

Everything you've wanted to know about NHS Digital and Digital Healthcare

(but didn't want to Google)



Let's be honest, digital healthcare is a big, sometimes baffling world. From EHRs to AI, digital strategies to NHS data tools, it can feel like there's always a new acronym to learn or system to keep up with. And figuring out where everything fits? Not always straightforward.

So we've made things easier.

We've pulled all the key info into one helpful, plain English PDF guide that you can download and keep to hand. No fluff, no jargon overload, just the essentials explained clearly.

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What is a digital health solution?

A digital health solution is, broadly, any technology used to support health services. That might sound like a wide net, and it is. It includes everything from digital health records and electronic health record (EHR) systems to online consultation platforms and patient facing apps. Some solutions are deeply embedded in clinical workflows, while others live on your phone and quietly remind you to take your medication.

What makes something a "solution" isn't always the tech itself. Sometimes it's how it solves a small but persistent problem, like not having to repeat your entire medical history each time you visit a new clinic. When these tools work well, they blend into the background. You don't think about digital healthcare technologies when a hospital appointment appears in your app calendar, but they're the reason it happens.

It's an evolving space, too. As digital health tech improves, so does the expectation for care to be simpler, faster, more joined up. It's not perfect, but when it works, it's hard to imagine going back.

What are the different types of digital health tools?

This one's a bit trickier because the category is always growing. At the core, there are electronic health record systems, which are probably the most recognisable. They replaced paper files with something (in theory) faster and easier to access. Then you've got patient apps, digital triage tools, remote monitoring kits - some that track your heart rate or send alerts if something's not right.

There's also the quieter stuff behind the scenes: scheduling platforms, secure messaging between teams, dashboards that help GPs spot trends across patient groups.

And of course, many of these tools now interact with each other. A patient might use a digital care app that feeds into their electronic health care profile, which is then visible to a hospital consultant. That's the promise, at least.

Not every system lives up to it, of course. Interoperability (the way systems "talk" to each other) is still a challenge. But in a typical day, a clinician might interact with at least five different digital healthcare technologies without even thinking about it.

What is a digital care app?

A digital care app is probably one of the more visible faces of digital healthcare. Patients use them to book appointments, request prescriptions, or access support - things that used to require a phone call (and a long wait on hold). They're not just admin tools, though. Some apps offer educational content, symptom checkers, or chat features that connect directly to a clinical team.

I think the best ones feel simple. You open it, tap a few times, and you're done. But a lot of work goes into that kind of simplicity - integrating with electronic health record systems, keeping everything secure, designing for people who may not feel confident with tech.

These apps are also a way for healthtech companies to get closer to real users. They create a feedback loop between the people using the service and those building it. It doesn't always go smoothly, but when it works, it feels like a genuine improvement.

What is the difference between healthtech and digital health?

Honestly, the terms are often used interchangeably, and that's part of the confusion. But there is a distinction, I think.

Healthtech usually refers to the companies and products themselves, the innovation side. Think of a startup building a smart stethoscope, or an AI model trained to detect cancer on a scan. These are health and tech innovations, and they don't always go straight into clinical use.

Digital health, on the other hand, is more about the application. It's about how those innovations are actually used in practice, in NHS clinics or care homes. It includes the health digital technologies that help doctors and nurses deliver care more efficiently.

So, in short: healthtech builds it. Digital health uses it. But the lines blur, especially as more tools go straight into patient hands - like digital care apps or consumer facing wearables that feed into digital health records.

What is digital health and social care?

This one feels more like a philosophy than a product category. Digital health and social care is about making sure technology supports not just clinical services, but also the wider systems people rely on, like social workers, carers, community services.

A practical example? A shared electronic health care system that lets a care home and a GP surgery see the same information. Or a digital discharge process that alerts a social care team when someone's being sent home from hospital. These are small things on the surface, but they reduce risk, duplication and confusion.

The idea is that people shouldn't fall through the gaps just because teams work in different sectors. With the right digital health tech, those barriers start to fade - slowly, but meaningfully.

What are the digital technologies for digital healthcare?

