Digitising outpatients

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Ortus-iHealth

NHS

Barts Health

NHS Trust

Disclaimer

- Dr Das is CEO of Ortus-iHealth as well as a Cardiologist at Barts

The Problem

Barts Health NHS Trust

- The number of hospital outpatient appointments has almost **doubled to 94million** in the last 10 years, costing **£8billion**
- **Over a quarter of doctors** say many **need not have come** to clinic or be seen in person
- In 2016-17, almost **8 million outpatient appointments were missed** due to patients not attending , costing nearly **£1billion**
- In 2017-2019, there were **5.5m Telehealth consultations in NHS Hospitals** (2.9% of all consultations)

The Problem

Barts Health NHS Trust

- Lots of virtual clinic solutions
- But who is all of this for?
- We can’t forget about patients!

The Problem

Dear Doctor Das,

I'm sorry to email you however, I am at a loss as where to go next apart from making a **complaint to NHS England**. You kindly saw me 6 months ago. You decided to see me 6 months later. 8 months have passed and I have had **3 appointments cancelled** so far. I have tried to call Byron ward at Whipps Cross Hospital, who gave me the cardiology secretary number which I called on numerous occasions only getting an answer phone once, which I left a message on with all my contact details **to date no reply**. I have sent an email to bhnt.electrophysiology@nhs.net two weeks ago which was not even acknowledged, I have also been to my GP who states that he would write to you again!

I am a serving **police officer** and currently on restricted duties until cleared by my occupational health dept. Please can you forward this to someone who can help!

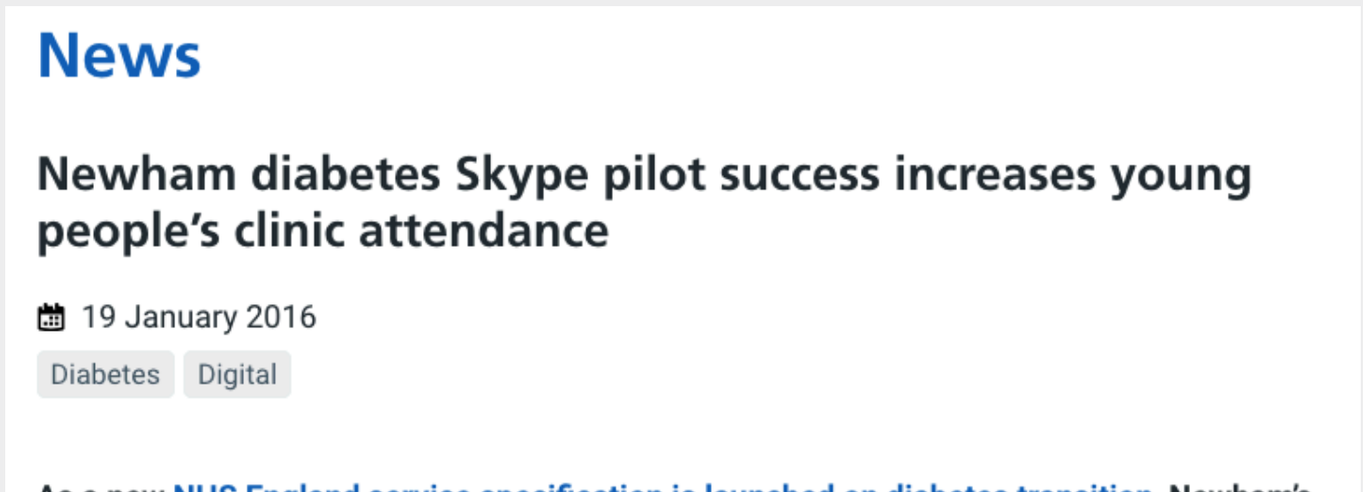
Paul

Were we ready?

Barts Health NHS Trust

Barts Video Clinic Strategy & Local CCG agreement

- Tariff agreement at present to pay **same tariff** as face to face
- Senior **management buy-in** – to do things differently
- Great **work already** within Barts to set the agenda



News

Newham diabetes Skype pilot success increases young people's clinic attendance

19 January 2016

Diabetes Digital

Were we ready?

