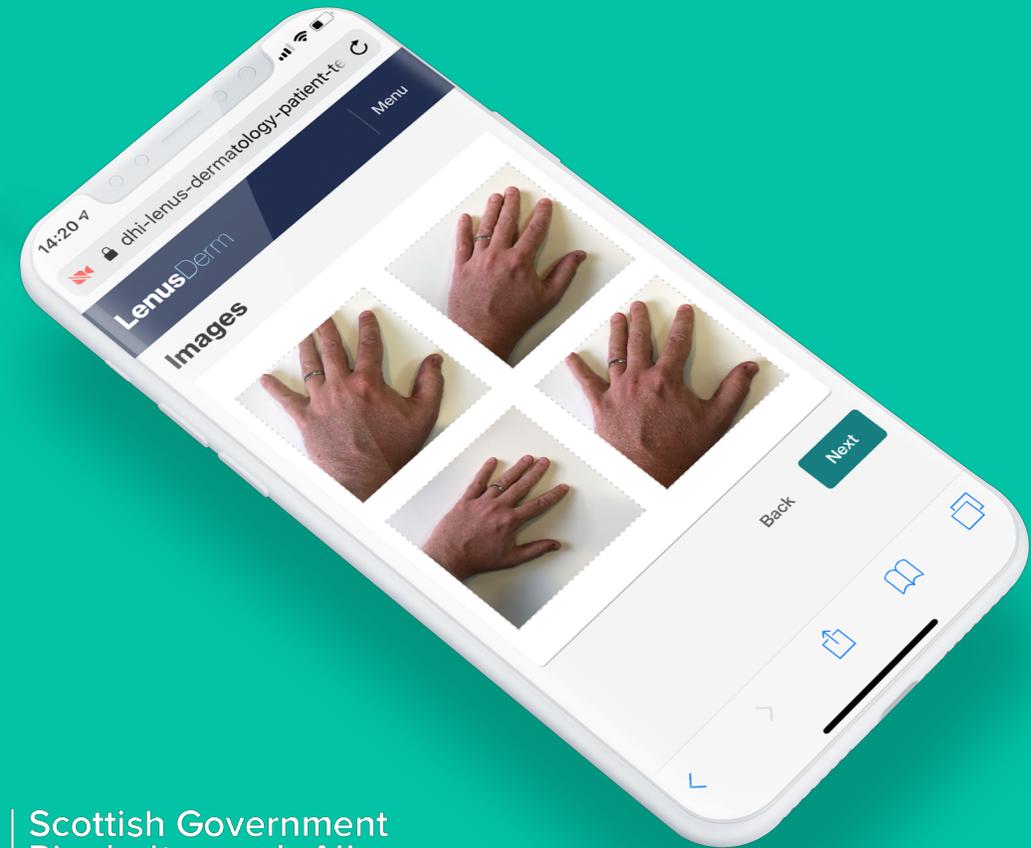


# Dermatology

Digital Outpatient Appointments



**SBRI** Government challenges.  
Ideas from business.  
Innovative solutions.

**NHS**  
SCOTLAND

 Scottish Government  
Riaghaltas na h-Alba  
gov.scot

# The Challenge

“The time has come to re-evaluate the purpose of outpatient care and align those objectives with modern-day living and expectations”

