



Sources	Forbes, Social AI [University of Glasgow]		
Date	December 2020		
Potential scale of impact	Certainty of outcome	Impact horizon	
★★★★	★★★★	H1	H2 H3

The World Health Organisation states that [mental health problems affects more than 5% of the population worldwide](#), whereas in UK, mental health services report that 19.7% of people over 16 years old show symptoms of anxiety and depression.

AI can't replace human therapists, but it can support them and it has the potential to revolutionise the way we diagnose and treat mental health conditions. In the future, algorithms may be our first line of defence against the mental health struggles that can be debilitating for so many people.

Five areas that are being looked at now are

- Integrating mental and physical healthcare - AI could alert doctors to patients at risk of developing a serious mental health issue based on their existing medical records. One study has already had success predicting which of the patients who were brought into the hospital for self-injuries are likely to attempt suicide in the future.
- Reducing bias and human error - algorithms have already been proven to be successful at detecting signs of conditions like depression and post-traumatic stress disorder by analysing speech patterns and facial expressions. Doctors running short appointments with patients might miss subtle signs of trouble.
- Flagging early warning signs of serious mental health problems trouble - your smartphone could alert your doctor that you're at risk of depression based on how fast you're typing or how often you're leaving your house.
- Making support available 24/7, wherever the sufferer is - chatbots and apps (such as the UK civil service's dogbot) are accessible everywhere there is connectivity and are a low-cost, affordable treatment option; and some people may feel more comfortable sharing their struggles with an anonymous chatbot than a human being
- Helping to destigmatise mental health issues - Making mental health diagnosis and treatment more quantifiable and less subjective could ultimately help destigmatise these conditions and improve outcomes. There's no blood test for mental health conditions, but a machine learning algorithm could become a kind of equivalent

