

Developing a National Strategy for Digital Mental Health in Ireland: A Reflexive Thematic Analysis of a Stakeholder Engagement Process.

Sarah Kennedy, Robyn Fitzgerald, Ruth Melia

Submitted to: Journal of Medical Internet Research
on: January 22, 2025

Disclaimer: © The authors. All rights reserved. This is a privileged document currently under peer-review/community review. Authors have provided JMIR Publications with an exclusive license to publish this preprint on its website for review purposes only. While the final peer-reviewed paper may be licensed under a CC BY license on publication, at this stage authors and publisher expressly prohibit redistribution of this draft paper other than for review purposes.

Table of Contents

Original Manuscript..... 5

Supplementary Files..... 28

..... 28

Multimedia Appendixes 29

Multimedia Appendix 1..... 29

Developing a National Strategy for Digital Mental Health in Ireland: A Reflexive Thematic Analysis of a Stakeholder Engagement Process.

Sarah Kennedy¹ MSc; Robyn Fitzgerald² MSc; Ruth Melia³ DClInPsych

¹ Queen's University Belfast Belfast GB

² Health Service Executive Dublin IE

³ Health Research Institute University of Limerick Limerick IE

Corresponding Author:

Ruth Melia DClInPsych

Health Research Institute

University of Limerick

Casteltroy

Limerick

IE

Abstract

Background: The World Health Organisation recommends integrating digital technologies into mental health care, underscoring the need for countries to develop national digital mental health strategies to guide efforts. In Ireland, the national Digital Mental Health (DMH) Specialist Group brought together key stakeholders in DMH research, practise, and lived experience, to develop 'A Shared Vision for Digital Mental Health in Ireland'.

Objective: The current study aimed to explore the views of DMH stakeholders to set priorities for the development of a DMH strategy.

Methods: 47 stakeholders were each assigned to one of six focused strategy discussion groups. Invited stakeholders included experts in DMH research, clinical practise, mental health advocacy and policy, together with those with lived experience of accessing mental health services. Qualitative data was analysed using a reflexive thematic analysis approach. Researchers followed Braun and Clarke's 6-step framework.

Results: Five major themes were identified; Inclusive Access, User-led, Trust, Education and Training, and Connectedness. Major themes related to 15 sub-themes. Inclusive Access comprised of inclusivity, accessibility and early intervention. User-led encompassed co-production, choice, and needs-led. Compelling narrative, regulation, policy and governance, and evidence-base were identified within the theme of Trust. The sub-themes of digital literacy, mental health literacy and transformation were identified within Education and Training. Finally, Connectedness incorporated the sub-themes of integration, relationships, and stigma.

Conclusions: Overall, delegates viewed digital technology as a potential enabler of accessible and inclusive mental health support. The need for policy to address concerns regarding privacy, further education and training needs, regulation, and a robust evidence base were raised. Co-production at all stages was identified as key to reducing access barriers and enhancing inclusion. Themes identified were used to inform the development of the first national DMH strategy in Ireland. Further research will involve a consensus seeking process to refine and prioritise actions to guide implementation planning. Clinical Trial: Not applicable.

(JMIR Preprints 22/01/2025:71601)

DOI: <https://doi.org/10.2196/preprints.71601>

Preprint Settings

1) Would you like to publish your submitted manuscript as preprint?

✓ **Please make my preprint PDF available to anyone at any time (recommended).**

Please make my preprint PDF available only to logged-in users; I understand that my title and abstract will remain visible to all users.

Only make the preprint title and abstract visible.

No, I do not wish to publish my submitted manuscript as a preprint.

2) If accepted for publication in a JMIR journal, would you like the PDF to be visible to the public?

✓ **Yes, please make my accepted manuscript PDF available to anyone at any time (Recommended).**

Yes, but please make my accepted manuscript PDF available only to logged-in users; I understand that the title and abstract will remain visible to the public.

Yes, but only make the title and abstract visible (see Important note, above). I understand that if I later pay to participate in <http://www.jmir.org/>, I will be able to make my accepted manuscript PDF available to anyone.

No. Please do not make my accepted manuscript PDF available to anyone.

Original Manuscript

Original Paper

Sarah Kennedy¹, BSc; Robyn Fitzgerald², BA, MA; Ruth Melia³, BA, MSc, DClinPsych

¹Psychology Department, University of Limerick, Ireland

²Child and Adolescent Mental Health Service, Limerick, Ireland

³Health Research Institute, University of Limerick, Ireland

Title: Developing a National Strategy for Digital Mental Health in Ireland: A Reflexive Thematic Analysis of a Stakeholder Engagement Process.

Abstract

Background: Recent advances in digital health technology offer the potential to overcome established access barriers to mental health support such as stigma and geographical location. The World Health Organisation recommends integrating digital technologies into mental health care, underscoring the need for countries to develop national digital mental health strategies to guide efforts. The rate of development and availability of digital mental health tools currently outpaces the policy or regulatory guidance required to guide usage. In Ireland, a key requirement of the national mental health strategy – Sharing the Vision, was the development of a National Digital Mental Health Strategy. Key stakeholders in Digital Mental Health (DMH) research, policy, practise, and lived experience, were brought together as part of a focused stakeholder engagement event to develop ‘A Shared Vision for Digital Mental Health in Ireland’.

Objective: The current study aimed to explore the views of DMH stakeholders to set priorities for the development of a national DMH strategy.

Methods: 47 stakeholders were each assigned to one of six focused strategy discussion groups. Invited stakeholders included experts in DMH research, clinical practise, mental health advocacy and policy, together with those with lived experience of accessing mental health services. Qualitative data was analysed using a reflexive thematic analysis approach. Researchers followed Braun and Clarke's 6-step framework. Reflexive Thematic analysis emphasises intentionality and critical thought emphasising researcher's deliberately interpreting data while being aware of how their perspectives shapes the conclusions.

Results: Five major themes were identified; Inclusive Access, User-led, Trust, Education and Training, and Connectedness. Major themes related to 15 sub-themes. Inclusive Access comprised of inclusivity, accessibility and early intervention. User-led encompassed co-production, choice, and needs-led. Compelling narrative, regulation, policy and governance, and evidence-base were identified within the theme of Trust. The sub-themes of digital literacy, mental health literacy and transformation were identified within Education and Training. Finally, Connectedness incorporated the sub-themes of integration, relationships, and stigma.

Conclusions: Overall, delegates viewed digital technology as a potential enabler of accessible and inclusive mental health support. However, it was also seen as a potential barrier to access and inclusion if concerns regarding data privacy, education and training needs, regulation, and the need for a more robust evidence base were not addressed. Co-production at all stages was identified as key to reducing access barriers, enhancing inclusion, and maintaining Trust. Themes identified informed a follow-on consensus seeking process to further refine and prioritise the proposed actions of the first national DMH strategy.

Keywords: Digital Mental Health; policy; thematic analysis.

Introduction

According to the World Health Organisation [1], the number of people living with anxiety and depressive disorders rose significantly during the COVID-19 pandemic. Initial estimates indicate a 26% and 28% increase respectively for anxiety and major depressive disorders in just one year. While effective prevention and treatment options exist, most people with mental health difficulties do not have access to effective care [2]. Crucially, 75% of mental health difficulties are reported to have their onset before the age of 25 years [3]. The mental health of young people is an area of heightened concern and focus, driven by rising trends of earlier onset of mental health difficulties [4]. Internationally, help-seeking, mental health service use, and related costs are increasing [4].

