Towards a better understanding of peer support platforms for digital mental health

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Learning from stakeholder engagement and mapping a Theory of Change

THE UNIVERSITY *of* EDINBURGH

togetherall

1 Table of Contents

2 Executive summary

With the high prevalence of mental health problems, particularly for young people, there is an urgent need to increase scalable access to effective mental health support and treatment at population level. Digital mental health (DMH) can play an important role in the mental health ecosystem, offering opportunities to improve access to evidence-based, psychologically informed treatments and support mechanisms. Best practice in digital mental health can also ensure safety and vibrancy of online support environments, alongside clear protocols for risk management. Digital peer support is a common element of DMH products and services, involving people sharing knowledge, experiences, advice, or practical help with each other, and provides benefits that 'traditional' face-to-face therapeutic approaches do not. However, further research into the effectiveness, utility, and acceptability of DMH platforms is needed.

Key Findings

- DMH peer support fills a service provision gap, and increases service-user choice and accessibility
- DMH is part of a wider ecosystem of suport
- DSuccessful platforms have clear guidance, a clear user interface and architecture, and well-designed procedures for risk management and escalation of concerns.
- Improving DMH platforms requires co-production and collaboration between users, DMH provides, comissioners, policy makers and the research community.

Our collaborative project worked with Togetherall, a DMH provider, to develop a model of how a DMH peer-support platform works in practice. In doing so we sought to identify stakeholder's perspectives on commissioning and/or using the platform to develop a model of how the use of DMH peer-support operates in practice, and the benefits it can bring. We developed a Theory of Change (ToC) for DMH peer support to understand the lived experience of how these platforms work for different stakeholders.

Findings highlight 3 distinct pathways through the platform for Togetherall staff, members using the platform, and commissioners who signpost to the platform. The platform was felt to fill a service provision gap and increase service-user choice and accessibility. Functionality within the platform to maintain a safe and vibrant community was highlighted as important. Provision of a safe online environment for all members was felt to lead to longer-term improvements in symptoms and wellbeing, whilst also enabling management of individuals in crisis using escalation procedures.

DMH peer support was felt to inhabit part of a wider ecosystem of support either imbedded within a care pathway or as an additional component of in-person mental health services. It was also felt to alleviate demand on mental health services, whilst also empowering people to access resources and manage their mental health independently from formal services. We highlight that successful

platforms have clear guidance for commissioners and users, have a clear user interface and architecture, and well-designed procedures for risk management and escalation of concerns.

Further work is required to better calibrate outcome measurement, understanding what causes members using peer support to disengage, how members perceive and react to supports, and how online social networks work in DMH environments. There are also opportunities to better understand risk management and to develop more responsive legal and regulatory frameworks in the field. Additionally, we highlight the importance of co-production and collaboration between users, DMH providers, commissioners, policy makers and the research community.

3 Introduction

3.1 Mental health & the challenges for interventions

Prior to the COVID-19 pandemic, it was estimated that approximately 1 in every 8 people around the world were living with a mental health issue (1). Problems with mental health are associated with disturbances in thinking, behaviour, and emotional regulation. Within the UK, an estimated 1 in 6 people above the age of 16 experience a "common mental health" disorder each week such as depression or anxiety. Mental health concerns are also more common in women and in younger adults (2–4).

Since the pandemic the occurrence of anxiety and depression has increased by an estimated 26-28% (5). In a UK survey conducted by YoungMinds, 81% of young people (aged 13-25) reported that the pandemic had worsened their mental health (6). The most common problems described were increased feelings of loneliness and isolation, increased anxiety, and a loss of motivation and productivity. While it is uncertain how mental health rates will change as we emerge from the pandemic, evidence strongly suggests that, since the 1990's the burden of global mental health has been growing. Indeed, mental health is a key public health priority, with increasing societal support for the design and implementation of responsive systems to ensure population mental health (7). In this context, Digital Mental Health (DMH) is a critical component of the mental health ecosystem.

Within the UK, psychological intervention delivery varies by intensity (i.e., high to low) and specialism (i.e., by age, stressor, or problem behaviours) (8,9). The growing public health demand for mental health provisions has made enhancing support and access a priority (8,9). Between 2008-2019 increased funding and implementation of psychological therapies in England has improved the uptake of services and recovery rates (10). Despite this, a "postcode lottery" remains as to what services are available to patients in their local area, with more deprived areas having less resources (11). This further entrenches mental health and wellbeing inequalities in the UK. Even in areas where services are available, there continues to be barriers related to waiting times to receive the intervention, the availability of staff and the cost to deliver interventions, and transitions between child and adult services (12–14).

