

Technology Matters: From innovation to implementation – Nationwide self-referral for digital mental healthcare is possible

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Digital mental health interventions for children are developing rapidly, yet a persistent gap remains between demonstrating that they work and making them available to families in routine care. This article describes Iceland's national rollout of the Online Support and Intervention for Child Anxiety (OSI) programme, a government-funded digital mental health intervention for parents of children aged 5–12 with common anxiety difficulties, adapted for Icelandic primary care. Its broader importance, we argue, rests not only on the intervention content but also on the service model through which it was delivered. We describe three features: a deliberately simple self-referral pathway that retains clinical oversight, delivery embedded within existing primary care services and national rollout achieved through collaboration across seven health institutions. We argue that scaling digital mental healthcare demands substantial organisational, technical and governance infrastructure and is rarely simpler than face-to-face provision. While Iceland's context may not be directly replicable in other countries, the implementation principles it illustrates may be informative for clinicians, service leaders and policymakers internationally. Improving access depends on implementation as much as innovation.

Key Practitioner Message

What is currently known?

- A digital mental health intervention is more likely to reach families when implementation is treated as seriously as the underlying innovation, with attention to how, where and by whom a digital mental health intervention is delivered and sustained.

What has been shown?

- Embedding a digital mental health intervention within existing primary care services, rather than running it as a standalone product, may improve access and sustainability and help families experience it as a recognised form of healthcare.

What is the significance of this for clinical practice?

- Self-referral can simplify and speed entry into care but should retain clinical oversight (e.g. brief screening followed by contact with a clinician) and clear routes for onward referral where higher-intensity support is needed.

Keywords: Digital mental health; self-referral; child anxiety; implementation; cognitive behavioural therapy

Digital mental health interventions for children are developing rapidly (Liverpool et al., 2025). Critically, the key questions for clinicians and service leaders are whether they are effective and how they can be implemented within healthcare systems in ways that are accessible, scalable, clinically useful and sustainable. Iceland's national rollout of Online Support and Intervention for Child Anxiety (OSI; Hill, Reardon, Taylor, & Creswell, 2022), a UK-developed programme

translated and culturally adapted for Icelandic primary care, offers one example of how this can be achieved. The Icelandic OSI programme is a government-funded digital intervention for parents of 5–12-year-old children with common anxiety problems, such as social anxiety, generalised anxiety, phobias and panic. However, its wider significance lies less in the intervention content than in the service model used to implement it.

The self-referral pathway

A key feature of the Icelandic OSI programme is that parents can seek support directly online rather than through a healthcare professional. The digital format makes self-referral feasible, as families can access services without face-to-face contact or gatekeeping through traditional referral routes. Self-referral is an important component of accessible child mental health services (Kirk et al., 2023). As shown in Figure S1, the Icelandic OSI programme pathway is deliberately simple. Parents self-refer online and complete a two-item parent report measure that assesses distress and impairment associated with anxiety (Reardon et al., 2025). Importantly, the pathway is not purely automated. Depending on the screening outcome, they are then offered a short call with a clinical psychologist who sits in primary care to confirm eligibility and discuss the next step. After that, they are given access to the Icelandic OSI platform and assigned a clinical psychologist. Notably, parents below the screening cut-off may still request further assessment and possible access to the programme.

By May 2026, 380 families had self-referred since the programme launched in September 2025; 342 (90%) screened above the clinical cut-off for probable anxiety and 204 (60% of those above cut-off) started the intervention. Growing clinical capacity and family awareness drove a 70% referral surge over the past 6 months, demonstrating that self-referral reaches children with clinically significant difficulties without professional gatekeeping.

This structure is important for two reasons. First, it reduces the number of steps families must navigate. Traditional pathways often involve multiple professional appointments before intervention begins. By contrast, the Icelandic OSI programme model aims to make the first point of access as straightforward as possible. Second, it simplifies access without removing clinical oversight.

The self-referral component also reflects an important shift in assumptions about help-seeking. Many referral systems rely on professional referral routes, with families often needing to access support through primary care, schools or other services first (Rocks, Glogowska, Stepney, Tsiachristas, & Fazel, 2020). In contrast, the Icelandic OSI programme allows parents to seek help directly when they are concerned about their child. Self-referral models may therefore make services feel more reachable, particularly when delivered digitally, as they reduce the practical barriers and stigma.

Embedding digital mental health interventions in primary care

A second important feature of the Icelandic OSI programme is that delivery is embedded within primary care services. In Iceland, clinical psychologists are already based in primary care and commonly provide treatment for anxiety problems there. This reflects a specific feature of the Icelandic system; in many other countries, psychological support is more commonly reached through specific referral routes. This makes primary care a practical and clinically appropriate setting for the

delivery of a programme such as OSI. Embedding digital mental health interventions through primary care offers several advantages. Primary care is familiar to families, geographically distributed and already part of routine healthcare system. Delivering the Icelandic OSI programme through this setting may therefore help families experience it as a recognised form of healthcare rather than as a standalone digital product. It also links the intervention to established clinical roles and service responsibilities, which may make implementation more feasible than if the programme sat elsewhere.

