knowledge and implementation awareness. A more comprehensive workforce development strategy in Ontario could align with Zhang et al.'s (2023) tiered training approach for upskilling current service providers' AI readiness and evolve with their professional needs through:

1. Basic AI knowledge: Understanding the broad scope of AI technologies.
2. Skill development: Learning how to use AI tools in clinical practice.
3. Skill application: Gaining hands-on experience with AI systems.
4. Mentorship: Providing ongoing support through mentors who can answer questions and guide AI's use, often more effective than traditional didactic sessions.



The Trevor Project is a suicide prevention and crisis intervention organization in the United States that provides community, information, and support to LGBTQ+ young people. The organization developed two AI-powered crisis contact simulators using GPT-2, "Drew" and "Riley," that mimic personas of LGBTQ+ young people in crisis. Drew and Riley are used to train incoming crisis counsellors by simulating realistic conversations that enable trainees to practice crisis scenarios in a safe, supportive, and scalable environment. Drew and Riley were used to train 1,000 crisis counsellors in 2021 and continue to be used to increase training capacity at The Trevor Project so they can reach more LGBTQ+ young people (Ma, 2025; Ohlheiser & Hao, 2021).

Stay informed on regulation, standardization, and accessibility

Canada has released steps to build an AI for all strategy grounded in trust, opportunity, and sovereignty (Government of Canada, 2026). Policies for AI use must develop regulations that govern AI's ethical use and include standardized measures that prevent improper data use and guarantee fair and equal access to AI-powered MHSUH services (Olawade et al., 2024). Researchers also recommend that a formal entity take responsibility for evaluating AI policies and practices (Stade et al., 2025). For example, Canada's proposed Safe social media act includes a digital safety commission responsible for setting standards, enforcing regulations, and collecting user complaints about non-compliance. AI strategies can also benefit from such oversight by groups of individuals with MHSUH expertise, insight into existing systems, and lived expertise, including from providers, administrators, and clients (Stade et al., 2025). Ethical frameworks such

as The Montréal Declaration for a Responsible Development of Artificial Intelligence promote values such as well-being, equity, inclusion, and responsibility, which are relevant to the sector. Providers should check in with their workplace policies frequently to stay informed on AI guidance. Keeping up with professional regulatory bodies is also necessary. See:

- College of Registered Psychotherapists of Ontario AI guidelines
- Ontario College of Social Workers and Social Service Workers AI use
- College of Psychologists and Behaviour Analysts of Ontario AI Q&A

Test AI programs and collect ongoing feedback

Before AI applications are widely adopted in MHSUH settings, they should first be tested in controlled, small-scale environments, as well as in practical or externally valid settings. Testing in these environments will help ensure AI's safety and effectiveness for use (Finlayson et al., 2021). This testing is essential, as it can validate the performance of AI algorithms across diverse demographic groups and identify and address any potential inequalities. Seeking continuous feedback from clients and providers also plays a critical role in refining these tools to reflect real-world experiences (Finlayson et al., 2021). This process includes actively seeking input from young people and families to guide the addition of AI into care settings, and adjusting as needed. Establishing feedback channels for professionals to correct or refine AI-generated suggestions can further improve the accuracy and relevance of these tools (Thakkar et al., 2024). Also, AI models must be regularly updated with new data and aligned with the latest research evidence and best practices in AI fairness and ethics. Ongoing monitoring and evaluation are essential to ensure that AI systems remain effective, accurate, and safe over time.

Collaborate with AI developers

To ensure AI tools used in the sector are fair, compassionate, and ethically created, collaboration is essential among computer scientists, engineers, psychiatrists, psychologists, allied health professionals, neuroscientists, ethicists, and policymakers (Singh et al., 2024; Thakkar et al., 2024). These professionals can work together to design AI systems that meet the specific needs of services while safeguarding client well-being. Emerging research and expert opinions suggest that blended care models, which combine AI applications and in-person clinical oversight and supervision, may offer a promising approach that balances technological innovation with human insight to draw on the strengths of both worlds (Fiske et al., 2019; Meadi et al., 2025; Ruan et al., 2026; South et al., 2025).