Recent advances in digital health technology offer the potential to overcome established access barriers to mental health support such as stigma [5] and geographical location [6]. DMH refers to technology-enabled provision of mental health supports and involves leveraging the internet and related technologies such as smartphone apps, websites, and social media to deliver mental health services. The now ubiquitous nature of mobile phone ownership, particularly among young people [7] highlights the potential for digital technology to transform mental health service access and delivery. To achieve this, DMH interventions and plans for their implementation must be designed with end users in mind [8].

Researchers have evaluated the acceptability [9, 10], feasibility [11], and efficacy of Digital Mental Health Interventions delivered using differing modalities [11,12] and with a broad range of participant groups [e.g. 12]. A recent meta-analysis [11] indicated that Web-based programs (32.3%), videoconferencing platforms (24.6%), smartphone apps (21.5%), and SMS text messaging (7.7%) were the main techniques used. Psychotherapy (67.7%) followed by psychoeducation (6/65, 9.2%) and psychological support (5/65, 7.7%) were commonly used. Concerns remain regarding user adherence and engagement [13], the need for digital infrastructure to support equity of access [14, 15], and the speed of development of digital mental health supports out-pacing the evaluative research required to ensure quality and safety. Researchers have called for further research examining longitudinal outcomes, evidence-informed regulation and governance, and greater

integration of DMH within traditional mental health services [11].

With an increase in the number of DMH supports available, researchers and advocacy groups have argued for services that are accessible to all those who stand to benefit from them [16, 17]. Digital inclusion refers to the activities necessary to ensure that all individuals and communities, including the most disadvantaged, have access to and use technologies that may benefit their health [14]. Co-production has emerged as a way to ensure that user needs are at the centre of digital mental health design and development processes [18, 19], and that the knowledge of those with lived experience meaningfully informs that process. Co-production is critical to ensuring that policies are designed according to the needs and requirements of all involved individuals and sectors at all levels. Stakeholder engagement processes that support meaningful engagement of those with lived experience of mental health difficulties at all stages, is an important part of co-production.

DMH research, policy, and practise are also informed by established theoretical perspectives.. Self-Determination Theory posits that humans have three basic psychological needs, namely autonomy (i.e., engaging in a behaviour with a full sense of volition), competence (i.e., the experience of mastery and efficacy), and relatedness (i.e., the need to feel connected to other people in a meaningful way) [20]. According to the theory, these basic needs are considered essential for individuals' adjustment, integrity, and growth [21, 22]. The theory postulates that need-supportive social environments improve human's internal motivational sources and well-being. In contrast, need-depriving (disregard for the needs) and need-thwarting (active undermining of the needs) social environments impact human's external motivational sources with maladaptive consequences such as passivity and ill-being [20, 22]. Thus, the social environments described above occupy opposite ends of a continuum that set the stage for human motivation. SDT suggests the extent of need-support, -deprivation, and -thwarting impact the quality of motivation (i.e., the relative quantity of different behavioural regulations) [23]. Self-Determination Theory [24], provides a framework through which we can understand how digitally-enabled support may impact on those three psychological needs (competence, autonomy, and relatedness), to support enhanced engagement in services and improving the likelihood of positive outcomes [25].

The WHO Global Health Strategy on Digital Health 2020-2025 [2] aims to stimulate and support every country to own, adapt and strengthen its digital health strategy, and to support countries to implement appropriate digital technologies to address their health priorities. Central to this is placing people at the centre of digital health, advancing inclusive approaches, and adopting digital health technologies to scale up and strengthen health service delivery. There have been significant and recent strategic drivers for the integration of digital technology in Health Services in Ireland.

Sláintecare [26] aimed to transform health and social care services in Ireland, over a 10-year period, espousing the need for an integrated model of care, including the use of eHealth. Sharing the Vision: A Mental Health Policy for Everyone [27], recommends leveraging digital technology to maximise resources and promote mental health at a population level. Specifically, recommendation 31 to "Develop the potential for digital health solutions to enhance service delivery and empower service users".

Connecting for Life: Ireland's National Strategy to Reduce Suicide 2015-2020 [28] identified the need to leverage digital technology to "deliver accessible information on all mental health services and access/referral mechanisms". eHealth Ireland published the HSE National Telehealth Roadmap in 2023 which sets out a Vision for Telehealth in Ireland [29]:

"To seamlessly integrate telehealth into business-as-usual within the healthcare service,

providing high quality and safe healthcare, accessible to all, no matter who they are or where they live”

The topic of digital health, and digital inclusion are also key to the Department of Public Expenditure NDP Delivery and Reform’s ‘Digital for Good: Ireland’s Digital Inclusion Roadmap’ [15].

While DMH has garnered strong policy support, ethical concerns have been raised related to insufficient effectiveness [30], data privacy vulnerabilities of DMH products [31], and a lack of adequate clinical validation and user-centred design [32]. Clear strategic guidance has been called for to help address these concerns, informed by the evidence base. However, the rate of development of DMH solutions has occurred at a faster pace than the evaluative research needed to inform such guidance. As a result, commissioning by mental health services of digital mental health tools can occur in reaction to increases in demand, availability in the market, or the requests of those accessing the service. However, implementation of DMH at-scale is hampered by the need for a clear strategy that reflects a shared vision of DMH, and addresses concerns such as quality, safety, regulation and governance.

It was in this context that the stakeholder engagement process was undertaken. A primary aim of which was to bring together experts across research, policy, practise, and lived experience, to develop a shared vision of DMH, and to set priorities for the development of a national DMH strategy.

Methods

Context

A key requirement within ‘Sharing the Vision: A Mental Health Policy for Everyone’, Ireland’s mental health policy [27], is the development of a National Digital Mental Health Strategy. The Digital Mental Health Specialist Group was formed under the StV implementation plan, tasked with developing the strategy, with a reporting relationship to the National Implementation Monitoring Committee. The Specialist group includes clinicians, mental health researchers, and patient and mental health advocacy representatives. Members appointed to the group were drawn from statutory, voluntary / charitable organisations, advocacy organisations and research institutions (universities). It is in the context of this task that an event was organised to bring together key stakeholders to inform the development of the strategy.

Design

Data collection occurred across three stages (1) an open-ended survey question at registration, (2) recorded and transcribed conference presentations, and (3) facilitated focus groups.

Participants

The conference team, with representation across research, clinical practise and lived experience, agreed the recruitment strategy. In the first instance, members of the Digital Mental Health Specialist Group were invited to attend and to put forward potential additional invitees. The Digital Mental Health Research exchange, a group of researchers in Digital Mental Health in Ireland (North and South) were invited to attend, and to extend the invitation to team members. Health and allied

healthcare professional bodies nationally were contacted and a representative invited to attend. Representatives from mental health voluntary / charitable organisations, mental health recovery colleges, and mental health advocacy organisations were invited to attend. Mental Health Services managers across community health organisations nationally were invited to attend. Lived experience members of the conference committee invited individuals within their networks. Those tasked with mental health policy development and implementation in the Health Service and Department of Health were invited to attend. Invitees were selected to be representative across disciplines and professional backgrounds and offer expertise in many specialised and general fields of DMH including clinical practise, software development and engineering, mental health advocacy, health service management and administration, mental health research, DMH co-design and development, mental health policy development, evidence synthesis, regulation, and implementation science. The overall group composition was gender-balanced and professional training backgrounds included psychology, psychiatry, nursing, occupational therapy, physiotherapy, social work, engineering, software development, and data analytics, and those with specific expertise in Artificial Intelligence (AI).