Barts Health NHS Trust

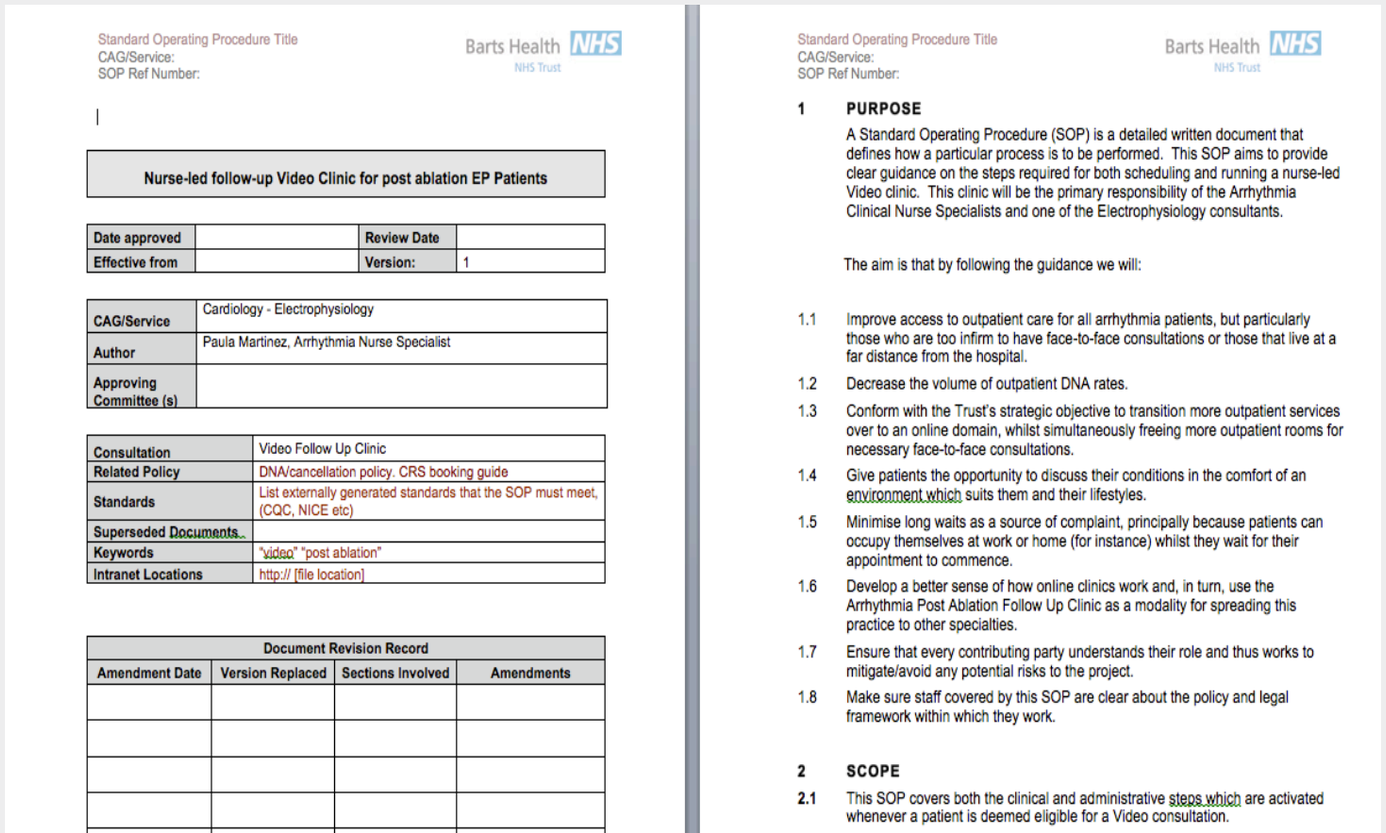
Barts Video Clinic Working Group

- Senior management
- Clinicians
- IT representation
- Outpatient booking & clinical support services
- Information governance lead

Were we ready?

Barts Video Clinic Working Group

- Standard Operating Protocol devised with video clinic appointment generation in Cerner



Standard Operating Procedure Title
CAG/Service:
SOP Ref Number:

Barts Health NHS Trust

Nurse-led follow-up Video Clinic for post ablation EP Patients

Date approved		**Review Date**	
Effective from		**Version:**	1

CAG/Service	Cardiology - Electrophysiology
Author	Paula Martinez, Arrhythmia Nurse Specialist
Approving Committee (s)	

Consultation	Video Follow Up Clinic
Related Policy	DNA/cancellation policy. CRS booking guide
Standards	List externally generated standards that the SOP must meet, (CQC, NICE etc)
Superseded Documents	
Keywords	"video" "post ablation"
Intranet Locations	http:// [file location]

Document Revision Record			
Amendment Date	**Version Replaced**	**Sections Involved**	**Amendments**

Standard Operating Procedure Title
CAG/Service:
SOP Ref Number:

Barts Health NHS Trust

1 PURPOSE

A Standard Operating Procedure (SOP) is a detailed written document that defines how a particular process is to be performed. This SOP aims to provide clear guidance on the steps required for both scheduling and running a nurse-led Video clinic. This clinic will be the primary responsibility of the Arrhythmia Clinical Nurse Specialists and one of the Electrophysiology consultants.

The aim is that by following the guidance we will:

1.1 Improve access to outpatient care for all arrhythmia patients, but particularly those who are too infirm to have face-to-face consultations or those that live at a far distance from the hospital.

1.2 Decrease the volume of outpatient DNA rates.

1.3 Conform with the Trust's strategic objective to transition more outpatient services over to an online domain, whilst simultaneously freeing more outpatient rooms for necessary face-to-face consultations.

1.4 Give patients the opportunity to discuss their conditions in the comfort of an environment which suits them and their lifestyles.

1.5 Minimise long waits as a source of complaint, principally because patients can occupy themselves at work or home (for instance) whilst they wait for their appointment to commence.

1.6 Develop a better sense of how online clinics work and, in turn, use the Arrhythmia Post Ablation Follow Up Clinic as a modality for spreading this practice to other specialties.

1.7 Ensure that every contributing party understands their role and thus works to mitigate/avoid any potential risks to the project.

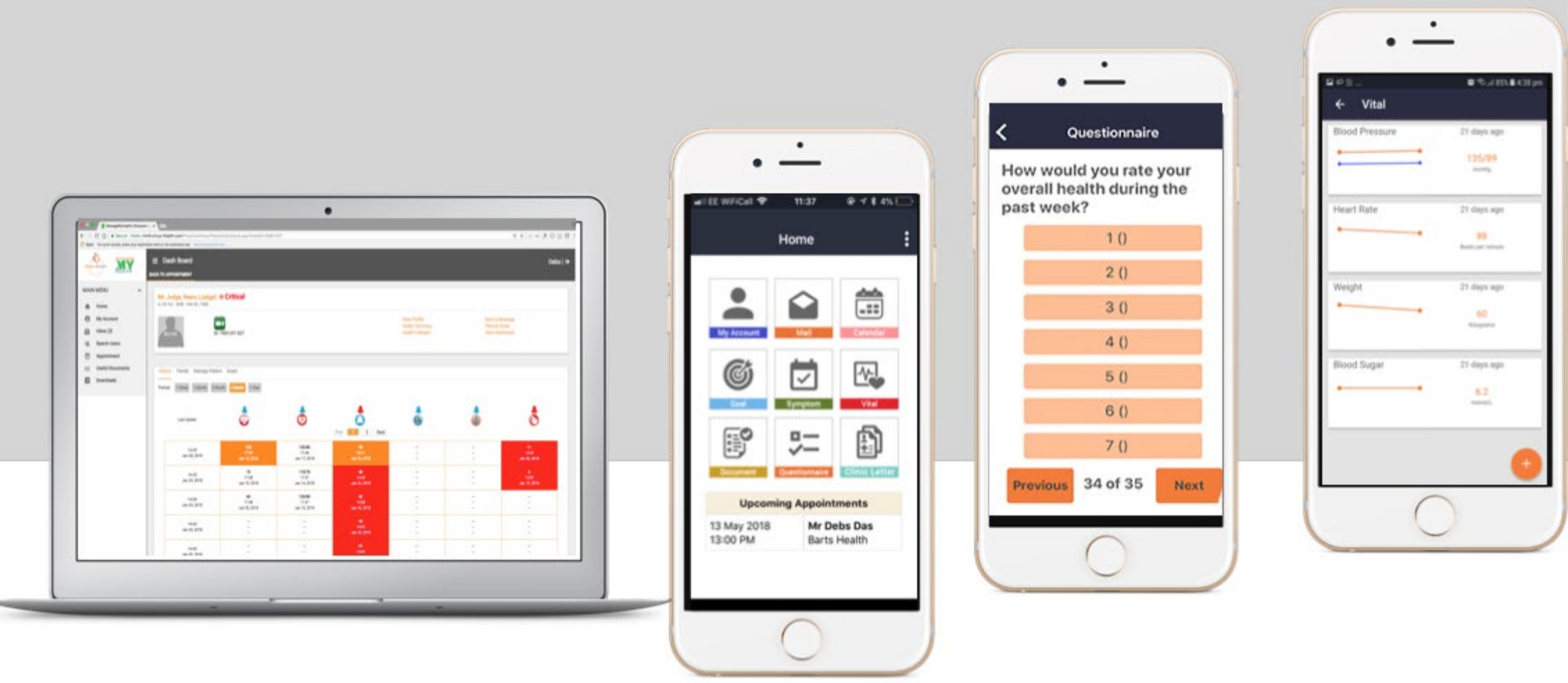
1.8 Make sure staff covered by this SOP are clear about the policy and legal framework within which they work.

