Made Tech
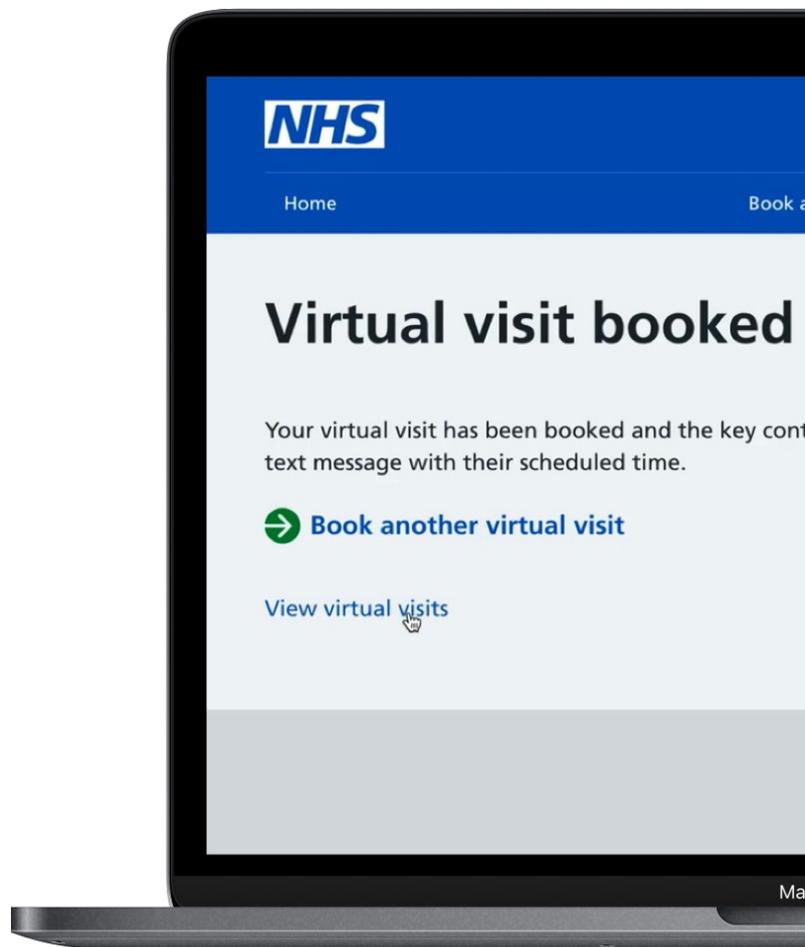
Connecting patients with loved ones via the NHS Book a virtual visit service

We delivered an alpha in 48 hours at the height of the COVID-19 pandemic then evolved the service for NHS Trusts across the country.

NHS

Home   Book a

Virtual visit booked

Your virtual visit has been booked and the key cont
text message with their scheduled time.

→ **Book another virtual visit**

View virtual visits

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Introduction

NHS Book a virtual visit is a digital service developed during the COVID-19 pandemic to allow hospital patients to remain connected with loved ones via video call while ward restrictions exist. It was built for London North West University Healthcare NHS Trust (LNWH), after we responded to a request from joint CIO Sonia Patel to build an alpha in just 48 hours.

The service is simple for both patients and hospital staff to use, doesn't ask for much data and works on ward WiFi across a lot of different devices. It allows hospital staff to book a virtual visit, start a visit and rebook a virtual visit. It also allows hospital administrators to monitor hospital and ward performance.

In the months since the alpha was delivered, it has expanded to be used by several NHS Trusts across the country, as well as in non-COVID-19 wards. As a result of our decision to release the service as open source, Trusts have been able to further develop the service with our help to meet the specific needs of their patients.

The service's success has been picked up by a number of local news, healthcare and technology publications, including Wired UK.

An urgent need during COVID-19

London North West University Healthcare NHS Trust (LNWH) was at the epicentre of the fight against coronavirus early on.

As the Trust started to shut its doors to visitors, it became clear one of the greatest challenges facing clinicians and staff, was the loss of communication between doctors, patients and their loved ones. They needed to find a way to reduce the emotional stress on patients, their families and staff.

Sonia Patel began looking for suitable solutions but quickly became frustrated by the few commercial products available. Most of what she found was existing software repackaged and offered for free, which lacked core functionality to meet connectivity and logistical demands and provided no information about the future costs and licensing fees.

