

The Secure Clinical Image Transfer (SCIT) App

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#hcsconference2019



● Design
● Photography
● Video



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What is SCIT?

- A clinical photography tool that enables health care providers to capture clinical images
- Using a smart phone or tablet, captured images and associated data are held securely on the device, until it is sent through the network and into the hospital's image management system.
- The app records patient data and consent alongside the images, and once the data presents to the destination database, all information is deleted from the mobile device.

Technology

Use of WhatsApp in NHS 'widespread' say doctors

By Jane Wakefield
Technology reporter

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Doctors' use of smartphones 'could threaten patient confidentiality'

Sensitive information about patients' conditions could become public if phones are lost or stolen, warn researchers



Up to 65% of doctors surveyed had used SMS messages to communicate with colleagues health. Photograph: Alamy

Details of patients' illnesses and treatment could be leaked because doctors use smartphones to send details of their cases to each other via text, x-ray results and photographs of wounds, warns research.

INDY/PULSE

HEALTH APPS USED BY NHS STAFF PUTTING 'HIGHLY SENSITIVE AND CONFIDENTIAL' PATIENT DATA AT RISK, NEW F

Doctors sharing images of patients' conditions



Healthcare Network
Views from the NHS
frontline

Should doctors use WhatsApp to bypass archaic NHS tech?

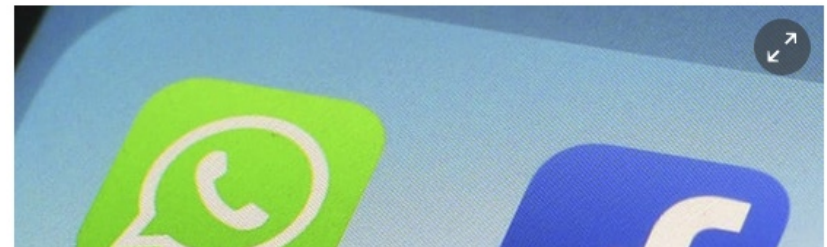
Being able to seek advice on patient care is invaluable but I worry about how to keep sensitive information confidential



135
23

Georgina Gould
Junior doctor

Monday 5 June 2017 14:32 BST



Research

- In 2014, 65% of doctors polled admitted to taking medical images on their smartphones.
- In 2016, 73% of doctors polled admitted to storing clinical photos among their personal photos.
- In 2017, a BMJ study stated that 97% of doctors claim they routinely use WhatsApp to send patient information without consent – despite 68% of them having concerns about using this tool for data sharing.

-
- The NHS has been accused of 'failing to keep pace with advances in digital technology and to take advantage of online tools and e-health'

Healthcare Network
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Should doctors use WhatsApp to bypass archaic NHS tech?

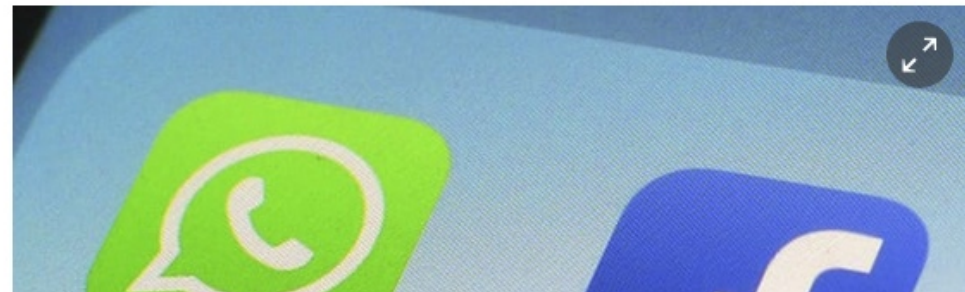
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High level policy

- UK – Making and using visual and audio recordings of patients (GMC)
- Australia – Clinical images and the use of personal mobile devices (AMA)
- Canada – Best Practices for Smartphone and Smart-Device Clinical Photo Taking and Sharing (CMA)
- USA – Sample Consent for Clinical Photography, Videotaping, Audiotaping, and Other Multimedia Imaging of Patients (AHIMA)