2 SCOPE

2.1 This SOP covers both the clinical and administrative steps which are activated whenever a patient is deemed eligible for a Video consultation.

Our solution

A comprehensive virtual clinic platform

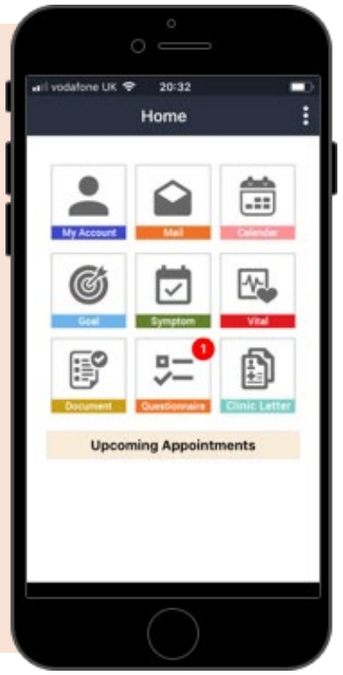


Our solution

For patients, a smartphone app

Manage appointments

- View appointments
- Receive reminders
- Reschedule appointments

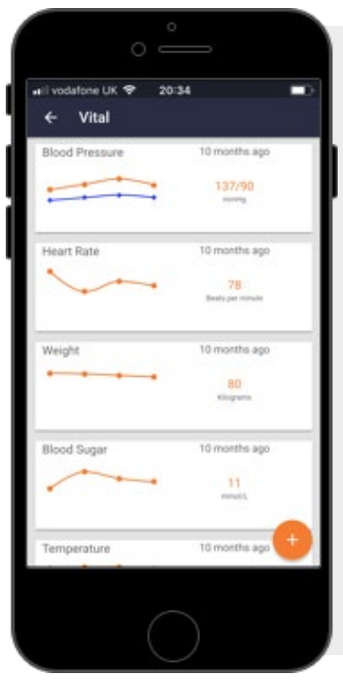


Better aftercare

- View clinic letters
- Receive medication reminders
- E-mail clinicians

Interact with clinicians

- Clinician-approved questionnaires
- More focussed discussions
- Video consultations