Delegates were drawn from within Ireland with the exception of two international speakers who were invited to share their experiences as leaders in DMH internationally. One, a Professor in e-Mental Health with over 20 years DMH research experience. The second international speaker, a National Lead for Public Mental Health, and a recognised leader and advocate of public mental health internationally.

Due to the public-policy focused nature of the event, and the parameters of the funding award used to support the event, representatives from commercial organisations were not identified to attend

54 participants attended. 16 were researchers affiliated with academic institutions, 10 were clinicians employed in the health service, 7 were health service managers or administrators, 9 represented mental health voluntary or charitable organisations (organisation CEO and / or designate), 4 worked in policy development (digital health, mental health, suicide prevention), 7 identified as having lived experience of mental health difficulties or as mental health advocates, 2 worked in recovery education. Some participants identified as having multiple affiliations. For example, 6 identified as clinicians and researchers. Certain areas of interest were more represented such as suicide prevention with 6 attendees working across suicide prevention research, policy, training, and as suicide prevention resource. Of the 16 researchers in attendance, 8 were affiliated with Psychology Departments, 6 with Computer Science and Engineering, and 3 indicated a specialism in Artificial Intelligence or Machine Learning applied to mental health research. Of the 54 attendees, 48 provided a keyword or phrase at registration, 8 contributed as speakers, 4 as panel discussion contributors, and 47 took part in the focused discussion session across 6 groups.

Speakers included Digital Mental Health Researchers (4), Voluntary Organisation CEOs (2), Research Funding organisations (1), health service senior management (1), policy development (1), lived experience / advocacy, recovery education (2), and clinicians (3) with some speakers working across these areas. Of the group of panel members and speakers, 8 were female, 8 male.

Setting

The event took place at the University of Limerick, Ireland, on November 23rd, 2023. Registration occurred online. Seven conference speakers presented in-person, one speaker presented online, and focused discussion sessions occurred on-site. Speakers presented for 10-15 minutes each, and the focused parallel group discussion session was 50 minutes in duration.

Ethical Approval

Ethical Approval was sought and received from the Institutional Research Board. Participants provided consent to share relevant data during the online registration process.

Data Collection

In the first instance, invited attendees and speakers were asked to provide a word or phrase to summarise their vision for DMH upon registering for the conference (figure 1). This question was intended as a prompt and to guide attendee attention to the focus of the event, ahead of more detailed questions put forward within the strategy discussion session.

Secondly, conference speakers were asked to identify 2-3 words or phrases that addressed the question 'A Vision for Digital Mental Health: what should it look like?' (table 1 and table 2). They were then invited to draw on their research/practise/lived experience to provide a rationale for their vision during the presentation sessions.

Panel discussion members were asked to reflect on key barriers and enablers to realising a vision for DMH, and to provide concrete examples from experience that had worked well.

Facilitated strategy discussion groups, structured using agreed question prompts, invited delegates to consider the development of a DMH strategy and discuss what the vision, principles, scope, and proposed outcomes of that strategy might be (See Appendix 1 for facilitator prompt document). Question prompts were informed by research, practise, and existing policy need, and were developed in consultation with a subgroup drawn from research, clinical practise and policy. A digital recording artist captured the proceedings and discussion throughout the day (Appendix 2). All presentations were video recorded and transcribed for further clarity. Each group was facilitated by a conference committee member and responses were recorded by an allocated scribe.

Data collection procedures were chosen as most appropriate to explore the views of experts from diverse fields, formulate broad strategic priorities, and identify general areas of challenge and uncertainty.

Data Analysis

The qualitative data collected was analysed using Reflexive Thematic Analysis. Two researchers separately analysed all transcripts using Braun and Clarke's approach [33]. Reflexive Thematic Analysis involves the identification and reporting of patterns in a dataset, which are then interpreted for their inherent meaning [33, 34, 35]; these patterns can be identified on the basis of understanding the meaning of keywords used by participants. Braun and Clarke's [33] 6-step framework involves the following steps: become familiar with the data, generate initial codes, search for themes, review themes, define themes, write-up. Reflexive Thematic analysis emphasises intentionality and critical thought emphasising the researcher's deliberately interpreting the data while being aware of how their perspectives shapes the conclusions.

Two researchers independently became familiar with the data and generated initial codes. Both researchers then met with the third researcher to discuss codes. In the second step both researchers began to search the data to identify related codes and begin to identify themes. Again, the research team met to discuss initial themes, identify reflective quotes, and discuss nuance in the data. In the next analytic step, data was broken down further to identify specific sub-themes (table 3). The research team met again to discuss sub-themes and discuss convergence or divergence in the data. In

the final step, the researchers, using the broad themes and sub-themes structure identified opposing views, tensions, and divergence in the data, and drew on reflective quotes to give voice to such data. The themes and sub-themes are used as headlines in the presentation of results, and quotes from participants are included to further illustrate the views of participants.

Finally, the Pillar Integration Process [36], a joint display technique, was used to integrate data from the initial survey question at registration, the speaker presentations, and the focused discussion sessions. To build the Pillar, the researchers compared and contrasted the findings that had been developed from the listing, matching and checking stages, and conceptualized the insights identified from connecting and integrating the qualitative data.

Quality

Bryman [37] put forward strategies to improve quality and rigor in qualitative research which the research team incorporated in the data analytic process such as having multiple individuals code the data and then explore inter-coder comparison [38]. Research team discussion was used to ensure that quotation selection would reflect robust patterns within the data and incorporate a diverse range of participant's voices, thus ensuring an inclusive representation [39]. Researchers are also encouraged to practice reflexivity by continually examining their beliefs, values and assumptions throughout the research process [40]. This was addressed through reflection at research group meetings and within research supervision to bring to awareness, perspectives which may impact the data analysis process. The below participant descriptor key was developed to provide a broad description of contributors' background or affiliation, to be provided after each attributed quote in the Results section.

R = Researchers affiliated with an academic institution

C = Clinician within the health service

V = Representative from a Voluntary / Charitable Organisation

LE = Attendee with Lived Experience

P = Policy Development Personnel

HM = Health Service Manager

RE = Recovery Education Personnel

Results

Initial data collection at registration required participants to provide a word or phrase to describe their vision of DMH. Results are presented in Table 1 and illustrated further in Figure 1. Secondly, speakers were invited to present on their research, clinical practise or lived experience knowledge relevant to DMH and to provide a word or phrase to summarise their vision for DMH based on their expertise and experience (Table 2).

Table 1. Word or phrase provided by participants to describe their "vision" for DMH.

Word or phrase
Accessible
Collaboration
Connection
Co-produced
Efficient
Empowering

Transformative
Human and Responsive
Inclusive
Machine Learning
Mental well-being
Opportunity
Optimism
Personalised
Trusted
Trauma-informed
Unlimited

Table 2. Word or phrase provided by speakers to describe their vision for digital mental health.