Therefore, on the evening of April 14th 2020, she put out a tweet requesting help from SME tech companies to build an app in 48 hours. At 5:30 am the next day, Made Tech's CTO Luke Morton spoke to her and by 9:00 am we had allocated a full team to deliver.

The project to deliver an alpha in 48 hours

A team of seven, which included engineers, a service designer and a delivery lead, was responsible for delivering a service that was open source and should be regarded as a best in show NHS branded application.

It needed to provide a seamless experience that didn't ask for much data. It needed to work on ward Wi-Fi and a lot of different devices. It needed to be simple for both patients and hospital staff to use quickly, so it took minimal time to set up. Crucially, it needed to be a secure solution that only kept personal data for as long as it was needed once the call had expired.

> "Connecting loved ones with virtual visits at this time is incredibly important. I want our patients to have access to the support they need, and for our ward staff to have a solution that is intuitive to use and allows them to spend more time caring for their patients, in extremely challenging circumstances. Thank you Made Tech for standing up an alpha app within 48 hours."
>
> Sonia Patel, CIO of London North West Healthcare NHS Trust and The Hillingdon Hospitals Foundation Trust

The NHS Book a virtual visit app that we delivered allows hospital staff to book a virtual visit, start a visit and rebook a virtual visit. It also allows hospital administrators to monitor hospital and ward performance. Hosted in the cloud and created within the principles of open source and to GDS and NHS Digital standards, the secure and OS agnostic solution does not require users to install any third-party applications. It can be accessed via any website browser and works across all devices.

For a fraction of the cost of what Sonia Patel had found in her initial search, Made Tech was able to rapidly build and deliver a digital service that exceeded expectations.
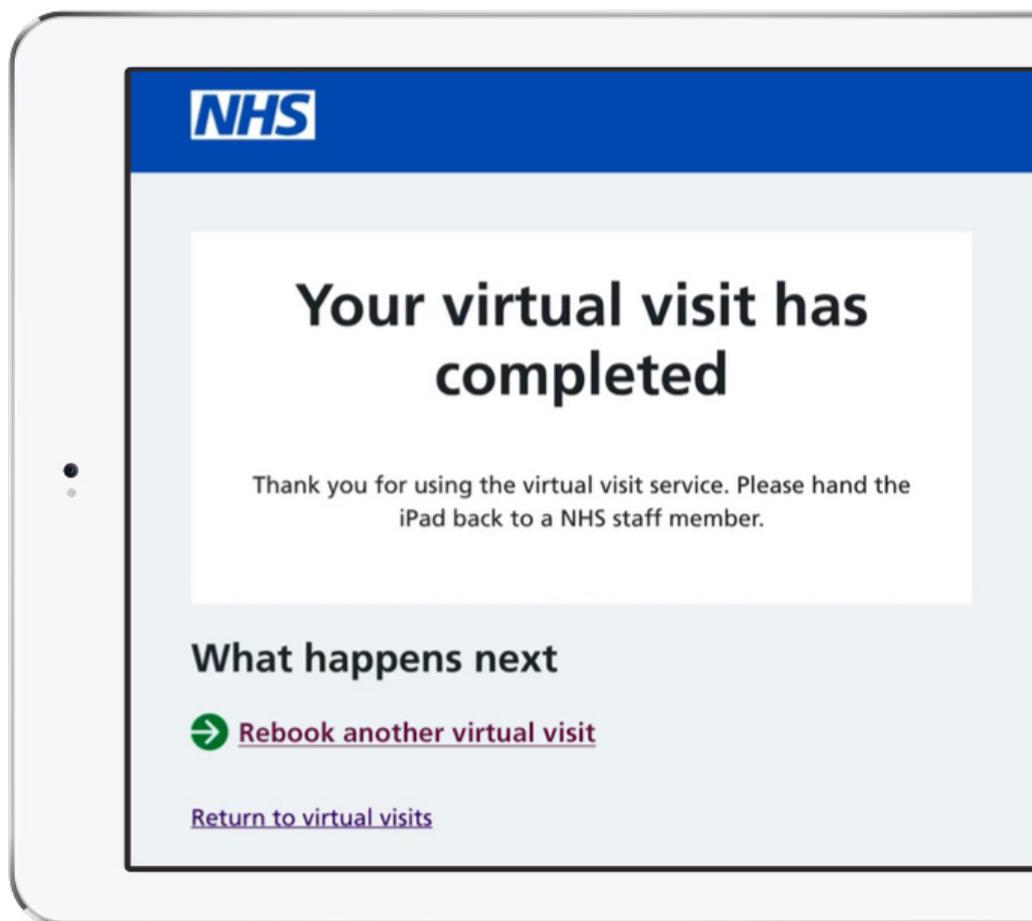
Evolving the service with an agile, user-centred approach