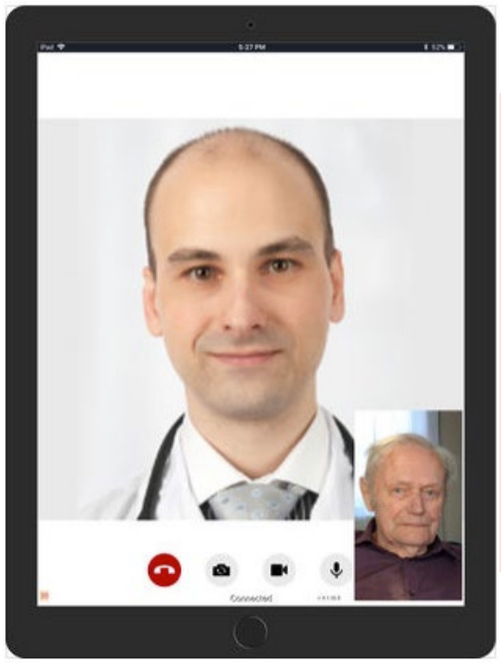


Track symptoms

- Monitor vitals
- Keep a symptom diary
- Set goals and monitor progress

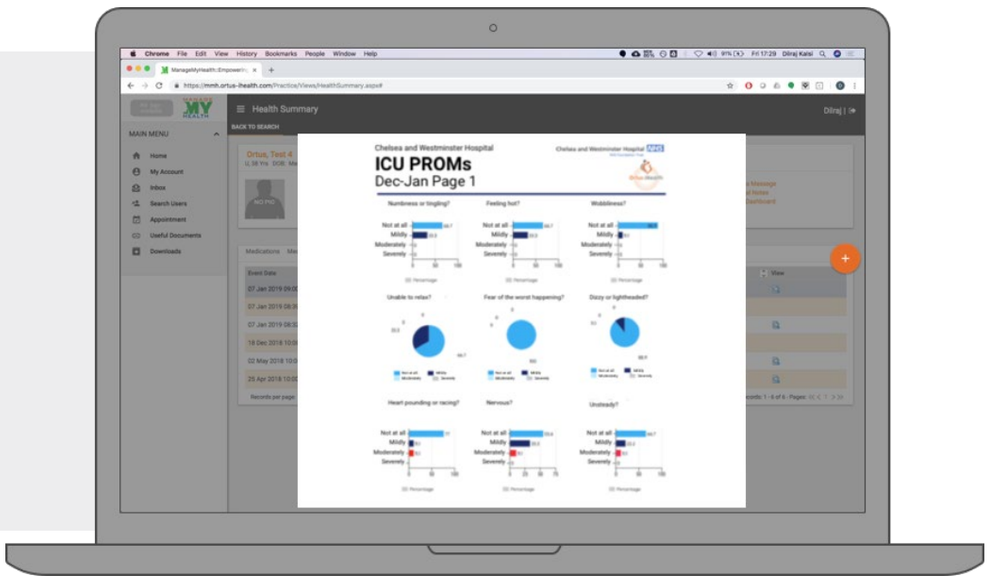
Our solution

For providers, a web portal

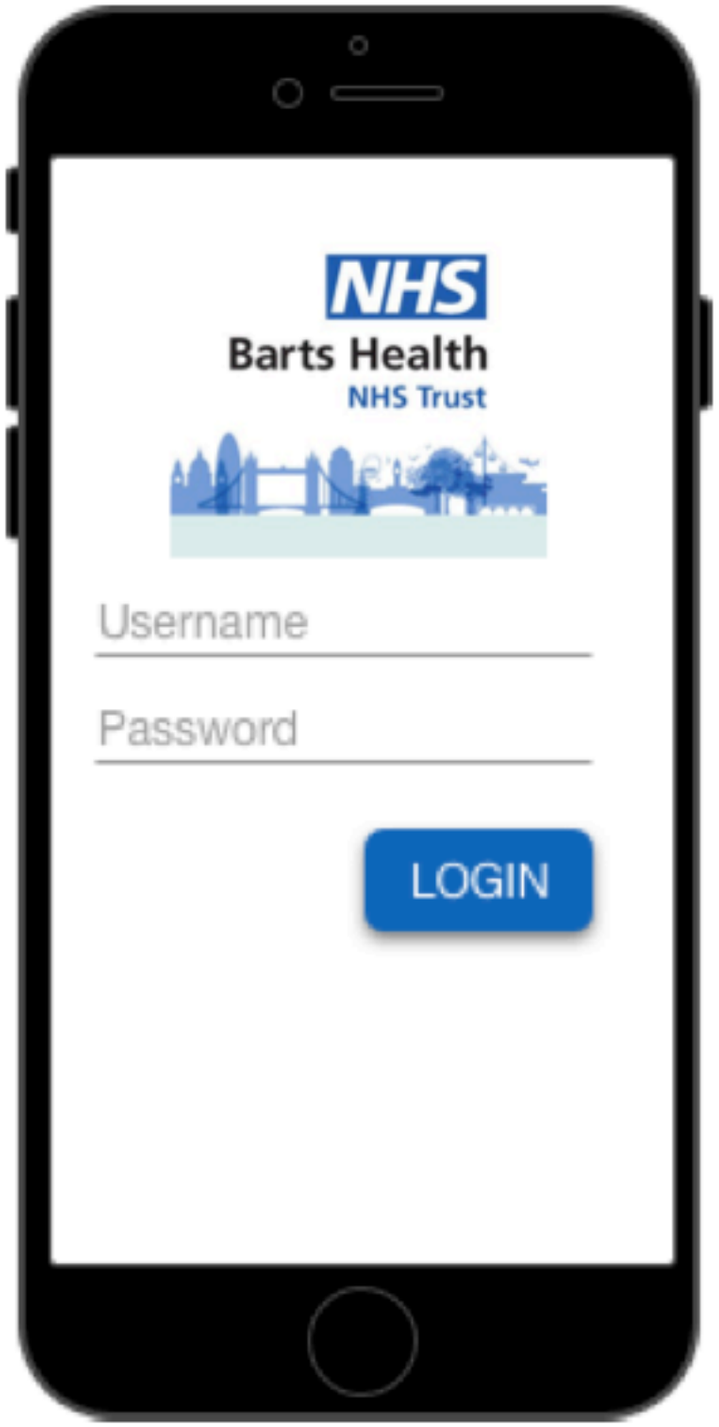


- Improved attendance and reduced DNAs
- Secure, effective video consultations

- Remotely monitor symptoms and vitals to tailor care
- Gather PROMs data and view live



Our solution



Digital pathway design

- Obs & Gynae
- Cardiology
- General Surgery
- Primary Care
- Orthopaedics
- Oncology
- Mental Health

Where we are

Barts Health NHS Trust

2 successful pilots in Cardiology and Breast Cancer patients, demonstrating…

Where we are

Barts Health NHS Trust

Increased efficiency

3% DNA rate, significantly less than Barts' average of 10-12%

10 additional patients seen per week due to extra capacity

0 adverse events

Where we are

Barts Health NHS Trust

Patient savings

80% reported an important saving

33% saved £10 or more

97% saved >30 minutes

Where we are

Barts Health NHS Trust

Patient satisfaction

90% satisfied with the virtual clinic experience

100% found appointment reminders useful

83% valued access to clinic letters

Where we are

Scale up in 2019 with at least **12 clinical pathway changes** catering to **>3000 patient appointments** across a wide **variety of specialties** including Cardiology and Oncology

Where we are

Barts Health NHS Trust

Established

- Post atrial fibrillation ablation clinic with PROMs data
- Post acute myocardial infarction video clinics with remote pharmacy-led up-titration of medications
- Inherited arrhythmia clinic with questionnaire and ECG based follow-up

Where we are

Barts Health NHS Trust

Post acute myocardial infarction clinics

- Need to uptitrate prognostic medication after heart attacks
- E arly review is beneficial
- Neither tend to happen due to lack of capacity

Where we are

Barts Health NHS Trust

Virtual acute myocardial infarction pathway

- Patient has heart attack
- Discharged home with app and advice to regularly input BP/HR
- 2 week and 4 week remote review of observations only and advice given through messaging facility in the app
- 8 week video review

Surely this is too long-winded and cumbersome?

