Integrating technology and mental health care

Many major medical and scientific advances occur in association with technology and there is no argument that computers, and indeed the Internet, are the greatest technological inventions of this era. Web 2.0 has quite literally ‘created’ a global village where anyone with an internet connection can access specialised medical information.

The Internet has certainly made possible things that were nearly impossible before. Historically, it has taken a median of 24 years to take new research discoveries from the lab to the clinic. The Internet enables this translation to occur much more quickly, provides broader dissemination and allows cost-effective tailoring to the individual.

While new technologies are useful across the medical spectrum, there are a number of features that make them especially impactful for mental health.

Unlike the more physiological conditions like cancer or diabetes, many people experiencing poor mental health will not need a physical intervention. Gold standard psychological therapy such as CBT can be delivered via the internet, and research shows you don’t need any further human interaction for it to be effective. This means people who may not be able to attend face-to-face therapy, or those may not want to due to perceived stigma, can still access quality treatment programs.

Mental health tools can actually work better when they are mobile and accessible 24/7. You can now use your smartphone to test yourself for mental illness, engage with an online treatment program or obtain real-time crisis counselling. Sophisticated bio-sensing technologies and Bluetooth can collect data, information and geographical location to provide a real-time view of behaviour and mood. These capabilities facilitate identification of ‘at-risk’ individuals and assist in referral and access to treatment. This is of particular use when preventing suicide.

Technology lets us create interactive treatment programs in a wide range of formats. Need to deliver a program to high school kids? The latest research shows us that programs presented as online games are both attractive and effective. A specially created app called iBobbly is uses artwork, stories and music to deliver quality mental health care to young indigenous people.

Big data and social media can give us real time insights into how the human mind works. We can now measure the emotional content of the global twitter stream using a program called “We Feel”, giving us unprecedented vision of how major world events can impact the collective mental health of communities.

Finally, the growth of self-help and the empowered patient movement has meant people are more likely to investigate their symptoms online. Whilst we don’t advise people to use “Dr Google” when experiencing poor mental health, having access to a range of specialised medical knowledge and treatments, as well as the many personal stories available on blogs and social media, does increase mental health literacy, reduce stigma and encourage help-seeking.

The most exciting thing for researchers and clinicians is that the impact of technological developments will become clear over a very short time. In the meantime, we will continue to see exciting new technologies that have the potential to extend, make more efficient and add value to mental health care.
Learn more about how digital technology is transforming mental health care at www.digitaldog.org.au or www.blackdoginstitute.org.au