Word or phrase
Mental Health Literacy
Inclusion
Integration
Trust and Evidence
Co-production
Infrastructure and Support

Finally, 47 participants were divided and took part in 6 focused discussion groups in parallel, and the reflexive thematic analysis applied to the qualitative data collected resulted in the identification of five main themes, related to fifteen subthemes. An overview of themes and subthemes is provided in Table 3 below. Themes included: Inclusive access, user-led. Trust, Education and Training, and Connectedness. Inclusive access comprised of Inclusivity, accessibility, and early intervention. User-led included co-production, choice, and needs-led. Trust incorporated: compelling narrative; regulation, policy and governance; and evidence-base. Education and training related to digital literacy, mental health literacy and transformation. Connectedness encompassed integration, relationships, and stigma.

Table 3. Themes and sub-themes identified from focus group discussions.

Theme	Sub-theme 1	Sub-theme 2	Sub-theme 3
Inclusive access	inclusivity	accessibility	early intervention
User-led	co-production	choice	needs-led
Trust	compelling narrative	regulation, policy, and governance	evidence-base
Education and training	digital literacy	mental health literacy	transformation
Connectedness	integration	relationships	stigma

Results Theme 1: Inclusive Access

Inclusive Access was identified as a prominent theme, comprising of the sub-themes; inclusivity, accessibility, and early intervention. Inclusive access, in this context, encapsulates the importance of broadening the reach of DMH to enhance accessibility for all. Participants detailed the multitude of

ways in which DMH could facilitate greater access to mental health support. However, participants consistently highlighted the need for this access to extend to everyone. Moreover, participants argued that inclusivity is pivotal in enhancing mental health outcomes, particularly for under-served or marginalised groups.

Sub-theme: Inclusivity

Inclusivity, as described by participants, reflects the practical ideology that DMH should be *“inclusive of everybody and user friendly”* [V]. In reference to inclusivity, one participant explained that *“if you don’t have that, there are more drop offs, especially for older and neurodivergent people”* [C].

Another emphasised that it is essential to include:

“Those seldom heard voices who communicate without words, including for example, people with autism, intellectual disability or locked in syndrome, DMH strategy might consider multi-media engagement (i.e. a range of inputs/technology)” [C]

This quote alludes to participants’ views that a DMH strategy needs to consider the expectation that modern technology automatically improves inclusivity versus the practical reality whereby certain groups may experience additional barriers to access due to a lack of consideration of their specific needs in the design process and in the development of training. This was a consistent tension in the data whereby digital was seen as a potential enabler or barrier to inclusivity.

There was a clear consensus that *“the assumption that people understand is a barrier.”* [LE]. Furthermore, *“it is important in the digital space, that we are using the languages that people are familiar with and can understand”*. An attendee with lived experience argued that jargon and acronyms complicate and reduce a mental health service user’s understanding acting as a barrier to inclusion. As one participant noted *“we must use the language that a specific community uses”*.

Similarly, equity of access across geographical, societal and digital barriers was raised by many participants. *“Making sure that people have access to the hardware or /devices...- necessary to access it and I think that infrastructure should be taken care of from a public health perspective.”* [HM]

Attendees noted the importance of equitable access to devices, network connection, and the broader infrastructure needed to ensure equitable access.

Sub-theme: Accessibility

Accessibility appeared frequently, referring both to the potential for DMH to enable accessibility, and the importance of designing, developing and implementing solutions that enhance access. Practical examples of professionals’ lived experience emphasised the importance of accessibility when disseminating clinical information and designing effective treatment strategies.

However, some participants provided insights that gave a more nuanced picture of accessibility in practice. For example, one clinician stressed that when developing a DMH strategy, we need to *“be careful we are not making another hoop for people to jump through to access services”* (in the context that people with moderate-severe presentations often access a number of services before reaching a service appropriate to their needs).

Another participant noted that the strategy needs to incorporate the wider and contextual variables

that act as barriers to accessible care.

“Everyone talks about online therapy during COVID but what actually came back in one area is psychologists don’t have Wi-Fi in the office and they are not prepared to risk letting a client down.... they aren’t allowed to work from home to get Wi-Fi, this type of structural stuff is not working” [R]

The infrastructural requirements (hardware, software, internet connectivity) were raised as potentially key barriers relevant to both Accessibility and Inclusivity sub-themes.

Sub-theme: Early intervention

There was general agreement on the need for DMH to improve responsiveness and address barriers to early intervention.

One participant described how they *“would love on a population level if people didn’t believe there was no access to support. People believe waiting lists are too long and there’s no point” [C]*.

Some participants highlighted that digital technology has the potential to maximise clinician time and facilitate early intervention

“If some clients’ needs can be met via Digital Mental Health it may free up therapist time to give more in-person input to another client” [LE].

Theme 2: User-led

The concept and importance of DMH strategy being “user-led” was frequently stressed by participants. This theme encompasses the sub-themes: co-production, choice, and needs-led.

Sub-theme: Co-production

Participants highlighted the importance of implementing a national DMH strategy that is co-produced. Participants argued that central to the development of a strategy is communication with and integration of those with lived experience in the development of services.

“Under that principal of co-production.... there has to be an identified need, you need a leader, but you also need relevant stakeholders, family, mental health staff, community staff” [RE]

Participants argued that DMH strategy development needs to involve all key stakeholders and that it is not exclusive of service-users or clinicians, both of whom are key consumers of digital health. Some participants argued that integrating those with lived experience as key stakeholders, not only yields positive outcomes, but brings *“a level of accountability.”*

“[The] feedback principal of co-production-if you don’t have all the stakeholders in the room from the outset you will never get there” [RE]

One participant commented on witnessing the positive outcomes of co-production, and noted that standardising assessment tools across sites was one way to achieve this goal.

“There is an aging research centre in (. . .) that I worked with, and it was my first time seeing real co-production of projects, service users engaging in policy and seeing changes. It came

down to using the same assessment tools so they could compare across sites” [C]

Sub-theme: Needs-led

Several participants noted the importance of meeting “*people where they are at*” [LE], and that the implementation of digital healthcare should be needs-led rather than driven by the available technology. Further, participants reiterated that regardless of its dynamic nature, technology should be used as an “*adjunct*” to treatment, not as a replacement.

“We cannot be led by the technology that is available, we have to be led by the needs of people rather than retrofitting into a piece of technology that fits it.” [RE]

By developing a timely strategy that incorporates the principles of co-production, and considers the needs of mental health service users, it was argued that strategy developers can alleviate the risk of being market-led or driven by the technology available. However, in order to do so:

“positive risk taking has to be included in this, otherwise it won’t be user led. People need the services now.” [V]

Sub-theme: Choice

Choice, in this context refers to offering a broader range of mental health service delivery options whereby a person has the option of engaging with mental health support in different formats (digital or face-to-face) based on their individual preferences. Participants highlighted that to keep person-centred practice at the forefront of service delivery, those accessing mental health supports must have the choice to engage in services that best suit their individual needs.

“[The] choice of delivery of intervention remains for the service user - person centred practice remains at the core” [V]

Lack of choice, or if a person feels they are being pushed towards a particular method of service delivery may exacerbate feelings frustration with services.

“People who wanted face-to-face and when there is only online options makes them feel very isolated” [LE]

One participant highlighted that ideally, they “*would like a corporate structure that allows people to always have a choice to choose technology rather than they have to or there is nothing else.*” [C]

Theme 3: Trust

Trust was identified as a central theme consisting of the following sub-themes: compelling narrative; evidence-base; regulation, policy and governance.