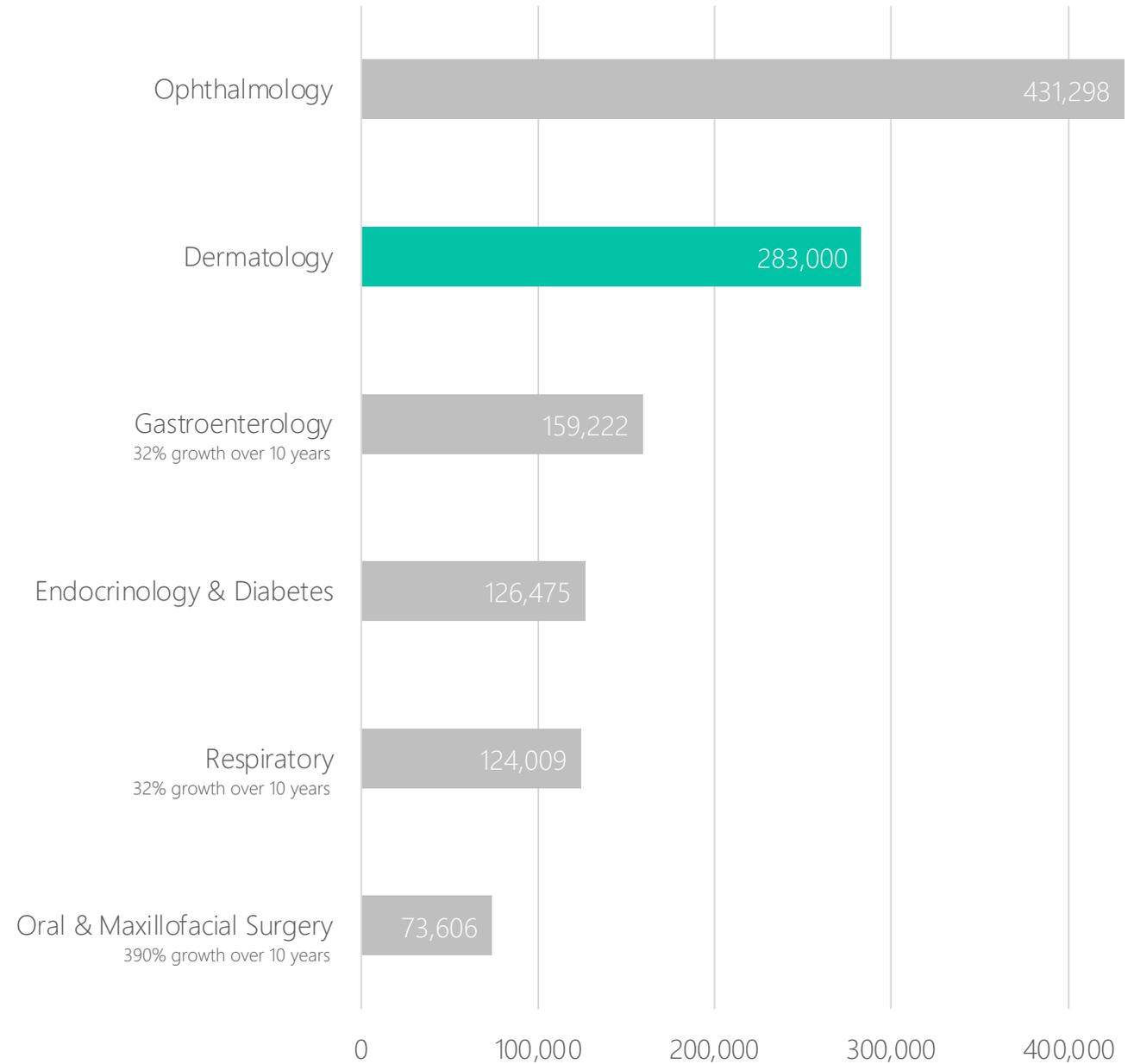
Outpatients: The Future - Royal College of Physicians Report Nov 2018

## Key Recommendations

- Alternatives to face-to-face consultations available to patients and included in reporting of clinical activity
- Clinic templates should allow for timing flexibility depending on case complexity
- All outpatient care pathways should aim to minimise disruption to patients' lives
- Clinical information should be available to clinician and patient prior to consult..
- Patients should be supported to be co-owners of their health decisions
- Patients should be able to communicate with secondary care in a variety of ways, and know how long a response will take.

# Increasing Demand

Some outpatient appointment types have grown over the last 10 years.