Waiting for mental health support has been highlighted as contributing to worsening symptoms. The Centre for Mental Health in the UK found on average that young people experience a 10-year gap between their first symptoms and receiving help (15). For those who do receive help from a younger age, the

transition from child to adult services (~16-18 years) is a particularly vulnerable stage where mental health can worsen, or they can drop out of services (15,16). Those with a severe mental health issue are more likely to successfully transition between services than those with neurodevelopmental, emotional disorders and personality disorders, suggesting individuals experiencing common mental health difficulties like anxiety or depression are lost to services (17). In a qualitative study, participants reported being put on waiting lists in the UK resulted in a deterioration of their psychological health by increasing negative beliefs, emotions, thoughts, and behaviours (18). The risks of being on a waiting list have been highlighted by the Royal College of Psychiatrists, who reported two-fifths of patients resorted to emergency or crisis services while waiting for intervention (19).

Barriers also emerge in engaging with services. Young adults often show a reluctance to seek formal support for their mental health (20), are less likely to seek help if they are experiencing depressive symptoms and have negative attitudes or past experiences of receiving help. Conversely, they are more likely to seek help if they had increased knowledge of available services, language to express their feelings and felt they could trust the provider. Finding ways to address these barriers by improving attitudes to help-seeking, creating resources to expand understanding and language used around mental health, and increasing accessibility to support could improve outcomes for young people.

Importantly, these mental health challenges are nested within a broader landscape of societal pressures, with social and health inequalities being increasingly important determinants of poor mental health and wellbeing. The Marmot review emphasises the importance of the social determinants of health in society (21). A 10-year update of the review highlights that these inequalities persist, and in particular deprivation experienced in childhood can perpetuate and lead to poor health outcomes into adulthood (11). Furthermore, research has shown adults living with mental health issues are more likely to have a physical health condition, have higher mortality rates, less social support and live in deprived areas (22–24).

Digital mental health can play an important role in the metal health ecosystem, offering opportunities to improve access to evidence-based, psychologically informed treatments and support mechanisms. Best practice in digital mental health can also ensure safety and vibrancy of online support environments, alongside clear protocols for risk management and pathways into higher intensity approaches if indicated.

Challenges for improving DMH within the wider mental health ecosystem include:

- Improving adoption and uptake of DMH by commissioners and organisations.

- Improving access for users of DMH platforms.
- How to configure DMH platforms to ensure safety and vibrancy
- Understanding risk and processes for escalation in the DMH environment
- Using evaluations to improve outcomes and understand the context of DMH platforms.

3.2 What is digital mental health?

Digital mental health is an umbrella term to describe the delivery of online psychological support, education, and therapy (25). DMH is a resource which could buffer the inequalities and barriers mentioned above (25). The definition of DMH includes interventions delivered via websites, mobile applications, and telehealth (I.e., telephone or videoconference-based interventions). Using such technologies could enable access to mental health support in a quicker, convenient way and alleviate demand on health care providers (26). These resources are efficacious in providing access to mental health support, with web-based and mobile applications being preferred by users and promoting higher levels of engagement than telehealth (27,28). The flexibility of online resources, offers the potential to promote behaviour change (e.g., incorporating self-care practices), deliver education and terminology to understand and express mental health and enables delivery to be tailored to different presenting problems, ages, cultural groups, and interests. There are also differences between web-based and app-based approaches. Web-apps are often universal delivery mechanisms, albeit with some limitations in comparison to true apps, particularly with respect to push-notifications. A review into how these interventions are effective for people with mental health problems found the following benefits: they reach harder to reach populations (i.e., by tackling geographical barriers), are cost-effective (i.e., they can be delivered to more people by non-specialists) and offer more privacy and require less disclosure which may increase participants engagement and feelings of comfort (29).

With COVID-19 face-to-face services were forced to an online format and the barriers associated with accessing support were exasperated (13). The movement to online delivery has increased the interest in understanding the efficacy of such interventions as a scalable solution to promote prevention, early intervention, self-management, and provide interim support while on waiting lists (30,31).

3.2.1 Peer support & digital mental health

Within the sphere of digital mental health, digital peer support is a common element of DMH products and services. Peer support involves people sharing knowledge, experiences, advice, or practical help with each other (32,33). This

type of support can be informal (i.e., naturally occurring between untrained peers), formal (i.e., delivered by a peer who has received training in the subject, typically someone who has recovered or experienced similar issues) or a combination of both these aspects (33). The format of this support varies between platforms. Some platforms implement a forum-type format where members can post and receive feedback from peers, while others may imbed members within a smaller group. Further, much online peer support is unmoderated, with potentials for harms via unmodulated hostile interactions, spreading of triggering content, or of misinformation. Moderated platforms can help shape safer, healthier online DMH communities (34). However, moderation differs in terms of who delivers (mental health practitioners or non-practitioners), level of training, modality (24/7 or at set hours only), immediacy (live versus offline) and the degree to which moderators can escalate risk via effective emergency protocols).