Where we are

Barts Health NHS Trust

Virtual acute myocardial infarction pathway

- Virtual medications optimisation clinic - 8 patients in 30mins
- Video clinic with use of pre-filled questionnaires
    - Average 8mins from time of call to finishing admin
    - Average 8 patient clinic takes 70 minutes

Where we are

Barts Health NHS Trust

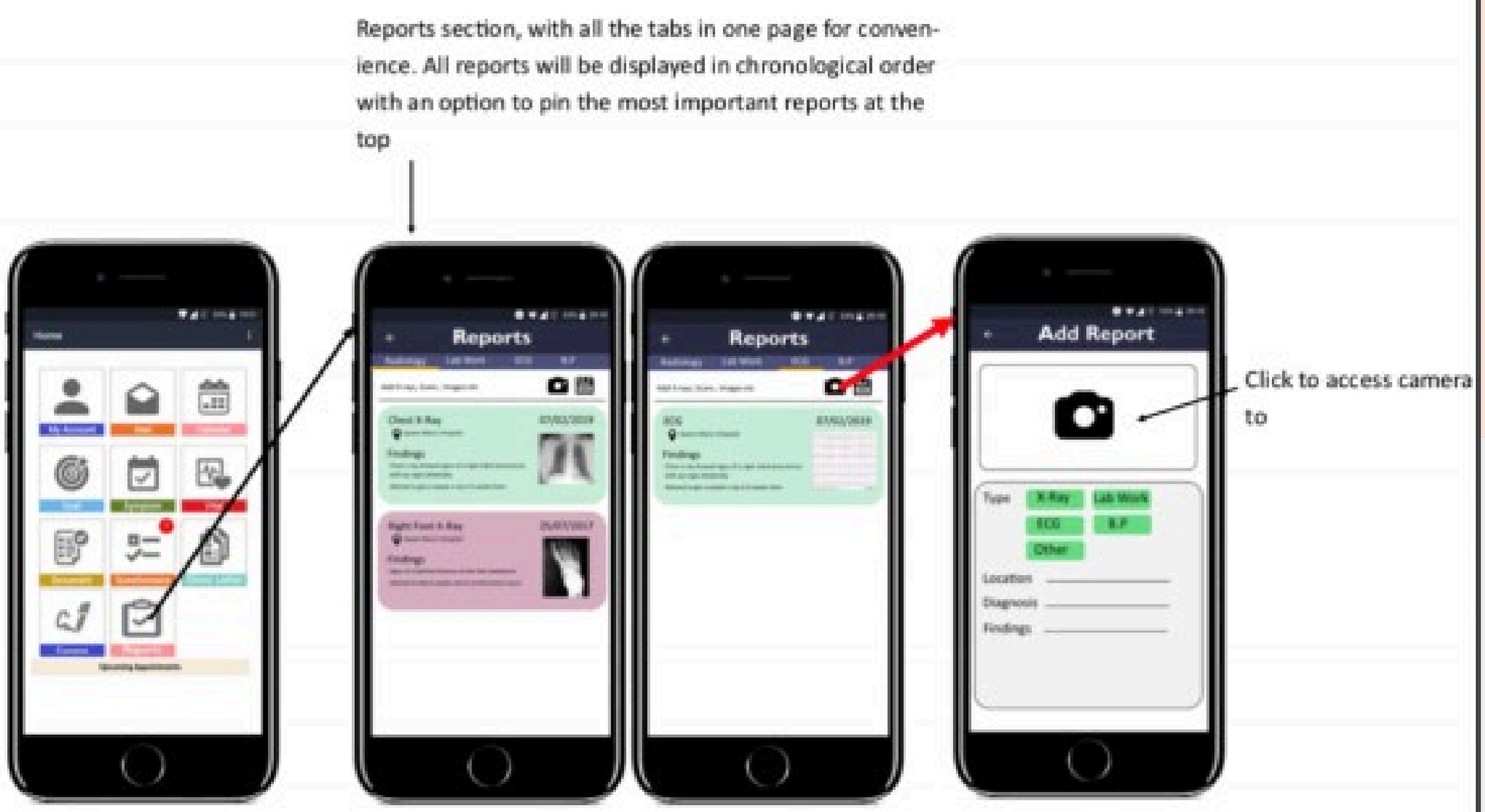
Delivering more efficient care in a personalised way

Medication

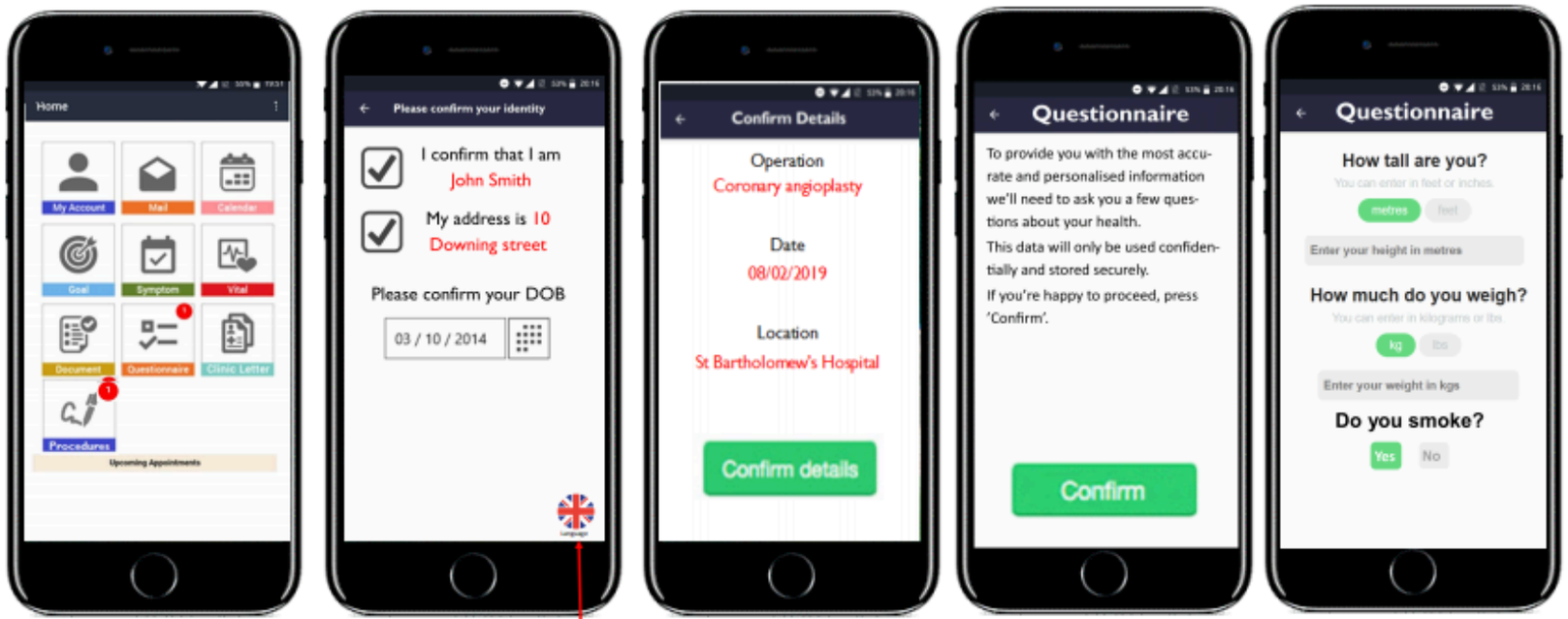
Due now, upcoming and missed medication section with the option to take or skip.