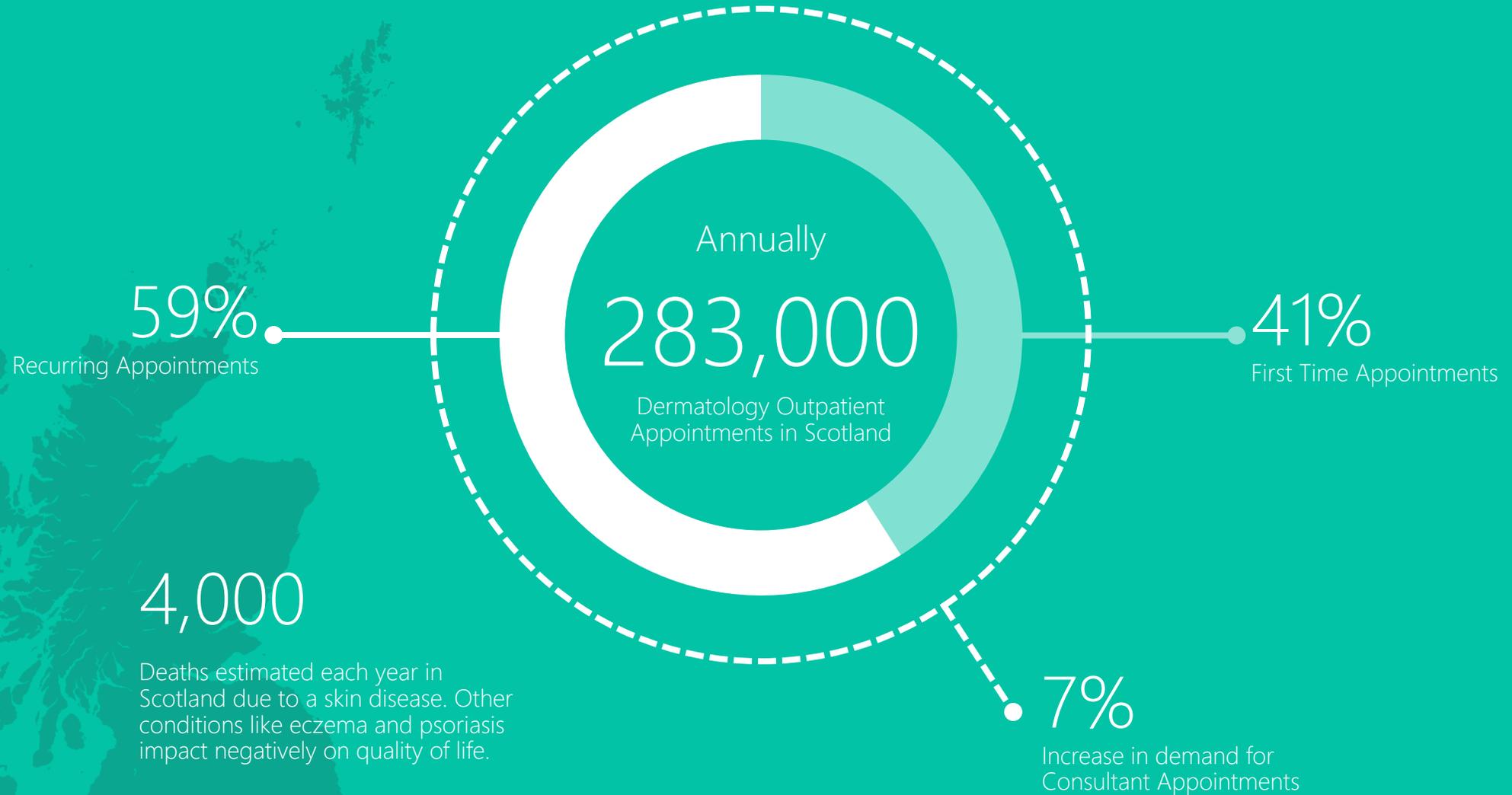
# The Opportunity



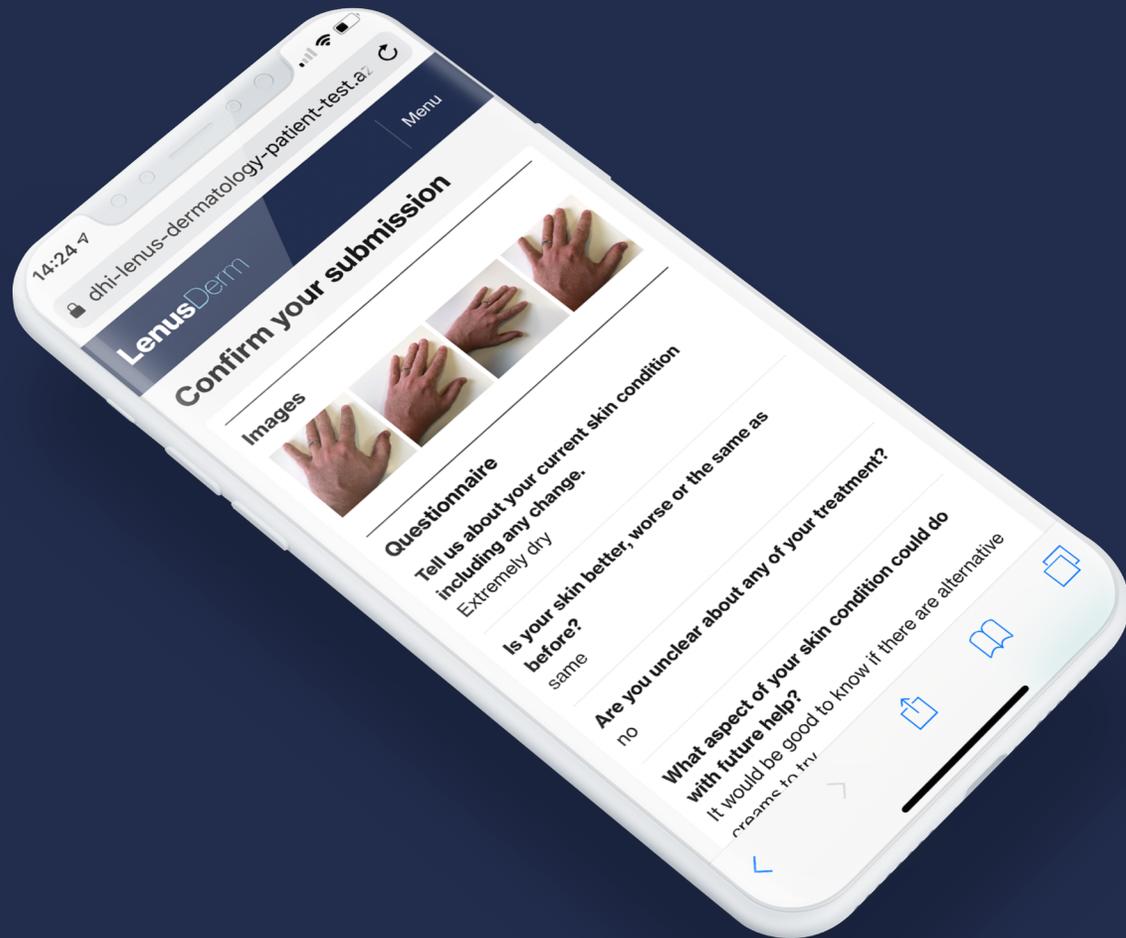
Can we change the current diagnosis on a single data point and by a real time appointment paradigm?