Peer support elements of DMH potentially provides benefits that 'traditional' face-to-face therapeutic approaches do not. The Scottish Health Survey found if people felt they had more people they could receive support from in a crisis they had better mental wellbeing – social support as a mediator for mental health (3). Peer support can facilitate positive mental health by increasing social connectedness, confidence and knowledge, normalising experiences, and reducing feelings of isolation for both providers and recipients (32,35). In addition to these, those providing peer support experience a development in person-centred skills (35). Crucially, during the pandemic, peer support was found to have a positive effect on mental wellbeing whilst access to services was reduced (36).

Although more evidence is needed for the specific contribution peer support has on DMH platforms, the combination has shown some promising results (37–39). This combination has been found to be effective in improving mood and anxiety symptoms (40). When comparing outcomes between DMH services which offered guidance from clinicians versus non-clinicians (e.g., peer supporters) improvements in wellbeing were comparable (41). However, there is a need to explore the barriers and facilitators of implementing DMH within the mental health landscape to improve its utilisation (42). Additionally, the ways in which DMH services can create and shape a community of users to support or enhance mental health are still unclear.

3.2.2 User experience

Understanding and exploring the user experience of DMH platforms can help to identify the benefits and challenges in this approach. Having access to digital peer support has been associated with a reduction in feelings of isolation and increased feelings of social connectedness (43,44). Being able to compare experiences and perspectives potentially provides valuable information to members which

enhances feelings of hope and empowerment (43). Participants of such platforms report they are useful tools for self-reflection, they are easy to access, and offer opportunities to reach out for support in an anonymous and discreet way (45,46).

Systematic reviews of barriers and facilitators of engagement in these platforms identify three key factors (47,48):

1) User characteristics

Influential user characteristics included mental health status (i.e., severe mental health acted as a barrier), experience and skills around technology and mental health, and how well the platform and advice could be integrated into the person's life.

2) Users experience of the content.

Content factors included the type of content (i.e., information and features of the platform), how well the guidance fitted with the user's needs and culture, feelings of social connectedness, and whether participants felt it was making an improvement to their lives.

3) The technology used to deliver these platforms.

Technology factors included usability, the appeal and format of the content and interactions (e.g., amount of text versus videos), concerns over privacy and confidentiality, and how acceptable the platform was to their social environment external to the platform.

Although peer support within DMH platforms has shown promise, members/users have identified concerns. These include encountering peers with unhealthy coping mechanisms, exacerbating their own symptoms through unhealthy comparisons or engagement with people who have similar issues, feeling unable to offer the required support, safety concerns (e.g., being invited to meet someone in real life), and cyberbullying (49,50). We need to better understand the reality of these risks and how they can be effectively mitigated.

3.2.3 Risk & Management

Utilising DMH approaches to support young people and adults in need of intervention comes with a responsibility for commissioners and platforms to manage potential risks to members. Challenges associated with the use of these platforms include lack of control over content, deterioration of member's mental health, absence of training of peer supporters, and privacy concerns (25,51).

Due to the infancy of DMH peer support within the wider mental health landscape there is a need to research further the associated risks and how these can be effectively managed for members (25,51). There is also a lack of policy for platforms in how to identify and manage risk effectively and where responsibilities lie for escalation and handling crisis (52). Exploring experiences and factors associated with risk and management in DMH peer support platforms with stakeholders can inform policy, practice and improve mechanisms in platforms.

4 Research Overview

4.1 What is missing/do we need to know?

DMH that incorporates peer support has the potential to bridge gaps in the availability and resources for mental health support. Despite the promise of these interventions, we need to increase the evidence base for what works in these platforms (e.g., techniques, member preferences, how to effectively manage risk), how these can be effectively blended into other mental health services, how we can make platforms responsive and adaptable to member's needs; and how to effectively implement them to maximise adoption and use of these resources by practitioners and members (52,53).

