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Rethinking Technology's Role in Adolescent Mental Health

What if the problem is the solution?

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Executive Summary

Adolescents are facing mounting pressures on their mental health, with rates of depression and anxiety climbing globally. One in three adolescents are now at risk of developing depression, while one in ten experiences an anxiety disorder before the age of 12. Traditional face-to-face therapy, though effective, is constrained by capacity, long waiting lists and high costs, leaving considerable gaps in provision.

Digital mental health interventions such as moodgym, SPARX and BRAVE for teenagers – Online are emerging as complements to, rather than replacements for, conventional care. These evidence-based programmes show encouraging outcomes:

- moodgym provides scalable, cost-effective cognitive behavioural therapy modules;
- SPARX employs gamification to engage adolescents in managing depressive symptoms; and
- BRAVE for teenagers - Online offers clinically validated treatment for anxiety disorders, achieving results comparable to in-person therapy.

Collectively, they address systemic barriers by reducing stigma, extending reach and enabling earlier intervention at lower cost.

For private health insurers, several learnings stand out. Firstly, digital platforms present a strategic opportunity to prevent the progression of mild conditions into severe, high-cost cases, thereby alleviating long-term claims expenditure. Secondly, they can reduce pressure on overstretched provider networks, streamline referrals and maintain therapeutic continuity between sessions. Thirdly, by offering stigma-free and readily accessible care, insurers can strengthen member satisfaction, particularly among younger populations who increasingly expect digital-first solutions.

However, challenges remain. High dropout rates, variable effectiveness outside controlled trials and cultural limitations highlight the importance of embedding these tools within blended or stepped-care models. The strongest outcomes occur when digital interventions are paired with therapist oversight, parental involvement and structured follow-up. These findings highlight the importance of prioritising investment in clinically validated platforms and working collaboratively with providers to ensure digital solutions are fully integrated into broader care pathways. In support of this, practical procurement considerations and tool selection criteria are offered as an Annex to this paper.

Ultimately, rethinking technology's role in adolescent mental health is not about replacing traditional therapy but enhancing it.

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Introduction

As adolescent mental health reaches crisis levels and digital mental health tools multiply faster than the research supporting them, how can we discern which ones are truly effective?

In today's digital age, adolescents are growing up in a world where screens have become an inseparable part of their lives, integrated into their social, academic and emotional worlds. As technology use continues to rise, the age at which young people first gain access to mobile devices is steadily decreasing, making early digital exposure the new norm. Research has found that 95% of adolescents in the United States and 80% in Europe own at least one mobile device (1) (2). Compounding this, adolescents' screen-time is steadily increasing as well, becoming more deeply embedded in their routines and social interactions. One study found that, between the ages of 13-18 years, the time spent using screen-based technology for non-school purposes is 6.67 hours per day (3). In a world where technology offers the most direct path to reaching countless teenagers, it is crucial to ask: how can we harness its potential to positively impact adolescent mental health?

This paper rethinks technology's role, not just as a potential problem, but as part of the solution. It explores how e-mental health platforms can bridge critical gaps in care by investigating published literature on some of the digital health tools available to adolescents. In doing so, it examines their clinical effectiveness, engagement challenges and cost implications, with an eye toward what these developments mean for adolescents, mental health providers and private insurers.

E-mental Health

One promising direction lies in digital tools that are now being designed to deliver earlier and more accessible mental health support for young people. E-mental health care, where digital technology intersects with psychological support, has emerged to fill a growing gap in mental health services. These platforms, ranging from mobile apps and web-based interventions to virtual reality and text messaging tools, offer support in prevention, diagnosis, treatment and psychoeducation. Developed to reach individuals who might otherwise remain untreated, e-mental health services aim to reduce wait times, expand access and deliver care that is both flexible and scalable. In recent years, this field has gained significant attention across disciplines such as psychology, medicine and digital technology, reflecting its growing relevance in the pursuit of mental health equity. As digital tools continue to reshape mental health care, the pressing question becomes whether they can truly deliver on their promise.

Technology and Mental Health

Technology has been linked in numerous studies to negative effects on young people's mental health. Between 2010 and 2015, the United States saw a 33% rise in teenagers reporting high levels of depressive symptoms, alongside a 31% increase in suicide rates among this age group (4). This sharp increase led many to worry that being constantly connected online might be playing a role in the decline in adolescent mental wellbeing (5) (6). Many studies have found a link between screen time and depressive symptoms (7) (8) (9) (10). While these studies mostly demonstrate a connection between the two (not necessarily cause and effect), research following

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adolescents over time also suggests that spending more time on screens can lead to more depressive symptoms later on (11).

