### Why you should read this article:

- To understand the potential benefits of using digital messaging services to engage with service users
- To learn about a digital messaging service that has been developed and rolled out in numerous trusts
- To recognise the challenges that may be encountered when providing digital healthcare and consider how to address these

# Using a digital messaging service to enhance access to mental health support

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### Conflict of interest

Caroline Palmer is ChatHealth clinical lead, Leicestershire Partnership NHS Trust

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#### Abstract

School nurses and health visitors across the NHS often use text messaging as a simple and efficient way to engage service users directly. This article explores how a team of school nurses used a safe and secure web-based messaging portal – ChatHealth – to enable young people and their parents and/or carers to discreetly contact nurses about sensitive topics, such as mental health. The author also discusses the UK-wide roll-out of ChatHealth, as well as exploring how a perinatal mental health service and young people's mental health support team implemented their own messaging services to meet the needs of service users.

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### **Keywords**

child and adolescent mental health, child health, communication, mental health, patient choice, patient empowerment, patients, professional, school nurses

DUE TO the effects of the coronavirus disease 2019 (COVID-19) pandemic, including the social distancing measures introduced to reduce the spread of the virus, the use of remote or digital mental health services was rapidly accelerated to ensure individuals who needed support could continue to access it (Mental Health Network 2020). As a result, many GPs and other healthcare professionals, such as nurses, provided care online rather than through face-to-face consultations, which were limited to protect people from COVID-19.

According to NHS England (2022), one in four adults and one in ten children experience mental health issues during their lifetime. However, there are still barriers for people in terms of accessing advice, support and treatment for their mental health, such as perceived stigma, the complexity of the healthcare system and a lack of service provision.

To enhance the outcomes of mental healthcare in England, the NHS Long Term Plan (NHS England 2019) set out a strategy to improve access to, and the quality of, perinatal mental healthcare for mothers, their partners and children by setting up specialist perinatal mental health services. In addition, the plan set out a strategy to embed mental health support for children and young people in schools and colleges, which included digital interventions such as websites and text messaging services to support care (NHS England 2019).

In 2013, staff at Leicestershire Partnership NHS Trust developed a safe and secure webbased messaging portal – ChatHealth – initially to enable young people to discreetly contact school nurses about sensitive topics, such as their mental health. ChatHealth enables service users to send messages via their mobile phones, which are delivered to a centrally managed inbox. Staff then reply to the service user via ChatHealth's web-based messaging platform. While the messaging platform is called ChatHealth, individual services can rebrand it locally for marketing and promotional purposes.

Endicott and Clarke (2014) explored the expansion of smartphone ownership and how

requests from young service users for modern ways of contacting healthcare professionals led to the development of technologies such as ChatHealth. The project team at Leicestershire Partnership NHS Trust saw text messaging as a way to improve access to services and enable nurses to work more efficiently. The project team has subsequently supported healthcare teams at other NHS trusts and organisations to offer safe and secure messaging to young people, parents and carers.

This article discusses how ChatHealth was expanded from school nursing and health visiting teams to adoption in mental health services, including a perinatal mental health service and a young people's mental health support team. The case studies outlined in this article were provided by staff from each service. The anonymised quotes were shared under the terms of the ChatHealth privacy policy, which enables service users to provide feedback at the conclusion of a conversation with a healthcare professional.

## Developing a healthcare messaging service

When ChatHealth was first developed, it was recognised that a bespoke technical solution was required to enable the safe delivery of an efficient messaging service. The traditional practice of healthcare professionals using their allocated work telephone handsets to send and receive text messages to and from service users was becoming increasingly common. However, the Leicestershire Partnership NHS Trust leadership did not feel comfortable with this method because it raised risks for the service user, the healthcare professionals and the service overall. For example, access to services was inconsistent; individual staff were not always able to respond; and service users were not aware if the individual staff member they were messaging was working, off sick or on leave.