Since the pandemic there has been calls in the UK to understand better the role DMH and peer support plays in the mental health landscape. Enhancing our understanding of what happens when members use the platform from beginning to end can inform content and design of platforms as well as increased awareness of its suitability and place in the wider mental health landscape. The mental health strategies of the 4 UK central and devolved governments have allocated resources to the development, incorporation, and research of digital tools and peer supports. This is an opportunity for widening access to support and self-management (54–57). As an example, the Scottish Health Technologies Group (SHTG) assessed the efficacy of the Togetherall platform (which is offered to populations via local authorities, employers, and educational establishments) and found there was evidence that the platform improved mental health outcomes and it can play a role in supplementing mental health services (58). However, they noted further research into the effectiveness, utility, and acceptability of the platform is needed. The following areas in user and commissioner experience require further exploration:

- What leads to a person using a DMH peer support platform?
- How do people use these platforms?
- What are the active ingredients in these platforms that leads to engagement and improvement?

- What are the barriers and facilitators experienced by participants of these platforms?
- What are the goals when using these platforms?
- What does success look like?
- How is risk and escalation managed?

To explore these challenges, we worked with Togetherall to develop a model of how a DMH peer-support platform works in practice. In doing so we sought to identify stakeholder perspectives on commissioning and/or using the platform, developing a model of how use of DMH peer-support operates in practice, and the benefits it can bring. The perspectives we identified were collated to inform a Theory of Change (ToC).

4.2 What is a theory of change?

A theory of change aims to describe how and why an intervention (i.e., project, platform, programme, or policy) works (59). It offers an explanation of how the intervention affects behaviour and change by considering the inputs, processes, outcomes and the wider contextual influences (60–62). The value of this approach is in identifying what conditions the intervention works under by exploring the connections, assumptions, facilitators, and barriers within and external to the intervention (62). This method is often used to plan and/or evaluate the impact an intervention is having in the real-world (63,64). ToC use involves engagement with a range of stakeholders to build the theory based on their experiences and encourage their interest in the research (61,62). This is an iterative process where stakeholder engagement informs the creation and revisions of the ToC (61). By considering how and what makes an intervention work from start to finish and within the wider social and environmental context problems, benefits, and gaps in knowledge and research can be identified.

4.3 Approach to the Research

To develop a theory of change of peer support and digital mental health we adopted a qualitative approach to understand the lived experience of how these platforms work from different stakeholders. We used Togetherall as a candidate example of a DMH peer support platform we identified and approached key stakeholders to take part in a launch event and focus groups. The launch event and focus groups were semi-structured and guided by the theory of change model (i.e., participants were asked questions on inputs, processes, outcomes, and assumptions of DMH use).

Togetherall provides an online support community and self-management resources to support and improve the mental health and wellbeing of people with a range of mental health and psychological needs. Designed on the principles of peer support, Togetherall service users ('members') draw on their strengths and experiences to support one another.

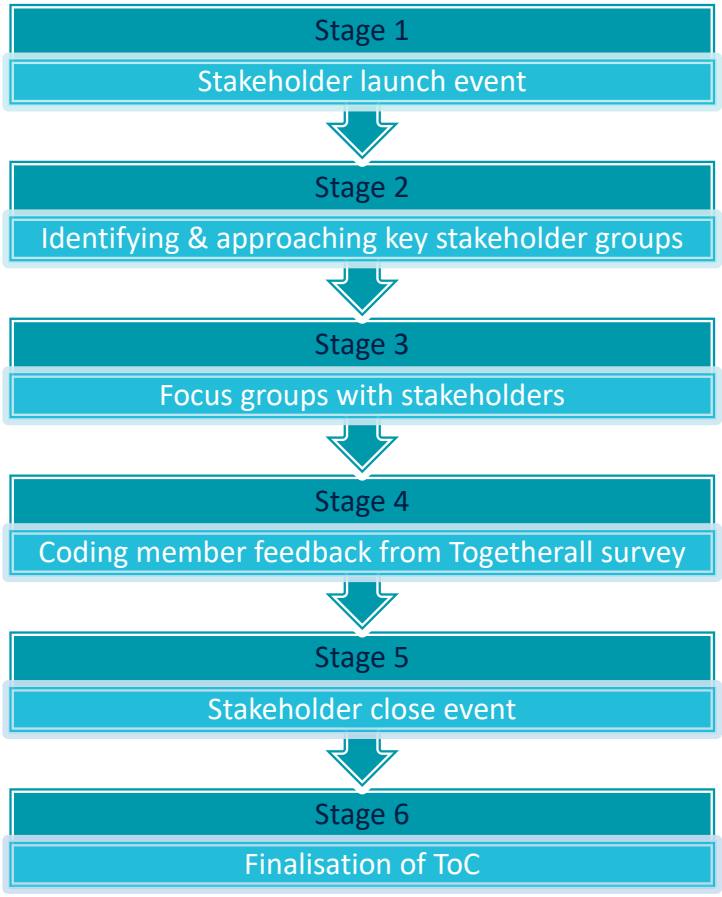
Members share text-based and creative posts anonymously on issues including relationships and family, stress, identity, financial concerns, loneliness, and isolation and coping with mental and physical health challenges. This is complemented by self-management tools and resources drawn from evidence-based practice. Togetherall is moderated and monitored 24/7/365 by a team of fully licensed and trained mental health professionals and clinicians. They encourage and moderate for safe and healthy interactions, support individuals with 1-2-1 support and detect and respond to individuals at risk or in crisis. All risk episodes are case managed by the clinical team following locality specific escalation protocols.