Sub-theme: Compelling Narrative

Participants reported that creating a compelling narrative in relation to DMH is essential. Participants noted that the public’s perception of DMH may be negative, as some individuals may perceive digital health interventions as a subordinate solution to face-to-face treatment or simply as a method of alleviating strain on services.

“Public trust - people need to feel safe. This shouldn’t be used as a way to move people off waiting lists- [there is a] perception that this is what digital health is used for” [C]

Sub-theme: Evidence-base

Participants highlighted the uncertainty and scepticism that comes with accessing digital resources that are not supported with good quality evidence or where the efficacy of a particular digital solution is uncertain. For instance, participants discussed young people engaging in help-seeking behaviour online:

“We now know most young people will google things when help seeking, so how do we know that they’re not being scammed?” [P]

Participants noted that to alleviate these doubts, the DMH services offered *“need to be robust and evidence based”*. [V]

Some hesitancy around the lack of human involvement in certain processes was also noted. For example, some participants stated that they felt that AI could be used to a certain point, however ultimately there was a need for human involvement in decisions regarding healthcare.

“If you use AI as part of anything, you use it to a point. It is part of GDPR that if you are making a decision about someone’s healthcare, you have to have a human involved, not just AI.” [P]

Sub-theme: Regulation, policy, and governance.

The theme of regulation, policy, and governance arose on multiple occasions amongst participants who stated *“regulation is important, there is science but there is also the law”* [HM]

Participants noted the necessity of having regulation, policy and governance in place, regardless of interventions themselves being evidence based, and highlighted concerns in relation to data privacy, ethical considerations, and the quality and safety of clinical practise.

Data privacy concerns were raised by participants in different contexts and in relation to various aspects of DMH. Ensuring users are fully aware of what happens to any data collected during DMH service delivery was highlighted as important in promoting trust.

“In terms of the variety of technological uses, software programs to interpret that people consent to the full use of their information and what happens and that they are aware of that.” [R]

Participants highlighted that standardised regulation in DMH, held the potential to address concerns regarding data privacy, and the quality and safety of DMH interventions..

“This is where policy has to be correct as if you don’t have that it’s a free for all” [LE]

Participants noted that a lack of standardisation of practices and regulation brings about feelings of uncertainty and hesitation, particularly in relation to the safety of DMH interventions. Participants voiced that, above all, the priority of clinicians is to implement good, safe practice that will avoid causing harm to their clients. Other views in relation to regulation were also shared.

“Regulation is obviously a positive thing, but sometimes it can limit. Which is what we’ve

seen in this space so far.....It boils down to being 'safe', to doing no harm." [P]

Theme 4: Education & Training

Another major theme identified in the transcripts was education and training. Participants highlighted the need for increased inclusion of DMH content within professional training programmes, in continued professional development for practicing clinicians, and for those accessing DMH services and their family members or supporters. Participants also drew attention to the opportunities offered by digital technology to share knowledge and information.

"Education promotion is a key piece, often people don't realise there are digital interventions available" [RE]

In turn, awareness of resources and interventions available allows for enhanced service delivery for individuals accessing health services.

"Another common thing when people engage with us in education is that they leave with a sense that they are not alone." [RE]

Within the theme of education and training, the sub-themes of digital literacy, mental health literacy, and transformation were identified.

Sub-theme: Digital literacy

Participants noted the importance of introducing the concept of DMH at an early stage, and *"increasing awareness and Digital Mental Health training in doctoral, counselling, masters training programmes" [P]*

Participants also reported on the importance of staff being engaged and comfortable with DMH. They noted the necessity of *"implementing digital literacy as well for staff, [as] often staff [are] assumed to be on board when they may not be, service users in contrast can push for it" [C]*

In this regard, participants noted the need for specific training in relation to the integration of digital technology.

"I think there's a whole pile on education, even if tablets are issued they need to be supported with education. Some staff are not comfortable with digital and that transfers" [RE]

Equally, participants highlighted that a lack of understanding is not just a barrier for clinicians, but for individuals accessing mental health services. Participants argued that DMH must be accurately promoted, with tailored messaging and support to ensure that individuals considering it as a treatment option fully understand what it entails.

"The assumption that people understand is a barrier. in brain injury services we use the word cognitive skills and people did not understand that, so we had to rearrange all our leaflets ..." [C]

Sub-theme: Mental Health Literacy

Mental Health Literacy was argued by participants to be important to the implementation of DMH.

Participants argued that it cannot be expected that individuals will opt to engage in DMH interventions if they are unaware or uninformed of the evidence base on their effectiveness, relative to face-to-face supports.

“There needs to be more information on the effectiveness [of DMH interventions] in comparison to face to face, someone waiting a long time on a waiting list then getting online therapy they may be unhappy with this because they see it as less effective” [C]

Further, participants reported that mental health literacy allows for individuals to access services appropriate to them, based on their identified needs. The potentially empowering impact of having a better understanding of mental health and knowledge of services was also put forward by participants. This also underscored a need, referenced by participants, to present mental health information in a way that goes beyond a biological model of mental health and provides information and supports informed by a broader psychosocial framework. In both the awareness of mental health difficulties, and the evidence base relating to appropriate interventions, the provision of information was seen as empowering, providing the opportunity to transform how mental health is conceptualised and supported at an individual and population level.

“There needs to be understanding between poor mental health, mental distress or mental illness because what happens is [people who have experienced] adverse childhood events access services that they should never have been assigned to according to the medical model and they end up feeling disenfranchised” [R]

Sub-theme: Transformative

Participants highlighted the potentially transformative nature of DMH, and the need for policy, education and training to keep pace with that impending transformation.

“Digital Mental Health is a rapidly expanding field, there will be huge advances in the lifespan of the policy and this needs to be accounted for”[V]

Participants note that by educating younger generations now we can potentially alleviate further lack of understanding in the future.

“If we think again about cohorts of people. Generation alpha – if we do something now, this is going to get easier over time. There are some groups we need to get up to speed, but others who won’t need to be. Thinking about Ireland in 10 years, it will be very different. If we get these basic pieces done now we will gain momentum” [V]

Participants also acknowledged that younger generations are often targeted based on the assumption that this cohort engages in a heightened use of technology and digital devices. However, many participants highlighted that digital interventions should be inclusive and target everyone, regardless of their perceived ability to engage.

“What mental health services and support should it address? We focus on youth today as we assume they will interact, but naturally this will continue as people get older.....ultimately it should address everyone” [V]

Theme 5: Connectedness

Connectedness refers both to the interpersonal enablers of emotional connectedness and the ways in which connecting people to the appropriate services digitally can reduce stigma. This encompassed the sub-themes of integration of services, relationships, and stigma.

Sub-theme: Integration of services

Participants noted that an advantage of DMH is that it can support people to connect with appropriate services, allowing for timely and responsive care. Additionally, the integration of digital services with standard services expands the reach of healthcare professionals so people *“leave with a sense that they are not alone”* [LE].

However, ethical concerns arose when discussing the risk of integrating more digital services because *“in the wider narrative, DMH has to be an adjunct intervention. We can’t lose sight of the fact that we are human beings.”* [LE]

Sub-theme: Relationships

Participants discussed the therapeutic relationship in the context of DMH. Some participants noted the usefulness of digital technology at different stages in the relationship.