Moving forward

AI has the potential to significantly improve MHSUH care by increasing workflow efficiency, expanding access, and fostering opportunities for connection between providers and digitally based care (Johnson et al., 2021; Minerva & Giubilini, 2023; Olawade et al., 2024). AI can also help personalize care when integrated into data collection, storage, analysis, use, and evaluation, to help create treatment plans that are more specific and tailored to a young person's unique needs (Bickman, 2020; Bickman et al., 2016; Ng & Weisz, 2016; Olawade et al., 2024). As MHSUH care becomes more data-driven, the use of AI is expected to grow, but it must be adopted responsibly to ensure ethical use and protect client rights (Terra et al., 2023). Thoughtful integration of AI, especially in community-based services, will be essential to maintaining ethical standards and safeguarding the well-being of those receiving care (Terra et al., 2023).

To fully realize these benefits, it could be valuable for the sector to take deliberate steps to guide the responsible and equitable implementation of AI technologies while also addressing potential risks.

1. Promote AI education and information.

To support informed decision-making, it is important to provide workshops and information sessions for young people and families about the role of AI in care and service. These efforts can boost digital literacy, reduce misunderstandings about what AI can and cannot do, and help prevent over-reliance on AI as a substitute for human care.

2. Upskill service providers with continuous education programs.

Ongoing training for service providers is essential to ensure they can use AI tools effectively and ethically. These education programs should cover AI literacy, ethical considerations, and best practices for integrating AI into care. Well-informed providers can also better support families and guide their responsible use of AI in everyday life.

3. Ensure safe, ethical, and inclusive use of AI in care.

To ensure the responsible use of AI in caring for children and young people, it is essential to establish clear safety, privacy, and ethical standards and policies. These should include strong protection for sensitive data, informed consent processes, and parental consent for minors, all of which help build and maintain public trust. Equally important is the need to regularly audit AI tools for potential biases and update them to reflect diverse cultural and social perspectives. Because context and nuance are critical in MHSUH care, proactively addressing bias is key to delivering equitable, inclusive, and effective support for all young people.

4. Build an AI advisory group with community partners and encourage feedback.

Creating an interdisciplinary advisory group — made up of providers, administrators, health leaders, young people, families, caregivers, AI experts, and ethicists — can offer essential guidance and oversight in developing new AI technologies. This group could help ensure that AI tools used in care are fair, inclusive, and aligned with community needs, while also addressing concerns like bias, cultural sensitivity, and data ethics. In addition, setting up regular feedback channels with young people, families, caregivers, and service providers allows for real-world insights into how AI tools are actually used and experienced. This input can then be used to refine and improve AI systems, keeping them people-centred and responsive to clients' needs.

5. Create balanced support systems.

AI should support, not replace, human care. Policies and communications should emphasize that while AI can support decision-making and enhance care, it cannot fully replace the empathy, judgment, and therapeutic relationships that human providers can offer. This balance can help preserve a strong therapeutic relationship with a service provider and the added benefits of AI-assisted care to enhance trust and quality.

References

Agarwal, R., Bjarnadottir, M., Rhue, L., Dugas, M., Crowley, K., Clark, J., & Gao, G. (2023). Addressing algorithmic bias and the perpetuation of health inequities: An AI bias aware framework. *Health Policy and Technology, 12*(1).

Asan, O., Bayrak, A. E., & Choudhury, A. (2020). Artificial intelligence and human trust in healthcare: Focus on clinicians. *Journal of Medical Internet Research, 22*(6).

Athreya, A. P., Vande Voort, J. L., Shekunov, J., Rackley, S. J., Leffler, J. M., McKean, A. J., Romanowicz, M., Kennard, B. D., Emslie, G. J., Mayes, T., Trivedi, M., Wang, L., Weinshilboum, R. M., Bobo, W. V., & Croarkin, P. E. (2022). Evidence for machine learning guided early prediction of acute outcomes in the treatment of depressed children and adolescents with antidepressants. *Journal of Child Psychology and Psychiatry, 63*(11), 1347–1358.

