Health Innovation East Midlands

Digital Technology for ADHD: Comparative Insights

Experts by Experience and Professionals

Bethany Askey

Contents

Background

Health Innovation East Midlands (HIEM) works with the NHS and industry partners to deliver healthcare innovations and improvements across the region. Within its Neurodiversity portfolio, HIEM has a current focus on Adult ADHD; aiming to strengthen care pathways, reduce assessment delays, support self-management and promote more consistent and equitable services through effective digital technologies.

As part of this work, the Digital for Neurodiversity (D4ND) Innovation Hubs have been established by HIEM to explore how digital tools can improve the lives of neurodivergent people. The hub provides a listening space for people with lived experience, carers, clinicians, commissioners and researchers to share their views on how digital services do and could further support their needs. These insights aim to inform the development of more useful and accessible digital solutions.

This report summarises the first round of hubs, which aimed to understand how digital tools are currently used, identify barriers and highlight opportunities for improvement. Particular attention was given to how digital technology could better support wellbeing before and after assessment.

The Digital for Neurodiversity Hubs included two online focus groups with Experts by Experience (EbE) and Healthcare Professionals (HCP), whose perspectives underpin the thematic analysis in this report.

Within this document we use the terms ‘people with ADHD’ and ‘Neurodiverse People/Users’. Here, ‘people with ADHD’ is inclusive of people who have an ADHD diagnosis, those awaiting diagnosis, and those who recognise themselves as having ADHD but who have chosen not to seek a formal diagnosis. We recognise that these may not be the terms every person with ADHD would use to describe themselves.

If you have any questions about the content in this report, please contact Bethany Askey

Executive Summary

This report presents a comparative thematic analysis of two stakeholder groups: **Experts by Experience**, people with lived experience of ADHD, and **Professionals** involved in ADHD care. Both groups participated in focus sessions exploring the role of digital technology in ADHD pathways, particularly during the pre-assessment stage. The analysis identifies **shared priorities**, **key differences**, and **strategic recommendations** to inform the development of inclusive, effective, and clinically safe digital solutions.

Key Insights:

- Both groups strongly advocate for **integration of digital tools with NHS systems**, **personalisation**, and **unified platforms** to reduce fragmentation.
- **Accessibility** is a universal priority, encompassing subtitles, formats written in clear, straightforward language without jargon, and multilingual support.
- **Experts by Experience** emphasize usability, emotional support, and affirming neurodiverse strengths.
- **Professionals** prioritise governance, data security, and administrative efficiency.
- Both groups highlighted the importance of leveraging **AI responsibly**, ensuring **co-production**, and addressing **digital exclusion**.

Core Priorities (derived from stakeholder insights and national policy):

1. Develop a **national ADHD digital platform** consolidating assessment, waiting safely support, prescriptions, and resources *(identified through stakeholder workshops and aligned with NHS Long Term Plan priorities)*.
2. Embed **accessibility standards** and **personalisation features** across all solutions *(based on national accessibility guidelines and feedback from lived experience groups)*.
3. Establish **national governance frameworks** for validation and clinical safety *(drawn from national policy and regulatory requirements)*.
4. Ensure **co-production** with both professionals and people with lived experience *(directly informed by engagement sessions)*.
5. Provide **alternative access points** for digitally excluded populations *(highlighted in stakeholder discussions and supported by inclusion standards)*.

Section 1: Current Use of Digital Technology

Narrative

Experts by Experience (EbE) participants described a strong reliance on digital tools to manage daily life and ADHD-related challenges. Organisational apps such as Goblin Tools, Tiimo, and Trello were frequently mentioned as helpful for structuring tasks, breaking down complex activities, and maintaining focus. These tools help users externalise their thoughts and create systems that compensate for executive function challenges. In addition, AI tools like ChatGPT were highlighted as transformative, enabling participants to draft professional emails, overcome procrastination, and process complex ideas with greater confidence.

Healthcare-related digital platforms, including the NHS App and GP online systems, were valued for practical functions such as prescription management and appointment booking. These tools reduce the stress of phone calls, which some neurodivergent people find challenging due to lack of visual cues and communication anxiety. Despite this digital engagement, hybrid approaches remain common, with participants often combining digital tools with physical aids such as diaries, post-it notes, and printed documents for reassurance and flexibility.