“If you are already established with your clinician... the choice to do stuff online with an existing client is valuable but for someone who has never had contact it is not as valuable”. [C]

As highlighted by this quote, a blended model of delivery was viewed as a means to improve adherence and independence. Specifically, this may better fit mental health service user’s needs when *“moving towards discharge or reviews at that stage sometimes a text or phone check-in is easier when the relationship has already been established”* [C]

However, it was again reiterated by another participant that virtual services are *“not a replacement for person-to-person connection”* [V]. Participants felt the benefits of virtual services are largely rooted in a pre-existing face-to-face therapeutic relationship, and integrating technology such as video-enabled care was best considered once rapport has been established.

Sub-theme: Stigma

The drive for connectedness also arose in the context of stigma. Participants noted that some people prefer to connect using digital tools as a means of overcoming stigma. For instance, *“there are a certain cohort of people who would prefer a Chabot to a person, because there is no judgement”.* [V]

Stigma acts as a significant barrier when it comes to service engagement because *“people don’t want to be seen in their community as if they have a problem with mental health”* [V]

Figure 1. Word cloud developed from words identified by delegates when prompted to “Provide a word or phrase to describe your vision for digital mental health”.

Discussion

Principal Results

Overall, delegates viewed digital as a potential enabler of accessible inclusive mental health support and noted that actively embedding co-production throughout the process was central to realising this. Barriers to inclusive access identified were the need for appropriate digital infrastructure, education and training, evidence base and research frameworks, robust regulation and governance structures to address data privacy and other concerns. Five key themes were identified as pertinent to the development of a DMH strategy: (1) Inclusive Access, sub-themes include; inclusivity, accessibility, and early intervention (2) User-led, sub-themes include; co-production, needs-led, and choice (3) Trust; sub-themes include; compelling narrative, evidence-base, and regulation, policy and governance (4) Education & Training, sub-themes include; digital literacy, mental health literacy, and transformation (5) Connectedness, sub-themes included, integration of services, relationships, and stigma. Analysis of these five themes revealed a pattern of recommendations to guide the next stage, a consensus seeking process, identifying concrete actions and priorities within the national strategy, and inform implementation planning.

Inclusive access

The need to address barriers and inequalities that create a 'digital divide', preventing disadvantaged groups from accessing digital mental health due to lack of access to devices, network coverage and concerns regarding privacy and confidentiality, were highlighted consistently. Those experiencing both mental health inequalities and digital divide barriers are at a particular disadvantage, with a number of groups considered to be at risk of this 'double jeopardy' [14]. Participants indicated that digital could act as a barrier to both access and inclusion if key concerns regarding infrastructure, education and training, and equity of access are not meaningfully addressed. The overarching question discussed repeatedly by participants was whether or not digital will enable greater access and inclusion to mental health support, seemed to be met with conflicting viewpoints, ultimately indicating "that's up to us". The necessity for policy guidance, alongside the design, development, and evaluation process of DMH tools, to actively work to address barriers to access and inclusion was shared amongst participants. Participants noted inclusive access as an essential component of quality mental health services and viewed digital technology as a potential key enabler of that. Participants advocated for co-designed and user-friendly digital tools accessible to all populations, including under-served or marginalised communities and groups. It was argued that this can be achieved by integrating diverse multimedia and avoiding technology that inadvertently excludes certain groups [17, 18]. The current findings add to previous research in highlighting accessibility as being a valued potential benefit of DMH, by further emphasising the importance of access being inclusive to all. Purposefully leveraging the opportunities provided by digital to reach underserved groups that tend to be under-represented in traditional mental health services was consistently argued for.

User-led

The importance of a "user-led" approach in DMH was frequently advocated for by participants. This supports previous research indicating that engaging users and stakeholders in co-production ensures services are tailored to actual needs, improving outcomes and accountability [16]. Where inclusive access was viewed as the ideal outcome, Co-production was identified as the safety rail that will

support us to achieve that goal. Further, prioritising needs-led development ensures technology complements rather than dictates treatment [19]. The theme of “user led” also highlighted the importance of mental health service users being empowered to choose their preferred mode of service delivery. In line with the values of Self-Determination Theory [20], offering mental health service users a choice in their treatment option may fulfil three psychological needs (competence, autonomy, and relatedness) to support enhanced engagement in services and improve the likelihood of fostering positive outcomes [21].

Trust

Trust arose in the data as fundamental to the implementation of DMH. In line with research from Lattie et al [8] and Smith et al [18], participants emphasised the need for compelling narratives as well as robust evidence to overcome scepticism and perceptions of DMH as a temporary or secondary solution.

Education & Training

The need for comprehensive education and training across multiple levels arose in this research. Specifically, participants argued that improving digital literacy through education and training initiatives is needed to address proficiency gaps in both clinician and mental health service user groups. This theme is consistent with previous research and policy developments [41] which outlined the need for the training and development of a sustainable infrastructure of mental health professionals. Indeed, health services such as the National Health Service, have proposed AI and Digital Healthcare Technologies Capability frameworks to address this [42] The current findings advance our knowledge further by indicating the need for a greater focus on both Digital and Mental Health literacy at a population level.

Connectedness

Finally, connectedness was highlighted as a crucial aspect of DMH implementation, reflecting both the importance of human connection, and the potential of digital technology to connect people and services in the face of stigma or disjointed infrastructure. Integrating digital technology to enhance rather than replace face-to-face service delivery may help alleviate stigma and isolation while also addressing individual and community needs [18]. However, as echoed by participants and in previous studies such as Lattie et al., [8], further research is needed to explore the impact of digital modalities within different contexts and with different groups.

Synthesis

The implementation and availability of digital mental health was not seen as a goal in and of itself. Rather, participants viewed digital as a potential enabler of accessible and inclusive mental health support. In contrast, digital could also be viewed as a potential barrier to inclusive access if key concerns regarding available infrastructure, mental health and digital literacy, equity of access, and privacy, are not meaningfully addressed. Participants viewed co-production as a necessary process in order to ensure that access barriers are addressed and DMH realises its potential to enhance choice and placing the person at the centre of their care. Across the entire process, participants moved from initially viewing DMH and discussing it as an *intervention* (e.g. specific mobile apps, websites, devices and psychotherapeutic approaches), to DMH as an *extension* of existing mental health support (e.g. video-enabled care), to finally viewing digital as a *force for change* in society, with the potential to not only fundamentally change how mental health support is provided but ultimately transform how we conceptualise mental health and respond to it in society.

Limitations

This research is subject to certain limitations, primarily the potential for sample bias. Focus groups consisted of participants who likely had a pre-existing preference or interest in DMH which led to them acquiring an expertise in the area. Their attendance may have introduced an element of self-selection which potentially impacts the generalisability of current findings to a broader audience. However, the nuance apparent in the data collected indicates that participants were equally vocal during the discussion session regarding concerns, particularly in relation to data privacy, ethical considerations, and safety in service provision. The use of focus groups, while valuable for generating rich, qualitative data, may have influenced the process due to the groupthink phenomenon [43], potentially allowing for conformity to allow dominant opinions to silence others. Furthermore, industry partners were not involved in focus group discussions due to the public policy-focused nature of the event, and the parameters of the funding call used to facilitate it. However, the DMH industry itself represent key stakeholders, particularly in relation to implementation, and further consultation with this group at subsequent stages will enhance strategy development and implementation. Finally, researchers often favour other methodologies such as Delphi studies or applying content analysis when analysing expert views to inform strategy. However, in the current study, the research team concluded that reflexive thematic analysis would be most appropriate to explore the broad range of experiences and views of a diverse group of stakeholders, and that this approach was most appropriate to the stage of strategy development. Similarly, researchers identified that a Delphi approach would be more appropriately employed at a later stage, for example during the consensus-seeking process to identify priority actions or outcomes.

