Delivered in partnership with

TheAHSN*Network*

NHS **X**

Innovation
Collaborative.

East of England: Transforming
dermatology services across
Norfolk and Waveney

Part one: planning and implementation.

REGIONAL INNOVATION SERIES
SUPPORTING DIGITAL TRANSFORMATION

Overview

In this report, we explore a project in Norfolk and Waveney that is transforming dermatology care via a new digitally-led, rapid referral process which uses the camera function on a smartphone to allow GPs to collect and share diagnostic images.

Demand for dermatology services across the region has grown due to an ageing population that is more susceptible to serious skin conditions, while the resulting increase in waiting lists has been further exacerbated by the COVID-19 pandemic.

The technology creates a faster and more continuous dialogue between primary care practitioners and hospital-based consultants, speeding up diagnosis and enabling more cases to be treated in the community rather than in hospital settings, thereby dramatically reducing expected waiting times.

It also encourages knowledge sharing between GPs and specialists, helping to improve professional standards – and as part of a wider regional improvement programme enabled by technology the project is helping to inspire similar innovation across other areas of care.

115%
INCREASE IN THE REGION'S DERMATOLOGY WAITING LISTS OVER THE LAST 5 YEARS.

(Source: NHS England)

24%
OF THE REGISTERED PRACTICE POPULATION FOR NORFOLK AND WAVENEY IS OVER 65.

(Source: Norfolk and Waveney registered practice lists)

8000+
PATIENTS WAITING TO START SPECIALIST TREATMENT FOR SKIN CONDITIONS ACROSS THE REGION.

(Source: NHS England)

19-49
WEEK INDICATIVE WAIT FOR ROUTINE TREATMENT FOR 9 OUT OF 10 DERMATOLOGY PATIENTS ACROSS THE REGION.

(Source: nhs.uk)

ABOUT THIS SERIES

Health and care teams across England are increasingly using new technology to enable more care to be provided at home in response to the COVID-19 pandemic, supported by additional funding from NHSX. NHSX is also working with the AHSN Network to deliver the Innovation Collaborative to enable regional teams to accelerate deployment, and share learning and best practice.

The **Regional Innovation Series** takes an in-depth look at some of the exciting projects underway across the country. It explores the challenges and opportunities presented by new technologies and looks at their impact on people, processes, cultures and the practical tools available to patients, service users and frontline professionals.

Each study will be followed by a second report capturing the key insights and reflections, once the project is fully established, with the aim of helping others embarking on similar programmes.

Project aims and ambitions
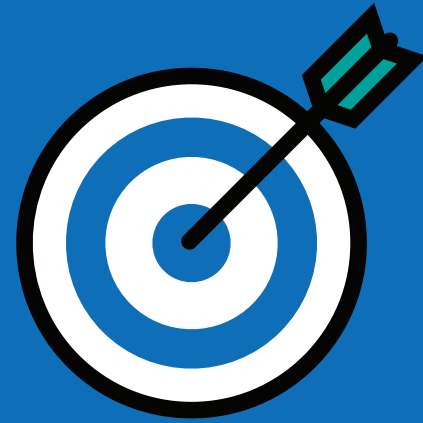
Reduce average waiting times for hospital-based consultant advice to 48 hours for routine referrals

Support better outcomes by ensuring patients receive treatment sooner, including identifying serious diseases that should be referred through urgent pathways.

Boost patient experience by allowing more care to be offered close to home, with around 60% of all treatment expected to be conducted in primary care settings in the future.

Improve clinical practices by creating strong, equitable relationships between primary care and consultant teams through enhanced contact.

"This project is creating new possibilities in terms of how we diagnose, refer and treat dermatology cases across Norfolk and Waveney. By opening up better channels of communication between GPs and hospital teams, we will be able to optimise the treatment of patients in primary care. This will result in shorter waiting times for those needing secondary care management, ultimately improving both the patient's experience and their clinical outcomes.