Depression and anxiety are two of the most common mental health issues affecting teenagers around the world, and the number of young people struggling with them is rising. Right now, about 1 in 3 teens aged 10 to 19 are at risk of developing depression and around 1 in 10 children experience an anxiety disorder at some point by the age of 12 (12) (13). This high and increasing number underscores the need for accessible, scalable and innovative solutions like e-health platforms that can reach adolescents early, right where they are, on their phones and devices, offering timely support before problems become crises.

However, the irony is hard to ignore; we continue to discuss app-based interventions as the answer, even as the very same technologies are implicated in worsening mental health for many young people. This tension does not invalidate the potential of digital tools, but it does underscore the need for a nuanced, evidence-based approach; one that recognises both the risks of technology overuse and the possibility of using those same platforms to deliver timely, low-barrier support before problems escalate into crises.

Barriers in the current system

Although mental health issues among young people are widespread, many adolescents still face significant barriers when trying to access support. According to Ross et al. (14), these challenges often come from both personal and systemic factors. On an individual level, poverty, unstable housing, limited transportation and the impact of mental health symptoms or medications can make it difficult to seek help. On the provider side, a lack of adequate training or reluctance to address mental health concerns can leave young people feeling dismissed or discouraged. At the system level, long waiting times, frequent staff turnover and insufficient follow-up care after hospitalisation further reduce access to consistent support.

With the growing demand for accessible, cost-effective and scalable support, particularly among adolescents, e-health platforms have emerged as a potential game-changer. Yet their widespread adoption raises important questions about their actual effectiveness, how well they integrate into existing healthcare systems and the broader implications for those involved.

E-Mental Health: Complement, Not Cure-All

E-mental health is carving out a place in payer strategies, not to replace in-person cognitive behavioural therapy (CBT), but to support it. Private health insurers are investing in digital platforms to expand access, increase flexibility and respond to growing client demand. Heightened corporate focus on wellbeing and rising awareness of mental health have all accelerated this shift.

Kaiser Permanente's partnerships with Calm and Headspace (15), Bupa's integration of the JAAQ online mental health platform (16) and SilverCloud Health online mental wellbeing (17) programmes into its digital services and Vitality's combination of Headspace mental health app subscriptions with Wysa powered digital self-help tools (18) are examples of this exploration. These developments signal an intent to position e-mental health as a strategic layer within broader wellbeing portfolios; if not primarily aimed at adolescent members. They are also often funded as value-added or embedded benefits within insurance premiums rather than requiring direct payment by individual members. Kaiser Permanente has provided full access to the apps Calm and Headspace at no extra cost to eligible plan members (15). Bupa has made SilverCloud Health programmes and the JAAQ available to insurance customers as an inclusive part of its online mental wellbeing programme (17). Vitality includes a 12-month Headspace subscription and app-based self-help tools powered by Wysa for members on qualifying plans, with costs covered through eligible insurance plans (18). Together, these examples

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show insurers layering digital mental health tools into broader wellbeing portfolios by absorbing the cost via premium funding rather than shifting it onto members.

However, health insurers are having to evaluate the effectiveness of an increasingly large number of options within a crowded market place. Digital mental health products are proliferating, often with inconsistent evidence and variable quality. For payers, the challenge is cutting through the noise to back interventions that can genuinely complement in-person CBT, reinforcing therapeutic progress, providing interim support between sessions and engaging individuals who might not yet seek face-to-face help.

Digital platforms offer insurers the possibility of lowering costs, expanding access to care and streamlining referrals through the use of evidence-based tools. Importantly, by supporting prevention and early treatment, these platforms can reduce the likelihood that adolescents develop more severe or chronic mental health issues, helping to prevent them from becoming a high-risk, high-cost group in the future. For the public, these tools can reduce wait times, reach underserved populations and offer flexible, stigma-free ways to seek help. For healthcare providers, e-health can ease the burden on overstretched services, support early intervention and enable more consistent follow-up care.

This paper explores some examples of digital platforms to better understand if they are truly effective for younger cohorts and what that means for the individuals using them, the professionals recommending them and for any insurers who may wish to include these (or similar digital tools) as part of their digital mental health support offer to younger members. Ultimately, it asks whether e-health can offer a rare win-win-win across the mental health landscape.

moodgym

What is moodgym?