Policy Overview

- In Scotland, 7 out of 14 Health Boards have signed up to a standardised policy on clinical recordings of patients
- Presents methods of best practice for taking and managing clinical recordings (photography and video) in terms of the patient, healthcare professionals, and the organisation.
- ‘while many hospitals and health departments ...have implemented clinical image policies, there is evidence that not all doctors are aware of or follow these policies’



Personal recording devices

- Only NHS GGC-owned equipment can be used to make and store clinical recordings of patients either by photography or video.
- All such equipment and users must be registered with the Head of Medical Illustration service or IT Security Manager.
- **The use of personal cameras, memory cards, mobile phones, or other similar devices to make clinical recordings is expressly prohibited.**

Information governance and technology resources

Resources to help health and care professionals use new technologies safely and securely to protect confidential patient information.

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[Bring Your Own Device \(BYOD\)](#)

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Instant messaging

Guidance on using instant messaging in acute clinical settings.

[Information governance and instant messaging](#)

Videoconferencing

Guidance on keeping patient information safe when using videoconferencing for consultations.

[Using videoconferencing for service user consultations](#)

Bring Your Own Device (BYOD)

Guidance on keeping information safe when health care staff may be using their own smartphones or tablets.

[Bring Your Own Devices \(BYOD\) information governance guidance](#)

Mobile devices

Guidance on the use of mobile devices, particularly cameras, but also mobile phones and tablets, in hospitals.

[The use of mobile devices in hospitals](#)

Last edited: 9 November 2018 12:00 pm

Guidance

UK GUIDANCE ON THE USE OF MOBILE PHOTOGRAPHIC DEVICES IN DERMATOLOGY



STANDARDS

1: Gaining the patient's Informed consent

- Consent should always be sought before capturing a patient image.
- It is the healthcare professional's responsibility to give the patient clear information on the risks and benefits of using an image captured on a mobile device – without this there is no informed consent.
- Written consent is recommended, preferably using a standardised consent form that covers use in direct care and also allows for consent to use the image for teaching and wider dissemination, ie on the internet.

2: Safe use of mobile devices to take patient images

Any device that is being used to capture clinical images that will not be either anonymised or pseudonymised should, as a minimum, have:

- a strong passcode (6+ characters)
- data encryption enabled
- any cloud-based backup systems disabled before use.

Some trusts may supply dedicated devices or operate a clear 'bring your own device' (BYOD) policy. This is the approach recommended by the ICO and this document should form part of such a policy and/or be used in the process of developing one.

In the absence of a clear BYOD policy the risks to personal data are greater and, in consequence, healthcare professionals may wish to consider installing a secure clinical image transfer app to keep PID images completely separate from their own use of social media or cloud-based storage.

Where patients use their own devices at the request of a healthcare professional, the security risks should be fully explained and consent sought in the usual manner.

3: Safe transfer and storage of images captured with mobile devices

If the healthcare professional is transferring data that is identifiable then it is important to ensure it arrives securely at the right destination for storage and use. It should not be vulnerable to interception or redirection but should be protected in line with the Data Protection Act (1998) (DPA). This can be achieved by sending encrypted data as follows:

- via email using NHS.net or to NHS.net similar secure NHS systems;
or
- by downloading to a secure (preferably NHS) wifi network or by cable to a PC that acts as a conduit to a secure network server and not as a storage device;
or
- by means of a secure clinical image transfer app.

When this level of security cannot be guaranteed, the use of anonymised or pseudonymised data may be a pragmatic solution.

It is important that images are completely deleted from the mobile device once transferred and that the storage system holding PID is encrypted/ password protected, searchable, regularly backed up and held within England, Scotland or Wales, as appropriate.

The current market ...

PicSafe®
Doctors Home · Download · Pricing · How It Works · More »

Your medical pics aren't



Epitomize Capture™ mobile app for clinical photography

Capture, standardize and manage clinical photos to support clinical decisions

Document, track and communicate





RXPHOTO
COMPANY
PRODUCTS
PRESS
FAQ
CONTACT
BLOG
SCHEDULE DEMO



Trusted healthcare messaging for everyone

Be part of the fast-growing community of health professionals changing the way we keep in touch with colleagues and patients. Get started today with free, secure text and photo messaging trusted for use at work.

NOW IN USE IN MORE THAN 100 HOSPITALS!