Balconi, M., Angioletti, L., & Crivelli, D. (2024). Integrating EEG biomarkers in the neurocognitive screening of executive functions in substance and behavioral addiction. *Frontiers in Psychiatry, 15.*

Bauer, M., Glenn, T., Monteith, S., Bauer, R., Whybrow, P. C., & Geddes, J. (2017). Ethical perspectives on recommending digital technology for clients with mental illness. *International Journal of Bipolar Disorders, 5*(6).

Bertie, L. A., McDermott, E. A., Quiroz, J. C., & Hudson, J. L. (2025). A scoping review of clinical decision support systems for child and adolescent mental health. *Current Psychology, 44*(4), 2785–2804.

Bians, N. K., Lyeo, J. S., Gilchrist, J., Honeywell, C., Cloutier, P., Kennedy, A., & Pajer, K. (2025). Predicting child and adolescent mental health emergency department revisits: a machine-learning approach compared to a clinician-derived baseline. *BMC Medical Informatics and Decision Making, 26*(1).

Bickman, L. (2020). Improving mental health services: A 50-Year journey from randomized experiments to artificial intelligence and precision mental health. *Administration and Policy in Mental Health and Mental Health Services Research, 47*, 795–843.

Bickman, L., Lyon, A. R., & Wolpert, M. (2016). Achieving precision mental health through effective assessment, monitoring, and feedback processes. *Administration and Policy in Mental Health and Mental Health Services Research, 43*, 271–276.

Bond, R. R., Mulvenna, M. D., Potts, C., O'Neill, S., Ennis, E., & Torous, J. (2023). Digital transformation of mental health services. *NPJ Mental Health Research, 2(13), 1*–13.

Boonstra, T. W., Nicholas, J., Wong, Q. J., Shaw, F., Townsend, S., & Christensen, H. (2018). Using mobile phone sensor technology for mental health research: Integrated analysis to identify hidden challenges and potential solutions. *Journal of Medical Internet Research, 20(7).*

Cabrera, J., Loyola, M. S., Magaña, I., & Rojas, R. (2023). Ethical dilemmas, mental health, artificial intelligence, and LLM-based Chatbots. In I., Rojas, O., Valenzuela, F., Rojas Ruiz, L.J., Herrera, & F., Ortuño (Eds.), Bioinformatics and Biomedical Engineering (pp. 313–326). Springer Nature Switzerland.

Carreiro, S., Taylor, M., Shrestha, S., Reinhardt, M., Gilbertson, N., & Indic, P. (2021). Realize, analyze, engage (RAE): A digital tool to support recovery from substance use disorder. *Journal of Psychiatry and Brain Science, 6.*

Chatterjee, S., Rengaraju, U., & Dindarian, A. (2025). Revolutionizing youth mental health with ethical AI: Transform youth mental well-being by exploring responsible AI and GenAI applications (1st ed.).

Chen, I. Y., Szolovits, P., & Ghassemi, M. (2019). Can AI help reduce disparities in general medical and mental health care? *AMA Journal of Ethics, 21*(2), 167–179.

Chen, Y., Clayton, E. W., Novak, L. L., Anders, S., & Malin, B. (2023). Human-centered design to address biases in artificial intelligence. *Journal of Medical Internet Research, 25.*

Core Solutions. (2024). AI for healthcare: A guide for behavioral health providers.

D'Alfonso, S. (2020). AI in mental health. *Current Opinion in Psychology, 36,* 112–117.

Dawoodbhoy, F. M., Delaney, J., Cecula, P., Yu, J., Peacock, I., Tan, J., & Cox, B. (2021). AI in patient flow: Applications of artificial intelligence to improve patient flow in NHS acute mental health inpatient units. *Heliyon, 7*(5).

Dwyer, D. B., Falkai, P., & Koutsouleris, N. (2018). Machine learning approaches for clinical psychology and psychiatry. *Annual Review of Clinical Psychology, 14, 91–*118.

Finlayson, S. G., Subbaswamy, A., Singh, K., Bowers, J., Kupke, A., Zittrain, J., Kohane, I.S., & Saria, S. (2021). The clinician and dataset shift in artificial intelligence. *New England Journal of Medicine, 385(3), 283–*286.