Professionals reported basic adoption of digital tools, largely guided by patient preferences rather than service design. While some apps are used, there is fallback to paper-based methods when technology fails or engagement drops. Professionals expressed interest in emerging technologies such as AI and Ambient Voice Technology, primarily for administrative efficiency e.g., automating notetaking and reducing report-writing time. However, online forms and referral systems are inconsistently used, with mixed success; digitally confident patients respond well, but some disengage, forcing services to revert to manual processes. This inconsistency reflects broader challenges in embedding digital solutions into routine workflows.

Comparison Table:

Aspect	Experts by Experience	Professionals
Common Tools	Goblin Tools, Tiimo, Trello, ChatGPT	Calendars, reminders, Tiimo, Finch *(Reported that patients have mentioned the use of these apps)*
Approach	Hybrid (digital + physical)	Hybrid (digital + paper fallback)
AI Use	Personal empowerment	Administrative efficiency

Section 2: Barriers to Digital Adoption

Narrative

Experts by Experience (EbE) consistently reported that usability challenges are a significant barrier to engaging with digital tools. Many described interfaces as overly complex, with dense text, unclear navigation, and too many steps required to complete simple tasks. These design flaws often lead to frustration and disengagement. Additionally, the absence of accessibility features, such as subtitles, adjustable video speeds, audio options, and multilingual support makes platforms less inclusive for neurodivergent users. Digital exclusion compounds these issues, as people without reliable internet access, devices, or digital literacy are unable to benefit from available solutions, creating inequity in access to care.

Professionals emphasised systemic and organisational barriers. Staff resistance to adopting new technologies was highlighted, often linked to limited digital confidence, lack of training, and concerns about workload implications. Governance challenges, such as data security, compliance with information governance standards, and integration with existing IT infrastructure were cited as major obstacles to implementation. Furthermore, professionals pointed to fragmented systems, where multiple apps and platforms operate in isolation, leading to duplication of effort, inefficiencies, and confusion for both staff and patients.

Both groups agreed that fragmentation is a critical barrier. The proliferation of standalone apps and disconnected systems creates a confusing digital landscape, undermining user confidence and reducing the effectiveness of digital interventions. There is a shared call for streamlined, interoperable solutions that consolidate functions and provide a consistent user experience across the ADHD care pathway.

Comparison Table:

Barrier	Experts by Experience	Professionals
Usability	Dense text, complex navigation	Limited staff capability
Accessibility	Missing subtitles, speed controls	Governance and IT alignment
Fragmentation	Multiple apps, no integration	Multiple systems, lack of interoperability

Section 3: Gaps and Opportunities

Narrative:

Experts by Experience (EbE) expressed a strong desire for integrated healthcare apps that connect seamlessly with NHS systems and consolidate multiple functions, such as appointment booking, prescription management, and communication with clinicians, into a single, user-friendly platform. Participants highlighted the inefficiency and confusion caused by having to navigate multiple disconnected apps and websites. They also called for online self-assessment tools to replace slow, paper-based processes, enabling people to complete initial screening forms digitally and track progress without waiting weeks for postal exchanges.

Another recurring theme was the need for centralised signposting to ADHD resources. Many participants described feeling overwhelmed by long lists of links and documents provided after diagnosis, which often remain unused due to cognitive overload. A centralised, interactive hub that tailors recommendations based on individual needs, such as coaching, support groups, or educational materials, was seen as critical for improving engagement and reducing stress.

Professionals emphasised the importance of digital pre-assessment tools that integrate with clinical systems and allow seamless transfer of data into patient records. Current processes require manual interpretation and scanning, which is time-consuming and prone to error. Automation of administrative tasks, such as generating referral letters, sending appointment reminders, and compiling assessment reports, was identified as a priority to reduce clinician workload and improve efficiency.

Finally, professionals stressed the need for national consistency in digital provision. Regional variation in tools and platforms creates inequity and confusion for both staff and patients. A standardised approach, supported by robust governance and evidence-based design, would ensure fairness, reduce duplication, and promote best practice across services.