APPLE
ANDROID

Photos Every Time

and shares patient photos and videos

PhotoSAF: allowing clinicians to take IG-compliant photos with their own phones



Information Governance safe
 No images stored on the phone
 Fast and easy
 Staying IG safe is now the practical option





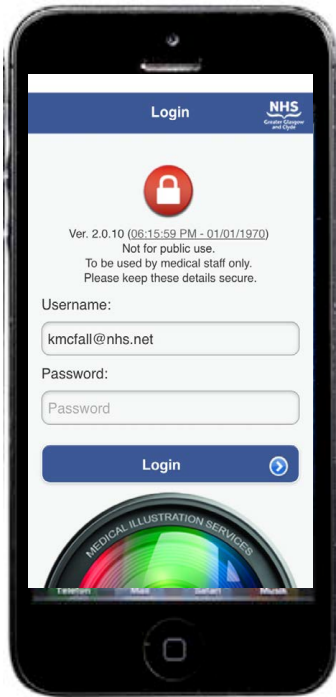
For Jonathan Patrick
more: jonathan.patrick@consultantconnect.org.uk
information: 01965 261 467



Our aim

- Provide employees with a safe and compliant tool to transfer clinical images into a secure storage system, connected to the EPR.
- To reduce the risk to the Health Board through compliance of protocol and policy.

SCIT App



SECURE CLINICAL IMAGE TRANSFER APP

WHAT IS IT?

The SCIT App enables NHS staff to securely take clinical images on their own mobile devices. Together with a small amount of patient identifiable data, the secure package is then transferred direct into the Trust's image storage system.

The App does not allow access to the images on the mobile device or independent cloud system and therefore conforms to NHS governance criteria and data protection.

HOW DOES IT WORK?

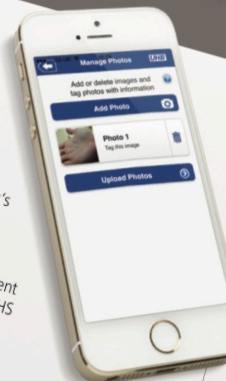
- The web server checks login details – information sits here as an unprocessed package and sends an 'ID reference' to the phone to say it is successful.
- The 'Process Black Box' will know what 'salt key' was being used at the time and will use this to unlock the data package.
- The system first checks the Trust's patient data spine (EPR) to confirm the patient identity, and then sends it to the image management system for storage.
- It will then send a message back to the user to confirm success.

PATIENT CONSENT

A consent button is available in the app. A consent statement is read or shown to the patient and consent registered. If capacity issues prevent agreement, the 'No consent' button is pressed. The app still allows the image to be taken and will register in the image management system there is no consent. The procedure for gaining retrospective consent for clinical photos should then be followed.

