TELEMEDICINE

What will health tech mean for ordinary people in 2026?

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Based on feedback from 17 experts this new report addresses: the 11 factors likely to define health tech in 2026; how common under-the-skin implants will really be; and what will surprise us most about tech-enabled healthcare 10 years' into the future…

Perhaps the most tragi-com film I've ever seen was shown in a dark room behind a red curtain at the "Splendour and Misery: Pictures of Prostitution, 1850-1910" exhibition at the Musée d'Orsay in Paris last autumn:

In this silent 19th century enactment of a government-driven public health mission for pre-coital soaping to prevent venereal disease, jerky footage showed the arriving punter, followed by the grinning lady doing some lengthy pantomime body-part sponging under a long white nighty. Historically mad and forlornly pornographic it left you wanting to holler back a 100 plus years: "That won't help you!"

Visual records like this just go to show the phenomenal distance healthcare has come since the guesswork and supposition of our ancestors. Yet despite the decades our mentality has remained pretty consistent. There are certain understood precautions we can take to reduce our likelihood of illness. Then if we do get sick – albeit following some tentative Googling – we visit a doctor for diagnosis. And then hope treatment is available to us.

But will things still follow this old familiar pattern in a decade? Well, when we consulted a panel of 17 industry thought leaders to find out how technology would transform health for ordinary people by 2026 we discovered the single biggest change looks likely to be in mentality.

This different approach to healthcare can already be seen in reproductive health. Here, home pregnancy testing is the norm, smartphone apps are used to track fertility, by time of the month, and under-the-skin implants are routinely used for contraception. In short, people are happy to accept regular invasive procedures and proactively take their health into their own hands.

So, what will technology mean for health in 2026?

Our experts believe in future, instead of seeing health outcomes as largely mysterious and to be escalated to professionals in times of crisis, people will monitor themselves as standard. While the vast new volumes of data available will help professionals to better profile illnesses.

This will be a world of connected care at home, virtual clinics and a better understanding of holistic health. In a decade ordinary patients will take a more "consumer" approach to their own wellness and a number of new professional roles will emerge to facilitate this transition.

Interestingly, evidence from YouGov in the UK suggests [PDF] young teens are already taking a different view of tech-enabled healthcare. Older people are reaching for any available ways to stay well. While it is the people in their thirties and forties who are getting most left behind.

How should we view this expert opinion?

The trouble with any form of future gazing is it comes with bias. And the main issue with this type of approach is that when looking at the world ahead people interviewed instinctively tend to push very positive answers and to highlight their own area of expertise. It is also important to remember that despite a constant drop in the price of technology, there is a monetary cost associated with everything, and new frontiers of health will never be available everyone.

The other thing that strikes me very strongly is that the more we monitor and track our health, the more anxiety disorders we're likely to see emerging. This is already happening.

As (largely) poorer people are suffering from obesity and damaging their health through surfeit, one of the newer disorders that has appeared in recent years is one where individuals are so obsessed with healthy eating they fail to stay healthy. Like anorexia and other more familiar eating disorders – all of which are on the rise – these are most common amongst middle class high achievers.

Yet caveats aside, the views compiled from our experts are remarkably consistent and the short report below aims to showcase what health tech might mean for ordinary people in a decade's time. In four short sections this covers:

1. What 11 factors do experts think will define health tech in 2026?
2. How common will under-the-skin implants be?
3. What will surprise people about healthcare in a decade's time?
4. What conclusions can we draw from all this?

What 11 factors do our experts think will define health tech in 2026?

1. Proactive monitoring

The biggest change highlighted by our experts for the next decade is the increase in proactive monitoring. *Jason Lee*, healthcare forum director at The Open Group suggests "a 'mini wellness health record' collected from a wearable mobile device will be the norm for ordinary people before too long."

This could include a wealth of data pulled from a variety of sources and would allow individuals to better understand their physical and mental health.

"In the next ten years we are going to see a huge adoption of health tech that has been specifically designed to help people improve their mental health," suggests David Ingram, CEO of Pip.

While says Peter Ballard, Co-founder of Foolproof adds: "Artificial Emotional Intelligence (AEI) will play a big role in how we monitor our mental wellbeing. AEI will allow us to replicate and map our brain activity, helping us identify subliminal thoughts and patterns of behaviour which can have a negative effect on our health and our relationships. These digital mind maps will help us to lead happier and healthier lives."