Clinical Implications and Future Directions

Ensuring inclusive access to mental health support is critical in the design, development and implementation of DMH going forward. Platforms should prioritise co-produced, user-friendly, culturally sensitive designs to engage users effectively, regardless of their level of digital or mental health literacy, age or demographic. Co-production of digital solutions with stakeholders ensures that DMH enhances, rather than dictates, treatment options [8]. Offering users a choice between in-person and digital care fosters a person-centred approach and reduces feelings of isolation [44]. In addition, findings continually highlight the importance for many of face-to-face interaction in developing rapport within the therapeutic relationship. Providing the choice of blended care will facilitate many individuals to overcome access barriers such as stigma and geographical location, ensuring that digital technology is leveraged to enhance rather than replace face-to-face service provision [44].

Education and Training should focus on enhancing digital literacy across clinician and mental health service user populations to bridge proficiency gaps and improve equitable access. Policymakers and commissioners should ensure that funding and continuous education programs align and evolve with technological advancements [5].

Communication of DMH research should speak to the impact and precise utility of digital interventions in mental health for specific groups. A sustainable infrastructure of DMH researchers is needed to build on and maintain an up-to-date evidence base. Standardising DMH terminology is also important to reduce confusion and facilitate trust.

It must also be acknowledged that recent advances in Artificial Intelligence and its application within mental health research and practise, did not garner the level of discussion or focus that may be expected in the current context. The authors have reviewed and added to existing discussion of the methodological and ethical concerns that have arisen in the area (data biases, consent to data sharing, the need for AI explainability and human-in-the-loop processes) [45]. The comparative shortage of data relevant to this topic may reflect the timing of this event in November 2023.

Conclusions

Participants shared a vision of inclusive accessible mental health supports and identified digital as a potentially transformative enabler of this. It was noted that co-production was pivotal in ensuring that digital is leveraged to achieve inclusive access and to avoid the compounding of access barriers for under-served groups. Specific barriers identified included; access to devices, connectivity, affordability, digital and mental health literacy, and specific communication needs. Opportunities to overcome such barriers included overcoming mobility or transport barriers, provision of services in a range of language and by culturally competent clinicians, and in-reach to remote or isolated groups. The need to address key prioritise regarding data privacy, education and training needs, regulation and governance, and robust research infrastructure, was raised. Overall, participant's vision was not of DMH implementation as an ideal outcome, but as a potential enabler of accessible and inclusive mental health care. Whether or not DMH achieves this was viewed as dependent on the extent to which policy, governance and regulation can address concerns, and co-production was viewed as a necessary process to support this. Throughout the process, participants moved from viewing digital as an intervention, to an extension, to a transformative force for change in society. Themes identified were used to guide the next stage, a consensus seeking process, which identified concrete actions for the first national DMH strategy in Ireland, and to guide implementation planning.

Acknowledgements

The stakeholder event that facilitated data collection was hosted at the University of Limerick supported by a Health Research Board Conference and Events Scheme Grant.

Data Availability

The anonymized data included in the Results section is made available through the published article and multimedia appendices. The full anonymized qualitative dataset may be made available to researchers as appropriate by reasonable request to the corresponding author.

Author Contributions

RM developed the original concept. SK and RF led out on data collection and data analysis. All authors contributed to the writing, review, and preparation for submission of the manuscript.

Conflicts of Interest

None declared.

Use of AI

The authors did not utilise AI in conducting this research or in the preparation of the manuscript.

Abbreviations

JMIR: Journal of Medical Internet Research

DMH: Digital Mental Health

RCT: randomized controlled trial

AI: Artificial Intelligence

StV: Sharing the Vision, Ireland's National Mental Health Policy

References

1. World Health Organization. COVID-19 pandemic triggers 25% increase in prevalence of anxiety and depression worldwide. World Health Organization. Published March 2, 2022. Available at: <https://www.who.int/news/item/02-03-2022-covid-19-pandemic-triggers-25-increase-in-prevalence-of-anxiety-and-depression-worldwide>
2. WHO. Global strategy on digital health 2020-2025. www.who.int. Published 2021. Available at: <https://www.who.int/publications/i/item/9789240020924>
3. Kessler RC, Berglund P, Demler O, Jin R, Merikangas KR, Walters EE. Lifetime prevalence and age-of-onset distributions of DSM-IV disorders in the national comorbidity survey replication. *Arch Gen Psychiatry* 2005;62(6):593-602. doi:10.1001/archpsyc.62.6.593
4. Korczak DJ, Madigan S. Opportunities for advancing knowledge and enhancing care in youth mental health. *Lancet Psychiatry* 2024;11(9):673-674. doi:10.1016/s2215-0366(24)00210-4
5. Borghouts J, Eikley E, Mark G, et al. Barriers to and facilitators of user engagement with digital mental health interventions: systematic review. *J Med Internet Res* 2021;23(3):e24387. doi:10.2196/24387
6. Naslund JA, Aschbrenner KA, Araya R, et al. Digital technology for treating and preventing mental disorders in low-income and middle-income countries: a narrative review of the literature. *Lancet Psychiatry* 2017;4(6):486-500. doi:10.1016/s2215-0366(17)30096-2
7. Statista. The Statistics portal for market data, market research, and market studies. Statista.com. Published 2023. Available at: <https://www.statista.com/>
8. Lattie EG, Stiles-Shields C, Graham AK. An overview of and recommendations for more accessible digital mental health services. *Nat Rev Psychol* 2022;1(2):87-100. doi:10.1038/s44159-021-00003-1
9. Löbner M, Stein J, Lupp M. et al. What comes after the trial? an observational study of the real-world uptake of an e-mental health intervention by general practitioners to reduce depressive symptoms in their patients. *Int. J.*
10. Environ. Res. Public Health 2022; 19, 6203 Rost T, Stein J, Löbner M, Kersting A, Luck-Sikorski C, Riedel-Heller SG
User Acceptance of Computerized Cognitive Behavioral Therapy for Depression: Systematic Review, *J Med Internet Res* 2017;19(9):e309
doi: 10.2196/jmir.7662
11. Zhong S, Yang X, Pan Z, Fan Y, Chen Y, Yu X, Zhou L. The Usability, Feasibility, Acceptability, and Efficacy of Digital Mental Health Services in the COVID-19 Pandemic: Scoping Review, Systematic Review, and Meta-analysis. *JMIR Public Health Surveill.* 2023 Feb 13;9:e43730. doi: 10.2196/43730. PMID: 36634261;PMCID: PMC9930923.
12. Diel A, Schröter IC, Frewer AL. et al. A systematic review and meta analysis on digital mental health interventions in inpatient settings. *npj Digit. Med.* 7, 253 (2024). <https://doi.org/10.1038/s41746-024-01252-z>
13. Beatty, L. & Binnion, C. A Systematic Review of Predictors of, and Reasons for,