Fiske, A., Henningsen, P., & Buyx, A. (2019). Your robot therapist will see you now: Ethical implications of embodied artificial intelligence in psychiatry, psychology, and psychotherapy. *Journal of Medical Internet Research, 21*(5).

Garriga, R., Mas, J., Abraha, S., Nolan, J., Harrison, O., Tadros, G., & Matic, A. (2022). Machine learning model to predict mental health crises from electronic health records. *Nature Medicine, 28*(6), 1240–1248.

Giancotti, R., Fani, R., Al Attrach, R., Veltri, P., & Pollard, T. (2026). DataAtlas: automatic generation of data dictionaries using large language models. *JAMIA Open, 9*(3).

Goldfine, C., Lai, J. T., Lucey, E., Newcomb, M., & Carreiro, S. *(2020).* Wearable and wireless mHealth technologies for substance use disorder. *Current Addiction Reports, 7, 291-300.*

Grové C. (2019). Using social networking sites in research: An emerging approach to engaging with young people who have a parent with a mental illness and/or substance abuse disorder. *Frontiers in Psychiatry, 10*.

Gual-Montolio, P., Jaén, I., Martínez-Borba, V., Castilla, D., & Suso-Ribera, C. (2022). Using artificial intelligence to enhance ongoing psychological interventions for emotional problems in real-or close to real-time: A systematic review. *International Journal of Environmental Research and Public Health, 19*(13).

Health Data for All of Us. (2025, April 29). Health data for all of us: A public dialogue on AI in health. *Health Data for All of Us 2025 Conference.* [Conference presentation].

Heinsch, M., Geddes, J., Sampson, D., Brosnan, C., Hunt, S., Wells, H., & Kay-Lambkin, F. (2019). Disclosure of suicidal thoughts during an e-mental health intervention: Relational ethics meets actor-network theory. *Ethics & Behavior, 31*(3), 151–170.

Johnson, K. B., Wei, W. Q., Weeraratne, D., Frisse, M. E., Misulis, K., Rhee, K., Zhao, J., & Snowdon, J. L. (2021). Precision medicine, AI, and the future of personalized health care. *Clinical and Translational Science*, *14*(1), 86–93.

Johnson, D. G., & Verdicchio, M. (2023). Ethical AI is not about AI. *Communications of the ACM*, *66*(2), 32–34.

Kids Help Phone. (2025). AI for mental health support: 2025 info sheet.

Korjian, S., & Gibson, C. M. (2022). Digital technologies and the democratization of clinical research: Social media, wearables, and artificial intelligence. *Contemporary Clinical Trials, 117.*

Kretzschmar, K., Tyroll, H., Pavarini, G., Manzini, A., Singh, I., & NeurOx Young People's Advisory Group. (2019). Can your phone be your therapist? Young people's ethical perspectives on the use of fully automated conversational agents (chatbots) in mental health support. *Biomedical Informatics Insights, 11, 1–9.*

LeCun, Y., Bengio, Y., & Hinton, G. (2015). Deep learning. *Nature, 521, 436–444.*

Lee, E. E., Torous, J., De Choudhury, M., Depp, C. A., Graham, S. A., Kim, H. C., Paulus, P. M., Krystal, J. H., & Jeste, D. V. (2021). Artificial intelligence for mental health care: Clinical applications, barriers, facilitators, and artificial wisdom. *Biological Psychiatry: Cognitive Neuroscience and Neuroimaging, 6*(9), 856–864.

Lovejoy, C. A. (2019). Technology and mental health: The role of artificial intelligence. *European Psychiatry*, *55*, 1–3.

Luxton, D. D. (2016). An introduction to artificial intelligence in behavioral and mental health care. (pp. 1–26). Academic Press.