- Can a new digital service model be delivered more efficiently and safely?
- Can it deliver an improved patient experience?
- What % of outpatient appointments are suitable for digital clinic model?
- Can it integrate with existing systems to support clinical workflows and reporting?
- What conditions are appropriate for this type of service model?

# Dermatology Challenge



# Digital Appointments via asynchronous virtual clinics



- Removes the scheduling conflict - health professional and patient do not interact in real time
- Alternative care pathway for % of clinics and outpatient consultations
- Improved patient experience and reduce reliance on oral histories
- Integration to Trak important to support workflow & reporting
- Increase control and ownership of health data - a patient focused longitudinal record

# Getting Started

The digital appointment is set up in TrakCare by an administrator

Track sends a message to new system with date & time + patient ID + email address

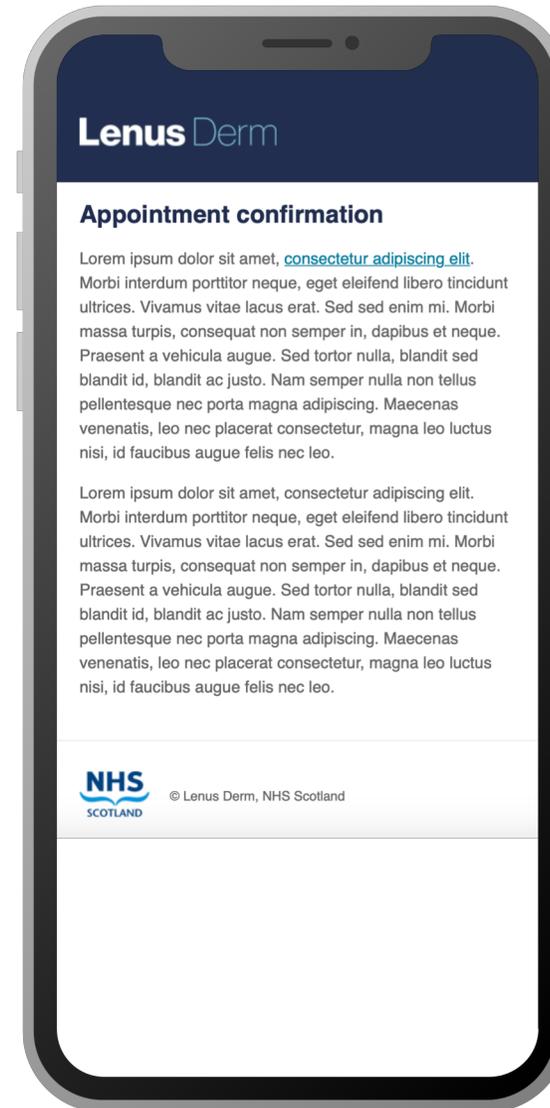
The screenshot displays the TrakCare web application interface. At the top, the user is identified as John Costello at Glasgow Royal Infirmary. The main navigation bar includes 'Follow Up Appt' and 'Appointment Search'. The patient details for 'Test Two Hscpportal' are shown, including CHI: 0109560000, Gender: Male, and DOB: 01/09/1956. The 'Appointment Search' section is highlighted in blue and contains various filters and options, such as 'Hospital: Glasgow Royal Infirmary', 'Specialty: Dermatology', and 'Appointment Type: G R NURSE VIRTUAL ONLINE'. Below this, a 'List of Services / Clinics' table is visible, showing a service for 'Nurse Gillian McCormick' on Friday, 22/02/2019, at 09:00, with a duration of 5 minutes and an interpreter of 'Not Stated'.

Care Provider	Day	Date	Start Time	Specialty	Appointment Type	Overbook/Edit	Delete	Duration	Transport	Interpreter
<input checked="" type="checkbox"/> Nurse Gillian McCormick	Friday	22/02/2019	09:00	Dermatology	G R NURSE VIRTUAL ONLINE DERM			5		Not Stated

