



**BUSINESS**

**The £232 billion opportunity**

# **HOW THE PANDEMIC ACCELERATED PROGRESS IN UK HEALTH AND SOCIAL CARE**

**REVOLUTIONISE  
THE EVERYDAY**

**From virtual consultations to virtual reality, cutting-edge digital techniques are driving daily innovations in the healthcare sector.**

**A nation forced into self-isolation has led to digital transformation in healthcare moving faster than ever.**

That process of constant innovation is now here to stay. And it's also boosting the UK's economy.

We recently commissioned the Centre for Economics and Business Research (Cebr) to look at the potential benefits to the UK economy of the continued investment in digital transformation projects, similar to what we've seen over last year.

Across the UK, in the private and public sectors, Cebr estimates that Covid-driven digital change could increase GDP by £232 billion, or 6.9%, by 2040.

Simply by continuing to invest in digital infrastructure projects in the health and social care sector, we could expect a £33 billion boost to UK GDP over the same timeframe – an uplift of approximately 1%.

More and more patients are seeing the doctor without either of them having to leave their home. Virtual consultations – like those at the Richmond Wellbeing Service – are booming.

Moorfields Eye Hospital has also added virtual reality to its toolkit, fulfilling its promise to always give a five-star service to patients, whether they're physically there or not.

And these sorts of projects are being rolled out nationwide.

We're working with the NHS across the UK to ensure every healthcare worker enjoys the secure, high-speed connectivity they need to deliver their increasingly digital services.

Now that the Health and Social Care Network (HSCN) is online, connecting 950 organisations across the UK, frontline workers can do more than ever before.

The University Hospitals Plymouth NHS Trust says that its staff now have “ten times more bandwidth.”

Here's how the digital transformation lessons learned during lockdown are now being rolled out permanently, benefiting patients and healthcare practitioners up and down the country.



**Digital transformation in health and social care is happening faster than ever before.**

Extract from the Cebr report focusing on the health sector.

## Health Sector

The table below summarises the impact of accelerated technological adoption in the health sector. Starting in 2020, and then each year from 2025-2040.

Impact of accelerated digital transformation in the health sector - in terms of economywide gains

(Real, £bn, 2020 prices)			
Year	Size of health sector	Economywide gains attributable to public sector investment	Gain as a % of GDP
2020	149	0	0.0%
2025	176	5	0.3%
2026	181	8	0.4%
2027	186	12	0.5%
2028	192	15	0.6%
2029	197	18	0.7%
2030	203	22	0.8%
2031	209	24	0.9%
2032	215	27	1.0%
2033	221	29	1.0%
2034	228	30	1.0%
2035	234	31	1.0%
2036	241	32	1.0%
2037	248	32	1.0%
2038	256	33	1.0%
2039	263	33	1.0%
2040	271	33	0.3%

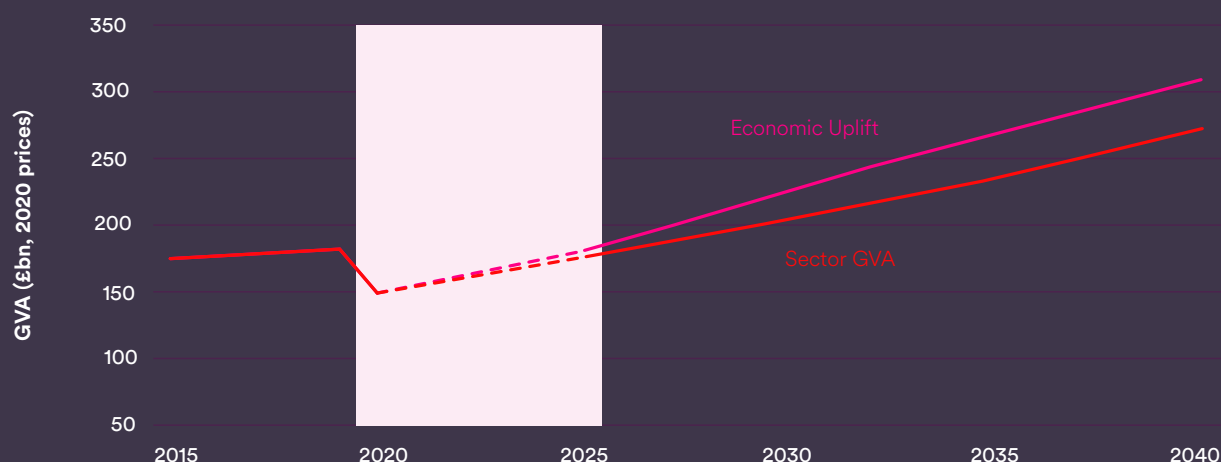
It is estimated that by 2040, increased adoption of digital and technological initiatives in the health and social care sector could increase GDP across the whole UK economy by around £33bn – a gain of approximately 1% of GDP. For context, this is broadly consistent with estimated gains attributable to public sector investment from the local government (defined as public administration and defence), where private sector GDP is estimated to realise cumulative gains of approximately £32bn in 2040.