The platform is used by a wide range of people aged 16 and above with temporary and or prolonged mental health needs. Togetherall acts as a population-based support to complement early-intervention, long-term condition management, wrap around support and recovery strategies. Most users present with some symptoms of depression or anxiety ranging from mild to severe. Togetherall is available via partners in the USA, Canada, UK, Ireland, New Zealand, and Australia and is commissioned by a range of health, university, college, employer, and voluntary sector agencies.

Registered mental health professionals ("Wall guides") continuously moderate Togetherall forums and offer guidance to users. The platform also sends automatic notifications of online activity to members. Components of Togetherall include guided courses ("Guided Support"), self-help materials ("Useful Stuff"), peer support forum ("The Community") and platform for creating digital art ("Bricks"). Separate from these services, some organizations also commission online psychotherapy ("Live Therapy"). Togetherall's "Guided support" offers free structured programs on mental health and general wellbeing, lasting 2 to 8 weeks.

Members can sign up for multiple courses, opt-out and choose when to do activities. Enrolled participants receive weekly course activities, notifications and email prompts and are encouraged to use peer support feature from a dedicated course forum. Self-help materials include psychological and health education and advice on skills development. These materials are organized into 8 categories, including emotional health, life-skills, health and lifestyle. Togetherall also offers voluntary self- monitoring of wellbeing on a large number of validated mental health measures (e. g., depression, anxiety, self-esteem). Members are encouraged to complete routine anxiety and depression measures, at first login (baseline) and throughout completion of Togetherall activities.

Figure 1: Stages of the project



Our stakeholder launch event introduced the project to stakeholders and involved breakout rooms to discuss their thoughts on different aspects of the theory of change. The launch event had 16 stakeholders from education, local authority, and Togetherall. The results from the stakeholder launch were used to produce the first draft of the ToC and identify key stakeholders for subsequent focus groups. We held a further 2 focus groups (7 participants) which involved stakeholders from education, employers, members of the platform, and the Togetherall clinical team. Following the focus groups, we identified some gaps in the member experience. To gain more insight into member experiences, we also coded qualitative feedback collected by Togetherall from 53 participants on whether they would recommend the platform to a friend and why to inform our understanding of limitations and benefits of the platform.

We used a thematic framework approach to code all the data. The key stages were: familiarisation with the data, identifying a thematic framework, coding using the framework and charting/mapping the data (67). We mapped the data using the framework matrix function in NVivo 12(68,69). This function generates a matrix of rows for cases (i.e., stakeholder group) and columns for theme nodes (i.e., ToC components). Each cell in the grid represents the intersection of the theme and case and summaries can be typed in. This makes it easier to have an overview of the responses to ToC components, review particular stakeholder groups, and

compare commonalities and differences in responses between groups. We grouped stakeholders as either Togetherall staff, commissioners (i.e., health services, educational establishments, or employers) and members of the platform. Grouping and reviewing the data in this way enabled us to identify gaps (i.e., in the ToC or from a particular stakeholder group) so subsequent focus groups and data could be arranged.

The coding framework was structured reflecting the typical structure of a ToC model where data were coded based on whether it was an input, process, outcome or reflected wider contextual integration or influence. We used a mixture of deductive (i.e., generated from the ToC model) and inductive (i.e., generated from the data), where deductive codes were used as the overarching themes and inductive as sub-themes to offer deeper insights into emergent ideas from stakeholders. By structuring the analysis in this way, we could identify and compare different outcomes and understanding between stakeholders from the beginning to the longer-term outcomes of the intervention (70). Developing the theory of change was an iterative process where it was updated throughout the project following coding of transcripts.