There are a few obvious players: electronic health record systems, wearable devices, remote monitoring platforms, AI-powered decision tools, even simple appointment booking software. All of these sit under the umbrella of digital healthcare technologies.

Then there are the tools we don't always notice, communication platforms that help teams share notes in real time, or analytics dashboards that highlight patients at risk of readmission. Not especially glamorous, perhaps, but quietly powerful.

Some of the most effective digital health records don't shout about their presence. They just allow safer prescribing, quicker referrals, fewer repeated questions. It's the kind of tech that proves its worth through absence: fewer mistakes, less admin, better flow.

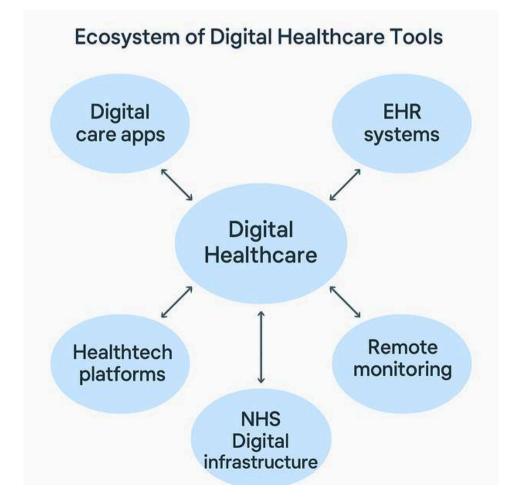
Of course, the tech is only part of the story. Success depends just as much on culture, training, and whether people trust the tools in front of them.

What is a digital hospital?

A digital hospital takes many of these systems and builds them into the fabric of care. It doesn't mean robots in every ward (though automation has its place). It means using digital healthcare technologies to manage beds, track patient movement, process results and reduce admin friction.

Instead of clipboards, there's a tablet. Instead of chasing lab results, they're sent automatically through the electronic health record (EHR) system. Nurses might get alerts about deteriorating patients based on real time data. Patients might self check in on a screen.

It's a shift in how hospitals function. Some are further along than others. But when a digital hospital is working well, it's not just about speed, it's about safety, visibility, even a better patient experience. Though, it has to be said, these improvements are only as good as the systems behind them. And those systems (digital health records, staff workflows, health digital technologies) require investment and crucially, time.



What are digital healthcare examples?

There's a wide range, and honestly, the list keeps expanding. Some of the more familiar examples of digital healthcare include video consultations with your GP, online repeat prescription services, and the electronic health care systems used in hospitals and clinics. Then there are digital health solutions like appointment reminders by text, digital triage tools on practice websites, and mobile apps that help patients manage long term conditions.

What's interesting is how many of these tools now feel routine. A friend recently mentioned they hadn't called their GP in years - they just use the online form. That's a digital health experience, even if it feels completely ordinary now.

Behind the scenes, there's also a lot of less visible tech: data dashboards for population health, <u>integrated care records</u>, remote monitoring devices feeding live updates to clinical teams. All of this fits under the umbrella of health tech digital, even if the average patient never sees it directly.

These examples show how digital innovation in healthcare is shifting from being "new" to being the expected norm - though, as always, some areas move faster than others.

What is digital health in the UK?

In the UK, digital health refers to how we use technology to deliver, support or improve health services across the NHS. It's everything from digital healthcare apps used by patients, to the electronic health care platforms behind the scenes. It covers a spectrum of tools and services, many of which are designed to support the unique structure of the NHS.

There's been a real focus on joined-up care recently, linking GPs, hospitals, pharmacies and social care with shared systems. And while it's still a work in progress, digital NHS UK strategies have helped move things forward. From national tools like the <u>NHS App</u> to more localised platforms, the goal is to give people easier access to care and better control over their health data.

That said, digital health solutions are only as good as their implementation. In some places, they've transformed services. In others, tech still feels like an added task. So yes, the UK has made progress in digital innovation healthcare, but there's still room to improve how it lands in everyday practice.

What does the NHS digital do?

This used to be clearer when NHS Digital was its own body. Now, after merging with NHS England, many of its responsibilities continue under different departments, but the role remains largely the same. NHS Digital (as most people still refer to it) designs and manages the national infrastructure that supports digital health services.

