Emerging Technologies in Digital Health
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Emerging Technologies in Digital Health

In the current era of digital and technological innovation, new technologies seem to appear every day. However, in the crowded market of smart phones, tablets, gaming applications and consoles; fantastic, innovative and practical products and services can be lost in the noise.

Hi, my name is Ciarán Morrison and I've been a Research and Knowledge Exchange Officer at the DHI for almost 3 months, and this is the first blog in a series discussing the emerging technologies in digital health. For this first post I'll be cheating, I will be talking about healthcare drones. Which are less of an emerging technology and more of a repurposed technology (this may become a trend in this series).

Drones, or unmanned aerial vehicles (UAVs), are primarily known for their military applications and because of this they are associated with a certain stigma. However, in recent years this stigma has reduced and people are beginning to see new applications for the technology, possibly due to their commercial use by companies like Amazon in 2013.

There are now multiple methods for drone healthcare being developed worldwide. One example of this can be seen at Zipline, where they have developed a drone called Zip to deliver medical supplies in Rwanda. In Africa over two billion people have little to no access to essential medical supplies, often this is due to infrastructural gaps that cause massive delays to the delivery of supplies. Zip can overcome these issues and deliver medicines within 15 minutes of their ordering by text, the drone is packed and then travels directly to its destination at 100km/hr. This can help prevent over 2.9 million child deaths and 150,000 pregnancy related deaths each year.

Closer to home automated Ambulance drones have been developed at the Delft University of Technology in the Netherlands. This is a potential support device for paramedics that is equipped with a defibrillator, a two-way radio, a camera and video screen so that trained healthcare professionals can remotely instruct members of the public to how to perform CPR and use the defibrillator. The Ambulance drone is still in development but may be available within the next 4 years.

The potential for drone healthcare may be currently restricted to delivery, but we are only in the first steps of their development. We do not yet know where the path will lead, but hopefully I'll be able to

keep you informed. Thanks for reading, I hoped you enjoyed this first post and will keep an eye out for the next one.