Brigette Bard, CEO of Biosure UK summarises: "The future is very much about individual empowerment – people using health technology to take control and ownership of their health and wellbeing. By transferring

responsibility to the individual person there is the potential for increased engagement and awareness around their own lifestyle choices and making informed decisions."

2. Attitudes to data

"One of the most significant changes to healthcare technology in 2026 will be access to data," says Jonathan Burr, CEO of Intelesant. "Patients will be able to routinely access GP and hospital records online – similarly to how online banking works today."

Dr Gordon Sanghera, CEO, Oxford Nanopore Technologies believes "environmental data will also be completely linked to individuals' health.

"As an internet of living things is created – where biology is connected to the internet for continuous monitoring – individuals' health will be more readily related to other factors. For example, monitors will constantly surveil public transport, airports, hospitals, rural location and other places of interest for the appearance and evolution of viruses."

This will lead to a fundamental change in mind-set. "We will have got over the fear that our personal data can be misused and will understand that there is much future good that can come of sharing disease details today," suggests Jurgi Camblong, CEO Sophia Genetics**.**

While Dr Sanghera adds: "People will share this information in a privileged way with healthcare providers, but also freely in social networks, where big data analytics will be able to provide insights that are more than one doctor's brain can generate."

3. Advanced analytics

The increase in data will in turn lead to more advanced analytics. As Roman Chernyshev, Senior VP Healthcare and Life Sciences at DataArt points out: "It is just a matter of time before technological developments [the IoT] allows various medical devices to continuously collect vital data from patients and compare this, in real time, to data from millions of patients around the world. This will radically change how medical conditions are diagnosed."

David Bolton, Global Healthcare Industry Director at Qlik adds: "The technology used to analyse data and make that data more accessible to all stake-holders, including the patient, will drive the transformation of the healthcare sector."

He believes analytics will help to support population healthcare. "The next ten years will see us taking all of the information we have on a population, and using this to improve the way that we proactively manage that population's health."

4. DNA sequencing

"We will see a much bigger interplay between biology and technology as data analytics begin to be applied to sequenced DNA and tumour samples," says Camblong of Sophia Genetics**.**

"These technologies will get faster, cheaper and more accurate, helping them proliferate to the point that it isn't ridiculous to think that every hospital and lab will be sequencing DNA to offer more information to clinicians."

5. Increased personalisation

“Personalised medicine is very much a reality today, but it is only as healthcare and political leaders begin to understand and embrace the power of genetic sequencing will it start to deliver its true potential,” adds Camblong.

She believes in the medium term, we will see the proliferation of devices and health monitoring apps be more widespread and offering useful, actionable information.

“As individuals become more used to accessing health information online and sharing it, we will see a higher degree of tolerance for their ‘professional’ healthcare to be online, whether that is through talking to doctors and therapists via apps, handling electronic records or even proactively sequencing parts of their genome to gain understanding of their personal make-up, we should see medicine become more transparent but also a lot more accurate and cost-effective.”

This is seconded by Burr of Intelesant: “Patient diagnosis and treatment will take into account the genetic make-up of an individual to identify the most appropriate form of treatment, based on how their body responds.

“The life expectancy of people will continue to increase, people will be living longer and will acquire multiple survivable long term conditions as research into cures continues. More reliability will be pushed onto social care and there will be much more everyday discussion and measurement of quality of life rather than survivability.”

6. At home care

Naturally much of this will make it easier for people to seek diagnosis and treatment in their own homes. “Camera and remote technologies that allow healthcare from the home will likely become more popular as the wearables [do],” suggests Jonathan Chevallier, CEO at Oxehealth

“With the IoT developing at pace, technology that operates securely via WiFi at low cost, and which can offer clinically-validated health monitoring from within a patient’s home is a huge opportunity for the healthcare technology market to develop. It’s recognised that we cannot continue to care for our sick and elderly in particular in the way that we currently do, and so shifting healthcare to a home environment is an increasingly attractive prospect.”

Thomas Sutton, Executive Creative Director of frog adds: “At-home health technology based on data will become the norm. We’ll have diagnostic devices – simple, connected devices that allow basic exams to be performed without the presence of a physician.