'moodgym' is an internet-based CBT programme developed by the Australian National University. Designed primarily for individuals experiencing depression and anxiety, it incorporates key CBT strategies such as cognitive restructuring, behavioural activation, problem-solving, assertiveness training and self-esteem building. moodgym consists of five interactive modules enriched with multimedia characters, quizzes and exercises that educate users on CBT principles while allowing them to apply coping techniques at their own pace. It is freely accessible and does not require direct clinician supervision, making it scalable and easy to disseminate.

Effectiveness Studies

There are numerous studies examining the effectiveness of moodgym. Those evaluating moodgym use among young populations showed mixed but generally promising outcomes. In randomised controlled trials, moodgym has demonstrated effectiveness in reducing anxiety symptoms, distress and automatic negative thoughts compared to control groups. For instance, in a university sample, post-treatment anxiety and distress significantly decreased in the moodgym group relative to controls, although the effect on symptoms of depression was not statistically significant (19). These findings were mirrored in another trial which showed that moodgym outperformed control conditions in terms of depression, anxiety, distress and automatic negative thoughts (20).

A school-based controlled trial in Australia also found promising effects when moodgym was delivered as part of the high school curriculum to adolescent girls (21). While immediate post-intervention effects were small (in terms of the magnitude of the effect of treatment) and non-significant (in terms of the statistical significance/confidence in findings), follow-up analyses showed a moderate and significant effect favouring

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moodgym. Furthermore, moodgym has also been evaluated in adult primary care settings (22). A large pragmatic cluster-randomised controlled trial in Germany investigated the German version of moodgym as an adjunct to usual care for patients with mild to moderately severe depression. Results showed significantly greater reductions in depression scores in the moodgym group compared to usual care at both 6 weeks and 6 months. Remission rates in the intervention group were also higher (39.0% vs. 23.0% at six months).

However, when compared with face-to-face CBT, face-to-face CBT was consistently found to be more effective than moodgym in reducing symptoms of depression and the frequency of automatic negative thoughts. Comparisons showed that those who received face-to-face CBT demonstrated significant reduction in their depressive symptoms and in the frequency of automatic negative thoughts (20). Even though face-to-face CBT is found to be more effective for most symptoms, the most effective approach appears to be the integration of moodgym with face-to-face CBT. The combination significantly outperformed both individual interventions on multiple outcome measures, including depression, distress and frequency of automatic negative thoughts (19). This hybrid approach likely leverages the strengths of both modalities: the guidance, motivation and personalization of face-to-face therapy, combined with the interactive, self-paced and skills-based structure of moodgym. Therapist input may enhance patient motivation and comprehension, thereby deepening the learning and engagement with moodgym's modules.

The qualitative data from participants using moodgym provide valuable insights into user experience and perceived utility (23). Many respondents appreciated the programme's ability to facilitate the identification and regulation of negative thoughts, describing it as a helpful reminder of their cognitive patterns. Users specifically highlighted the multimedia characters as engaging and effective in conveying psychological concepts with humour and relatability, enhancing their understanding of mood states.

Limitations

Despite its strengths, moodgym faces notable engagement challenges. Christensen et al. (24) reported an 85% dropout rate after the first module. Similarly, Spek et al. (25) found that only 48.3% of participants completed computerized CBT compared to 94.5% completion in group CBT formats. However, in subsequent adolescent trials, shortening the intervention duration (five sessions over three weeks) improved completion rates, suggesting that time commitment is a key factor in sustaining engagement (20). Self-reports also highlight notable drawbacks (23). A common theme was the program's repetitiveness and length, which some participants found tedious and difficult to stay focused on for a sustained period. While nearly half reported that moodgym was helpful and worth recommending to others, the relatively low enjoyment rate (39%) suggests that longer term user engagement may be hindered by the platform's monotonous format. These responses underscore the importance of optimising digital interventions for both therapeutic content and sustained user engagement, especially in younger populations.