Because ChatHealth involves a service user sending a simple message from their mobile phone to a secure central inbox, the healthcare team can share the responsibility of managing responses to messages. This also means that staff are engaging with service users using a team approach, which assists with the effective sharing of resources and capacity. The messaging portal was co-designed with healthcare professionals, stakeholders and service users to ensure it was safe and effective for all. Alongside the development of the technology itself, engaging and supporting healthcare professionals to deliver ChatHealth was essential. ChatHealth is recognised by NHS England and has been part of the NHS innovation accelerator programme since 2019. All innovations selected to join this programme undergo vigorous scrutiny involving expert assessors from several organisations, including NHS England, NHS Digital, Academic Health Science Networks, the National Institute for Health and Care Excellence (NICE) and The Health Foundation (Palmer 2019a).

ChatHealth is not designed to replace faceto-face care, which in the author's clinical experience will still be more appropriate for some individuals, such as those with severe and enduring mental illness.

Benefits of digital messaging services Typically, ChatHealth services incorporate a rota system, with one member of staff on duty to respond to messages. If a conversation needs to be continued the following day, the next member of staff can easily pick this up from the shared inbox. Individual services can set their ChatHealth opening and closing times locally, with most services aiming to respond on the same day or the next working day. If a service user sends an out-of-hours message, a bounceback reply advises them when to expect a response and where they can find support elsewhere. This provides service users with a clear understanding of the remit of the service, as well as reassuring healthcare professionals that service users are being signposted to alternative support when the service is closed.

There are several online providers and platforms offering various digital solutions in healthcare, including remote monitoring, online counselling, patient portal management and interactive self-care tools. Each individual service user will have preferences in relation to how they engage with healthcare, and through the provision of multiple options and resources they have a range of choices available, which encourages greater engagement.

Unlike some other digital messaging services, ChatHealth was not developed using commercial web-based platforms due to challenges in terms of safeguarding, information handling and the ever-changing popularity of various platforms. Instead, ChatHealth offers higher levels of safety and security by following NHS-wide guidance on information handling and clinical governance processes.

Furthermore, in contrast with large-scale digital platforms that offer support nationally from a centralised team of healthcare practitioners, ChatHealth empowers local healthcare teams to deliver care digitally. For example, ChatHealth enables person-centred

### **Key points**

- The effects of the coronavirus disease 2019 (COVID-19) pandemic have accelerated demand for digital access to mental health support
- ChatHealth is a digital messaging service that was developed to enable young people and their parents and/ or carers to discreetly contact nurses about sensitive topics, such as mental health
- It has been identified that ChatHealth offers healthcare services the opportunity for early intervention and potentially improved clinical outcomes, while also demonstrating advantages for the wider public health agenda
- The ChatHealth service is not designed to replace face-to-face care, which will still be more appropriate for some individuals, such as those with severe and enduring mental illness

care because staff can offer a blended approach of digital, telephone and face-to-face contact. In addition, the staff member's contact with the service user is not limited to the ChatHealth conversation – the system enables staff to refer service users on to other local services directly, thereby offering integrated and joined-up care and support.

### **ChatHealth roll-out**

When Leicestershire Partnership NHS Trust developed ChatHealth, the key drivers were to enhance the care provided to service users and to provide service users with a choice regarding how they access services. The service was piloted in 2012-13 with 3,500 young people across three schools, and following this the trust began providing ChatHealth within its school nursing service. Several outcomes were documented, with Endicott and Clarke (2014) recognising that the service was 'helping school nursing to become more widely available, particularly to young people for whom this service may be the only access to healthcare'.

Leicestershire Partnership NHS Trust shared its experiences with other school nurses and school nursing services via social media, national school nurse forums, conferences and relationshipbuilding with other school nursing services and provider organisations. School nursing services around England began to recognise the positive outcomes that ChatHealth was having for service users and services alike, and supported the roll-out of the service nationally.

The roll-out of the ChatHealth service to other NHS trusts and healthcare organisations began in 2015, when school nursing teams across the country began to incorporate it into their school nursing services. In 2016, soon after the national success of ChatHealth within school nursing, a pilot of the service was carried out by Leicestershire Partnership NHS Trust's health visiting service, then it was subsequently launched across the trust's entire health visiting service. This pilot demonstrated that, if given the choice, parents and carers would use a text messaging service to seek advice and support from health visitors (Palmer 2019b). As with school nursing, the use of ChatHealth in health visiting created a blueprint for health visiting services in other localities.