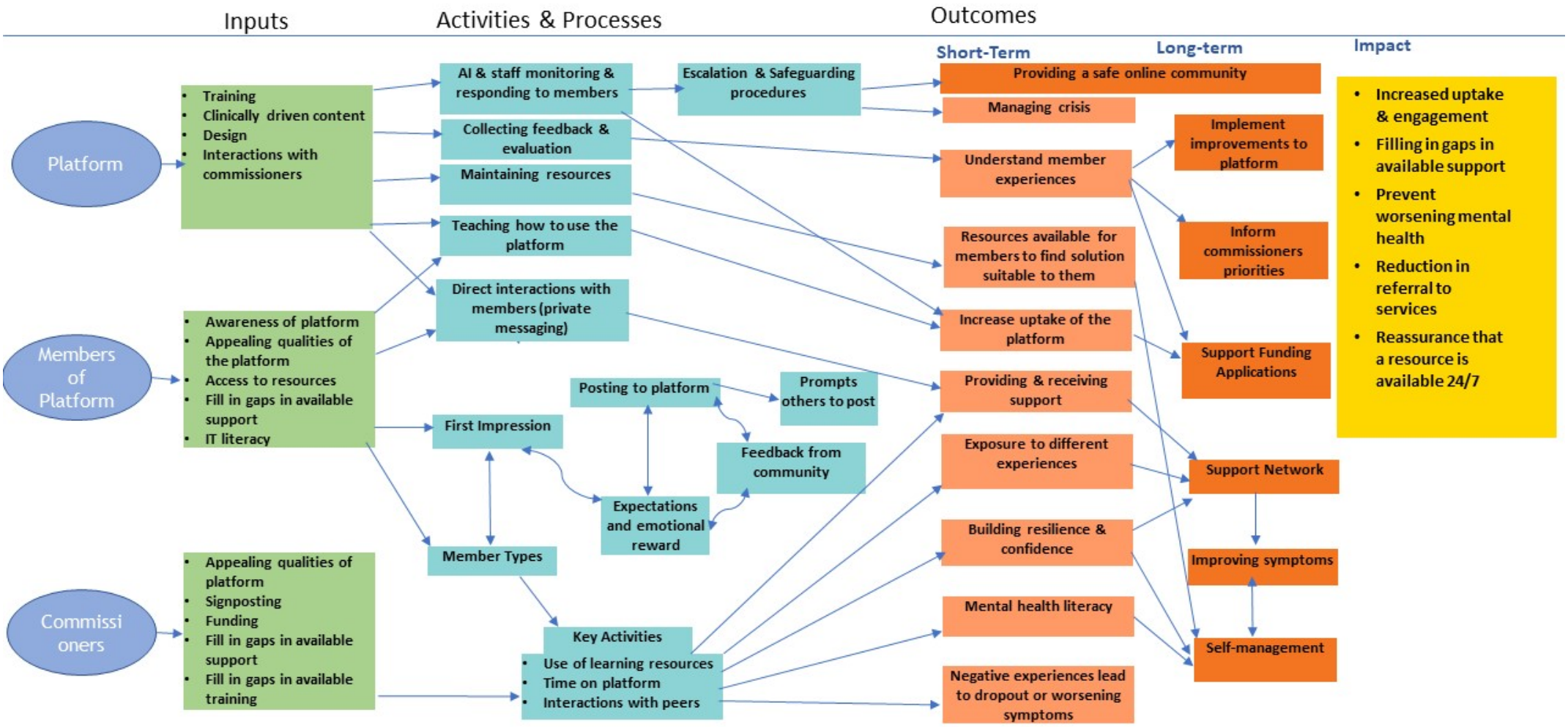
4.4 Key Findings

Figure 2 shows the final theory of change. Overall, the findings show platform, member, and commissioner pathways from input to outcomes during the use of these platforms. The ToC highlighted different uses of and ways to engage with the platform as well as barriers and facilitators of use. Each component of the ToC is discussed in more detail in section 3.4.1-3.4.5 below.

4.4.1 Assumptions

There were several key assumptions made by the platform, commissioners, and members throughout the ToC. Platform and commissioner assumptions included members are young people, members want and prefer online services, the platform is accessible (i.e., everyone has access to internet and a device which can use the internet), viewing other members content is positive, and members understand the data handling and safeguarding procedures. Member assumptions included it is a safe environment, they have anonymity, they will engage with people with shared experiences, and other members will not disengage like in-person peers can.

Digital Mental Health & Peer Support -Theory of Change



4.4.2 Pathways

Overall, 3 main stakeholder pathways were identified when using the platform. These were the pathways for the platform staff, members using the platform, and the commissioners who signpost to the platform. The inputs for each relate to factors which link to uptake of the platform and the content and design of the platform. Activities and processes relate to what happens when the platform is being used. The short- and long-term outcomes show the results of the processes leading to the longer-term impact of the platform. Throughout the pathways there are a range of barriers, assumptions and risks which are listed at the bottom of the figure.

