

Introduction

It's a popularly held view that the digitally savvy Britons who make up 'Generation Google' are at the leading edge of a transformation in the healthcare system, driving the greater utilisation of technology, including how doctors interact with their patients.

Naturally, we assume that millennials, having grown up as 'digital natives', will be more comfortable with, or even expect the integration of tech-based products and services into the healthcare system. But at Bupa we know that it's not just the young who are eager to capitalise on the health and wellbeing benefits of innovative technology.

Newly empowered and health-literate patients are able to take control of their own healthcare at the touch of a button or click of a mouse, and patients of all ages are interested in investigating how digital technology can improve their wellbeing and enhance their healthcare experience.

This report considers the impact of technology on the healthcare industry, investigating which services are most susceptible to digital disruption, and what society is not yet comfortable with. While exploring the potential impact of future technologies, we found that the human touch is the most valued medical input of all.

Behind the tech-curve

Breakthroughs in technology are radically changing the way we live our everyday lives in a multitude of ways – from on demand cab services like Uber to same day shipping from Amazon Prime – but med-tech appears to be currently lagging behind the curve. While a huge majority of Brits have used the internet to buy consumer goods (73%), book a holiday (66%), watch a film (56%) or even read health advice (55%), only a third of people have booked medical appointments online, and one in 10 have bought prescription drugs online.

This is a key signifier of an industry that's ripe for disruption. However, there is a question over whether a sceptical public would take up

med-tech with as much enthusiasm as online shopping or travel planning. One major roadblock is the poor quality of health information currently available at the touch of a button.



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Is Dr Google always right?

The doctor is in. Or online, at least.

There's a vast amount of information online about every imaginable health concern, so it's perhaps no surprise that many people consult 'Dr Google' in an attempt to self-diagnose.

But an over-reliance on internet resources has led to what is casually referred to as 'cyberchondria', meaning the unfounded escalation of concerns about common symptoms based on search results and online literature. Most doctors advise against relying on the internet as a standalone medical resource due to vast amounts of unreliable information, or simply because information out of context can be misleading.

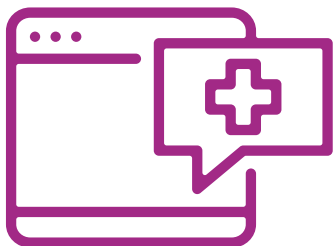
Our research shows that while many people see the internet as a convenient resource to research healthcare issues, they're cognisant of its shortcomings in terms of quality. In fact, it's a major priority, with eight in ten people (81%) believing it is important to improve the quality of health advice available online by removing 'fake news' and inaccurate articles.

Nearly three quarters (73%) of respondents went further, suggesting a formal accreditation for health advice on the internet, in order to distinguish valuable information from unvetted resources.

Dr. Søren Carstens, Head of Clinical Operations at Bupa Global confirms,

"When looking at complex medical information online, particularly when you're worried about something, you can end up just identifying with the sections you understand - which means the information you find may not even be relevant to your situation."

"Our research shows that around half of searches for illnesses online will lead to at least one cancer result. Even for illnesses as straightforward as constipation or sore throats! Out of context, online research can be frightening and cause a lot of unnecessary concern. Never underestimate the role that a medical professional takes in helping you translate and apply that information. In healthcare, decisions are not black and white, and often require non-clinical factors to be taken into account."



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Future technologies - transformation happens here

Although there's been tremendous progress on medical diagnoses and treatments, healthcare delivery hasn't changed much over the last half century. It's still largely a bricks-and-mortar world, where people who are acutely ill come to be treated by medically trained professionals.

But the future of healthcare delivery looks very different, particularly if medical experts continue to learn from consumer industries. By capitalising on digital technology to promote a 'patient-first' strategy, patients can be empowered to take a more active role in managing their own health, including taking preventative measures rather than focusing on treatment alone.

As a part of our research, we explored numerous medical advancements that are now within the realms of possibility, and exist on the distant horizon. Five groundbreaking technologies were identified as attractive by the public:

1. Gene therapy medication that would help prevent cancer or dementia (68%)
2. A home hospital diagnostics machine that conducts scans and blood tests at home (62%)
3. A full report on your DNA that tells you your risk of being affected by certain diseases like cancer (62%)

4. A geolocation app to alert you where NOT to go to avoid catching a disease like flu or where air quality might make you unwell (55%)
5. A computer packed with medical knowledge that would help you diagnose health issues (54%)

Most people would be interested in using these future technologies

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A home hospital diagnostics machine that conducts scans and blood tests at home



A full report on your DNA that tells you your risk of being affected by certain diseases like cancer



A geolocation app to alert you where NOT to go to avoid catching a disease like flu or where air quality might make you unwell

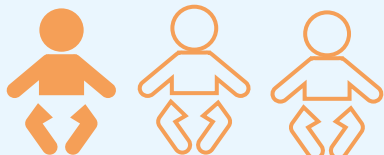


A computer packed with medical knowledge that would help you diagnose health issues



Society's view on ensuring healthy futures

It is estimated that one in three babies born in 2016 will reach their hundredth birthday. Around 12 million of the UK population are now over 65, a 30% increase in the last 25 years. And by 2066, it is projected that five million people (or 7% of the population) will be aged 85 or over. [source: ONS]



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Longer life expectancy is thanks to lower mortality rates and better healthcare, but it does pose a quandary for society. The impact of an aging society is significant, on everything from the economy – with greater spending required but less tax revenue – to additional pressure on healthcare systems everywhere.

