There's more to mental health AI than therapy bots

UK mental health care is in desperate need of digital innovation. Demand for support has skyrocketed post-pandemic, while record wait lists mean many are left unable to access care when they need it.

At its simplest level, innovation has begun addressing such need through the digitisation of traditionally paper-based and time-intensive administrative processes used to organise mental health care. Adoption remains patchy in some areas, but many mental health care services are already benefiting from these solutions, which are helping to enable faster patient triage and care delivery.

This initial innovation has been taken one step further following the recent boom in AI development. Solutions are now being built which can use AI to automate repetitive administrative tasks, such as recording clinical notes, and streamlining patient triage. Most notably, we've seen a number of conversational AI chatbots receive widespread attention for their ability to provide direct and instant triage support to patients, with the <u>first</u> to achieve medical device certification earlier this year.

But there is much more to mental health AI than therapy bots.

When delivered safely and ethically, therapy bots have a place in helping to better streamline mental health triage and enabling a wider number of patients to access support when they need it. But they are scratching the surface when it comes to Al's potential for supporting better mental health outcomes.

A third, even deeper layer of innovation is also gaining momentum, bringing Al into the heart of mental health care delivery. Developed responsibly, these pioneering solutions can safely offer assistance at a clinical level, providing practitioners with more objective insight to directly aid diagnosis (by identifying key biomarkers), improve patient monitoring and strengthen clinical decision making.

Supporting clinicians to enhance care delivery

Within therapeutic treatment, AI is being introduced to help evaluate and improve clinical delivery. Therapy analysis and intervention tools, such as those being pioneered by leso, are giving clinicians an objective measure of therapeutic efficacy and helping enhance delivery by compliantly analysing conversations between clinicians and their patients.

These tools can give clear, actionable insights into what does and does not work in practice, supporting clinicians to iterate their approach and adapt therapeutic delivery accordingly. As a result, treatment can be more effectively tailored to support faster progress and recovery for individual patients. This can ultimately help clinicians achieve positive outcomes more quickly and free up clinical capacity for others who are on the waiting list for care.

Aiding diagnostic accuracy and objectivity

Al can also provide unparalleled insights at a diagnostic level. Currently, clinicians are still heavily reliant on subjective, anecdotal reports from patients of their symptoms. But this can only ever offer a snapshot of how a patient is feeling in the present moment, leaving open the risk of mis- or under-diagnosis. Introducing Al tools which are able to offer objective assessment, by identifying invisible biomarkers – which may be present in a patient's speech, behaviour or voice – can give clinicians an additional, objective layer of information from which to draw a more accurate picture of a patient's condition.

At <u>thymia</u>, we're helping enable this by channelling AI into gamified tools which enable clinicians to capture these objective insights during a clinical assessment. These can be used to help inform diagnosis, or to monitor changes in a patient's condition over time.

Crucially, tools like these are not a replacement for human intervention or decision making. They are instead designed to support clinicians with a richer, more detailed and objective analysis of a patient's mental health, to speed up accurate diagnosis and help patients access the most appropriate form of treatment, sooner.

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Al isn't always bad news. Here's how to deploy it ethically.

Empowering patients to drive preventative care

Outside of direct clinical practice, AI still has a significant role to play in empowering patients to manage their wellbeing and boost preventative care. This could help drive down treatment wait lists and reduce the number of people in need of specialist support. But at a consumer-facing level, there is a greater risk involved in introducing AI, particularly if being used to directly advise or support people with their mental health. Measured, responsible and ethically-led development is therefore vital to ensuring both patient wellbeing and data safety is protected when these AI tools are placed in consumers' hands.

If delivered safely and ethically, these AI tools hold the potential to help us empower individuals to track biomarkers of their own wellbeing – including sleep quality, stress levels and low mood. This can provide a layer of preventative care, stopping many from experiencing a deterioration in their mental health and needing clinical support as a result.

Al tools could also be used to flag earlier interventions – such as online wellbeing platforms, information and therapeutic advice – which can provide an intermediate source of support for those who are struggling but don't yet meet the threshold for more targeted, clinical care. Above all, safety must be placed ahead of innovation when it comes to development, to ensure such tools are able to deliver support without introducing undue risk.

Tackling the current mental health care crisis requires a diverse and nuanced response. While AI chatbots may signify an encouraging step towards more digital and data-led approaches, they are only one part of the solution. To solve

the myriad challenges and underlying issues fuelling both the rise in mental health care demand, and the simultaneous spike in wait times, we must broaden our scope and embrace the potential of ethical, responsible AI to offer support and improvement at every point of care delivery.

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