Cost-Effectiveness

MoodGYM is distinguished among the digital mental health resources reviewed within this paper by the available data on its cost-effectiveness. Beyond clinical effectiveness, moodgym shows exceptional promise as a cost-effective mental health intervention (26). A model-based economic evaluation conducted across 30 Australian schools found that the total cost of delivering moodgym was A$6.2 million, yet it generated an estimated A$18.8 million in savings due to reduced healthcare costs and productivity gains. Furthermore, the programme prevented approximately 10,500 anxiety cases and yielded 842 quality-adjusted life years over a 10-year period. The return on investment was calculated at 3.06, meaning each dollar invested in moodgym

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returned over three dollars in value, a compelling case for its implementation in schools and public health systems.

Conclusion

moodgym, having outperformed control groups in reducing anxiety, distress and negative thought patterns, can be considered an effective interim tool for individuals on therapy waitlists, a common and significant barrier to timely mental health care. Its accessibility and low cost make it particularly useful in bridging the gap while awaiting face-to-face treatment. However, when evaluated as a standalone treatment, moodgym was consistently outperformed by traditional face-to-face CBT. Notably, the combination of moodgym with face-to-face therapy produced the most significant improvements across outcomes, suggesting that its greatest utility lies in an assistive role. Rather than replacing therapist-led care, moodgym appears best suited to enhance and support traditional interventions, offering users the opportunity to reinforce therapeutic skills and engage in self-paced learning alongside professional guidance.

SPARX

What is SPARX?

SPARX (Smart, Positive, Active, Realistic, X-factor thoughts) is an innovative, gamified digital mental health intervention designed specifically for adolescents with depressive symptoms. Developed in New Zealand, SPARX delivers CBT principles through an interactive fantasy game and it is freely available online to everyone in New Zealand (27). Users create an avatar and complete challenges to restore balance in a world plagued by Gloomy Negative Automatic Thoughts (GNATs). As they progress through seven modules, players practice evidence-based CBT techniques such as behavioural activation, relaxation, cognitive restructuring, problem-solving, and social skills. Unlike conventional talk therapy, SPARX empowers adolescents to work through depression at their own pace, using gameplay mechanics that feel familiar and engaging. Each level includes guidance from a virtual "mentor", interactive content and homework tasks that connect game lessons to real-life challenges.

Effectiveness Studies

Numerous studies have investigated the effectiveness of SPARX. In a randomised controlled non-inferiority trial by Merry et al. (28), SPARX was found to produce clinically significant reductions in depression, anxiety and hopelessness, performing as well as or slightly better than treatment-as-usual (TAU). Adherence was high, with 60% of participants completing all seven modules and 86% completing at least four. Dropout rates were low (9%), further indicating strong engagement. The analysis revealed that 43.7% of adolescents in the SPARX group achieved remission, compared to 26.4% in the TAU group. Moreover, a pragmatic trial by Fleming et al. (29) focused on adolescents excluded from mainstream education found SPARX significantly reduced depression scores and anxiety scores, with 85% achieving clinically meaningful improvement, indicating strong impact in at-risk populations.

A school-based study by Poppelaars et al. (30) in the Netherlands evaluated SPARX alongside a classroom CBT programme and a control group, involving 208 adolescent girls with subclinical depression. Although all groups, including the control, showed significant symptom reduction, no significant differences were found between conditions, raising questions about SPARX's preventive value in low-risk school samples. Finally, a real-world

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implementation study by Lucassen et al. (31) analysed data from over 13,000 users in New Zealand, including transgender adolescents. While cisgender users showed significant reductions in depressive symptoms, transgender users did not and overall completion rates were low, with fewer than 10% finishing the full programme. This underlines a critical limitation of SPARX in real-world settings, especially when interventions are unguided or lack personalisation and follow-up support.

Limitations

Despite SPARX demonstrating clinical efficacy in controlled research environments, several real-world challenges limit its broader impact. One major concern is attrition: in school-based and national implementations, dropout rates were notably high, especially by the middle of the programme (Modules 4 and 7), with fewer than 10% of users completing all seven modules. Engagement also varied across demographics, with transgender adolescents showing lower benefit from the programme, highlighting the need for more inclusive and personalised design features. Additionally, unlike the structured support found in randomised controlled trials, real-world users typically received no therapeutic guidance or follow-up, which likely contributed to reduced effectiveness and poorer outcomes. Moreover, SPARX did not perform as well in the Netherlands, indicating that the programme might not be as effective in other cultures without a culturally appropriate adaptation. These limitations suggest that while SPARX has strong potential, its success outside of research settings depends on improved user retention strategies, demographic/cultural sensitivity and integrated support systems.