#### **Evaluation**

A research study undertaken in 2019 concluded that ChatHealth offered healthcare services the opportunity for early intervention and potentially improved clinical outcomes, while also demonstrating advantages for the wider public health agenda (Wales and Sayer 2019). Service users also regularly provided anonymised feedback, with this being requested at the end of each ChatHealth conversation and some service users providing free-text comments. For example, one young person made the following comment to a school nurse about the ChatHealth service:

'I felt listened to and I felt like I wasn't being judged for feeling the way I do. It was very helpful.'

In another example, a parent who was using ChatHealth told a health visitor:

'I can't say thank you enough. It's my first time using this service and it's been so helpful and comforting. Feel less alone and lost with what to do, so thank you.'

ChatHealth's efficacy is evident through its widespread use in the NHS, where it is used to increase service reach and enhance accessibility. ChatHealth has been reviewed and evaluated by NICE (2017) following their evidence for effectiveness framework, and meets all regulatory approvals for data compliance and information governance. It is now used by more than 60 NHS trusts across the UK and available to more than four million service users.

### ChatHealth and mental health support

Salaheddin and Mason (2016) suggested that barriers to accessing mental health support include: challenges in identifying and communicating distress; stigmatising beliefs; shame; a preference for self-reliance; and anticipation that help will be difficult to access. The researchers also emphasised that although mental health issues are prevalent among young people and are associated with various adverse effects, there is a concern that young people infrequently seek help (Salaheddin and Mason 2016). In addition, from March 2020, young people have had to manage the effects of the COVID-19 pandemic, which may have exacerbated existing mental health conditions, contributed to new mental health issues and placed a huge strain on already stretched mental health services. A report by the charity YoungMinds (2021) identified that 67% of young people aged 13-25 years believed that the pandemic would have a long-term negative effect on their mental health.

Table 1 shows the types of enquiries received from young people contacting local ChatHealth messaging services across the UK before and during the pandemic. It indicates that within school nursing most of these enquiries were related to emotional health, and that type of enquiry increased during the COVID-19 pandemic. Across the UK, increased enquiries about mental health from service users on ChatHealth, as well as the recent uptake of ChatHealth by perinatal mental health and young people's mental health support services, showed that the use of messaging services could be an effective way to enhance access to mental healthcare.

Anonymous service user feedback from young people's messaging conversations across the UK was captured for the period November 2019 to March 2020, with service users being asked at the end of each session: 'Has this conversation helped you – yes or no?' Around 88% (*n*=442/502) of respondents replied that the system had helped them, with one young person stating:

'I love that it's anonymous and that it's a texting service. This means you can openly talk about your problems freely without feeling nervous.'

**Uptake in mental health services** The effective national implementation of ChatHealth within school nursing and health visiting has subsequently given mental health professionals the confidence to embed it within their services. Staff at two services – a perinatal mental health service at Leicestershire Partnership NHS Trust and a young people's mental health support team at Gloucestershire Health and Care NHS Foundation Trust – have recognised the need to 'reach out' to service users, identifying that they are increasingly engaging with other healthcare services via digital messaging.

#### Perinatal mental health

Bauer et al (2014) identified that, aside from the direct effects on service users, the consequences of not accessing high-quality perinatal mental healthcare were estimated to cost the NHS and social care services approximately £1.2 billion per year. In 2019, staff at the perinatal mental health service at Leicestershire Partnership NHS Trust recognised that service users were engaging with health visitors via ChatHealth, and wanted to incorporate messaging into their own service. As a result, the perinatal mental health service team launched their ChatHealth service under the name Mum's Mind.

Feedback and co-design with service users was important. Service users stated that they felt there had previously been a gap in how to access the perinatal service and that launching a messaging service could improve this. The perinatal mental health team also wanted to respond to increasing demand and offer early intervention and support, but in a way that would enable team members to manage their workload.

The perinatal mental health team decided to use a messaging service to support service users who experienced moderate-to-severe mental health issues by signposting them to services, as well as assisting new and expectant mothers and families to navigate services so they could access the 'right help at the right time'. Following service user and public engagement, a promotional poster designed for Mum's Mind emphasised that advice and support was available to new and expectant mothers and families via confidential text messaging for issues such as panic attacks, anxiety, depression, bipolar disorder and psychosis, medicines concerns, assistance with bonding and attachment between 'mum and bump' or babies, and signposting to services for mothers and their families.