# Patient App: Desktop/Tablet/Mobile

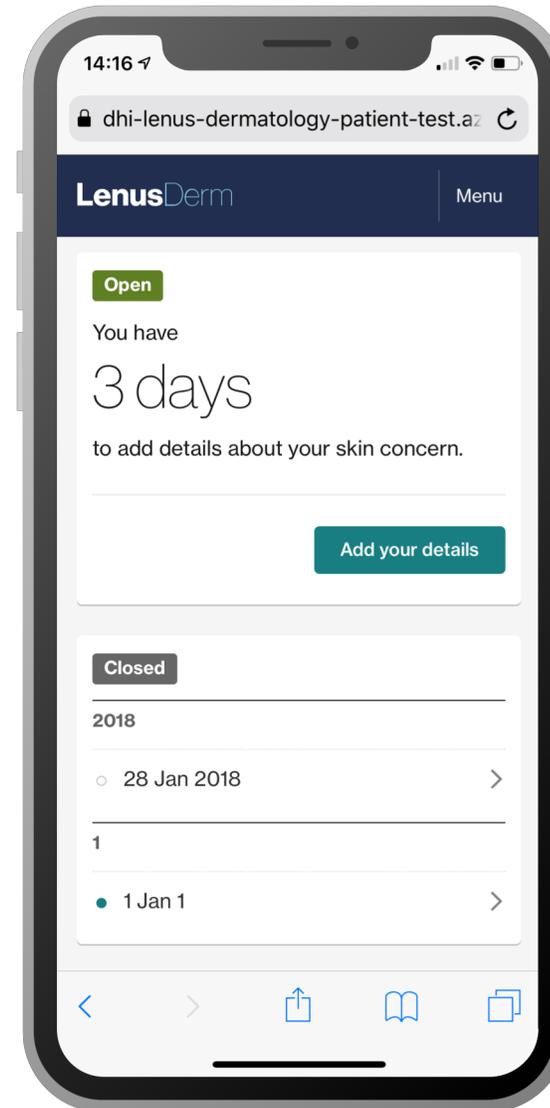
## The patient:

- Receives an email with link to the app.
- Is prompted to login or register.
- Then grants consent to share data (GDPR)
- Sets preferences for reminders (SMS/Email)



# Patient App

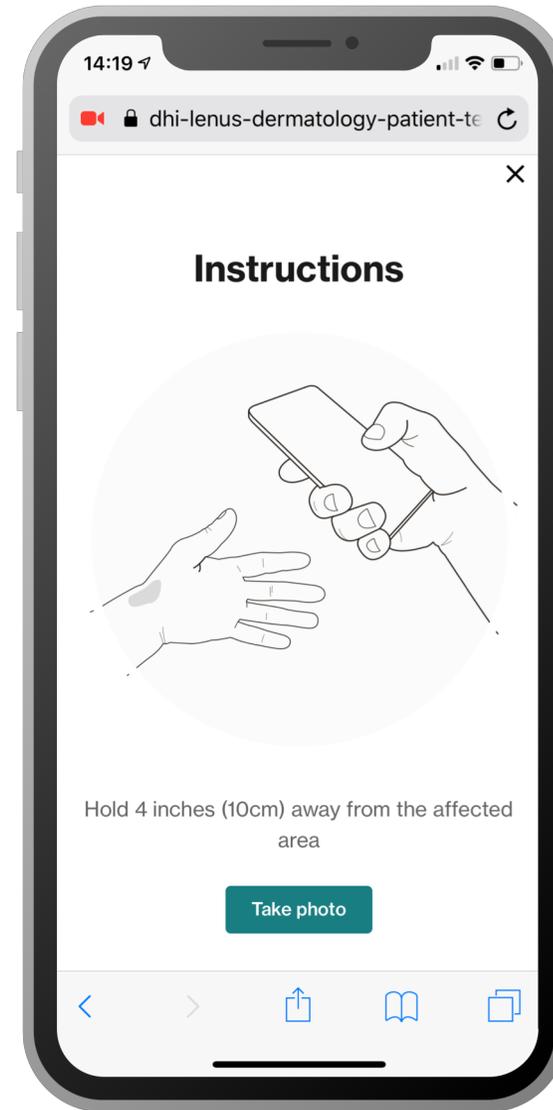
When the patient's virtual appointment window opens they can add information to send to their clinician.



