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Lessons Learnt from COVID-19

A mental health perspective on the use of digital technologies

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While capacity in the health system was increased to manage COVID-19 infections, the experience for mental health was very different – services were closed and referrals fell by 90%. What are the lessons learnt for managing mental health services in a future pandemic and what is the role of digital technology?

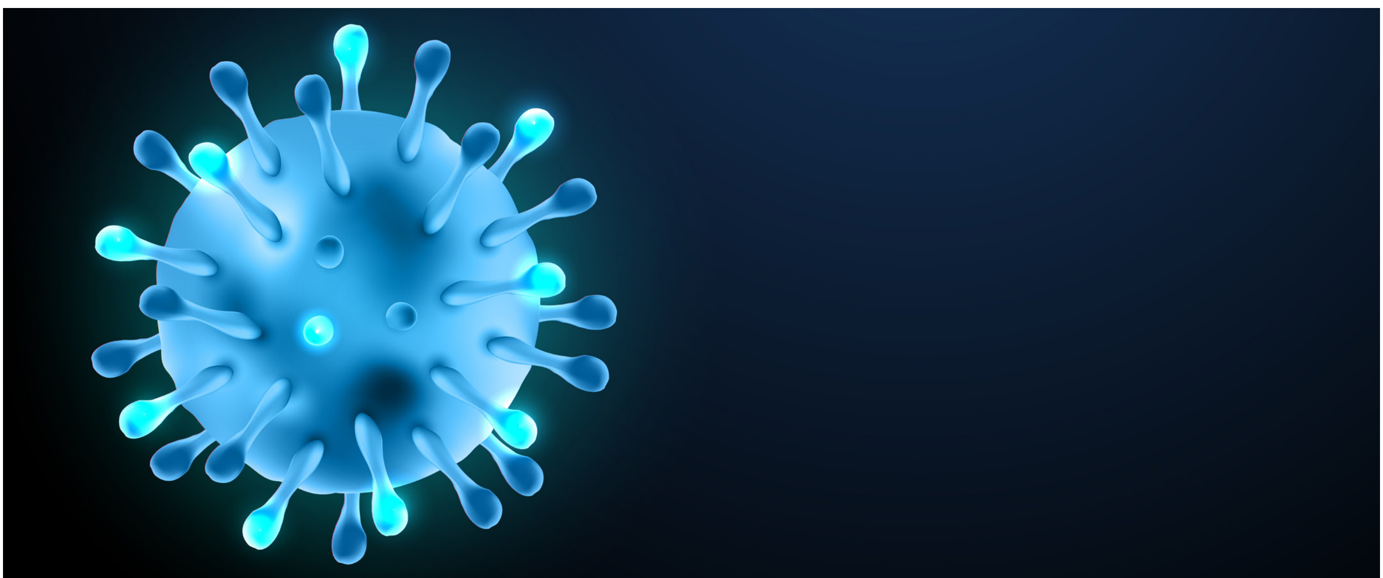
Key Points

- Mental health has had a different experience during the pandemic than services managing the COVID-19 infection – mental health services closed, referrals fell by 90%.
- Data predicts a six-fold increase in mental health referrals in the wake of the pandemic, underlying the need for a tech-enabled mental health services model.
- Scaling up of technology gets overlooked in incident planning, and the impact of this on the vulnerable not getting appropriate level of mental health care.
- Planning is key for digital therapy technology suppliers, e.g. load testing, capacity, security and ability to scale up.
- To avoid the 'wild west' of apps and digital solutions, service providers should consider scaling up across their different services and a range of mental health conditions.
- A multi-channel approach should be used to drive awareness of solutions, with co-ordination between national bodies.

As the UK government enters 'phase 3' of its healthcare response to COVID-19 and other health systems around the world plan for managing the upcoming winter season, it becomes prudent to take stock of the initial response to the pandemic and to see what lessons should be learnt from the experience. This is particularly important through the lens of mental health because, while capacity increased for managing the infectious disease of COVID-19, mental health had a different experience, with services closed and staff re-deployed or forced to work from home. At the same time, the number of referrals fell by up to 90%. This was despite the collective turmoil, stress and trauma facing millions of people experiencing isolation, grief at the loss of loved ones and the psychological impact of frontline care workers enduring a pandemic on a scale not seen for a century.

This stark picture was highlighted by a recent House of Lords Report (Lewis 2020) published on 22 June, which looked at the impact of lockdown on individuals' mental health, the impact on individuals with pre-existing mental health conditions prior to the pandemic, and the loss of funding and operational capacity for mental health services and charities. Furthermore, the Office for National Statistics reported that between 24 April and 3 May 2020, 75% of British adults were "very worried or somewhat worried" about the effect that COVID-19 was having on their lives. Further data released on 15 June showed that the equivalent of 19 million UK adults were experiencing high levels of anxiety.

With the inability to see people face-to-face and the reduced capacity for mental health service delivery, there was significant attention on digital health and technology solutions. It was their moment in the spotlight, rather than being often considered a 'nice to have' they became a critical part of enabling services to stay open. So how did they perform and what can we learn to help mitigate against further waves of COVID-19 and the inevitable winter pressures?



These are not inconsequential questions to ask – looking at the data it is predicted that there is a 'tsunami' of mental health problems on its way (Inkster et al. n.d.), with some forecasting that over the next few months there will be a six-fold increase in referrals. It is imperative that planning takes place now with the backdrop of a technology-enabled mental health service delivery model.