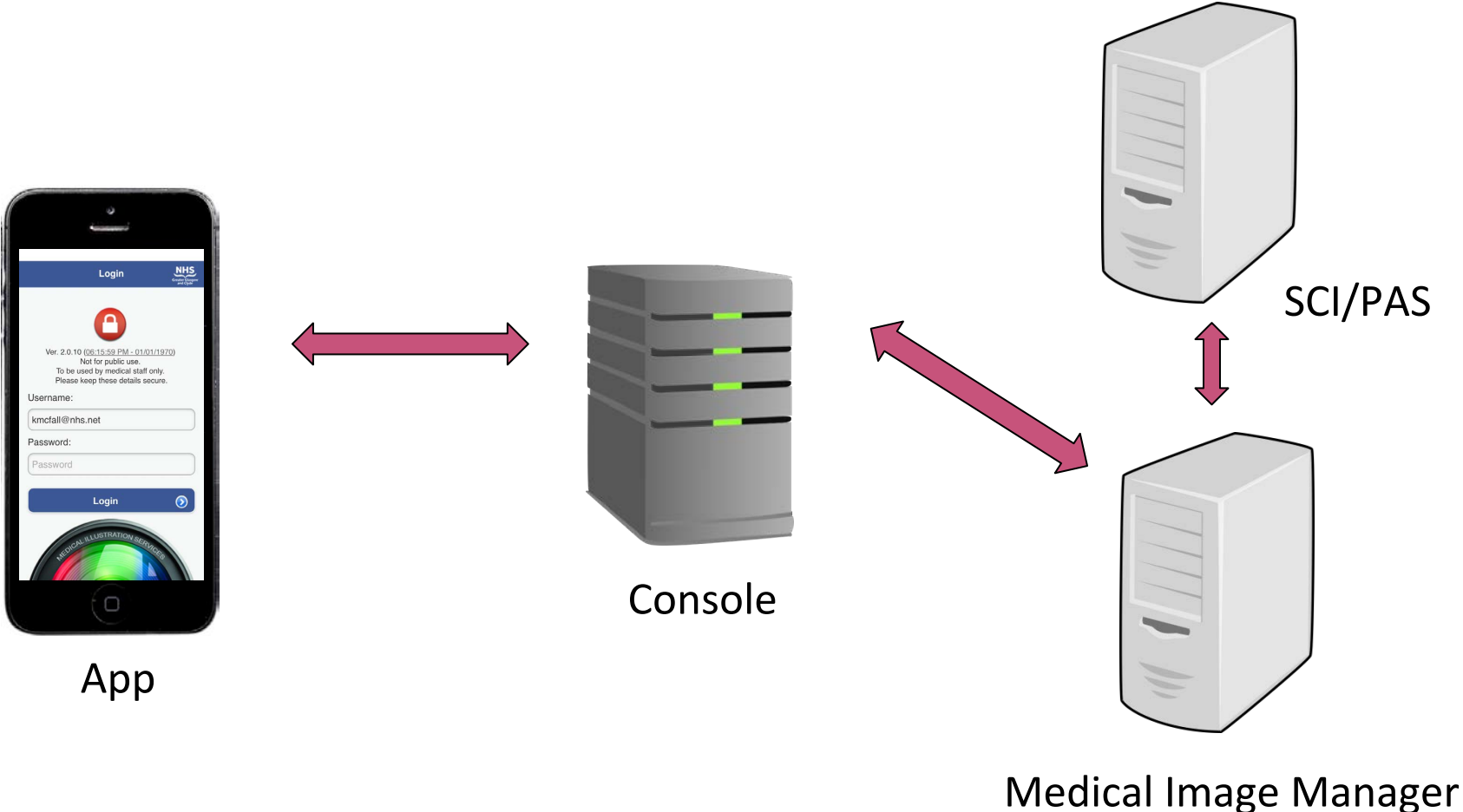
INFORMATION GOVERNANCE APPROVED

The system provides an extensive audit trail of activity which can be monitored at all stages. SCIT has been penetration tested by an independent cyber security company and is in use in a number of Trusts. The metadata is encrypted using strong authentication (AES-256) whilst in transmission, it also sits behind the Trust network and is therefore protected by Trust systems.



- Design
- Photography
- Video

Infrastructure





Welcome to NHS GGC SCIT

Welcome to the NHS GGC SCIT (Secure Clinical Image Transfer) system.

Use the following options to get help on how to use the SCIT mobile application, register to use the mobile application within NHS GGC or to reset your access password. Please click here if you need [further support](#).

For installation issues and advice, please contact the eHealth helpdesk.



Help using SCIT mobile application



Register for SCIT access



Expired SCIT password?



- Design
- Photography
- Video



NHS
Greater Glasgow
and Clyde

Secure Clinical Image Transfer (SCIT) App Registration

Please read the [Usage Policy](#) before completing this registration form. If you are having problems with your account or have forgotten your password, please contact the [SCIT Administrator](#).

Personal Details

First Name:

Last Name:

Department:

Please select your related department. If your department is not listed, please contact [SCIT Administrator](#) so it can be arranged for you.