# Patient App

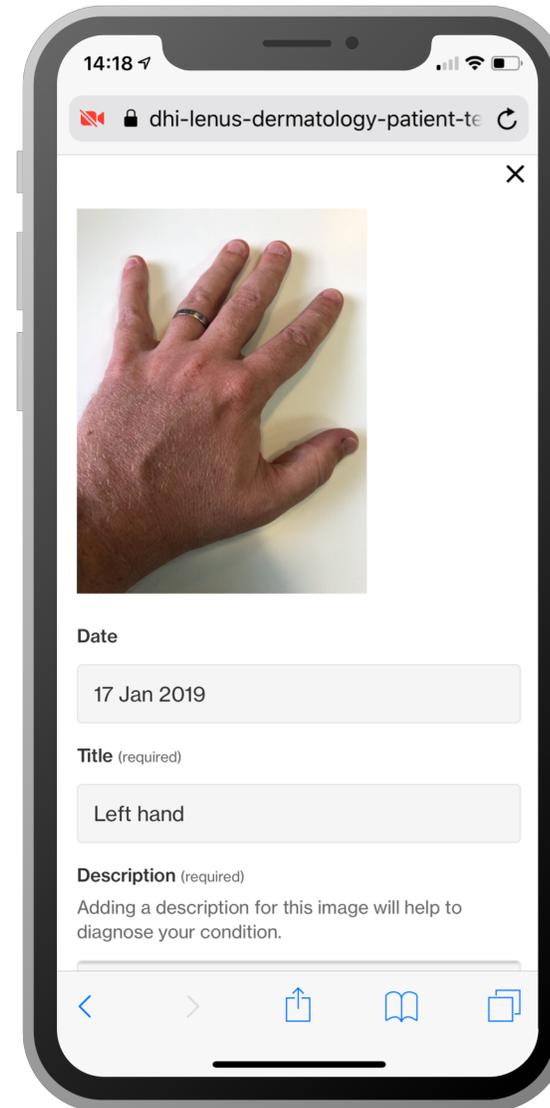
The patient can upload images using the app.

The images are sent to the data platform's FHIR API.



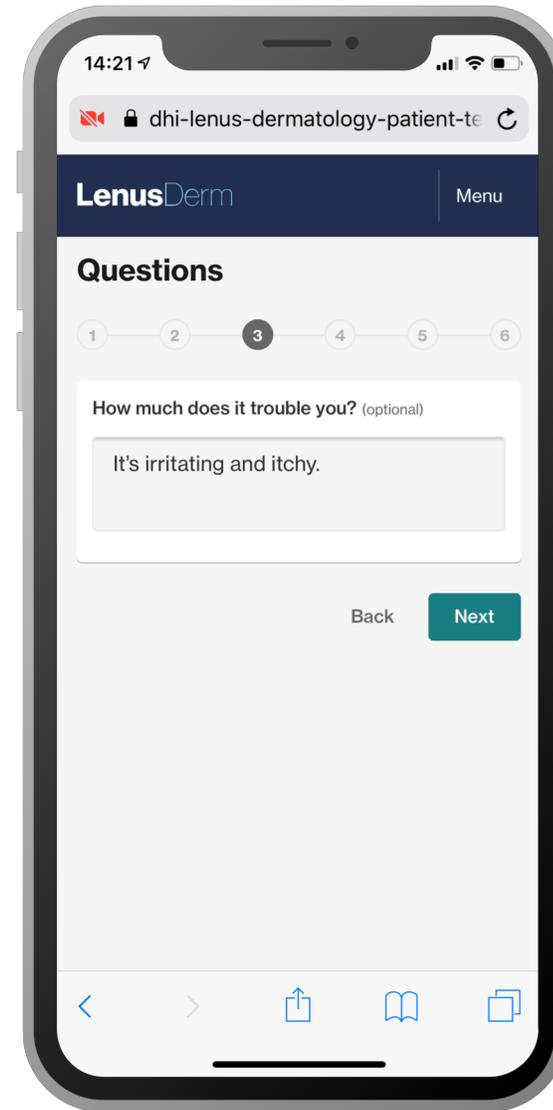
# Patient App

The patient can upload images using the app. The images are sent to the data platform's FHIR API.