4.4.3 Inputs

Platform inputs were the characteristics of the platform and interactions with commissioners. The platform was designed to be a safe space available 24/7 for members to engage with peers about their mental health. Within the design to monitor the digital community, AI was developed, and staff and resources were updated to deliver clinically informed support. The platform also had interactions with commissioners to increase uptake of the platform.

"...saying to people there is peer support on Togetherall like you can find your tribe, there's thousands of people. It's not just this institution and that way you know you can actually maybe get understanding and recognition and maybe normalization of those difficult experiences in a way that we just can't do as one [institution]"

Commissioner inputs related to filling in gaps in mental health support. Qualities deemed appealing to commissioners included: providing peer support to enhance a sense of belonging, shared experience, and normalisation, as well as a platform which was clinically monitored to identify those at risk.

Commissioners liked the sense of choice and accessibility the platform gave to members – that they could chose when, where, and how much to engage with the platform. They also noted that funding could limit whether they could include the platform within their resources.

Funders could also set parameters on who the platform should be offered to which could limit accessibility and opportunity for uptake in different age groups.

A barrier to funding applications was not having qualitative evidence to include in applications. Throughout the ToC, commissioners identified dissemination and uptake of the platform as key barriers. They found it difficult to get members to

engage and tried a range of strategies to increase uptake with differing levels of success.

Members shared similar inputs to commissioners in that awareness of the platform, increasing access and filling in gaps in available support would lead to them trying the platform. Key barriers to use were a perceived lack of convenience (i.e., it not being a mobile phone application), digital poverty (I.e., not owning or being able to afford an internet compatible device), poor IT literacy skills, and finding the content overwhelming.

4.4.4 Activities & Processes

The platform had several crucial ongoing practices to maintain a safe online-community for members. The platform primarily interacts with members through direct messaging to offer support and encouragement to engage with the resources and other members. To maintain a safe community. The platform adopts AI monitoring of member posts for "risk" terms that would indicate the member needed further support. If a risk term was flagged, a member of staff would receive an alert and respond either by communicating with the member or escalating to senior staff if necessary. These judgements were made based on staff experience and ongoing training. Where uncertain, staff would alert a senior staff member. In situations where escalation had to go beyond the platform (e.g., police or health service involvement) the platform followed pre-agreed procedures with each commissioning body.

Other activities on the platform included collecting feedback and evaluation from members of the platform, maintaining educational resources, and going out to commissioning bodies to teach members how to use the platform.

The first action from members was using the platform. It emerged that the first impression was one of the critical times for determining whether a member would continue to engage with the platform. If this were a negative impression or members had a negative experience while doing any of the key activities, they would disengage from the platform. This is consistent with existing studies of user engagement in DMH (71). If it was positive, a member would go on to use the platform in diverse ways. Our stakeholders discussed 3 ways members could use the platform:

1) Actively engaging with the peer support (i.e., posting)
2) Passively engaging with peer support (i.e., reading posts but not posting)
3) Using resources.

Those who did post to the platform engaged in a feedback loop whereby they had expectations of how others would react to their post. The reaction from the community would then inform their future expectations and posting behaviour. A contagion effect is also observable, whereby once someone posts, it encouraged others to also post. Members who were enthusiastic about the platform were described as teaching others how to use the platform at their institutions by creating videos. Commissioners raised key risks related to the social aspect of the platform including the risk of members worsening each other's mental health or behaviours (i.e., through sharing unhealthy coping strategies or interpretations of events), not receiving the level of support they need or becoming too demanding of the support of a peer; and being identified by oversharing.

Commissioners did not identify any activities influential to the member's journey. However, it was observed by commissioners that they use the platform as a form of continued professional development to address gaps in available mental health training.

4.4.5 Outcomes

There was a consensus from commissioners that outcomes and goals of platform use were tailored to the individual. Since the platform was used for varied reasons, it was recommended to fill in gaps in support which commissioners felt could be filled by peer support. However, overarching outcomes were identified which could apply to all members.

From the platform processes, the outcomes were to provide a safe online environment for all members, which managed people in crisis using escalation procedures. This would lead to longer-term improvements in symptoms. The platform also increased their understanding of member experiences, kept up-to-date resources available to members, and increased uptake of the platform through their processes. In the longer-term feedback and increasing uptake could

lead to improvements in the platforms and support for funding applications for commissioners.

The remaining outcomes related to the results of using the platform. Short-term outcomes included receiving support, being exposed to different experiences, building resilience and confidence, and improving mental health literacy. Participants noted a variety of benefits of peer support including developing a sense of belonging, feeling support is always available, normalisation and validation of experiences, and learning how to cope with experiences based on other members' experiences. Negative outcomes from peer support included learning unhealthy coping behaviours, self-diagnosing, or feeling unable to offer the support needed by another member. These led to the longer-term outcomes of improving symptoms, building an online support network, and developing self-management skills and strategies.