Comparison Table:

Gap/Opportunity	Experts by Experience	Professionals
Integration	Link apps to NHS systems	Interoperable pre-assessment tools
Support	Emotional support post-diagnosis	Waiting safely platforms
Efficiency	Automated prescription reminders	Automated referral and letter systems

Section 4: Future Innovations

Narrative:

Experts by Experience (EbE) articulated a clear vision for future digital solutions that prioritise personalisation and accessibility. They want apps that can adapt to individual needs, offering customisable notifications, task breakdowns, and tailored support for co-morbidities and/or lifestyle factors. Accessibility enhancements were seen as non-negotiable, including features such as subtitles, adjustable video speeds, audio options, and multilingual support to ensure inclusivity for neurodivergent users and those with additional sensory or language needs.

Participants also expressed enthusiasm for AI-driven virtual assistants, which could act as personal digital companions, helping with scheduling, reminders, and even providing motivational prompts. These assistants could integrate with calendars, health records, and task management tools, reducing cognitive load and supporting executive function challenges. The emphasis was on creating technology that feels intuitive, empowering, and affirming of neurodiverse strengths rather than focusing solely on deficits.

Professionals focused on systemic and operational priorities. They highlighted the need for unified platforms that consolidate multiple functions, such as referrals, assessments, and patient communication, into a single, interoperable system. This would reduce fragmentation, improve efficiency, and simplify workflows for staff.

Professionals also see AI as a tool for workflow automation, particularly for time-intensive tasks like report writing, agreement scribing, and pre-diagnostic data gathering. By automating these processes, clinicians could spend more time on direct patient care and reduce administrative burden.

Finally, professionals stressed the importance of national governance frameworks to ensure digital solutions are clinically safe, evidence-based, and compliant with data security standards. They advocated for centralised validation processes, similar to NICE guidelines, to provide assurance and consistency across regions.

Comparison Table:

Innovation	Experts by Experience	Professionals
Personalisation	Task breakdown, custom notifications	Tailored support for co-morbidities
AI Use	Virtual assistants, calendars	Report writing, agreement scribing
Governance	Co-production focus	National validation frameworks

Shared Priorities

Integration

Both groups emphasised the critical need for seamless linkage between digital tools and NHS systems. Current fragmentation, where apps and platforms operate in isolation, creates inefficiencies and confusion for patients and staff. Integration would allow data to flow securely between systems, enabling features such as automatic updates to patient records, synchronised appointment scheduling, and real-time prescription management. This interoperability is essential for reducing duplication, improving accuracy, and delivering a consistent experience across the ADHD care pathway.

Accessibility

Accessibility was identified as a non-negotiable design principle. Solutions must accommodate ADHD-specific needs, such as reducing cognitive load through clear layouts, minimal steps, and intuitive navigation. Features like subtitles, adjustable video speeds, audio options, and multilingual support are vital for inclusivity. Additionally, addressing digital exclusion, by providing alternative access points such as telephone support, community hubs, or library-based assistance, ensures that people without reliable internet or devices are not left behind.

Personalisation

Participants across both groups stressed the importance of customisable features to meet diverse user requirements. Personalisation could include adjustable notification settings, tailored content based on co-morbidities or lifestyle factors, and adaptive interfaces that respond to user preferences. For professionals, personalisation also means tools that can be configured for different service models and individual needs, ensuring flexibility without compromising standardisation.

Unified Platforms

The proliferation of standalone apps and disconnected systems was seen as a major barrier. Both groups called for unified platforms that consolidate core functions, such as referrals, assessments, waiting well support, and self-management resources, into a single, user-friendly solution. This approach would reduce fragmentation, simplify navigation, and enhance user confidence, while also improving efficiency for clinicians.

Co-Production

Finally, there was unanimous agreement on the need for co-production in the design and testing of digital solutions. Involving both professionals and people with lived experience ensures that tools are clinically safe, operationally feasible, and genuinely useful for end-users. Co-production fosters trust, promotes inclusivity, and helps identify practical challenges early in the development process, leading to more sustainable and effective solutions.

Key Differences

Participants with lived experience of ADHD consistently emphasised usability as a critical factor in digital tool adoption. They want platforms that are intuitive, visually clear, and easy to navigate, with minimal steps and cognitive load. Complex interfaces, dense text, and unpredictable layouts were described as overwhelming and discouraging. Beyond functionality, EbE highlighted the importance of emotional support within digital solutions features that provide reassurance, motivation, and positive reinforcement during challenging tasks. This includes reminders that feel encouraging rather than punitive and content that validates their experiences.