Lyeo, J. S., Blais, A., Cloutier, P., Boafo, A., Dargél, A., Helleman, A., Tanya, T., Kashala-Abotnes, E., Honeywell, C., & Pajer, K. (2026). Scoping review of precision child and youth mental health research: dwelling in possibility. *Frontiers in Psychiatry, 16.*

Ma, Z. (2025). Designing intelligent interactive systems for vulnerable populations. ProQuest Dissertations and Theses Global. [Doctoral Thesis]

Malik, T., Ambrose, A. J., & Sinha, C. (2022). Evaluating User Feedback for an Artificial Intelligence–Enabled, Cognitive Behavioral Therapy–Based Mental Health App (Wysa): Qualitative Thematic Analysis. *JMIR Human Factors*, *9*(2).

Marshall, N. J., Loades, M. E., Jacobs, C., Biddle, L., & Lambert, J. D. (2025). Integrating artificial intelligence in youth mental health care: Advances, challenges, and future directions. *Current Treatment Options in Psychiatry*, *12*(11), 1–9.

Martinez-Martin, N., & Kreitmair, K. (2018). Ethical issues for direct-to-consumer digital psychotherapy apps: Addressing accountability, data protection, and consent. *JMIR Mental Health*, *5*(2).

McCoy T. H. Jr., Castro, V. M., Hart, K. L., Pellegrini, A. M., Yu, S., Cai, T., & Perlis, R. H. (2018). Genome-wide association study of dimensional psychopathology using electronic health records. *Biological Psychiatry, 83*(12), 1005–1011.

McCradden, M., Hui, K., & Buchman, D. Z. (2023). Evidence, ethics and the promise of artificial intelligence in psychiatry. *Journal of Medical Ethics*, *49*(8), 573–579.

McGrath, P., Wozney, L., Rathore, S.S., Notarianni, M., & Schellenberg, M. (2018). Toolkit for e-mental health implementation. Mental Health Commission of Canada.

Meadi, M. R., Sillekens, T., Metselaar, S., Van Balkom, A., Bernstein, J., & Batelaan, N. (2025). Exploring the ethical challenges of conversational AI in mental health care: Scoping review. *JMIR Mental Health, 12.*

Medina, J. C., & Andrade, R. R. (2024). Advancements in artificial intelligence for health: A rapid review of AI-based mental health technologies used in the age of large language models. In Bioinformatics and Biomedical Engineering (pp. 318–343). Springer Nature Switzerland.

Mehrotra, S., Kumar, S., Sudhir, P., Rao, G. N., Thirthalli, J., & Gandotra, A. (2017). Unguided mental health self-help apps: Reflections on challenges through a clinician's lens. *Indian Journal of Psychological Medicine, 39*(5), 707–711.

Mental Health Commission of Canada. (2026). The role of virtual services and AI in mental health care across Canada.

Mental Health Commission of Canada. (2024). An e-mental health strategy for Canada. Health Canada.

Mental Health Research Canada, & Knowledge Institute on Child and Youth Mental Health and Addictions. (2026). Writing good prompts [Tip sheet].

Mental Health Research Canada, & Knowledge Institute on Child and Youth Mental Health and Addictions. (2026). AI Tip Sheet.

Mentis, A. F. A., Lee, D., & Roussos, P. (2024). Applications of artificial intelligence – machine learning for detection of stress: A critical overview. *Molecular Psychiatry, 29, 1882–1894.*

Minerva, F., & Giubilini, A. (2023). Is AI the future of mental healthcare? *Topoi, 42*(3), 809–817.

Nazer, L. H., Zatarah, R., Waldrip, S., Ke, J. X. C., Moukheiber, M., Khanna, A. K., Hicklen, R.S., Moukheiber, L., Moukheiber, D., Ma, H., & Mathur, P. (2023). Bias in artificial intelligence algorithms and recommendations for mitigation. *PLOS Digital Health, 2*(6).

Negriff, S., Lynch, F. L., Cronkite, D. J., Pardee, R. E., & Penfold, R. B. (2023). Using natural language processing to identify child maltreatment in health systems. *Child Abuse & Neglect, 138.*

Ng, M. Y., & Weisz, J. R. (2016). Annual Research Review: Building a science of personalized intervention for youth mental health. *Journal of Child Psychology and Psychiatry, 57*(3), 216–236.