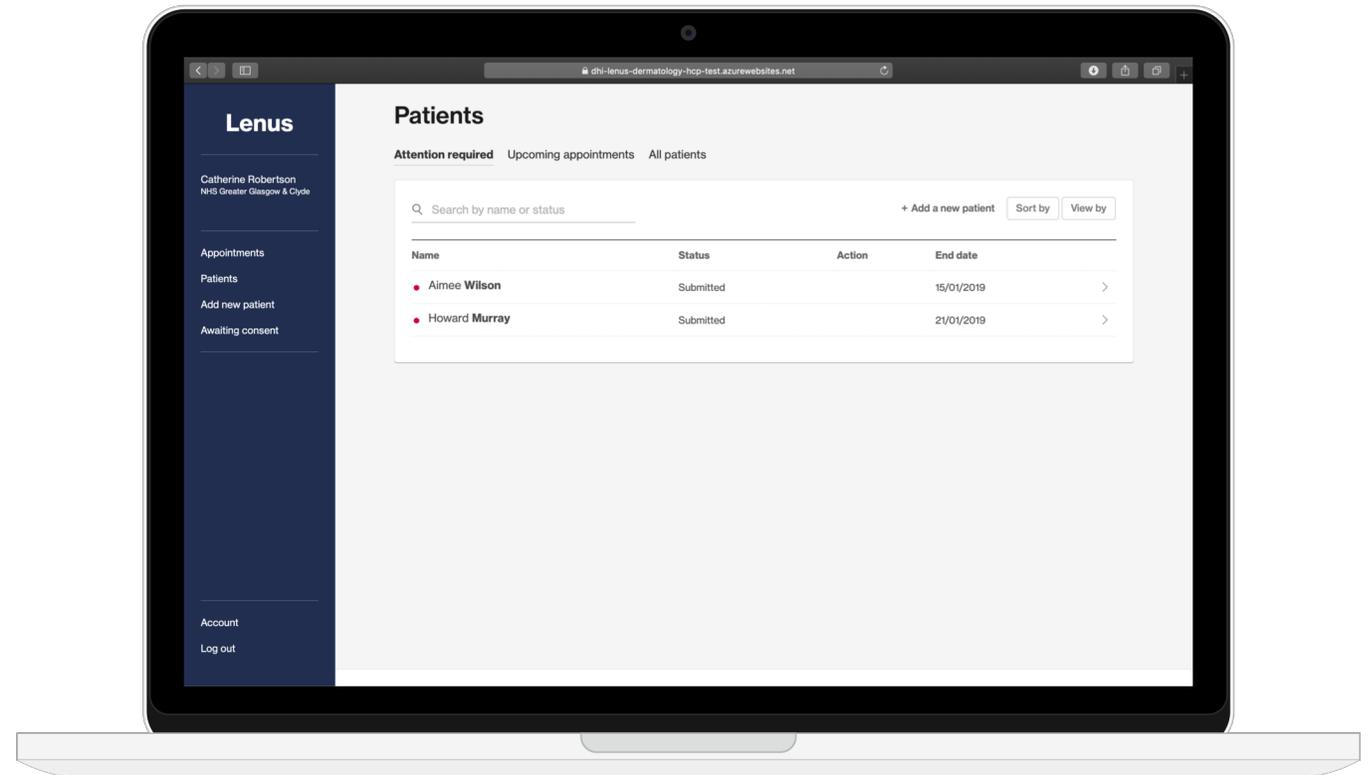
# Patient App

The patient answers clinical questions before submitting the appointment.



# Clinical Dashboard

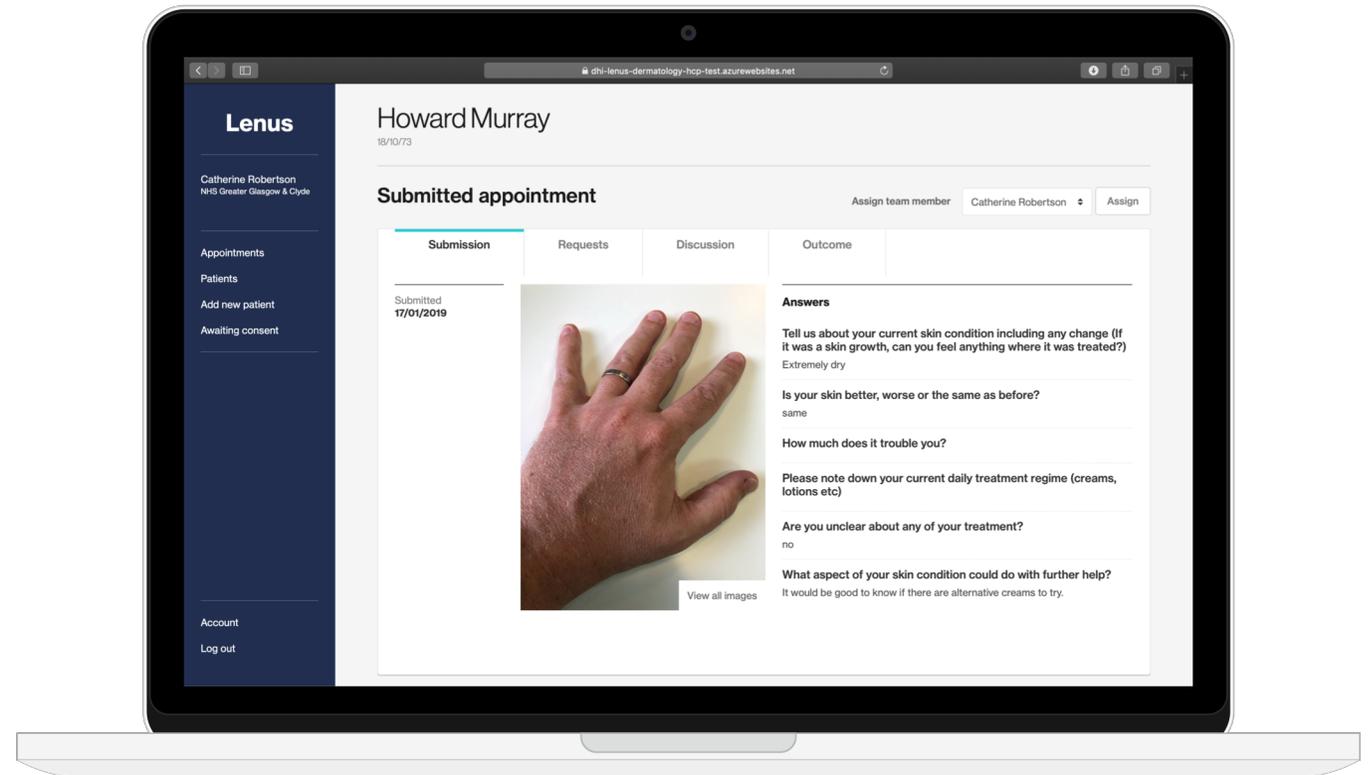
The clinician is presented with a view of patients that have recently submitted data for an appointment.