Katie Pryce, GP Fellow, NHS Norfolk and Waveney CCG
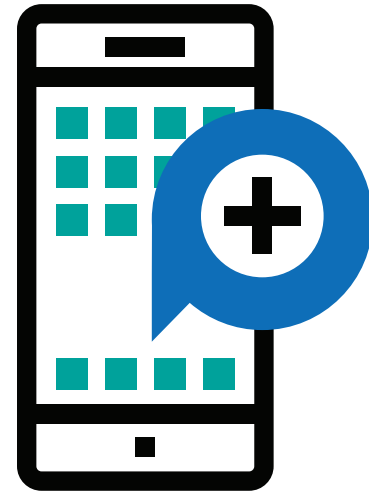
Who is involved

The Norfolk and Waveney project is part of a wider digital transformation programme taking place across the six Integrated Care Systems (ICSs) in the East of England.

It involves close collaboration between the following key organisations, along with several other providers:

NNPC
North Norfolk
Primary Care

Eastern AHSN

NHS
Norfolk and Waveney
Clinical Commissioning Group

What digital technologies are being used?

" This technology is exciting because it will start to break down the walls between primary and secondary care. It should allow consultants to review cases quickly and accurately, then work with the GP or practice nurse to recommend the best way forward. It doesn't replace outpatient care – we will still see patients physically when it is most appropriate – but it enhances it and means we can act much faster in getting patients the treatment they need. "

Dr Paul Everden, Clinical Quality & Innovation Lead, North Norfolk Primary Care

The technology turns the smartphone into a powerful clinical tool that allows GPs and other primary care practitioners to capture skin observations and images which can be shared quickly with specialists for further investigation and diagnosis.

This is achieved by attaching a **specialised magnifying lens called a dermatoscope** to the phone to take high-definition images of the patient's skin. Dermatoscopes are used by dermatologists to examine skin lesions. The lens can be magnified up to 10 times to capture clear, clinical-grade photographs.

An **app on the smartphone** then allows the user to connect to a secure digital referral management platform, provided by Cinapsis, which allows the patient information and imagery to be shared with both primary and secondary care practitioners. Office-based systems also connect to the platform.

System interoperability and security are integral to the project's long-term success. Extensive review and testing have been completed by the project team to test the referral platform is capable of securely speaking to a wide range of IT systems.

The impact on processes and working practices

The technology forms part of a **fast, simple and easy to use process which leads to much faster diagnosis and advice** as below.

1 The GP or primary care practitioner takes a **photograph of the patient's skin** using their enhanced smartphone.

2 The image and other supporting information are **immediately sent to the platform** which is accessed by a team of consultants.

3 The consultant and primary care practitioner may then **discuss the case** or **seek more information** or advice prior to diagnosis.

4 **Within a maximum of 48 hours, the consultant responds** providing detailed information about the diagnosis and the required treatment.

5 Following diagnosis, the **necessary treatment plan is put in place,** either directly by the primary care team if appropriate or through referral to a specialist clinic.

> " The platform will provide us with real insight from a training and education perspective as we will be able to access data to help us to identify and understand individual and common knowledge gaps experienced by practitioners. Thanks to this real-time insight we will be able to take immediate action to develop and implement personalised education which links to professional development records. It's a groundbreaking way of educating people. "

Amy Crawford, Digital Lead, North Norfolk Primary Care
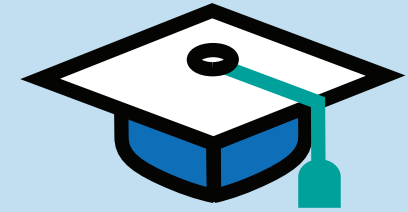
Key tools and techniques for implementation

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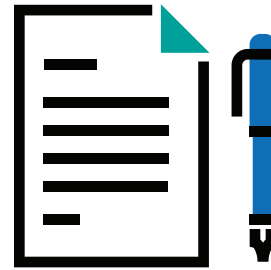
Planning

A planning group directs the project to ensure the digital tool and the data it gathers is accurately informing all clinical decisions, as well as creating governance and operational frameworks that can be applied quickly and easily to future services.
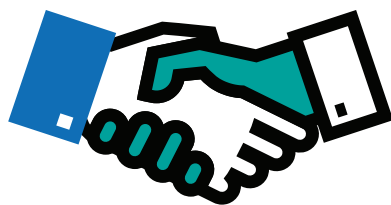
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Training

Ongoing training is key to the project's success. Regular virtual training, live demos, 'how to' guides and other forms of engagement help all users within primary and secondary care to embrace the technologies and experience the benefits. Through a process of constant evaluation, further training needs are identified and addressed.