This point may be particularly relevant internationally. One recurring challenge in digital mental health is that interventions may show promise in research studies, but further work is often needed to understand how they can be implemented safely, sustainably and effectively in routine care (Liverpool et al., 2025). The challenge is often not only about evidence but also about where the intervention sits organisationally, who delivers and sustains it, through which service, and with what clinical oversight. The Icelandic OSI programme suggests that a digital intervention is easier to implement when integrated into an existing service context rather than introduced as something separate.

What national rollout involves

A third notable aspect of the Icelandic OSI programme is that it has been implemented at a national level. This distinguishes it from many interventions confined to pilot projects or local services. In Iceland, national rollout has been possible in part because the workforce infrastructure already exists: clinical psychologists are working within primary care services across the country. However, this did not mean implementing the model within a single, unified primary care organisation. Instead, rollout required collaboration across seven different health institutions within which primary care sits, each with its own governance structures and local working practices. Capacity varies, and rural areas have fewer staff than the capital region. However, there is a distributed clinical base on which a national model can be built.

The broader lesson is that scaling digital mental healthcare involves much more than making an intervention available online. The work of implementation extends beyond intervention delivery itself. It includes technical development and maintenance, adaptation to clinical services, legal and regulatory review, cybersecurity and data protection requirements, electronic identification and communication systems, ethics processes, and approvals from health authorities. It also requires administrative support, funding applications, ongoing clinician training and supervision, and the capacity to manage unanticipated costs and practical problems as they arise. Critically, it also involves raising awareness of the programme among families; an intervention programme that families do not know about will not be used.

A common misconception is that delivering interventions digitally makes implementation simpler. In reality, scale-up is demanding. What changes is not the need for infrastructure, but its form. Instead of relying only on buildings, clinics and face-to-face appointments, digital

mental healthcare also depends on technical systems, digital literacy, governance arrangements and close coordination between clinical and non-clinical teams.

International relevance

The relevance of the Icelandic OSI programme extends beyond Iceland, but not because it offers a model that can simply be copied unchanged. Healthcare systems differ in funding arrangements, workforce distribution, regulation, digital maturity and service organisation. Iceland also has features that may make national implementation more feasible than in some larger or more fragmented systems. Its international value therefore lies less in exact replication than in the implementation principles it illustrates. Several of those principles may be informative elsewhere:

- Simplification of access through self-referral.
- Embedding digital mental health interventions within an existing clinical service rather than running them as standalone digital products. The transferable principle is integration into routine healthcare, not the use of primary care specifically. Where clinical psychologists are not routinely based in primary care, the relevant question becomes which existing infrastructure could most feasibly host the model.
- Close collaboration between clinical and technical teams. Implementation has depended on partnerships between psychology and computer science, strong working relationships with primary care services, and regular support for clinicians delivering the intervention, including clinical supervision and practical support with the digital platform across multiple health institutions, each with its own governance structures and ways of working.

These are useful lessons for health systems considering similar models. A digital mental health intervention is most likely to be sustained when it is developed alongside clinical work rather than separately from it, when clinicians are supported to deliver it as part of their routine work, and when implementation is treated as a practical, organisational task rather than simply the launch of a digital platform.

From digital mental health intervention to routine care

The central message of the Icelandic OSI programme experience is that improving access to digital mental healthcare depends on implementation as much as innovation. The systems through which families reach effective interventions matter just as much. In this project, that has meant simplifying entry into care through self-referral, embedding delivery within primary care and investing in the infrastructure needed for national rollout.

The Icelandic OSI programme does not solve every challenge in child mental healthcare. Self-referral will not be suitable in every setting, and streamlined access must sit alongside sound clinical judgement, appropriate assessment and clear onward referral routes where higher-intensity support is needed. Nevertheless, it

shows that a national self-referral pathway for digital mental healthcare can be created within a publicly funded healthcare system and integrated into ordinary clinical services. For clinicians, service leaders and policymakers the key lesson may be this: digital mental healthcare becomes meaningful not when it is merely shown to work, but when it is organised so that patients and families can use it. The move from innovation to implementation may be the most important step.

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AI statement

The self-referral pathway. The authors acknowledge that this figure was created with assistance from ChatGPT (OpenAI; accessed May 2026). The figure was subsequently edited, reviewed and approved by all authors.

Conflicts of interest statement

The authors have declared that they have no competing or potential conflicts of interest.

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Ethical considerations

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Data availability statement

Data sharing is not applicable to this article as no datasets were generated or analysed during the current study.

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Supporting information

Additional Supporting Information may be found in the online version of this article:

Figure S1. The self-referral pathway

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