# Clinical Dashboard

The clinician uses the dashboard to review the information submitted by patients.

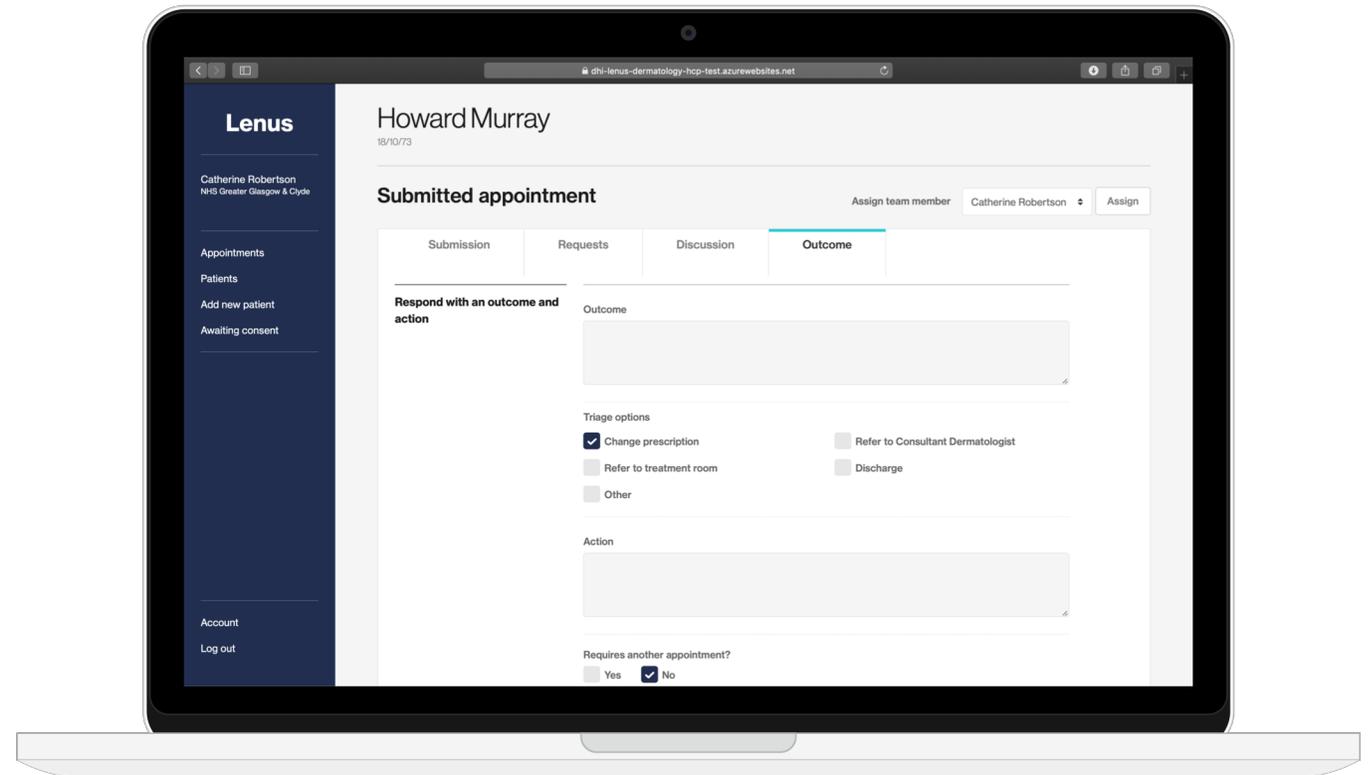
Option to request more data from patient and refer to colleague for second opinion



# Clinical Dashboard

The clinician responds to the consultation with an outcome which is shared with patient.

A PDF of the clinical interaction is automatically exported back into the patient record in EHR.



## Addressable Market

- ✓ 20%  
of appointments could be onboarded to this model now.
- ✓ 57,600  
derm appointments per year could be fulfilled using this model.

## Anticipated Benefits

### 4 minutes rather than 10

Early testing of the service highlights appointments can be conducted, on average, in 4 minutes rather than 10.



5,760

Hours of consultation time saved pa



200

Tonnes of CO<sub>2</sub>  
saved from reduced patient  
travel time pa

# Other Outpatient condition Types

Easily customise to  
meet requirements for  
other conditions.

Leverage existing  
digital components:  
identity, consent,  
notifications, FHIR data  
exchange & Trak &  
EHR integration.

Customise data  
collection and  
presentation to fit  
condition