Estimates from Cebr’s macro framework indicate that the total size of the health sector in 2020 is approximately £149bn. By 2025 this will increase in size under normal steady state assumption to approximately £176bn.

The cumulative uplift – which is realised across the whole economy – is illustrated below. The delta between the two lines represents the size of the digital transformation uplift that is attributable to investment in the health sector.

While there might be a number of ways in which the gain is channeled, our scenario assumes that cost savings – examples of which are given in the literature review – are reinvested into the sector. This becomes possible because few operational resources are needed to provide the same quality of healthcare as currently provided.

### The impact of accelerated digital transformation in the health and social care sector



Source: Cebr analysis

[Download the full CEBR Report](#) to find out more about the national picture.  
Or the detailed CEBR report focusing on [health sector](#).



## The rise and rise of virtual healthcare, and improving patient outcomes

Covid-19 accelerated digital transformation in clinical settings, even improving some services during the pandemic. And for many medics on the frontline there is no going back.

Dr Ben Wright, Lead Clinician for the Richmond Wellbeing Service, says: “We have gone to an entirely digital service. For patients who don’t have digital assets, we developed digital pods. We repurposed some of our smaller clinical spaces with Webex boards.

“Patients with no digital skills can come in, have a virtual face to face consultation and go. It addressed the gap between those that have and those that don’t.

“I require that clinicians offer virtual face to face consultations. Not just phone calls. We found an improvement in clinical delivery. It really helped the outcomes.

“Now, with virtual consultations the personal cost of having an appointment is so much less. So, more people are able to have treatment and to benefit from it.”

He thinks this trend will continue long after the pandemic. Dr Wright explains: “My prediction is that 70% of mental health consultations will remain virtual and 20% delivered through digital pods.

“At these community venues these digital pods offer people a high quality, virtual consultation. In the future I think these pods may have medical equipment like an ultrasound probe, or high quality microphones so patients can self examine. I estimate that only 10% of mental health consultations will be face-to-face.”

Dr Wright is now Chief Clinical Digital Officer with East London NHS Foundation Trust. There he works at the interface between clinical and digital practice.

He is a strong advocate of digital change. And has first-hand experience of the challenges faced by those determined to bring it about.

Dr Wright says: “The Covid phenomena created very strong organisational engagement. But the strategic will and concerted delivery lag behind. There is so much more value we can extract from digital, if we go about it in a systematic way. The challenge is to go from good to great.

“There is a fantastic commercial opportunity for companies like Virgin Media Business and other suppliers to jump into the gap and really address the need.”



## From paper and ink to digital-first: the increasing pace of transformation

The pandemic has proven to be a catalyst for change in healthcare, bringing forward innovations that may, in other circumstances, have taken years to enact.

Dr Wright has first-hand experience of that increasing pace of change, as a digital pioneer right from the days when the NHS was mostly a paper and ink organisation.