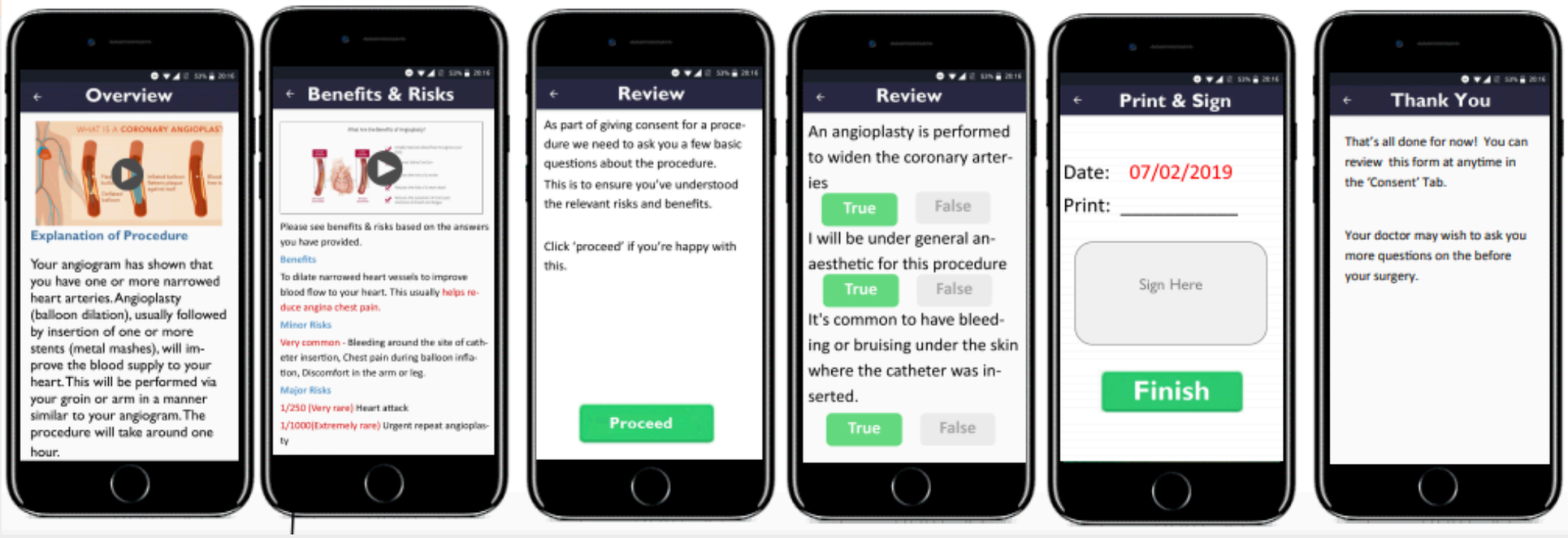
Add all the details for medication, doses, time to take, additional information.