The COVID-19 pandemic began 12 months after the initial launch of the Mum's Mind service, and feedback received during the initial phase of the pandemic demonstrated the effects of the service. For example, the perinatal mental health service lead for Leicestershire Partnership NHS Trust stated:

'We have seen an increased demand for the service since COVID-19 restrictions were put in place and we have been able to provide mental health support and advice to women and their families.'

Table 2 details the types of enquiries received by the Mum's Mind perinatal messaging service before and during the pandemic.

Table 2 shows that the most common reason service users were contacting the Mum's Mind messaging service before and during the COVID-19 pandemic was for signposting to appropriate services, such as GPs, midwives, health visitors and the voluntary sector. These

Table 1. Types of enquiries received from young people contacting local ChatHealth messaging services across the UK before and during the pandemic

Types of enquiries	August 2019 - before the pandemic	August 2020 – during the pandemic
Emotional health	168 (54%)	285 (60%)
General health	49 (16%)	70 (15%)
Relationships	38 (12%)	52 (11%)
Sexual health	25 (8%)	40 (8%)
Other	31 (10%)	30 (6%)
Total	311	477

Mum's Mind enquiries were predominantly related to service users' anxieties and the team members were able to offer reassurance that support was still available. Patel (2020) reported that the Mum's Mind messaging service saw demand rise by around 60% in April 2020 compared with previous months.

At the time of writing, the increase in the number of service user contacts with Mum's Mind remained consistent, demonstrating a continued need for the messaging service. One service user, who anonymously provided feedback about their experience of using the messaging service during the pandemic, stated:

'I'm really impressed with this service and so far it's provided me with reassurance and answers without having to contact a doctor. Considering the current situation as well, it's an invaluable service.'

Anonymous feedback from another service user also demonstrated the value of the messaging service:

'You can message a trained professional and know they're going to get back to you in 24 hours and give you support and advice. And they're not going to judge you.'

**Young people's mental health support team** Another example of a mental health service that implemented ChatHealth in 2020 was a young people's mental health support team at Gloucestershire Health and Care NHS Foundation Trust. This was one of the first mental health support teams established in line with national plans to provide early intervention and advice to schools and pupils about mental health issues, such as mild-tomoderate anxiety (Department of Health

### Table 2. Types of enquiries received by the Mum's Mind's perinatal messaging service before and during the pandemic

Types of enquiries	December 2019 – before the pandemic	December 2020 – during the pandemic
Signposting	7 (47%)	18 (32%)
Emotional support	7 (47%)	16 (28%)
Anxiety management	0	5 (9%)
Coping strategies	1 (7%)	2 (4%)
Depression	0	4 (7%)
Medicines	0	3 (5%)
Direct contact from other healthcare professionals, such as GPs and midwives	0	9 (16%)
Total	15	57

and Department of Education 2017). The mental health support team members at the trust felt that ChatHealth could complement their work by offering an easy way for service users to access the service and engage with mental health practitioners. The mental health support team branded their service as Young Minds Matter and the service lead provided the author of this article with an update on the service's development in July 2021:

'I would recommend that other mental health support team services consider setting up a messaging service. The biggest benefit for us is the infrastructure and support behind ChatHealth. We were fully supported by the project management team, which made it easier to get up and running, and there's a helpdesk available if you have any technical issues.'

The service lead also explained how the effective implementation of ChatHealth by their local school nursing team had positively influenced their decision to implement mental health support for young people:

'ChatHealth is a tried-and-tested method for engaging young people, so it made good sense to replicate this model for our service. As it was already used in school nursing, it gave us the confidence to implement a messaging service that would ensure patient data is kept safe and secure, and meet our information governance requirements.'

Feedback provided to the service lead from the mental health support team members indicated that ChatHealth has been welcomed by young people in the selected schools where it is available as an approachable way to access mental health support. The mental health support team members also stated that they found the ChatHealth system to be user-friendly and liked engaging with young people via the system.