Nilsen, P., Svedberg, P., Nygren, J., Frideros, M., Johansson, J., & Schueller, S. (2022). Accelerating the impact of artificial intelligence in mental healthcare through implementation science. *Implementation Research and Practice, 3.*

Norori, N., Hu, Q., Aellen, F. M., Faraci, F. D., & Tzovara, A. (2021). Addressing bias in big data and AI for health care: A call for open science. *Patterns, 2*(10), 1–9.

Nuwasiima, M., Ahonon, M. P., & Kadiri, C. (2024). The role of artificial intelligence (AI) and machine learning in social work practice. *World Journal of Advanced Research and Reviews, 24*(1), 80–97.

Olawade, D. B., Wada, O. Z., Odetayo, A., David-Olawade, A. C., Asaolu, F., & Eberhardt, J. (2024). Enhancing mental health with artificial intelligence: Current trends and future prospects. *Journal of Medicine, Surgery, and Public Health, 3.*

Ontario Hospital Association. (2023). Using AI to cut wait-times for clients in need of mental health care.

Ontario Shores Communications and Public Affairs. (2025, May 24). AI-driven tool set to transform forensic psychiatry by predicting high-risk patients, enhancing safety, and improving treatment outcomes.

Penfold, R. B., Carrell, D. S., Cronkite, D. J., Pabiniak, C., Dodd, T., Glass, A. M., Johnson, E., Thompson, E., Arrighi, H.M., & Stang, P. E. (2022). Development of a machine learning model to predict mild cognitive impairment using natural language processing in the absence of screening. *BMC Medical Informatics and Decision Making, 22*(129).

Rigby, M. J. (2019). Ethical dimensions of using artificial intelligence in health care. *AMA Journal of Ethics, 21*(2), 121–124.

Rollwage, M., Habicht, J., Juechems, K., Carrington, B., Viswanathan, S., Stylianou, M., Hauser, T. U., & Harper, R. (2023). Using conversational AI to facilitate mental health assessments and improve clinical efficiency within psychotherapy services: real-world observational study. *JMIR AI, 2*.

Ruan, Q., Hu, S., ShangGuan, Z., & Zhou, S. (2026). The augmented clinician as a framework for human-AI collaboration in mental healthcare. *Frontiers in Psychiatry, 17*.

Sadeh-Sharvit, S., Camp, T. D., Horton, S. E., Hefner, J. D., Berry, J. M., Grossman, E., & Hollon, S. D. (2023). Effects of an artificial intelligence platform for behavioral interventions on depression and anxiety symptoms: Randomized clinical trial. *Journal of Medical Internet Research, 25*.

Salas-Zárate, R., Alor-Hernández, G., Salas-Zárate, M. D. P., Paredes-Valverde, M. A., Bustos-López, M., & Sánchez-Cervantes, J. L. (2022). Detecting depression signs on social media: A systematic literature review. *Healthcare, 10*(2), 291–313.

Shahsavar, Y., & Choudhury, A. (2025). Effectiveness of evidence based mental health apps on user health outcome: A systematic literature review. *PloS one, 20*(3).

Sheth, D., Patel, P., & Pathak, Y. (2023). Ethical issues and artificial intelligence technologies in bioinformatics concerning behavioural and mental health care. In Y. V. Pathak, S. Saikia, S. Pathak, J. K. Patel, & J. B. Prajapati (Eds.), Ethical issues in AI for bioinformatics and chemoinformatics (pp. 72–90). CRC Press.

Singh, V., Sarkar, S., Gaur, V., Grover, S., & Singh, O. P. (2024). Clinical practice guidelines on using artificial intelligence and gadgets for mental health and well-being. *Indian Journal of Psychiatry, 66*(2), 414–419.

South, A. J., Theobald, A., Corkish, B., Li, S., Achilles, M., Subotic-Kerry, M., O'Dea, B., & Werner-Seidler, A. (2025). Clinician perspectives about delivering a blended care treatment model for adolescent depression: A qualitative study. *Child and Adolescent Psychiatry and Mental Health, 19*(132).

Stade, E. C., Eichstaedt, J. C., Kim, J. P., & Wiltsey Stirman, S. (2025). Readiness evaluation for artificial intelligence-mental health deployment and implementation (READI): A review and proposed framework. *Technology, Mind, and Behavior, 6*(2), 111–122.