Reports

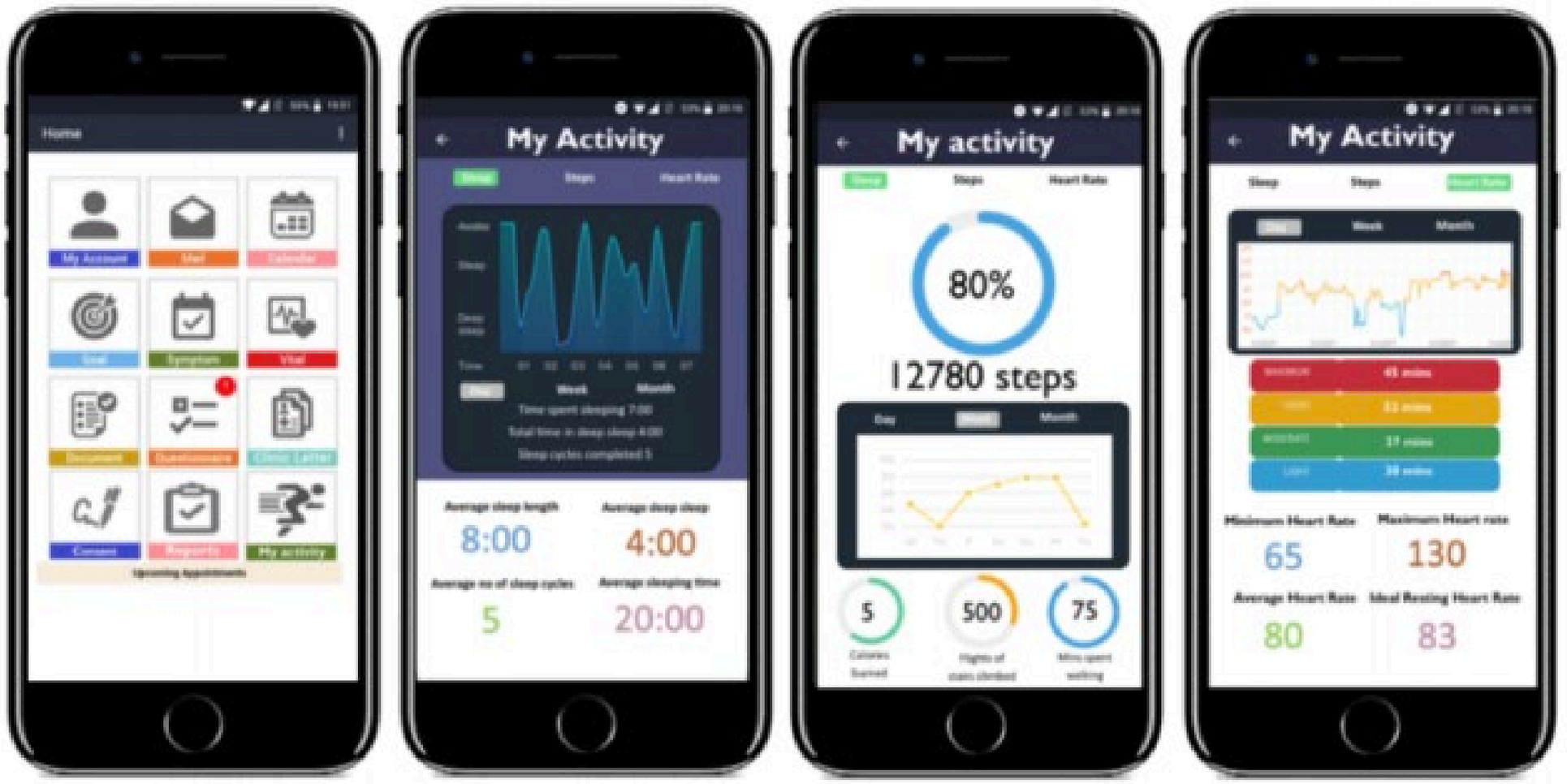

Reports section, with all the tabs in one page for convenience. All reports will be displayed in chronological order with an option to pin the most important reports at the top
Reports
Reports
Add Report
Click to access camera to
Type
X-Ray
Lab Work
ECG
E.F
Other
Location
Diagnosis
Findings