Now, as associate medical director for clinical information at East London NHS Foundation Trust, he is responsible for helping to drive a culture of innovation.

He and his colleagues deliver cutting edge primary and secondary care across more than 150 sites, serving a population of 2.5 million.

Dr Wright says: "I sit at the interface between clinical and digital practise. But I've got a long background in digital.

"I got into digital during my final year at St Thomas', when I saw a typed invitation to apply for clinical informatics.

"Back then I had access to the only computer in the building. I was able to use it and I realised this was going to be the future...I've always seen the potential.

"But I think the challenge around digital transformation is not in its potential, the challenge is in the realisation...and getting sufficient momentum.

"If your organisation doesn't have strategic will, it won't make available the necessary resources and it won't orientate the organisation to engage with the digital process."

The pandemic changed all that.

Dr Wright continues: "What Covid has changed is the organisational engagement. It forced people to make the change. Now we can't go back to the historical path of least resistance.

"The wholesale move from face-to-face work, to simply not being able to see each other and working from home, meant organisations had to enable that digital infrastructure."

And he believes that this switch to more digital has led to improved health outcomes for many.

Dr Wright says: "There are multiple dimensions in which digital improves quality of care delivery: information access, information coordination, information transformation.

"It can be really helpful. And that's just the really basic stuff having information about the patient and working collaboratively with other agencies.

"But there's also the broader access to world knowledge on health systems which is really important as well.

"For example, our e-prescribing programme is a success. It's realising many of the benefits in terms of patient safety, consistency and information tracking."

*Virgin Media Business has partnered with East London NHS Foundation Trust since 2013.*

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**“My prediction is that 70% of mental health consultations will remain virtual.”**

Dr Ben Wright, Lead Clinician for the Richmond Wellbeing Service

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## The problem-solver's guide to digital healthcare

There's a reason healthcare today benefits from so many practical innovations forged during the pandemic: our frontline medics are natural problem-solvers.

Speech and language therapist Rebecca Bright MBE believes the digital transformation forced on clinics by Covid-19 is here to stay. And will make for better outcomes.

She says: "In many ways it feels like we've pressed the fast-forward button. Because people had to do it, everyone got on board. The things we were hoping for happened.

"Barriers have been removed. Things have been fast-tracked. It's probably a good thing. Now everyone will benefit from a positive attitude towards how we use technology."

Rebecca's MedTech company Therapy Box helps those who struggle to communicate. Its apps, research and data monitoring have proved invaluable to health professionals.

The company's agility and mature use of technology and remote working meant it already had the tools to survive and thrive during the Covid crisis.

Smart innovation is more important than simply throwing money at a problem.

Rebecca explains: "We've been able to maintain our projects and deliver them on time and on schedule.

"Our bigger competitors have face-to-face customer meetings built into their cost. While they have big communications budgets, we always tried to do stuff online.

"People used to be a bit reluctant about online training, they felt like it had less value. Now people are much more willing to do that."

She adds: "We were involved in research projects where previously the plan was to see the patients. Now, we've built it into our technology. You can have the session within the app itself.

"Otherwise research projects would have ground to a halt. Patients won't be coming through the door for a long time. That's quite a barrier to research."

Therapy Box already shares its new-found online research experience with other teams around the country, helping others take advantage of the lessons it learned.

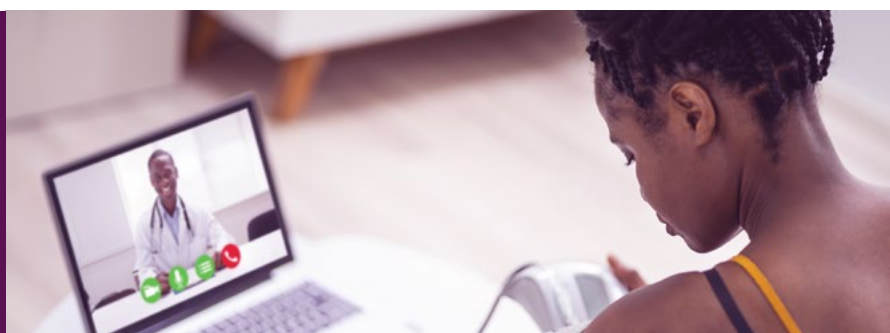
Rebecca says: "This will now become the routine way of working. People are more open-minded to try new things.