Planning Is Everything

"Peace-time plans are of no particular value, but peace-time planning is indispensable."
Dwight D. Eisenhower (1950)

Health systems have had years of planning for different scenarios, from winter pressures to critical incidents and disaster planning. However, all of these plans rely on people and places, and at its simplest are about increasing bed capacity and staffing numbers. COVID-19 highlighted that whilst this was essential to deal with the surge in patients with infectious diseases, it did not meet the needs of all the other patients requiring health care services that could no longer see a healthcare professional (HCP) face-to-face or come into a building for tests. The critical measure of the impact of COVID-19 – excess deaths – is testament to this lack of planning, which in the future should take a holistic view and include the rapid mobilisation of technology-enabled care and processes.

The scaling of technology is currently overlooked in incident planning. The consequences of this have unfortunately been seen in mental health services, where staff were redeployed, and the most vulnerable were often unable to receive their normal level of care. Those with pre-existing mental health issues are at particular risk of worsening symptoms (Chatterjee et al. 2020), with suicide rates having increased. These consequences of COVID-19 are likely to continue to increase and peak much later than the disease progression of the virus.

Planning is also key for technology suppliers. For example, many digital therapy organisations saw a surge in usage, with one reporting in excess of a 450% overnight increase. If sufficient headroom in capacity and bandwidth is not available, then a service may fail, leaving patients unable to access critical services at a time of greatest need. Load testing is essential, along with regular security testing. This has been highlighted by the growth in Zoom video conferencing, with questions over robustness of security protocols due to people randomly guessing a meeting ID and joining a video conference. Frequent vulnerability scans, penetration tests and ensuring that the technology addresses the top ten risks identified by the Open Web Application Security Project (OWASP) are essential. If technology is to be seen as part of critical infrastructure, then it can no more fail than the rest of the health system.

Lastly, as a digital solution provider you must be able to scale the resources required to deliver, from project management to training. For example, implementing online training for health professionals can be highly effective in increasing coverage and the number of people able to access solutions. In the case of the leading provider of digital mental health, more than 1,200 professionals were trained in the space of three weeks, and UK coverage increased by an extra 20 million people able to access a solution.

There Is (Seemingly) a Digital Solution for Everything

"The web and physical world is plagued with abundance – people need help sorting through all the good and bad stuff out there. The tyranny of choice is causing psychic pain and frustration for people."
Jason Calacanis

When the initial crisis hit, there was an influx in advertising from digital technology suppliers, being the supposed answer to everyone's problems. With this noise it is difficult to differentiate

between the quality, evidence-based solutions and the 'vapourware' looking to get a foothold in healthcare. This noise saw some technology solutions rapidly scale, without evidence to demonstrate their impact. This was addressed, to some extent, much later into the pandemic, with the creation of a dynamic purchasing framework in England where proven digital solutions could be catalogued and then implemented locally, but so far this has not been used for mental health delivery planning.

One robust way to address this 'wild west' of apps and digital solutions is for service providers at a local and national level to recognise their existing digital estate and leverage these assets – scaling up their existing solutions horizontally across their different services and vertically across the continuum of mental health experience. Can a digital technology used with mild to moderate mental health (e.g. within Improving Access to Psychological Therapies) be applied in community mental health? Can a digital pathway for young people be replicated for adults? This provides rapid mobilisation – an established digital solution is easier to deploy elsewhere within an organisation – and a more cost-effective approach.

One caveat to this scaling is to consider how a solution can be utilised effectively and the gap that it will fill during a pandemic. For example, self-help information and support are good for normalising and providing reassurance but do not offer effective help, being the start of someone's journey to better mental health. Online peer support is a natural extension to this but suffers the same problems, it is not a therapeutic intervention. Video consultations and text messaging are essential when you cannot see someone face-to-face but lack the ability to scale as they are still a one-to-one approach that can be impacted by redeployment. Digital therapy, such as internet-based cognitive behavioural therapy has the extensive evidence-base and robustness to scale up quickly but may not be appropriate for more complex clients or those requiring crisis interventions. Therefore, taking a single solution approach could lead to people having an unsatisfactory experience when it does not fully meet their needs.

Taking Coordinated Approach to Drive Awareness

Having the right solutions available and at the right time is meaningless if the intended recipients do not know they exist or that they are available to them. Whilst the initial response to support NHS frontline workers saw a huge surge in awareness building from NHS Employers and NHS England, the visibility has not been maintained. Social media is a channel to build such awareness, but other mediums should not be overlooked. A continuous multi-channel campaign that is sustained over time is essential, so whilst the initial wave of hundreds of thousands of downloads and usage of digital suggested a very positive impact, over the coming months there has been a tail-off. Coordination between national bodies is essential but can sometimes be at odds with one another across NHS England and Improvement, Health Education England and NHS Employers. It is heartening to see the interim NHS People Plan (NHS 2020) that specifically calls out mental health and wellbeing, but ensuring that people working on the hospital wards, care staff in the communities, people in GP surgeries and everywhere else are all familiar with what is available.

More needs to be done to coordinate with social care, and the creation of the Care brand (Department of Health and Social Care 2020a) and the associated app to support frontline care staff was laudable, the awareness 'on the ground' was less so – this can be seen from one digital mental health provider that saw a tenth of the usage from the Care app than it did from the NHS workforce.

Summary

Whilst there is some hope that mental health provision has a head start on an impending crisis, and there is additional funding being made available (Department of Health and Social Care 2020b) for both service providers and charities, now is the time to identify appropriate digital solutions, plan in detail for a technology enabled service and drive awareness. It is critical that no one gets left behind, whether that be young people or people from diverse backgrounds that may be digitally excluded (Ellwood and Bell 2020). Though digital services may not be the panacea we are hoping for, they do form a critical part of our future response to challenges. This can already be seen by national responses of digital mental health in Scotland and Wales that are now being rolled out at scale and dedicated investment in distress intervention.

Conflict of Interest

None. ■

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