

## **HealthTech, Inclusion and Accessibility**

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HealthTech refers to the application of technology, information, and data analytics to improve healthcare delivery, enhance patient outcomes, and streamline various aspects of the healthcare industry. It is a rapidly growing field that leverages advancements in technology and data science to address challenges and improve efficiency within the healthcare sector.

This encompasses a wide range of technologies and solutions used by healthcare providers, patients, and other stakeholders in the healthcare ecosystem. Some examples of HealthTech include: mobile health apps, wearable devices such as smartwatches, virtual coaching, and other digital platforms that can facilitate citizens' engagement with their own health.

Health policies and strategies worldwide place significant emphasis on utilising these technologies to promote disease prevention and improve public health, while also addressing health disparities. Embracing healthy lifestyles, such as abstaining from smoking, adhering to alcohol guidelines, maintaining a healthy weight, engaging in regular physical activity, and following a nutritious diet, is key to preventing a multitude of chronic illnesses. By crafting HealthTech solutions that encourage widespread adoption of these behaviors, we can enhance people's overall quality of life and extend their well-being.

However, despite the constant innovation of HealthTech, there remains low accessibility and high digital exclusion for the most vulnerable groups in the society, such as the older people, individuals from minority ethnic backgrounds, and refugees. Steps need to be taken in the design of HealthTech to ensure it's as inclusive as possible. Here are some measures that should be considered:

### **Keep all users in mind**

HealthTech platforms often accommodate the needs of different users all in the one platform: citizens or customers, healthcare practitioners and technology developers. Therefore, the key objective in designing such technologies should be to identify all user types and understand what functionality and benefits each type of user will need.

Once these needs are understood, technology architecture can be put in place to enable integration of all these requirements in those tools. This allows for seamless interactions among all users for maximum health benefit for the end-user.

### **Differentiate and specialise**

To reach different audiences, HealthTech must consider the unique needs of those the technology is designed to benefit most. While we know that some of the advanced technology users would like to have more health functions in one place (e.g., an app), this is not necessarily the case for individuals who are less familiar with technology or less active in relation to their health.

If it is acknowledged that people are different and might need different HealthTech solutions, we can develop tools that are tailored for different types of people. Understanding the unique needs of a citizen or customer group allows us to more easily design technology that will be of value to them. According to World Health Organisation, one in six people in the world will be 60 years old or older by 2030.

Also, despite around 50% of humans being born female, a lot of the research conducted in medical science has involved male cells, animals, and men. This means most advances in medicine and healthcare throughout history have come from the study of male biology, but are still applied to women. If we consider and include female anatomy and biology more in research, then aspects of HealthTech can be more accurately applied to a larger group of people.

### **Consider behavioural changes**

The specific use of HealthTech can change throughout our lives. For example, health promotion and disease prevention might be more pertinent at one point, while in later life, disease detection or maintenance becomes more relevant.

It should also be recognised that health behaviours are more likely to be accepted and adopted if they are compatible with daily activities people already engage in. Someone might not be willing to go to a gym or engage in stretching exercises, but they might already engage in physical activity by commuting to work or walking their dog, for example.

HealthTech should recognise the effort of these alternative health behaviours or routines that are already in place. This effort should be rewarded, with further engagement supported, if this feels right for the user. People are very busy in their daily lives, so having an additional tool that demands more from us might not be helpful for everyone.

### **Be personable**

HealthTech should consider appropriate communication approaches that are more likely to attract attention from different citizens at different stages of their behaviour change journey throughout their lives

For example, personalised communication can be used to reach and attract wider audiences to engage with HealthTech. Personalised coaching dialogues can also be used to provide feedback and help people continue with healthy behaviours.

Some of the research I am currently engaged in suggests some people are more likely to be motivated by their desire to avoid illness or feel (and look) better, or both. We also find that different levels of health literacy translate into different types of health engagement. There is scope to tailor health communications to different people in a way that they find the health recommendation feasible and attractive. There is an opportunity for Artificial Intelligence (AI) algorithms to be developed and optimised to feel more “right” and personal for people.

**Prioritise accessibility**

HealthTech is likely to be impacted by many accessibility issues and consequently requirements. Broadly, accessibility requires a product to be easily used by a wide range of people, including those with disabilities.

As most HealthTech involves a display or website to communicate with users, website accessibility guidelines, which ensure content that is displayed to users creates no barriers to use, need to be considered. Accessibility in this context could involve readability of the content, size of fonts, colours used on websites, sizes of images, etc.

**Evaluate and Validate**

HealthTech is involved in a very sensitive area of people's lives. Therefore, we must ensure that HealthTech initiatives do not harm people and truly contribute to improved health outcomes.

In pursuit of this, HealthTech should enable research, data collection and validation procedures to evaluate performance when it comes to safety, performance and impact. Evaluation and validation could be necessary to advance health policy guidelines and strategies leading to further innovation in digital health inclusion.

HealthTech has the potential to revolutionise healthcare by providing better access to medical services, improving patient outcomes, reducing healthcare costs, and enabling more personalised and proactive approaches to health management. As technology continues to advance, the role of HealthTech is likely to grow, shaping the future of healthcare delivery and patient care, as long as we ensure HealthTech is as accessible and inclusive as it can be.