Digital and COVID-19

TECHNOLOGY IS AT THE HEART OF WALES' RESPONSE TO THE COVID-19 PANDEMIC. It has the potential to **save lives**, **enable remote working** and **provide the information needed to deliver the best possible care**.

At the outset we acted swiftly, and in a short space of time provided the technology and information needed to help manage the impact of COVID-19.

With an all-Wales technical platform already in place we had the integration and interoperability needed to introduce new capabilities and data flows.
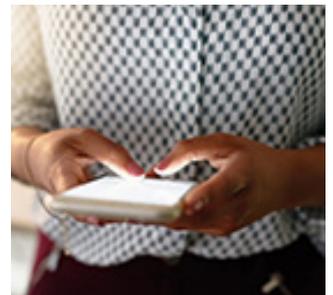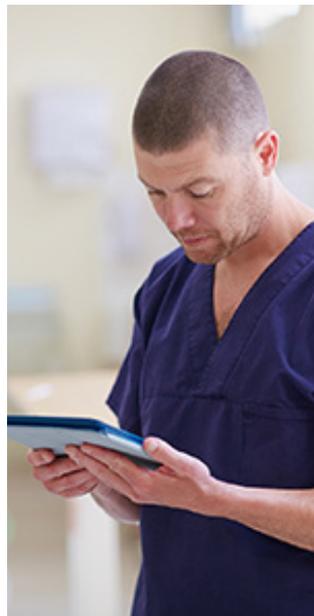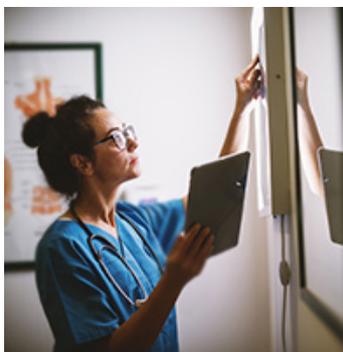
PRIMARY CARE

We gave GPs **remote access to the clinical desktop** so they can work anywhere, from home or the surgery, and enabled an email at home service – allowing practice staff access to their NHS email from any location.

We also put the **Welsh Clinical Portal** on the desktop so family doctors can view patients' hospital information such as discharge summaries and clinical letters. This is aiding diagnosis and dramatically reducing the time spent chasing patient information.

Patients are now able to use **video conferencing** for remote non-contact consultations with their GP, community nurses and mental health teams. Support, implementation and training to accelerate uptake is provided by our Primary Care Services Team.

And GP practices were allocated an extra two text messages per patient to help keep in contact with patients during a time of rapid change to services.

New systems are not only providing social distancing benefits but are contributing to the longer-term transformation of care.

Mark Allen, Practice Pharmacist at North Cardiff Medical Centre told us:

"You have changed the way we will work in the future and given us the ability to work from anywhere."

Other Comments from GPs include

- *"Excellent call quality made a skin infection diagnosis possible"*

- *"Did find this very useful and have used it with a case of possible COVID which enabled assessment and help to my patient for both of our benefit"*

Patients have also been pleased with the new digital service.

- *"This is a very useful facility and could be used more widely in the future"*

- *"Excellent service. This has now saved us a trip to the surgery and therefore ensuring the doctors are available for other patients. Thank you!"*

TEST, TRACE, PROTECT
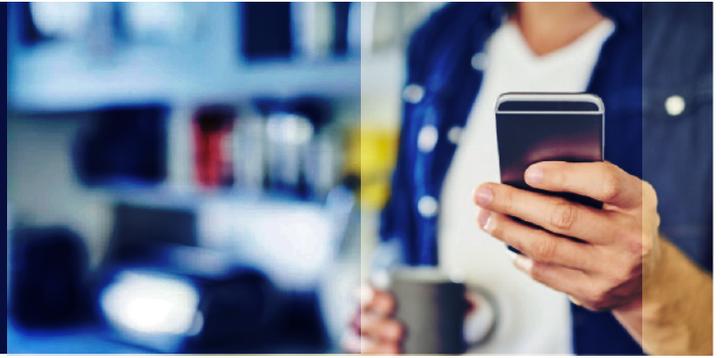
When Community Testing Units (CTUs) were first set up tests were requested using paper-forms. In response, we fast-tracked development of a COVID-19 **digital test request and results** reporting service, made available through the Welsh Clinic Portal.

Using expertise from across the Informatics Service an e-test request service was developed within two weeks and went live at the start of April. More than 95% of tests are now digital.

The test result is stored in the patient's digital record. Negative results are forwarded to the patient by SMS message, while patients with positive tests receive a phone call.

As part of Wales' Test, Trace and Protect service, we worked with industry partners to develop the **all-Wales digital contact tracing system** within three weeks.

The contract tracing system allows people who have had a positive test for COVID-19 to provide details of close contacts electronically.

Contacts will then be asked to self-isolate for 14 days as a precaution to prevent the virus spreading further.

During this period daily monitoring is managed through the contact tracing system. Depending on individual choice, contacts can be monitored via text message, email or automated phone calls, with responses fed directly back into the system. Contacts can also choose to receive a personal call from an advisor.