Almost half (44%) of the British public believe the onus is on the individual to look after themselves, with a particular focus on keeping our brains healthy to avoid diseases like dementia. Similarly, the public recognises that our

healthcare systems need to focus on prevention as much as cure.

In addition to our increased longevity, there are other trends emerging that the public believe will influence our wellbeing. Environmental challenges, including being more carbon-aware, means that over a third of the UK population believe that eating less meat and more locally sourced produce will be a key focus.



32%

of people believe the government should tax unhealthy food or discount healthy choices

A similar number (32%) believe that government taxation on unhealthy food or discounting of healthy choices will be a key factor in ensuring long-term health, as well as a greater focus from employers on employee wellbeing.

Mindtech for mental health

Society's growing awareness of mental health has converted into tech-based action. The detrimental effects of an 'always on' digital culture are now better understood, and we're learning to use tech responsibly, and even reap the benefits of a new wave of wellbeing tech designed to counteract traditional technology stressors in intuitive digital formats.

From on-demand guided meditations, to happiness life coaching, and even sleep cycle trackers, many of the latest wellbeing trends and advice are available in app format, and are being embraced by people across the country.



Almost half

of people in the UK would consider using technology to improve their wellbeing

Almost half of people in the UK would consider using technology to improve their wellbeing, with meditation apps like Calm reported as the most popular choice. 30% of respondents in our study told us that they would use a meditation app, figure that rises to almost half (48%) when talking to 18-34 year olds.

Half of people who would or already use meditation apps say that convenience is their major appeal, while nearly four in ten (38%) cite its 24-hour service, providing round-the-clock monitoring and intervention support as being important.

But the appeal of this technology is not yet universal, with more than half (51%) of people not using technology to support a mental health issue.

Apprehensive that it's not effective in treating a problem (49%), the lack of industry-wide standards (38%), and an inability to tailor apps to personal requirements (36%) are the main barriers to take up.

It's clear that technology providers still have a number of concerns that they must address in order to enjoy success in this space.

Preserving the human touch in a technological world

With technological advancements on the horizon, it would be easy to believe that personal communication between doctor and patient may be on its way out.

However, despite the ability of technology to make diagnosis and care easier, speedier, and more accurate, we know that patients still place high value on human intervention. More than three quarters of respondents (76%) in our study told us they believe computers will never completely replace human doctors, and seven in 10 would never rely fully on technology to treat a condition.

It appears, though, that there is a happy medium to be found – where technology and human interaction are able to coexist to provide a holistic healthcare provision. Nearly three quarters (71%) of respondents told us they are most comfortable using health technology if it is in tandem with human support.

In fact, 78% of respondents believe that human involvement is the most important factor when it comes to healthcare, and do not see that changing. This is a sentiment echoed by many healthcare professionals, who see medical and wellbeing provision being led by talented professionals, supported by innovative and groundbreaking technology.

Dr Luke James, Medical Director, Insurance at Bupa UK commented,
"There are incredible advancements being made in medicine and healthcare, and we should embrace these potentially life-changing technologies fully. However, we must be careful to understand the limitations of what is possible without human input. Tech can enable us to know, diagnose and understand more of what is happening in our bodies, but that knowledge must be interpreted by a trained eye to be useful and safe. The nation's belief that human involvement is key is accurate and comforting."

But it must have a human touch

Computers will never completely replace human doctors



Would like to see improvements in the ability to conduct better health appointments over the phone or on the computer



Never fully rely on AI or technology to diagnose or treat a condition



Comfortable using health technology as long as a human is involved at some stage



Don't trust tech companies to handle their data



In summary

So where does this leave us? There's no doubt that technology is already everywhere in healthcare – and it's set to get exponentially more prevalent. As this report shows, it's not just limited to hospitals. It can be used by end-users to 'be their own doctors' in a controlled and safe way, and to create a better quality of life for individuals.

However, while the potential of technology is seemingly limitless, studies like this remind us that technology must be used in tandem with, not instead of, human interaction. In order to contextualise information, provide empathetic care and to help patients develop a healthy and productive relationship with mental and physical wellbeing, the human touch is still the strongest driving factor in our comfort and confidence in our healthcare.

What we should be looking for is technology that enables the relationship between doctors and patients to be more effective. Tech can have the ability to make objective assessments, freeing up the time of medical professionals to focus on the subjective elements of decisions – non-clinical nuances that technology can't understand. This division of responsibility gives doctors a greater opportunity for more empathetic conversations, and in turn empowers patients to have greater understanding of and control over their own healthcare.



Methodology:

Future technologies were identified through research from WHO: Compendium of new and emerging health technologies, Policy Horizons Canada: MetaScan 3: Emerging Technologies, and National Institute of Standards & Technology: Emerging Technologies in Healthcare. Additional consultancy into the future of healthcare was provided by Nelson Research. All statistics were sourced from quantitative research conducted by Opinium in May 2019, among a nationally representative sample of 2000 adults, on behalf of Bupa Global. For more information, please contact: externalrelations@bupa.com