They're behind big national systems like the Spine (which supports patient data sharing), the NHS digital services that power the NHS App, and much of the cybersecurity and data governance that underpins it all. Think of them as the architects of NHS technology (not always visible, but essential to keeping things running).



They're also involved in setting the direction for digital standards. Whether it's improving electronic health care records or ensuring NHS digital services are accessible and secure, their work quietly shapes a lot of the day to day experience within digital NHS UK.

Sometimes, it's easy to forget how much infrastructure is involved in things that seem simple, like viewing your vaccine record or getting a referral letter emailed instead of posted. But all of that depends on systems NHS Digital helped build or maintain.

What are innovations in digital health?

Innovations in digital health can be wide-ranging, some are headline grabbing, others far more subtle. On one end, you've got AI models used to speed up scan analysis, digital therapeutics for mental health, or robotic process automation in hospital admin teams. These are high tech, often pilot stage developments that hint at the future.

But innovation can also be something smaller and surprisingly impactful. A digital health solution that allows district nurses to access real time notes on their phone, that's innovation. So is a chatbot that helps people self-refer to mental health services, or a smart inhaler that tracks usage for asthma patients.

In the UK, much of this digital innovation in healthcare is being trialled across NHS trusts, supported by frameworks and funding tied to NHS technology priorities. The goal, usually, is not just efficiency, but to reduce variation and improve access.

It's worth noting that health tech digital doesn't always land as intended. Some innovations take years to prove their value. Some don't scale. But when they do, they often feel obvious in hindsight, why weren't we always doing it that way?

What are the NHS digital channels?

When people talk about NHS digital channels, they're usually referring to the tools and platforms the NHS uses to interact with the public and sometimes with staff too. The most visible examples include the NHS App, <u>NHS.uk</u>, e-referral systems, and even SMS text messaging for appointment reminders.

But digital channels also include things like online self-referral forms, video consultations, and even virtual wards in some cases. These platforms sit at the intersection of NHS and technology, aiming to improve access, streamline communication and reduce pressure on in person services.

Not all digital channels are patient facing. Internal NHS digital platforms, like those used for workforce rostering or analytics dashboards, are just as vital to daily operations. You just don't hear about them as often.

What are the 3 main categories digital channels fit into?

Digital channels tend to fall into three broad categories: information, interaction and transaction. That might sound slightly corporate, but it's a helpful framework.

- **Information**: This includes websites like NHS.uk or local trust pages places where patients find health advice, opening times, service updates
- Interaction: This is more two-way video calls with clinicians, patient portals, symptom checkers
- **Transaction**: Booking an appointment, requesting a repeat prescription, accessing test results. These are functional, often integrated with NHS technology systems like e-referral or EHR platforms

All of these categories depend on well designed NHS digital infrastructure. Without it, even something as simple as cancelling an appointment becomes frustrating. And that frustration builds up, for patients and staff.

What is the NHS digital strategy?

The <u>NHS Digital Strategy</u> (or more accurately, the digital components within the broader NHS England strategy) lays out the vision for how the NHS and technology will support care in the years ahead. It's ambitious in places, understandably cautious in others.

At its core, the NHS digital strategy is about connecting services, empowering patients, and improving outcomes through smarter use of NHS technology. It covers things like integrated care records, AI adoption, digital inclusion and workforce training. It doesn't just look at tools, it looks at culture and capacity.



There's a recognition that digital isn't just about apps or systems. It's about mindset. And that change is quite often slower than the tech itself.

What are the barriers to digital healthcare?

There are plenty. Some are technical, systems that don't talk to each other, outdated infrastructure, limited interoperability. Others are cultural, resistance to change, digital literacy gaps and the very real fear of losing the human touch in care.

Funding cycles can make it hard to plan for the long term. And then there's the tension between national ambitions and local realities. What works well in one trust may fall flat in another, simply due to staff capacity or local leadership.

NHS and technology are deeply intertwined now, but that doesn't mean the relationship is smooth. The NHS digital strategy tries to address some of these barriers, especially through training and clearer standards, but it's a long road. The enthusiasm for NHS technology is there but enthusiasm doesn't always translate to practical, everyday use.