All information is fed back directly into the contact tracing system with alerts flagged for people who are not feeling well.

TEST   **TRACE**   **PROTECT**

SECONDARY CARE
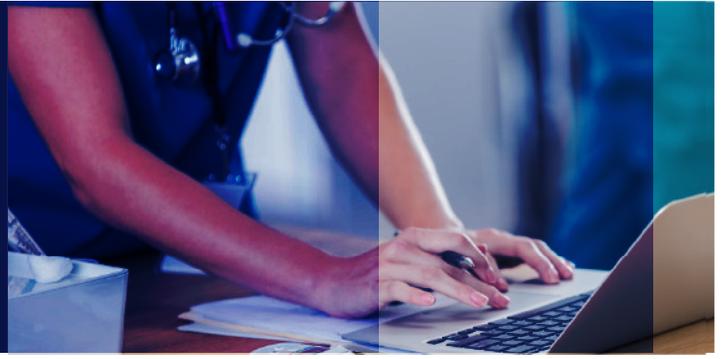
With around 1200 outpatients' clinics taking place in Wales on an average day, we **accelerated developments** to support remote clinical consultations, adding features to the Welsh Clinical Portal (WCP) to support virtual clinics.

A new **digital outpatient form** allows the clinician to record the virtual appointment outcome online. It means the consultant is able to use the WCP, wherever they are, to access their clinic list, review the patient record, record the details of the consultation and capture the decision, supporting the

Rebecca has a chronic condition and the appointment with her gastroenterology specialist at University Hospital Wales was critical to her ongoing care and well-being. As the consultant was self-isolating at home, Rebecca was offered a remote consultation.

She said: *"My consultant was able to use the Welsh Clinical Portal from home to access my details and test results. The appointment was just as useful as a face to face appointment and far less stressful. It made such a difference!*

"The work you are doing to make digital services available for health and care is fantastic."

We accelerated implementation of the Fuji Mobility **image viewing** software, which means secondary care clinicians in Wales can now view images across health board boundaries.

If a patient dies due to the COVID-19 virus clinicians can report the death through the WCP. While it does not replace a death certificate it saves time as clinicians no longer need to phone Public Health Wales. This securely collected Mortality Surveillance data is vital to help the NHS in Wales manage during this pandemic.

We launched the **WCP mobile app** for hospital doctors to use on iOS and Android devices. It offers patient information on the go and at the bedside, including notifications, view and sign off test results, add and edit notes and tasks for patients.

Porthol **Clinigol** Cymru
Welsh **Clinical** Portal

The Welsh Clinical Portal is the home of the digital patient record. It shares, delivers and displays patient information from a number of sources with a single log-on, so information is where and when its needed.

the **SINGLE DIGITAL HEALTH RECORD** for Wales

INFORMATION AND DATA

To understand and predict demand on health and care services during the COVID-19 pandemic timely data is critical.

We are supporting the establishment of the National Data Resource (NDR), a flagship Welsh Government Programme to use health and care data for better care, by enabling a data driven NHS Wales.

Working collaboratively with all seven health boards, we fast-tracked development of a new **Data Hub**, so decision makers have a real-time view of the NHS Wales' response to the pandemic.

The data hub brings together information from disparate sources, providing a single source of evidence about a rapidly changing situation. It can be used to

- identify hot-spots and trends in access to healthcare
- manage capacity based on demand and availability

Data is collected from across NHS Wales, hospitals, GP surgeries, emergency care, the Welsh Ambulance Service, 111 and NHS Direct Wales call centres and is combined with COVID-19 test results.

Collected data is held securely within the NHS Wales data warehouse, and is cleansed, anonymised and integrated to provide the metrics and scientific evidence required to aid understanding at both local, national and UK levels.

Reports available illustrate the status of the NHS Wales response to COVID-19. The data hub does not provide access to any patient-level data.

- Capacity at hospitals in each health board, including admissions and discharges, invasive ventilator beds, other COVID-19 related beds, mortuary spaces and hospitals deaths.
- Positive COVID-19 lab tests by local authority
- Daily attendances at hospital Emergency Departments
- Statistics from the ambulance service and NHS 111 call centres
- GP appointments data

We also produced the **Shielded Patient's List** to allow public sector bodies to support people identified as needing to shield during the pandemic.

As part of the technology solutions needed to support the NHS during the pandemic, we refocussed our **website** around digital support updates for healthcare professionals.

INFRASTRUCTURE AND CORE SERVICES

To provide colleagues with the latest collaboration tools we made Office 365 available across NHS Wales and rolled out **Teams** to more than 16,000 users including GPs. This has also kept information flowing, supporting collaboration and liaison among colleagues and health professionals.

To provide the capacity for high resolution remote and mobile services we doubled the capability of the NHS Wales **network** bandwidth from 5gb to 10gb.

The enhanced bandwidth comes on the heels of rapid improvements in network capability by our Core Services team and cooperation between Welsh Government, Welsh health boards, service suppliers like BT, and many other organisations.

nwis.nhs.wales

WE ARE THE NATIONAL ORGANISATION BUILDING AND DESIGNING DIGITAL SERVICES FOR NHS WALES.