“Each of us will have an AI ‘health and wellness advisor’ that is dedicated to proactively keeping us healthy, monitoring our health status and nudging us towards healthy behaviour choices. These advisors will be constantly connected to us through applications such as Facebook, WhatsApp, and their successors.”

7. Virtual appointments

As things become more focused on the patient’s connected devices virtual consultations will naturally become an integral part of professional healthcare.

“Skype consultation will be widely available with specialists in different locations, backed up by new diagnostic equipment to minimise travel to hospital. There will also be development of 'virtual' GP practices, and by 2026 some may already exist,” says Burr of Intelesant.

While Michael Core at Össur Webshop adds: “This could revolutionise healthcare as specialists located around the other side of the world will be available to patients at a fraction of the cost.”

8. Less intrusion

Chernyshev of DataArt tells us: “Everyday healthcare technology for the ordinary person in 2026 will be non-intrusive. That is to say that the ordinary person will be faced with less technology that requires interaction. Technology advancements will enable healthcare to be much more seamless.”
Hospital beds that will be able to collect human data and feed vital signs in real time to staff without the need for patient interaction, is example. Along with all the wealth of data being collected by the Internet of Things.
Manish Tandon, EVP of Healthcare, Insurance and Life Sciences at Infosys describes world of "connected care”. The key principle of this, he explains, “is to connect patients, healthcare providers, medical device and pharmaceutical companies and payers to develop and deliver all the elements necessary to provide the right healthcare to every patient that needs it”.

9. New roles

The change in the way we approach healthcare will also have an impact on the jobs people healthcare professionals do. None of this is likely to decrease the volume of people needed but it is likely to change some of the roles required.
“Roles such as health coach, concierge, or care coordinator – focused on empowering better patient self-management – will rapidly become an important part of the healthcare ecosystem,” says Sutton of frog. “These new professionals will primarily interact with patients outside of the clinical context and over digital platforms, building on the successes of pioneers such as ginger.io and omada health.”

10. 3D printing

“3D printing is already in early-stage use developing unique, lifelike organs for surgeons to practice on and prepare before complex operations,” suggests David Mills, CEO of Ricoh Europe.
“The capacity for 3D printing to rapidly manufacture high quality, bespoke implants at relatively low cost has the potential to greatly reduce waiting times for life-saving treatment.”

11. The cost of care

Last summer, Goldman Sachs estimated the digital healthcare revolution could save America $300 billion.
And this element of cost saving is highlighted by many of the people we spoke to.
“Big data technologies will also help us to move from a cost-based care model to a value-based care model. This means focusing on patient outcomes rather than cost,” says Bolton of Qlik.
He adds that Sweden is currently rolling out value based care across the whole economy and changing the way that they deliver healthcare.
“From my perspective, the biggest change in healthcare in the next 10 years is beginning to take place today: The Rise of the Insured Healthcare Consumer,” says Jim Rogers, Director, Healthcare Solutions at Salesforce.com Practice, Persistent Systems.
In this healthy people offset the cost if sicker patients, he explains. “These younger, healthy consumers want to be able to shop for services online and even complete physician visits virtually, and when possible receive treatment at home.”

How common will under-the-skin implants be?

Under-the-skin implants is an area which has received a lot of research and generates a very strong emotional reaction. Opinions were divided amongst the people we spoke to as to how common they will be by 2026 although most agreed that the artificial pancreas for the treatment of diabetes will be the most standard implant.

Chernyshev of DataArt believes they "will be more common". But they will be increasingly developed by biochemistry. "Tissue will be grown rather than being artificially created. Interaction with the human body will be kept at a minimum," he says.

Chevallier of Oxehealth thinks these "will be much slower to be generally adopted than people may think": "The primary issue with implantables is simply that many people will dislike the idea of them, and there are a range of obstacles with skin irritation, allergy and immune responses that will mean they will be unsuitable for some people, too."

Matt Hunt, CEO of Apadmi Enterprise takes a similar view. "There's a big difference between putting a watch on your wrist and fitting a microchip under the skin. At the moment, it's seen as invasive. Can it be done? Yes. Will people want to do it? Debatable. If safety measures can be put in place, for instance firewalls so devices can't be hacked, public trust will grow and they will become more popular."

However, Core of Össur Webshop is much more open to the idea. He says: "With mobile phones scaling down to small wrist devices due to the developing human need for convenience, it's only a matter of time before health monitoring devices, such as the Fitbit, are no longer worn but embedded in our skin. An implant in the hand may allow you to unlock your car, pay for products, verify your identity or be used to store a person's medical records.