Stankovic, S. (2025). Leveraging AI to enhance electronic health records. *Electronic Journal of the International Federation of Clinical Chemistry and Laboratory Medicine, 36*(4), 618–623.

Terra, M., Baklola, M., Ali, S., & El-Bastawisy, K. (2023). Opportunities, applications, challenges and ethical implications of artificial intelligence in psychiatry: A narrative review. *The Egyptian Journal of Neurology, Psychiatry and Neurosurgery, 59*(80).

Thai, K., Tsiandoulas, K. H., Stephenson, E. A., Menna-Dack, D., Shaul, R. Z., Anderson, J. A., Shinewald, A.R., Ampofo, A. & McCradden, M. D. (2023). Perspectives of youths on the ethical use of artificial intelligence in health care research and clinical care. *JAMA Network Open, 6*(5).

Thakkar, A., Gupta, A., & De Sousa, A. (2024). Artificial intelligence in positive mental health: A narrative review. *Frontiers in Digital Health*, 6.

Thieme, A., Hanratty, M., Lyons, M., Palacios, J., Marques, R. F., Morrison, C., & Doherty, G. (2023). Designing human-centered AI for mental health: Developing clinically relevant applications for online CBT treatment. *ACM Transactions on Computer-Human Interaction, 30*(2), 1–50.

Tierney, A. A., Gayre, G., Hoberman, B., Mattern, B., Ballesca, M., Kipnis, P., & Lee, K. (2024). Ambient artificial intelligence scribes to alleviate the burden of clinical documentation. *NEJM Catalyst Innovations in Care Delivery, 5*(3).

Topol, E. J. (2019). High-performance medicine: The convergence of human and artificial intelligence. *Nature Medicine, 25*(1), 44–56.

Tornero-Costa, R., Martinez-Millana, A., Azzopardi-Muscat, N., Lazeri, L., Traver, V., & Novillo-Ortiz, D. (2023). Methodological and quality flaws in the use of artificial intelligence in mental health research: Systematic review. *JMIR Mental Health, 10*(1).

Tutun, S., Johnson, M. E., Ahmed, A., Albizri, A., Irgil, S., Yesilkaya, I., Ucar, E.N., Sengun, T., & Harfouche, A. (2023). An AI-based decision support system for predicting mental health disorders. *Information Systems Frontiers, 25*(3), 1261–1276.

Verma, S. (2019). Weapons of math destruction: How big data increases inequality and threatens democracy. *Vikalpa, 44*(2), 97–98.

Wang, C., Zhang, J., Lassi, N., & Zhang, X. (2022). Privacy protection in using artificial intelligence for healthcare: Chinese regulation in comparative perspective. *Healthcare, 10*(10), 1878–1897.

Waypoint Research Institute. (2026). 2025/26 Year in Review Impact Report.

Wies, B., Landers, C., & Ienca, M. (2021). Digital mental health for young people: A scoping review of ethical promises and challenges. *Frontiers in Digital Health, 3.*

Wisniewski, H., Gorrindo, T., Rauseo-Ricupero, N., Hilty, D., & Torous, J. (2020). The role of digital navigators in promoting clinical care and technology integration into practice. *Digital Biomarkers, 4(Suppl 1),* 119.

Wüllner, S., Hermenau, K., Krutkova, M., Petras, I. K., Hecker, T., & Siniatchkin, M. (2024). Mobile applications in adolescent psychotherapy during the COVID-19 pandemic: A systematic review. *Frontiers in Public Health, 12.*

Zhang, M., Scandiffio, J., Younus, S., Jeyakumar, T., Karsan, I., Charow, R., Salhia, M., & Wiljer, D. (2023). The adoption of AI in mental health care – perspectives from mental health professionals: Qualitative descriptive study. *JMIR Formative Research, 7*(1).



CYMHAOntario

cymhaon

@cymha_on

695 Industrial Avenue, Ottawa, Ontario K1G 0Z1

– info@cymha.ca

– cymha.ca