Digital Health Tools to Address Mental Health and Substance Use Problems in Youth





What are digital mental health and substance use tools?

Any program/service/initiative aiming to address mental health or substance use and delivered through a technological device/digital platform. Some of these tools can be used to complement work that clinicians are already doing, and some can be used as stand-alone or unguided support.



- Digital tools can be broadly categorized as:
 - Tools used to monitor/assess behaviours, moods, or substance use and tools used to collect data and predict certain things also known as digital phenotyping
 - Tools targeted at prevention/treatment/intervention that aim to change behaviour or outcomes relating to mental health/substance use
 - Tools that use digital platforms to connect one individual to another individual, such as virtual services or telehealth

Examples:

- Smart Rings to measure sleep and activity levels alongside an app that measures mood to see which indicators could predict depressive episodes in people with bipolar disorder (Ortiz et al., 2025)
- A smartphone app developed by CAMH called Hope looks at suicidality, allowing individuals to create a personalized safety plan and access crisis resources
- A harm reduction intervention app called CHAMPS is a mobile app that addresses cannabis use in youth with psychosis through the provision of personalized feedback (Coronado-Montoya et al., 2025)



Benefits of Digital Tools:

- Cost effective
- Assistance when you need it
- Near-instantaneous assessments
- Improved access for those in remote areas
- Less confrontational than in-person services



Cons of Digital Tools:

- High attrition rates
- Data security and privacy concerns
- Potential weakening of patient-clinical bonds
- Clinical symptoms interfering with using intervention

Practical tips for clinicians and families

- Talk about the importance of data security and privacy
- Teach youth about the dangers of misinformation, bias and data manipulation
- Have open, non-judgmental conversations with youth about apps they are using
- Encourage responsible use (orienting more towards tools for learning and creativity)
- Teach youth that AI-generated content may sound confident, but it is not always accurate (e.g., hallucinations)
- For more information on how to evaluate apps and key questions to consider, check out The App Evaluation Model

References

Ortiz, A., Halabi, R., Alda, M., DeShaw, A., Husain, M. I., Nunes, A., ... & Hintze, A. (2025). Day-to-day variability in activity levels detects transitions to depressive symptoms in bipolar disorder earlier than changes in sleep and mood. International Journal of Bipolar Disorders, 13(1), 13.

Coronado-Montoya, S., Abdel-Baki, A., Bodson-Clermont, P., Boucher-Roy, D., Côté, J., Crocker, C. E., ... & Jutras-Aswad, D. (2025). A pilot randomized controlled trial of a digital cannabis harm reduction intervention for young adults with first-episode psychosis who use cannabis. Psychiatry Research, 116553.