- Adherence to Online Psychological Interventions. *Int J. Behav. Med* 23, 776-794 (2016). DecPMID: 26957109.
14. Mental Health Reform. Digital inclusion and access to mental health services: reducing barriers and leveraging the positive potential. Executive summary. October 2023. Available at: https://mentalhealthreform.ie/wp-content/uploads/2023/10/Mental-Health-Reform_Digital-Inclusion_Executive-Summary_2023-111023.pdf
 15. Digital for good: Ireland's digital inclusion roadmap. Department of Public Expenditure, NDP Delivery and Reform (DPENDR, 2023). Available at: <https://assets.gov.ie/267401/a898d78c-e234-465f-bedd-7ccd0655b7d2.pdf>
 16. Smith K, Blease C, Faurholt-Jepsen M, et al. Digital mental health: challenge and next steps. *BMJ Ment Health* 2023;26(1):e300670-e300670. doi:10.1136/bmjment-2023-300670
 17. Elena-Bucea A, Cruz-Jesus F, Oliveira T, Coelho PS. Assessing the role of age, education, gender, and income on the digital divide: evidence for the European Union. *Inf Syst Front* 2020;23:305-316. doi:10.1007/s10796-020-10012-9
 18. Smith H, Budworth L, Grindey C, et al. Co-production practice and future research priorities in United Kingdom-funded applied health research: a scoping review. *Health Res Policy Syst* 2022;20(1):1-10. doi:10.1186/s12961-022-00838-x
 19. Brotherdale R, Berry K, Branitsky A, Bucci S. Co-producing digital mental health interventions: a systematic review. *Digit Health* 2024;10:1-11. doi:10.1177/20552076241239172
 20. Deci E L, Ryan R M. Intrinsic motivation and self-determination in human behavior. 1985, New York: Plenum.
 21. Ryan RM. Psychological needs and the facilitation of integrative processes. *Journal of Personality*, 1995, 63, 397-427.
 22. Vansteenkiste, M., Ryan, R. M., & Soenens, B. (2020). Basic psychological need theory: Advancements, critical themes, and future directions. *Motivation and Emotion*, 44(1), 1–31. <https://doi.org/10.1007/s11031-019-09818-1>
 23. Ryan RM, Deci EL. Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 2000, 55(1), 68–78. <https://doi.org/10.1037/0003-066X.55.1.68>
 24. Ryan RM, Deci EL. Self-determination theory: basic psychological needs in motivation, development, and wellness. *Rajagiri Manag J* 2021;15(1):88-90.
 25. Thomas EC, Zisman-Ilani Y, Salzer MS. Self-determination and choice in mental health: qualitative insights from a study of self-directed care. *Psychiatr Serv* 2019;70(9):801-807. doi:10.1176/appi.ps.201800544
 26. Government of Ireland. Sláintecare action plan: right care, right place, right time. 2023. Available at: <https://www.gov.ie/en/publication/49c5c-slaintecare-action-plan-2023/>
 27. Department of Health. Sharing the vision: a mental health policy for everyone. Dublin, 2015. Available at: <https://www.gov.ie/en/publication/2e46f-sharing-the-vision-a-mental-health-policy-for-everyone/>
 28. Department of Health. Connecting for life: Ireland's national strategy to reduce suicide 2015-2020. DoH, Dublin. Available at: <https://www.hse.ie/eng/services/list/4/mental-health-services/nosp/preventionstrategy/connectingforlife.pdf>
 29. Health Service Executive. HSE National Telehealth Roadmap in 2023. Available at: https://assets.hse.ie/media/documents/HSE_Telehealth_Roadmap_full_report.pdf
 30. Wexler et al. Digital mental health interventions: challenges and opportunities. *PubMed* 2019;22:295-310. doi:10.1186/s44159-019-00050-2
 31. Ienca M, Vayena E, Blasimme A, et al. Ethical issues of digital mental health interventions.

- Lancet Psychiatry 2017;4(4):1-4. doi:10.1016/s2215-0366(17)30052-8
32. Wies B, Landers C, Ienca M. Digital mental health for young people: a scoping review of ethical promises and challenges. *Front Digit Health* 2021;3(1):1-10. doi:10.3389/fdgth.2021.697072
 33. Braun V, Clarke V. Using thematic analysis in psychology. *Qual Res Psychol* 2006;3(2):77-101. doi:10.1191/1478088706qp063oa
 34. Liebenberg L, Jamal A, Ikeda J. Extending youth voices in a participatory thematic analysis approach. *Int J Qual Methods* 2020;19:1-12. doi:10.1177/1609406920934614
 35. Xu W, Zammit K. Applying thematic analysis to education: a hybrid approach to interpreting data in practitioner research. *Int J Qual Methods* 2020;19(2):1-9. doi:10.1177/1609406920918810
 36. Johnson RE, Grove AL, Clarke A. Pillar integration process: a joint display technique to integrate data in mixed methods research. *J Mix Methods Res* 2017;13(3):301-320. doi:10.1177/1558689817743108
 37. Bryman A. Integrating quantitative and qualitative research: how is it done? *Qual Res* 2006;6(1):97-113. doi:10.1177/1468794106058877
 38. Brooks J, King N. *Applied qualitative research in psychology*. Bloomsbury Publishing; 2017. ISBN:1137359153.
 39. Lingard L. Beyond the default colon: effective use of quotes in qualitative research. *Perspect Med Educ* 2019;8(6):360-364. doi:10.1007/s40037-019-00550-740. Jackson AY, Mazzei LA. *Thinking with theory in qualitative research*. 2nd ed. Routledge; 2022. ISBN:9781317359081
 41. Melia R, Monahan L, Duggan J. et al. Exploring the experiences of mental health professionals engaged in the adoption of mobile health technology in Irish mental health services. *BMC Psychiatry* 21, 412 (2021). <https://doi.org/10.1186/s12888-021-03426-5>
 42. Health Education England. Artificial Intelligence (AI) and Digital Healthcare Technologies Capability Framework, 2023. Available at: <https://digital-transformation.hee.nhs.uk/building-a-digital-workforce/dart-ed/horizon-scanning/ai-and-digital-healthcare-technologies>
 43. Shaukat R. Impact of group think in decision making process across different professional groups. *Int Res J Manag Soc Sci* 2024;5(2):410-432
 44. Gormley E, Melia R, McCormack S, Paige Phayer B and Madden J (2023) The experiences of young people, parents and professionals of using the attend anywhere video consultation system in a child and adolescent mental health service: a mixed-methods approach. *Front. Child Adolesc. Psychiatry* 2:1194302. doi: 10.3389/frcha.2023.1194302
 45. Bernert RA, Hilberg AM, Melia R, Kim JP, Shah NH, Abnoui F. Artificial Intelligence and Suicide Prevention: A Systematic Review of Machine Learning Investigations. *Int J Environ Res Public Health*. 2020 Aug 15;17(16):5929. doi: 10.3390/ijerph17165929. PMID: 32824149; PMCID: PMC7460360.

Supplementary Files

Untitled.

URL: <http://asset.jmir.pub/assets/5df198095354e6fe8b55859724ced445.docx>

Multimedia Appendixes

Focus Group Question Prompts.

URL: <http://asset.jmir.pub/assets/96ada3e2e2500125e563532e7e427b05.docx>