Also, with the birth control implant revolutionising contraception for millions of women around the world, using implants is surely going to spill out into other areas of healthcare. Implants may be used to stimulate areas of the body such as the brain and spine to treat conditions like chronic pain, depression and even paralysis."

Which leave Jason Lee, healthcare forum director at The Open Group *to sit on the fence:*

"This is hard if not impossible to predict. Miniaturisation is the rule in the development of IT. But the security of these devices is unknown. Safety is probably not as big an issue. Perhaps implantable devices will be more commonly used by animals and will more commonly be found in foods we digest."

What will surprise people about healthcare in a decade's time?

Fundamentally, the mentality of healthcare looks set to change over the next decade, which is a very difficult idea to process.

"The thing that will surprise most people about the future of health technology is that it'll push healthcare to the background in terms of visibility," says Chernyshev of DataArt. "When people think of the future they think of robots and other such futuristic images but the reality with healthcare is that it will not be so obvious. Technology will result in healthcare being everywhere but now it'll be invisible."

Mills of Ricoh Europe believes the "speed with which these technologies can be introduced" will surprise people most. While Sutton of frog thinks it "will be looking back to today and realising how quickly the 'unthinkable' became our new normal". This point is seconded by *Lee* at The Open Group who says:

"The fact that we ever did things the 'old fashioned' way will surprise people in future. New technologies will be accepted as fact and as common. It will also surprise people in the future to learn that just a short while ago people did not have access to their own health information."

Core at Össur Webshop suggests: "One of the most surprising things about future health technology will be what it allows us to do. The capacity and potential to cure incurable injuries and ailments are astounding."

While Camblong of Sophia Genetics adds: "Many diseases that kill us today will become manageable conditions.

"This is largely to do with huge improvements in sequencing technologies and analytics, which have become more accurate. As machine learning techniques enter healthcare more and more, pooling knowledge (and not patient data) will make the algorithms smarter, to the benefit of all. Today, there is much nervousness about this but we will overcome this fear for the greater good."

More pragmatically Professor Ian Weeks, Dean of Clinical Innovation at Cardiff University tells us: "People are familiar with having tests for a disease when they feel ill but may be surprised to be tested even before they are ill and also to be tested to establish which drug or other treatment will be most effective."

Ballard of Foolproof adds: "I think the biggest surprise for people about the future of HealthTech will be how empowered we become by the personalised health data it provides us.

"Access to personalised feedback from a medical AI agent, or by live video stream from a doctor who is being sent the medical data from your wearable, will allow us to self-manage our health and illnesses."

What conclusions can we draw from all this?

All predictions about the future are fraught with issues and things rarely work out in practice as they do on paper. However, technology is moving at a ferocious pace. And the feedback offered by our panel of experts is remarkably consistent, and reflects a continuation of all the trends we're seeing today.

There are security implications to all these changes, of course. As Hunt of Apadmi Enterprise points out "as with all technology, developers must be careful to ensure security and data protection are inbuilt into any future tech advancement," and this is never more crucial than in healthcare.

There also clear regional differences in the way healthcare works and is rolled out. The UK, which offers free healthcare via the National Health Service (NHS) but has severe cash issues, is very different from the US model. And a recent report on the NHS suggested while there are clear short term difficulties in the service the longer term – by 2030 – there is more potential:

"The NHS has the opportunity to take advantage of two powerful and under–exploited sources of innovation that have the potential to make care better and, under the right circumstances, cheaper. These are the rapidly accelerating pace of digital technology, and the power of social innovation."

In the end, there is plenty of technology that is nearly ready now, and will certainly be usable in 10 years' time but the rate at which is brings about health change will ultimately come down to human factors. And so while the potential for joined up care and decent analytics are all very much within our grasp, we can only hope they get applied in a way that will truly help ordinary people.

This short report was compiled based on feedback from the following individuals:

Peter Ballard, Co-founder of Foolproof
Brigette Bard, CEO of Biosure UK
David Bolton, Global Healthcare Industry Director at Qlik
Jonathan Burr, CEO of Intelesant
Jurgi Camblong, CEO of Sophia Genetics
Roman Chernyshev, Senior VP Healthcare and Life Sciences at DataArt
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