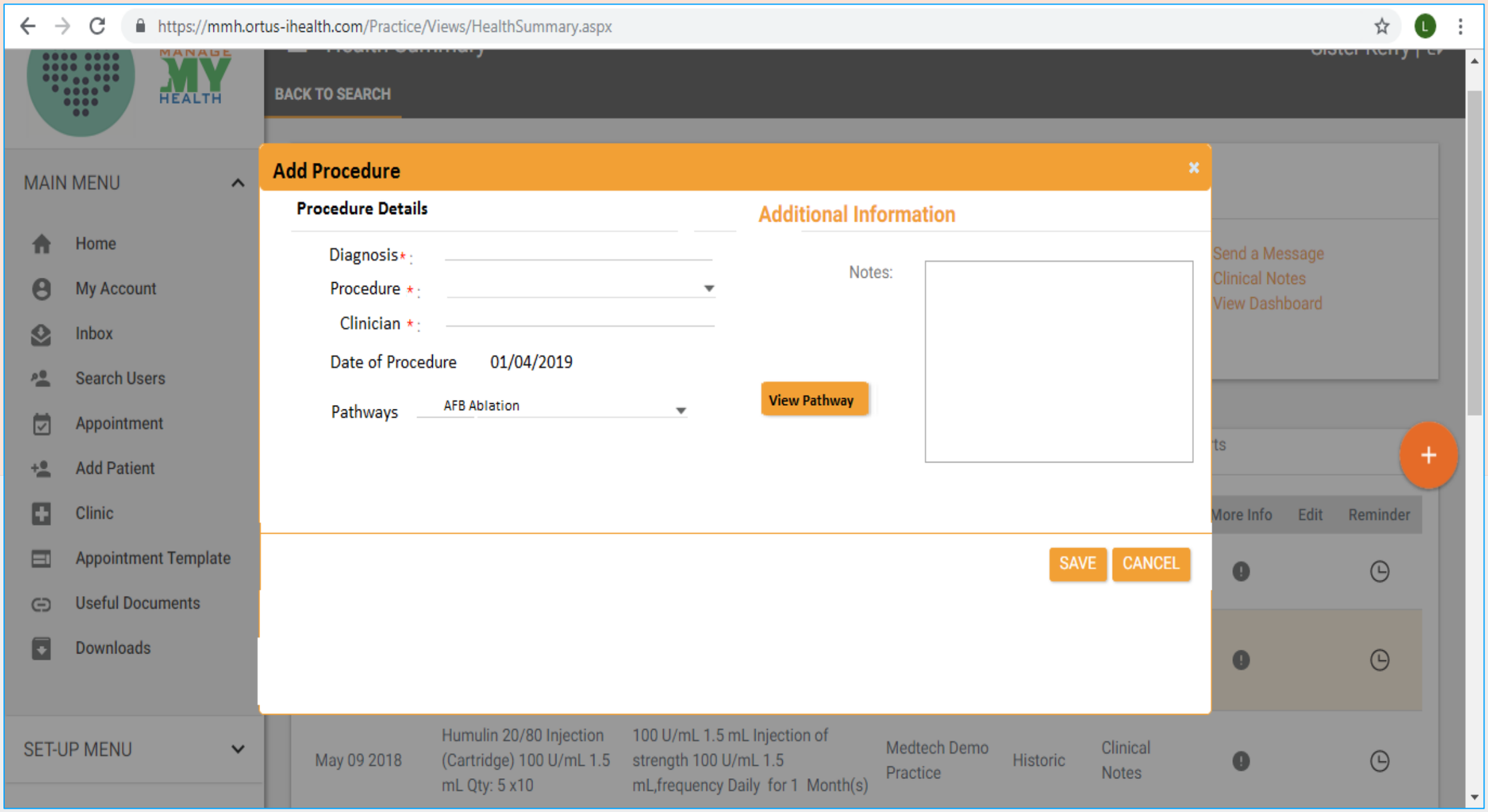
Consent


Home
My Account
Mail
Calendar
Goal
Symptom
Vital
Document
Questionnaire
Clinic Letter
Procedures
Upcoming Appointments
Please confirm your identity
I confirm that I am
John Smith
My address is 10
Downing street
Please confirm your DOB
03 / 10 / 2014
Can change language
Confirm Details
Operation
Coronary angioplasty
Date
08/02/2019
Location
St Bartholomew's Hospital
Confirm details
Questionnaire
To provide you with the most accurate and personalised information we'll need to ask you a few questions about your health.
This data will only be used confidentially and stored securely.
If you're happy to proceed, press 'Confirm'.
Confirm
Questionnaire
How tall are you?
You can enter in feet or inches
metres
feet
Enter your height in metres
How much do you weigh?
You can enter in kilograms or lbs
kg
lbs
Enter your weight in kgs
Do you smoke?
Yes
No


Overview
WHAT IS A CORONARY ANGIOPLASTY
Explanation of Procedure
Your angiogram has shown that you have one or more narrowed heart arteries. Angioplasty (balloon dilation), usually followed by insertion of one or more stents (metal mashes), will improve the blood supply to your heart. This will be performed via your groin or arm in a manner similar to your angiogram. The procedure will take around one hour.
Benefits & Risks
Please see benefits & risks based on the answers you have provided.
Benefits
To dilate narrowed heart vessels to improve blood flow to your heart. This usually helps reduce angina chest pain.
Minor Risks
Very common - Bleeding around the site of catheter insertion, Chest pain during balloon inflation, Discomfort in the arm or leg.
Major Risks
1/250 (Very rare) Heart attack
1/1000(Extremely rare) Urgent repeat angioplasty
Review
As part of giving consent for a procedure we need to ask you a few basic questions about the procedure.
This is to ensure you've understood the relevant risks and benefits.
Click 'proceed' if you're happy with this.
Proceed
Review
An angioplasty is performed to widen the coronary arteries
True
False
I will be under general anaesthetic for this procedure
True
False
It's common to have bleeding or bruising under the skin where the catheter was inserted.
True
False
Print & Sign
Date: 07/02/2019
Print: _____
Sign Here
Finish
Thank You
That's all done for now! You can review this form at anytime in the 'Consent' Tab.
Your doctor may wish to ask you more questions on the before your surgery.

My Activity


Home
My Account
Vital
Calendar
Goal
Symptom
Vital
Document
Questionnaire
Clinic Letter
Consent
Appointment
My activity
Upcoming Appointments
My Activity
Sleep
Steps
Heart Rate
Week
Month
Average sleep length
8:00
Average deep sleep
4:00
Average no of sleep cycles
5
Average sleeping time
20:00
My activity
Sleep
Steps
Heart Rate
80%
12780 steps
Day
Week
Month
5
500
75
My Activity
Sleep
Steps
Heart Rate
Day
Week
Month
Minimum Heart Rate
65
Maximum Heart rate
130
Average Heart Rate
80
Ideal Resting Heart Rate
83


https://mmh.ortus-ihealth.com/Practice/Views/HealthSummary.aspx
MANAGE MY HEALTH
BACK TO SEARCH
MAIN MENU
Home
My Account
Inbox
Search Users
Appointment
Add Patient
Clinic
Appointment Template
Useful Documents
Downloads
SET-UP MENU
Add Procedure
Procedure Details
Diagnosis* :
Procedure * :
Clinician * :
Date of Procedure 01/04/2019
Pathways AFB Ablation
Additional Information
Notes:
View Pathway
SAVE
CANCEL
Send a Message
Clinical Notes
View Dashboard
More Info
Edit
Reminder
May 09 2018
Humulin 20/80 Injection (Cartridge) 100 U/mL 1.5 mL Qty: 5 x10
100 U/mL 1.5 mL Injection of strength 100 U/mL 1.5 mL,frequency Daily for 1 Month(s)
Medtech Demo Practice
Historic
Clinical Notes

https://mmh.ortus-ihealth.com/Practice/Views/HealthSummary.aspx

MANAGE MY HEALTH

BACK TO SEARCH

MAIN MENU

- Home
- My Account
- Inbox
- Search Users
- Appointment
- Add Patient
- Clinic
- Appointment Template
- Useful Documents
- Downloads

SET-UP MENU

Mr.Sushma_Pati_0....pdf

Pathways Select

Location Select

Age Range Select

Questionnaire Select

Clinicians

Select	Clinicians
☑	
☑	

Gender Select

Questions

Select	Questions
☑	
☑	

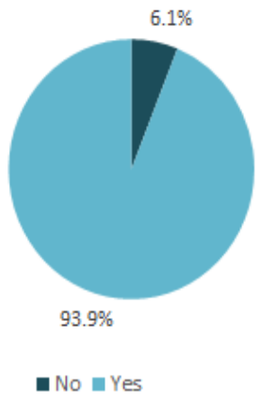
From 01/01/2019

To 01/02/2019

Show Clear

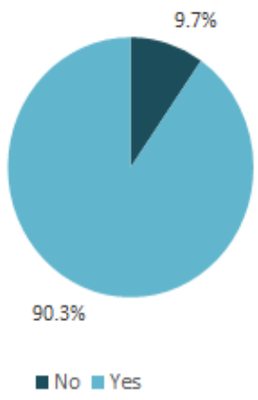
Drinking enough fluids - 2 litres fluids?

Pie / Bar Chart



Eating small frequent meals?

Pie / Bar Chart



tingling/numbness hands/feet?

Pie / Bar Chart

Excel PDF

Where we are

Using our clinical expertise, we are digitally enhancing outpatient journeys to provide efficient, personalised care

- Reduce DNAs
- Increase capacity and efficiency
- Improve clinical outcomes

Lessons learned

Barts Health NHS Trust

- Requires **stepwise changes**
- Find **early adopters** and like-minded clinicians
- Embed into the **current need** to deliver video or virtual clinics
- **Establish the technology** then further pathway changes

Any questions?

Ortus-iHealth

NHS

Barts Health

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