NHS book a virtual visit was delivered following agile methodologies, with feedback from patients and staff leading directly to rapid feature developments throughout.

The team utilised one week sprints, with sprint goals agreed before each one was kicked off, and daily standups with the client project lead and Made Tech delivery lead. Where possible, the team accessed users directly to facilitate rapid feedback cycles. When this wasn't possible, feedback was provided by hospital and clinical staff.

Onboarding was streamlined into a rapid setup and rollout process that involved the setup of an open source service on cloud infrastructure, plus training and testing with ward staff in the first two weeks. This was followed by rollout over 2-6 weeks, scaling from a handful of early adopter wards through to full rollout.

As the code has been open sourced to keep inline with NHSX and GDS guidelines of using open standards, it laid the foundations for future development. It could be rolled out by other Trusts who saw the initial success of the service and got in touch about using it in their COVID-19 response, as well as to connect patients and loved ones in non-COVID wards.

One of these was Kettering General Hospital Trust, which rolled out the service in just two weeks and now has it available across 25 wards. Working with the Trust, we were able to rapidly add features, such as rebooking a call and the call completion notification, that sprang from user research with patients and were delivered in one week sprints.

The results – an open source service used across the NHS

To date, the service has enabled over 8,000 virtual visits to be scheduled across more than 50 wards in 6 hospitals. From an alpha product that was rapidly delivered in just 48 hours, it has now been evolved to roll out across wards in a number of NHS Trusts across the country.

The expansion has included use by COVID-19 positive parents in neonatal wards to remain connected with their babies and chaplaincy services using it to provide spiritual and pastoral support. The service has facilitated thousands of calls and the admin console within the service allows a Trust to track the number of scheduled visits, the average visit time, the average number of participants in a visit and the average visits per day.

The rollout was made possible because the **open sourced code** has laid the foundations for further development. On top of being rolled out in hospital wards across the UK, NHSX is investigating how it can be used in social care. Furthermore, the service's success has been picked up by a number of local news, healthcare and technology publications, including **Wired UK**.

"The NHS is building its own digital capability now and we want to build home grown solutions for patient experiences that are based on their needs. This is a beautiful little product that had been based on user needs and was built to be flexible."

Ian Roddis, Deputy Chief Digital and Information Officer, Kettering General Hospital NHS Foundation Trust

Key results achieved

- **An alpha service** developed in **48 hours**

- **Connecting patients and loved ones**

- Delivered at the **height of the COVID-19 pandemic**

- **Expansion** into various non-COVID wards

- **User led** from the start

- **8,000+ virtual visits** completed

- **1+ hour** average call

- **~40 visits per day** 6 months after launch

- Rollout into **6 Hospitals and 50+ Wards**

- Open source code in line with **NHSX and GDS guidelines**

- **Agile delivery** and **user-centred design**

- New ways of working for **IT and frontline NHS staff**

- Prepared for **future pandemics**

- Hosted entirely **in the cloud**

- Works **across devices**

- Accessible through **any web browser**

- **Secure** and **OS agnostic**

- **No third-party installations** required

- **Minimal data required** to support call

About Made Tech

Made Tech are public sector technology delivery experts. We provide Digital, Data and Technology services across the UK market.

We help public sector leaders to modernise legacy applications and working practices, accelerate digital service delivery, drive smarter decisions with data and enable improved technology skills within teams.

If you'd like to find out more, you may want to read about some related projects:

→ **Delivering GovWifi for the Government Digital Service (GDS)**

→ **Building an API platform for Hackney Council**

→ **Technology Capability Building at Ministry of Justice**

→ **Check out what we do at madetech.com**

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