"From now, we'll use a mix of face-to-face and remote service delivery. Online will suit some better than others. But the option's there. And that's the good thing.

"I think clinicians are good problem-solvers. They are, by nature, trying to identify the problem and what can we do to solve it. They have the right attitude and skills. And they're keen to adapt."

*Therapy Box was one of the winners of Virgin Media Business's VOOM competition in 2018. Its apps are already estimated to have saved the NHS more than £6 million.*

Smart innovation is more important than throwing money at a problem.



## How digital innovation helps put patients first at the UK's leading eye hospital

Patient experience is a number-one priority for healthcare in a digital age. And that's increasingly true for both face-to-face and virtual consultations.

Frontline workers at Moorfields Eye Hospital, London, lead the way on both fronts.

Staff use virtual reality headsets to see first-hand the real challenges faced by patients, with workshops and training sessions helping fine-tune how they respond to them.

Sarah Needham, Deputy Director of Nursing at Moorfields, says: "For the first time, we have the ability to walk in our patients' shoes and learn from their lived experience.

"[It's] the perfect tool for us to recreate real-life experiences in a way that was previously impossible with traditional training methods.

The 360-degree VR films include scenarios ranging from the waiting room to the operating theatre, and even explore methods of breaking bad news.

Sarah continues: "Each scenario will reflect good and poor practice and allow the user to feel what it is like to utilise our services with sight loss.

"We're really excited to be using immersive technology to improve staff and student engagement whilst giving them more confidence and a deeper understanding of our patients' needs."

But along with many healthcare providers, the pandemic meant Moorfields had to see many more patients online – a trend that is likely to continue long after the pandemic.

The hospital rolled out an ambitious digital programme to tackle this that was up and running in just two days. It gives patients access to the vital eye care they need without having to travel to hospital.

Moorfields can host more than 600 video appointments a week. Typically seeing patients via their smartphone, computer or tablet, within one minute of logging on to the platform.

Specialists could continue to support thousands of patients with a range of eye conditions, including those requiring follow-up to surgery, as well as running a virtual accident and emergency (A&E) service.

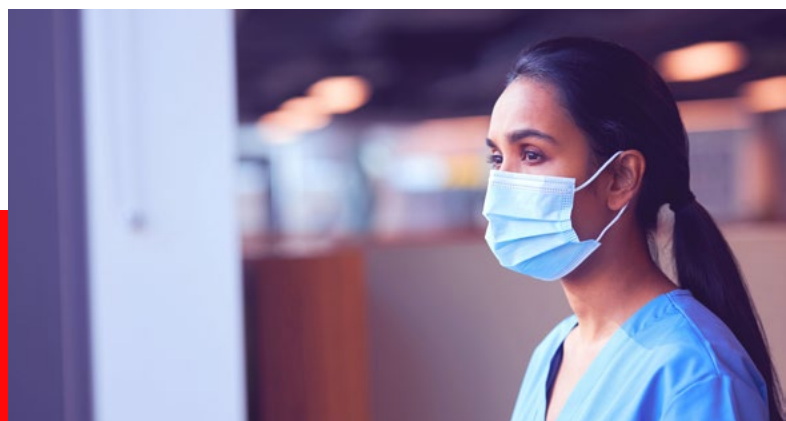
Eight out of ten people were able to get the treatment they needed online, with almost 95% giving the service they received the maximum rating of five stars.

Dr Peter Thomas, Director of Digital Innovation and Consultant Paediatric Ophthalmologist at Moorfields, says: "We're proud that we're able to offer this new service.