What data does the NHS digital collect?

A lot.... though it's governed by strict privacy and ethical rules. <u>NHS Digital</u> has historically been responsible for collecting health and social care data from across the system. This includes information on hospital activity, A&E attendance, prescriptions, vaccinations, diagnoses, waiting times... the list goes on.

That data feeds into everything from policy decisions to operational planning. It also powers NHS digital tools, dashboards and national datasets. And although data is often anonymised, public concern about how it's used means transparency is increasingly important.

With the rise of integrated care systems, the need for robust, real time data has only grown. And as more NHS and technology services become digital first, ensuring data is accurate, timely and trusted has never been more essential.

What type of business is NHS digital?

NHS Digital was a non-departmental public body, but as of 2023 it has been absorbed into NHS England. So technically, it's no longer a standalone business, it's now part of a larger structure within the public sector.

That said, its function hasn't disappeared. The teams that managed infrastructure, cybersecurity, system standards and national digital programmes still exist. They just work within a broader digital delivery unit. These teams remain central to delivering the NHS digital strategy and managing NHS technology priorities across England.

It's not a commercial enterprise. It's public infrastructure, and its role is to support a system, one that millions rely on daily.

What are the responsibilities of NHS digital?

Broadly, NHS Digital has been responsible for building and managing the technology that powers the health and care system. That includes national IT systems like the Spine, the Summary Care Record and the infrastructure behind the NHS App.

Its responsibilities also include setting data and technical standards, managing cyber security, and supporting the safe sharing of data between services. Without it, the day to day running of the NHS and technology would grind to a halt.

Even after merging with NHS England, those responsibilities haven't gone away. They've just been integrated into a larger team, still focused on delivering and maintaining the systems that keep services connected and patients supported.

What are the NHS data tools?

There are quite a few. Some are public facing, like the NHS England dashboard or <u>Open Data</u> <u>Portal</u>, which let people explore key metrics and trends. Others are internal: reporting platforms used by analysts, commissioners and clinicians to monitor service delivery and performance.

Many of these NHS digital tools are built to support Integrated Care Boards (ICBs) and Trusts in making data informed decisions. That might involve tracking appointment backlogs, analysing variation in care, or spotting early warning signs of system pressure.

The tools rely on timely, accurate data and on the digital infrastructure to move it around securely. The vision laid out in the NHS digital strategy includes making more of these tools user friendly, accessible and actually useful at the point of care. Which, to be fair, is a work in progress.

What is the plan for digital health and care?

The plan, broadly, is to make digital a default, not a bolt-on. The NHS digital strategy aims to create a health and care system that is proactive, personalised and efficient, using NHS technology to improve outcomes and reduce workload.

This includes universal access to shared care records, digitally mature Trusts, better interoperability and increased use of AI and automation. But also (and perhaps most importantly) it means supporting the people using the tech: clinicians, admin staff, carers, patients.

As ever, implementation is the hard part. Ambitions are high. Timelines shift. But the direction is clear: NHS and technology are not just connected, they're co-dependent. And the plan, ultimately, is to make that relationship one that improves care for everyone.

Conclusion

Digital health isn't one single thing - it's a web of tools, ideas, systems and behaviours, all moving at slightly different speeds. Some parts feel mature now, even expected. Booking an appointment online, checking test results on the NHS App, that's just normal for many people. Other areas still feel early stage, or maybe not quite joined up yet.

What's clear though, is that the relationship between the NHS and technology is no longer a side note. It's central. The goals laid out in the NHS digital strategy (joined up care, smarter use of data, better access) aren't just technical aims, they're practical ones. They shape how care feels, for patients and for the people delivering it.

There are barriers, of course. Systems don't always talk to each other. Not every patient or clinician finds digital tools easy or helpful. But the potential is there. In many places, it's already being realised, in others it's still catching up.

At its best, digital healthcare feels invisible. It doesn't get in the way. It just makes things smoother, faster, more connected. That's the space we're all working towards, not perfection, but progress that sticks.

And that perhaps, is the most important point. Digital isn't a destination. It's a direction.

Want to learn more?