Another key theme was the desire for affirming neurodiverse strengths. Many existing tools focus on deficits and symptom management, which can feel stigmatising. EbE envision solutions that celebrate creativity, problem-solving, and resilience, helping users leverage these strengths in daily life. This approach fosters empowerment and reduces the sense of being “managed” by technology, instead positioning digital tools as collaborative aids.

Professionals, in contrast, placed strong emphasis on governance and data security. Their priority is ensuring that any digital solution complies with clinical safety standards, information governance requirements, and data protection regulations. Concerns about confidentiality, secure data transfer, and interoperability with NHS systems were central to their perspective.

Additionally, professionals highlighted the need for administrative efficiency. With growing caseloads and resource constraints, they see digital tools to streamline workflows, automating tasks such as referral processing, report writing, and appointment scheduling. Efficiency gains would free up clinician time for direct user care and reduce operational bottlenecks. For professionals, the success of digital innovation hinges on its ability to deliver measurable improvements in service delivery while maintaining compliance and safety.

Recommendations

1. Develop a scalable ADHD digital platform: Consolidate core functions (assessment, waiting safely, prescriptions, resources) in a way that can be adopted locally and expanded nationally over time.
2. Embed Accessibility Standards: Subtitles, audio options, Easy Read, and multilingual support.
3. Leverage AI Responsibly: Use AI for personalisation and administrative automation, supported by governance frameworks.
4. Ensure Co-Production: Engage both user groups in iterative design and testing.
5. Address Digital Exclusion: Provide alternative access points (libraries, phone support).
6. Establish National Governance: Validate content and ensure clinical safety through centralised oversight

Digital for Neurodiversity Hub 2 – Innovator and Researcher Session

Purpose of Hub 2

Hub 2 formed the next phase of the Digital for Neurodiversity programme, following the engagement work with Experts by Experience (EbE) and Healthcare Professionals (HCP). Whereas Hubs 1A and 1B focused on gathering lived experience and clinical insight, Hub 2 brought these findings to innovators and researchers to support evidence-driven design of future digital tools. The session provided an opportunity to:

- Present the thematic findings from D4ND#1
- Share digital tool specifications from the Health Innovation North West Coast adult ADHD pathway
- Summarise evidence from HIEM's mixed-methods review of ADHD digital tools
- Explore opportunities for collaboration, innovation and co-development

Session Design

Hub 2 was delivered online via Microsoft Teams as a 90-minute interactive session. The format followed a structured flow used across the D4ND programme, incorporating short presentations, baseline and end-of-session polls, and opportunities for participant reflection and feedback. The agenda included:

1. Welcome and objectives
2. Baseline polling
3. Presentation of D4ND#1 lived experience and clinician findings
4. Review of digital tool specifications
5. Summary of HIEM's systematic evidence review
6. Discussion on opportunities for innovation
7. End-of-session polling and open feedback
8. Next steps and close

Data collection

Quantitative and qualitative evaluation data were gathered through live poll questions (n = 18 respondents). These included measures of baseline understanding, end-of-session confidence, perceived value of session components, and open-text suggestions for improvement.

Attendance

The session was attended by 22 participants, including digital health innovators, SMEs, researchers, industry partners, and NHS colleagues. Attendance data shows representation across innovation companies, academic teams, NHS organisations, and product developers.

Baseline confidence

At the outset of the session, participants reported moderate confidence in their understanding of both the real-world challenges faced by adults with ADHD and the challenges clinicians experience when implementing digital tools.

End-of-session confidence

Following the presentations and discussions, confidence increased significantly, with all respondents selecting “Somewhat confident” or “Very confident” when reassessing their understanding.

Perceived Value of the Session

Participants highlighted a number of components as particularly valuable:

- Lived experience insights
- Future-state pathway specification
- Detailed digital requirements

Likelihood to Recommend

Participants responded very positively when asked how likely they were to recommend future Digital for Neurodiversity Hubs. The majority selected “Very likely”, with the remainder selecting “Likely”.

Suggestions for Improvement

Suggestions included:

- Breakout rooms for deeper discussion
- Case studies and real NHS service examples
- External speakers
- More information on funding and research opportunities
- Clearer programme objectives

Contribution of Hub 2 to the D4ND Programme

Hub 2 served an important translational role within the programme, bridging the insights generated through lived experience and professional engagement with innovators, researchers, and digital SMEs capable of developing solutions aligned with these needs.