"Necessity has forced us to approach problems in new ways and this is a great example of how we can utilise technology to provide a rapid solution."

Chief Executive David Probert adds: "Our virtual A&E provides an all-important lifeline to anyone worried about losing their sight, providing rapid access to our team of specialists without the need to travel.

"Across the NHS, trusts have been innovating at pace thanks to having the right technology at the right time."





## The day the NHS network got 10 times faster

During the Covid crisis, NHS Digital completed the biggest ever public-sector data-network migration and saved around £75 million a year in the process.

Today the Health and Social Care Network (HSCN) connects 12,000 sites belonging to 950 NHS, social care, private-sector and local authority organisations.

Now they benefit from the faster connections vital to deliver health and care services in a digital age. HSCN supports the NHS Internet First policy and the shift to public-cloud-based services.

They can source network connectivity from multiple suppliers in a competitive marketplace and in collaboration with other health and social care organisations.

So frontline workers enjoy faster, cheaper, smarter connectivity.

Patrick Clark, HSCN Programme Director at NHS Digital, says: "This is a hugely significant achievement both in terms of the scale and the benefit of what's been delivered.

"Reforming long-standing services in order to promote real choice, competition, innovation and value for money is always difficult.

"But the HSCN initiative demonstrates what can be achieved when you work collaboratively across the health and care system, and industry."

He adds: "The Covid-19 pandemic demonstrated how important it is to underpin online, digital services with the right connectivity.

"And I'm delighted that the HSCN initiative has enabled so many organisations to upgrade and future-proof their connectivity services affordably.

"Good connectivity is vital for healthcare practitioners, supporting them with faster, more reliable access to the information and services they need, when they need it.

"HSCN now provides organisations with the ideal way to obtain the best connectivity for their staff at the best price."

Dr Toral Thomas, Consultant Forensic Psychiatrist and CIO at Norfolk and Suffolk Foundation Trust, says: "Our speed has increased up to 10 times faster. This allows us to deliver high-quality care. Spending less time behind screens and more time with our service users."



**HSCN has significantly improved connectivity for the health and social care sector across the country.**

Rob Harder, CTO for University Hospitals Plymouth NHS Trust, confirms: “It’s given us 10 times more bandwidth at 20% less cost.

“More reliable connectivity for our clinical systems gives us capacity to share more information.

“The more information our clinicians can share when they are discussing complex patients gives them better ability to provide better patient care.”

Dan Parry, HSCN Lead Migration Programme Manager at NHS Digital, says: “Completing the HSCN migration ahead of schedule and within budget is an incredible achievement, given the project’s size and complexity.

“A great success is seeing the number of local NHS organisations benefiting from significant savings as a result of the HSCN marketplace whilst still being able to upgrade their capacity to fibre-based products.

“This will enable them to make better use of digital tools not only during the pandemic but as part of their longer-term digital ambitions.

“This has been a mammoth task as we switch the lights off on the legacy network and bring HSCN migration activity to a close.”

*Virgin Media Business paved the way for delivery of HSCN with our Public Services Network (PSN). We were one of the first organisations in the country to be awarded the PSN Compliance Certification CAS(T) 2-2-4. We since achieved two-stage compliance for HSCN.*



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Rob Harder, CTO for University Hospitals Plymouth NHS Trust

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## How can we help you?

Healthcare providers are leading the way when it comes to digital transformation projects.

Virgin Media Business is partnering with clinicians nationwide to revolutionise the everyday for their patients and their staff.

From rolling out ultra-fast broadband through to helping with cutting-edge telemedicine projects, we are proud to play our part in helping the UK rebound.

This is a Virgin Media Business report based on work undertaken by Cebr. For the full analysis and economic modelling, methodology and literature review, you can [read Virgin Media Business' summary](#) and download Cebr's report [The impact of digital transformation on the UK economy: Health Sector - A Cebr report for Virgin Media Business from our hub](#).



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