4.4.6 Impact

Stakeholders identified 4 ways that the use of DMH and peer support could have a positive impact on mental health systems:

1) Uptake and engagement with these resources. This could support funding applications to endorse these platforms and improve skills and levels of support for the public.
2) Preventing worsening mental health when someone is waiting for support (i.e., either due to the weekend, holidays or being on a waiting list).
3) Reduced referrals to services. This was debated by stakeholders as the dynamic nature of referral rates create challenges for measurement. Some stakeholders also expressed concerns around the optimal fit of DMH services to provide the right type of support to people who need support from such services.
4) Offering reassurance to members that there are resources and support available 24/7. Stakeholders emphasised this reassurance was critical for members and for commissioners, linking to impact 2) above.

4.4.7 The Mental Health Landscape

Stakeholders indicated that DMH fitted into the wider mental health landscape in the following ways:

1) Being part of a wider ecosystem of support (i.e., imbedded or as an additional component of in-person mental health services)
2) Alleviating demand and providing support to mental health services (i.e., by providing support when people are on waiting lists or in between visits to support services)
3) Empowering people to access resources and manage their mental health independently from formal services.

4) This indicates DMH is well fitted into the notion of providing mental health support for individuals requiring differing levels of support. It can be delivered with complementary services or as an independent mechanism of support. Further, where DMH peer-support services are backed by a clinical team, as with Togetherall, there is a considerable aspect of this delivery which focuses on enhancing a positive sense of community amongst users of the platform, suggesting a unique place for DMH peer-support within the MH ecosystem.

5 Conclusions

Through the ToC developed with Togetherall we have revealed a variety of inputs, uses and outcomes in DMH peer support. This can help inform development of the DMH peer-support landscape going forward.

Key considerations for DMH platforms and commissioners include better understanding the technical provision of access to resources (I.e., internet and internet-ready devices), how to improve outreach to users and increase uptake of platforms, and where their use is suited within the services they deliver. This final point matches the challenge of "what works for whom" in psychological therapies and speaks to the challenge of personalised intervention for mental health.

Further exploration is also needed into the member experience of the platform. This includes understanding what causes a member to disengage, how members perceive and react to support, and how the online social network works (I.e., do members develop reciprocal relationships with a certain number of peers or is the network platform-wide, does it change over time or is it static?).

Another challenge in assessing the efficacy of these platforms is there is not a clear measurement of success due to the variability in reasons for using the platforms. Success is different between users and is therefore challenging for commissioners and platforms to identify longer-term impact of platforms.

Our findings highlight the value of peer-support in DMH, as identified by multiple stakeholders including platforms themselves, commissioners across health, social care and education, and users. We highlight that successful platforms have clear guidance for commissioners and users, have a clear user interface and architecture, and well-designed procedures for risk management and escalation of concerns. Further, effectives procedures for escalation go beyond simply being a safe well governed provider and, extend to having detailed protocols and protections for members/users 24:7 and that incorporate an awareness that support needs to be brokered by the platform via an online, distance environment. Other challenges going forward include better understanding the lived experience for users of working with DMH peer-support, integrating research

data with implementation to optimise insights into delivery of DMH and working to iteratively improve DMH products in line with changes in the technological and health policy landscape. A further ethical issue is posed by the interaction between DMH platforms and their responsibilities with regard to regulatory frameworks. As the DMH field develops this raise questions of whether a platform is also a regulated treatment provider; the implications for legal responsibility and liability; policy and procedures for information governance across jurisdictions; and the relationships with emergency services and external agencies in the context of holding access to potentially sensitive individual data. These are important, but necessary challenges for all stakeholders with an interest in DMH to engage with.

6 Considerations for policy and practice

Consideration	**Lessons from this research**
Risk & Escalation	Risk management is a critical part of online platforms. Processes need to be in place to identify, mitigate and manage risk. Escalation procedures need to be accessible at all hours, clearly set out, agreed and communicated with commissioners and made transparent to members of these platforms.
Peer support	Peer support offers many benefits to members (e.g., learning, normalisation) and services (e.g., alleviating demand). Providers need to be proactive in managing negative interactions and ensuring appropriate support is being given/received between peers
Educational uses	Consider whether resources are appropriate for continued professional development. Develop courses for this use.
Member expectations & interactions with platforms	Consider how to make initial platform interactions more rewarding to members. Create better introductions to the platform so members can easily navigate and use
Signposting	Raising awareness of the platform in unique and visual ways to increase uptake

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