3

Resourcing

The project is being temporarily supported by a team of dermatologists who are working with in-house NHS teams to provide additional surge capacity to help bring down the number of patients waiting for referrals. Legacy plans are in place to ensure this resource can be gradually stepped down as lists reduce and in-house teams adopt the process within their schedules.

4

Engaging

Ongoing engagement through regular meetings is helping to create, nurture and sustain the 'one team' ethos between the temporary dermatology team and in-house consultants. This will be complemented by future evaluation. User feedback from patients and practitioners will help to develop the system further.

5

Reviewing

The impact on patient outcomes, reducing the pressure on hospital demand and the financial savings achieved will be regularly reviewed. Shared learning networks and formal evaluations will enable the region to collectively evaluate effectiveness and explore opportunities to use similar schemes across other care pathways.

The impact on people: the human perspective

Tony, 45, went to see his GP to ask about some eczema on his leg that had gradually been getting worse over the last 12 months - previous treatment had not worked. His GP took a number of images and uploaded these and supporting case notes onto the referral platform.

Later that day, a consultant reviewed the case and diagnosed that the skin rash was a poorly controlled atopic eczema which could be treated through a primary care management plan. Tony was informed at his next GP appointment and treatment started. Six weeks later, he went back to see his GP for a review - he was pleased as the condition had improved. The GP with guidance from the consultant continued to manage Tony's care over the next few months.

Gina, in her late teens, went to see her GP with a mole that had been worrying her. Her GP did not suspect skin cancer but wanted an opinion regarding diagnosis and management and so took an image of the lesion and processed it through the referral platform with additional notes. Within one hour, the case was reviewed by a consultant who identified that it was harmless and Gina was discharged back to primary care.

Later that day, her GP was able to give Gina the news that there was nothing to worry about - she was relieved to hear back so quickly. Under the previous process, she may have had to wait around 32 weeks to see a hospital consultant for a routine referral. For her GP, the process meant an unnecessary patient referral had been avoided while the consultant's feedback had improved their own confidence to diagnose similar lesions in future.

Audrey, a woman in her eighties, attended her GP surgery complaining of a sore spot below her eye. She was concerned because it had been there for a few months but it was not healing. Her GP took images of the crusted red lesion and uploaded these and supporting information to the referral platform.

The consultant reviewed the case within two hours and recommended that Audrey should be referred onto the two-week cancer pathway as the lesion showed possible signs of squamous cell cancer. This was immediately actioned, preventing an inappropriate wait on the previous routine referral pathway.

To protect patient confidentiality, please note that these are fictional pen portraits that reflect the range of scenarios where the technology is already proving useful.

ALL

105

GP PRACTICES ACROSS NORFOLK AND WAVENEY WILL BE INVITED TO USE THE DIGITAL REFERRAL PROCESS BY THE END OF MARCH WITH THE EXPECTATION THAT
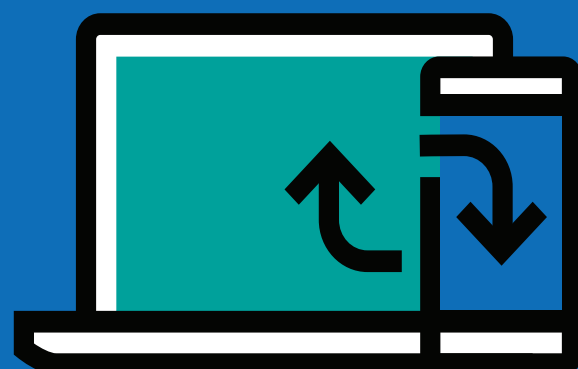
450

DIGITAL REFERRALS WILL BE MADE EVERY WEEK

THIS WILL NOT ONLY IMPROVE STANDARDS OF CARE FOR MORE PATIENTS LIKE THESE, BUT ALSO ACHIEVE EXPECTED COST SAVINGS OF

£1.4 MILLION EVERY YEAR

"We know the tool is secure and highly effective through the review carried out and has the interoperability to allow this to work with other systems. There is possibly an opportunity to apply the same principles and technologies used to transform the dermatology outpatient pathway to help enhance and improve other types of care.

Marika Pieri, Change Manager – Community, NHS Norfolk and Waveney CCG

For more information about this project supported by NHSX:

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To find out more about the Innovation Collaborative:

https://future.nhs.uk/connect.ti/InnovationCollaborative/grouphome