Conclusion

SPARX offers a scalable solution to the growing challenge of adolescent depression, particularly in settings with limited access to traditional therapy. Its evidence-based structure and engaging game format make it especially well-suited for tech-savvy adolescents. This digital intervention can be used to reduce waitlists for in-person therapy, provide early intervention for subclinical cases and function within blended care models alongside brief clinician check-ins. For private insurance companies, supporting SPARX could translate into reduced long-term treatment costs by preventing symptom escalation, improved member satisfaction through accessible and stigma-free care and a visible commitment to innovation in mental health services. However, it is important to acknowledge the engagement challenges that have been observed in real-world implementation. High attrition rates, limited personalization, cultural differences and lack of ongoing support have all affected programme completion and effectiveness, especially among more vulnerable groups such as transgender adolescents. In conclusion, while SPARX may not be a standalone solution for all adolescents, it stands as a promising, evidence-based tool that, when thoughtfully implemented, has the potential to enhance the reach and effectiveness of mental health services across diverse youth populations.

BRAVE for teenagers - Online

What is BRAVE for teenagers - Online?

BRAVE for teenagers - Online (BRAVE Online) is an interactive internet-based CBT programme designed to treat adolescents with clinically significant anxiety disorders. Developed by Spence, Holmes, and Donovan (32), it targets social anxiety, generalised anxiety disorder, separation anxiety, and specific phobias. The programme delivers 10 weekly sessions for adolescents and five sessions for parents, each lasting approximately 60 minutes. Two booster sessions are provided at 1 and 3 months post-treatment to consolidate skills. BRAVE Online

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integrates standard CBT strategies: psychoeducation, relaxation training, cognitive restructuring, coping self-talk, problem-solving, graded exposure and self-reinforcement, using interactive exercises, quizzes and personalised tasks. Eye-catching graphics, peer modelling through adolescent characters, age-appropriate examples (e.g., school exams, dating, public speaking), and gamified elements help maintain engagement. Parents are taught complementary CBT techniques and parenting strategies to reinforce their adolescent's anxiety management skills.

Effectiveness Studies

A randomised controlled trial (33) compared BRAVE Online (NET) with clinic-based CBT (CLIN) and a waitlist control (WLC) in 115 adolescents (aged 12–18) with clinical anxiety. At post-treatment (12 weeks), significantly more adolescents in the NET (36.6%) and CLIN (32.5%) groups were free from their primary anxiety diagnosis than in the WLC group (4.2%). Adolescents' psychosocial functioning and clinicians' severity ratings improved significantly more in NET and CLIN than WLC. No significant differences were found between NET and CLIN, suggesting that BRAVE Online was as effective as face-to-face therapy in reducing anxiety severity and improving functioning. Importantly, treatment gains were maintained or enhanced at 6- and 12-month follow-ups, with 62.2% of participants free from their primary diagnosis and 54.1% free from all anxiety diagnoses at 6 months.

A second trial conducted in routine clinical care (34) reinforced these findings. The study aimed to evaluate the effectiveness of therapist supported BRAVE Online for adolescents' anxiety disorders. Among 60 adolescents (aged 13-18 years) randomised to immediate treatment or waitlist, 40% of those receiving BRAVE Online support achieved remission from their primary anxiety diagnosis post-treatment, compared to 23% in the waitlist group. At 6-month follow-up, remission rates rose to 53% and 45% reported "much" or "very much" improved for their severity of anxiety. These outcomes mirror those achieved in controlled research settings, demonstrating that BRAVE Online can be successfully implemented in real-world clinical care.

In a large-scale open trial, BRAVE (therapist-assisted; BRAVE-TA) was delivered to children and adolescents referred through primary care (35). Effect sizes for anxiety reduction were in the moderate range for child self-reports and ranged between low to moderate for parent self-reports. Completing more sessions predicted greater reductions in anxiety, particularly for those with elevated baseline symptoms. While attrition was a challenge, those completing the trail demonstrated clinically meaningful improvements, underscoring the programme's real-world impact for mild-to-moderate anxiety in community settings.

Limitations

Despite its strong efficacy, BRAVE Online faces several challenges. Engagement and completion rates remain a concern: in a study by Spence et al. (33), only 39% of adolescents completed all 10 sessions by 12 weeks, although this rose to 57% by 12-month follow-up. Session completion was significantly slower in the online format compared to face-to-face CBT, reflecting the need for enhanced motivational strategies to maintain adherence. On the other hand, in the second study, the completion rate was 79.2% for all 10 sessions and 15.5% for booster sessions (34). This shows that when the programme is therapist assisted, adolescents are more likely to complete the whole programme.