Table 3 shows the types of enquiries received by the Young Minds Matter messaging service in October 2020 and June 2021. It indicates that, as time went on, the variety of enquiries received by the digital messaging service increased, particularly in relation to family issues, eating issues, body image and suicidal ideation.

### Challenges to digital transformation

Delivering digital healthcare is sometimes approached with apprehension by healthcare professionals, particularly when it relates to sensitive topics such as mental health. In the experience of the ChatHealth project team at Leicestershire Partnership NHS Trust, delivering digital healthcare can potentially take healthcare professionals outside of their 'comfort zone'. Not only do they have a new piece of technology to learn, but also digital interactions can initially feel unnatural. This is particularly the case where care has been predominantly delivered face-to-face and where people's body language, presentation (for example how they are dressed) and other cues, such as eye contact and tone of voice, have an important role in rapport-building and the assessment of a service user.

Despite these challenges, the ChatHealth project team have found that when staff members were supported throughout an implementation process they felt empowered and were willing to embrace change. Staff recognised that not only did ChatHealth offer direct engagement with service users, but it also enabled them to contact more service users than before. In addition, in some ways, ChatHealth enhanced face-to-face care because many service users' issues could be managed by messaging alone, thereby releasing more time for face-to-face appointments for those who really need them.

For any healthcare service, moving to digital healthcare must be a considered and informed decision and not introduced as a tick-box exercise. Rather than a 'one-sizefits-all' philosophy, healthcare services need to take a blended and person-centred approach to care delivery. For example, a service user may initially contact a healthcare professional via a messaging service such as ChatHealth, but then move on to telephone consultations, before requesting a face-to-face appointment.

Another issue is that some service users will be digitally excluded, and as such are at greater risk of not accessing services and deteriorating health outcomes. For example, according to NHS Digital (2019): 'Eleven million people (20% of the population of the UK) lack basic digital skills, or do not use digital technology at all. These are likely to be older, less educated and in poorer health than the rest of the population.' In its Online Nation report, the UK's communications regulator Ofcom (2021) provided examples of those who may be digitally excluded, such as:

- » Households that do not have home internet access (6%).
- » Adults who only access the internet infrequently (14%).
- » Those aged over 64 years who do not have internet access (18%).
- » Lower socio-economic households who do not have internet access (11%).
- » Adults who rely on a mobile phone for internet access, so may find it challenging to work or learn from home, or complete online forms (10% of all adults and 18% of adults in lower socio-economic households).

» People with internet access who say they are not confident in using it (5%).

The Ofcom (2021) report also detailed how the COVID-19 pandemic has created a significant digital divide between those with access to the internet and smartphones, and those who do not have access to technology. The report suggested this disparity in access to online services meant that the first lockdown in 2020 'had a greater effect on people who are digitally excluded'. Therefore, it is essential that healthcare services take digital exclusion into consideration and are flexible and adaptable in how they provide and develop their services (NHS Digital 2019). Furthermore, the NHS Long Term Plan (NHS England 2019) states that: 'people will be empowered, and their experience of health and care will be transformed, by the ability to access, manage and contribute to digital tools, information and services.'

### Conclusion

There has been a rising demand for digital healthcare services in response to the COVID-19 pandemic. ChatHealth is a safe and effective digital messaging tool, which provides service users with choice in how they access healthcare services outside of traditional faceto-face care provision.

By implementing ChatHealth, healthcare services can expand service users' access to services and support them in navigating the complex healthcare system. However, ChatHealth is not designed to replace face-toface care, which will still be more appropriate for some individuals, such as those with severe and enduring mental illness.

### Table 3. Types of enquiries received by the Young Minds Matter messagingservice in October 2020 and June 2021

Types of enquiries	October 2020	June 2021
Depression or low mood	1 (25%)	3 (18%)
Anxiety or panic attacks	1 (25%)	6 (35%)
Emotional well-being/worry	1 (25%)	2 (12%)
Family issues	0	2 (12%)
Bullying	1 (25%)	0
Eating issues	0	1 (6%)
Body image	0	2 (12%)
Suicidal ideation	0	1 (6%)
Total	4	17

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