Implementation studies also highlight specific difficulties encountered with online delivery (36). One of the most significant challenges lies in designing appropriate exposure hierarchies, structured, step-by-step lists of feared situations arranged from least to most anxiety. While the programme includes phone support and detailed guidelines, developing graded exposure tasks without substantial therapist input can be difficult,

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particularly for adolescents with multiple anxiety disorders or comorbid conditions. Monitoring is also found to be harder for online treatment as the absence of visual cues and reduced verbal communication limit therapists' ability to detect non-compliance or barriers to engagement. Additionally, delays in session completion are common; despite automated reminders, some families postpone sessions when competing demands arise.

Conclusion

BRAVE Online emerges as a well-validated, engaging, and scalable CBT programme for adolescent anxiety, demonstrating outcomes comparable to traditional face-to-face therapy. Its inclusion of parent sessions and therapist support options enhances both treatment adherence and long-term gains, making it particularly valuable in addressing clinically significant anxiety in both research and real-world contexts. However, like many digital interventions, BRAVE Online faces ongoing challenges with engagement, session completion, and the development of individualized exposure tasks, issues that can be partially mitigated through therapist involvement and structured follow-up. Rather than serving as a replacement for in-person therapy, BRAVE Online is best understood as a key component in a stepped-care or blended treatment model: it can offer immediate, accessible and cost-effective support while complementing or preparing adolescents for more intensive face-to-face interventions.

Final Conclusion

Digital mental health tools such as moodgym, SPARX, and BRAVE Online represent a promising shift toward more accessible, scalable and personalised psychological care for adolescents. Each programme demonstrates clinically meaningful benefits: moodgym provides cost-effective and widely accessible CBT-based modules, SPARX offers an engaging gamified approach tailored for youth and BRAVE Online delivers evidence-based treatment for clinically significant anxiety disorder, while also offering guidance and support for parents. Importantly, these tools have the potential to extend mental health support beyond traditional settings, reducing wait times, reducing costs and offering stigma-free options for adolescents who might otherwise remain untreated.

For insurers, digital interventions present a strategic opportunity to reduce long-term treatment costs by preventing the escalation of mild symptoms into severe or chronic conditions, thus decreasing reliance on expensive inpatient or crisis care. They also streamline referral pathways by offering evidence-based, low-cost options that can be deployed early in the care process, improving overall cost-efficiency. For healthcare providers, these tools can help reduce clinician caseloads and enable more timely interventions as they are accessible 24/7. They also facilitate ongoing patient monitoring and skill reinforcement between sessions, thereby improving treatment continuity and long-term outcomes.

However, their limitations, high dropout rates, reduced effectiveness in unguided real-world use and the need for greater personalisation, highlight that digital interventions are most effective when integrated into stepped-care or blended models rather than used as standalone treatments. These platforms can serve either as assistive tools to enhance ongoing therapy or as interim support to reduce the negative impact of waiting times for actual therapy, as they have been found to be more effective compared to waitlist groups. The strongest outcomes emerge when these platforms are complemented by therapist input, parental involvement and consistent follow-up, allowing them to reinforce and enhance the therapeutic process.

In rethinking technology's role in adolescent mental health, the question is not whether digital tools can replace traditional therapy but how they can best augment it. When thoughtfully implemented, e-mental health

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interventions can offer a rare win-win: empowering adolescents with immediate, engaging support while improving cost-efficiency for healthcare systems and insurers. Rather than framing technology solely as the problem, this evidence indicates it can be part of a broader response to the growing pressures on adolescent mental health.

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Annex 1 – Procurement Guidance & Checklists for Digital Tools

This annex provides practical procurement guidance for insurers and health organisations investing in digital mental health tools for adolescents. It outlines the core criteria that should guide purchasing decisions: clinical evidence, integration into care pathways, engagement design, cultural suitability and long-term value for money.

It further provides accompanying checklists to support consistent, transparent vendor assessment. The aim is to ensure that adopted tools are safe, effective, equitable, and capable of delivering meaningful clinical and financial impact.

1. Prioritise Clinically Validated and Evidence-Based Digital Tools

The digital mental health marketplace for adolescents is crowded and highly variable in quality. Procurement decisions should prioritise tools backed by strong, peer-reviewed evidence especially those demonstrating robust cost-effectiveness and improvements in symptom severity, functioning, or quality of life comparable to the outcomes expected for in-person CBT treatments.

Selecting clinically validated tools contributes to clinical outcomes, reduces wasteful spending and strengthens trust with regulators, clinicians and members.

Procurement Checklist – Clinical Validation

Before contracting, confirm that the provider offers:

☐ Peer-reviewed trials in adolescent populations

☐ Evidence of efficacy relative to standard CBT

☐ Outcomes data for anxiety, depression, or related conditions

☐ Independent economic evaluations or cost-effectiveness analyses

☐ Transparent reporting of study methods and limitations

☐ Evidence applicable to the insurer's target population(s)

2. Select Tools that Integrate Seamlessly into Stepped-Care or Blended Treatment Pathways

Evidence shows digital interventions are most effective when supported by therapist oversight, structured follow-up, or parental involvement. Procurement should therefore favour tools that integrate into stepped-care pathways that triage adolescents based on risk, blended care models where digital tools supplement in-person therapy and waiting-list support programmes that reduce time to first intervention.

Tools should augment, not replace, clinician-delivered care.

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Procurement Checklist – Integration & Care Pathways

Providers should be able to demonstrate:

☐ Clear interoperability with existing clinical workflows

☐ Ability to integrate with stepped-care triage systems

☐ Therapist dashboards or clinician-facing controls

☐ Parental engagement pathways (where appropriate)

☐ Options for blended digital + therapist-supported care

☐ Evidence of effectiveness when used in integrated pathways

3. Prioritise Tools with Strong Engagement and Adherence Features

High attrition rates are a major limitation in digital mental health. Procurement should prioritise programmes that demonstrate strong engagement and include:

- short, digestible modules
- gamified or interactive elements
- reminders, nudges, or milestone notifications
- dashboards for parental oversight (where appropriate)
- therapist-supported or coach-supported options

Improved adherence boosts clinical outcomes and secures financial return on investment.

Procurement Checklist – Engagement & User Experience

Evaluate whether the digital tool offers:

☐ High completion rates in trials or real-world data

☐ Age-appropriate design for adolescents

☐ Gamification or interactive tasks

☐ Personalised nudges and reminders

☐ Progress tracking for users, parents, or clinicians

☐ Options for incorporating professional support (coaches, therapists, moderators)

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4. Ensure Cultural, Linguistic and Demographic Suitability Across Diverse Member Groups

Some digital programmes vary in effectiveness across cultures or show lower engagement among gender-diverse adolescents. Tools should be assessed for:

- Cultural adaptability and local relevance
- Availability in required languages
- Accessibility for adolescents with disabilities
- Inclusivity of gender-diverse and minority groups

Preference should be given to tools with evidence of effectiveness among diverse, underserved, or high-risk populations.

Procurement Checklist – Equity, Inclusion & Accessibility

Confirm that the provider offers:

☐ Data on effectiveness across different demographic groups

☐ Content culturally adapted for the target population

☐ Multilingual availability

☐ Accessibility compliance (e.g., Web Content Accessibility Guidelines (WCAG) 2.1)

☐ Inclusive design for gender-diverse adolescents

☐ Customisation for different educational or literacy levels

5. Leverage Digital Tools Proactively to Reduce Long-Term Mental Health Claims Costs

A 2025 iFHP White Paper: *Managing Mental Health Support for Young Adults in the Post-COVID-19 Era* explored the need for earlier intervention to mitigate long-term mental health claims risk (37). Digital interventions offer strategic value not only as treatment aids but also as early intervention and prevention tools to tackle cost escalation. Insurers should use them to:

- reduce waiting times
- prevent mild symptoms from escalating
- provide continuity between therapist sessions
- support early detection, monitoring, and triage

When used proactively, these interventions can reduce the long-term financial burden associated with crisis episodes, inpatient admissions and chronic mental health trajectories.

Procurement Checklist – Value for Money & Long-Term Impact

Assess the digital tools' effectiveness in regard to:

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☐ Evidence of reduced symptom escalation

☐ Data showing impact on service utilisation

☐ Reduced demand for high-intensity care

☐ Demonstrated cost savings in comparable populations

☐ Predictive analytics or triage capabilities

☐ Return-on-investment modelling

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Contributors

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