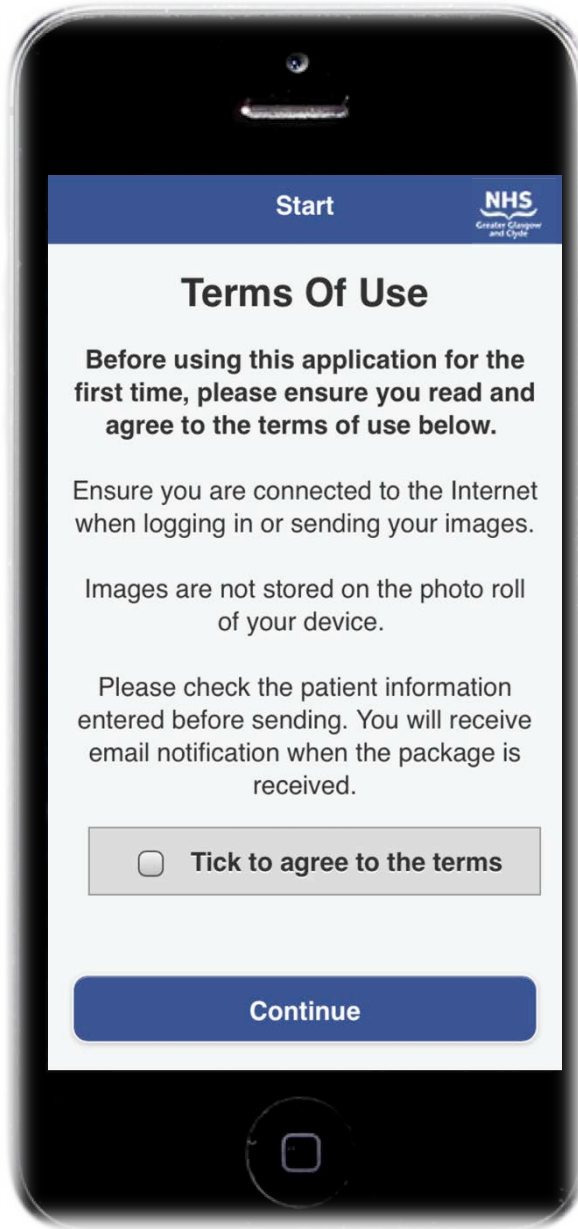
NHSGGC or NHS Email:

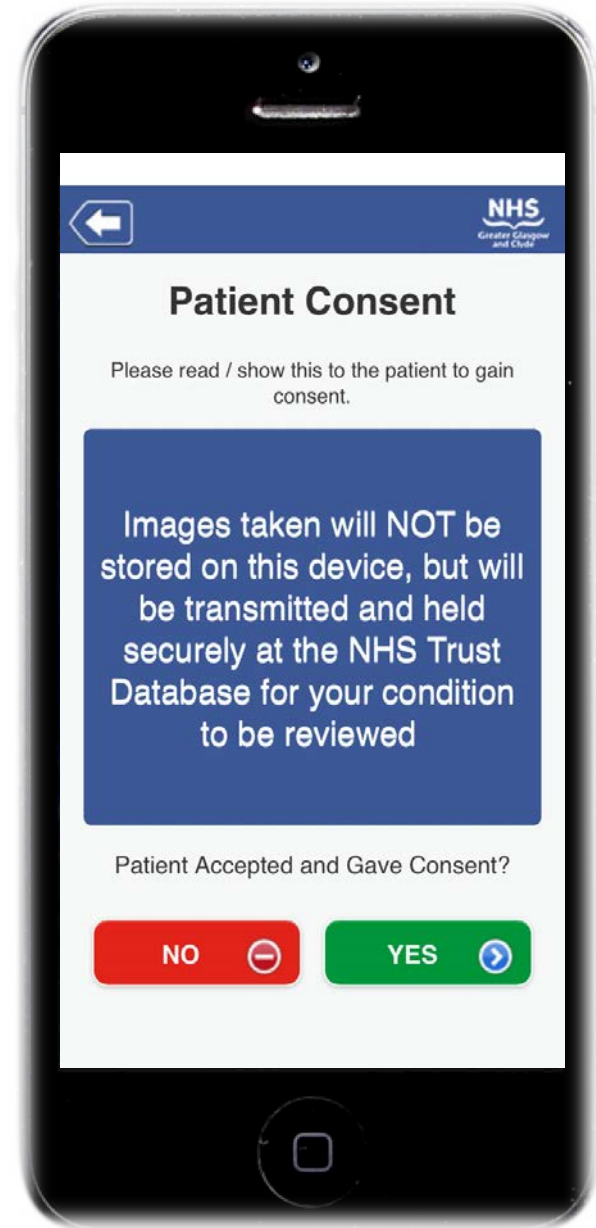
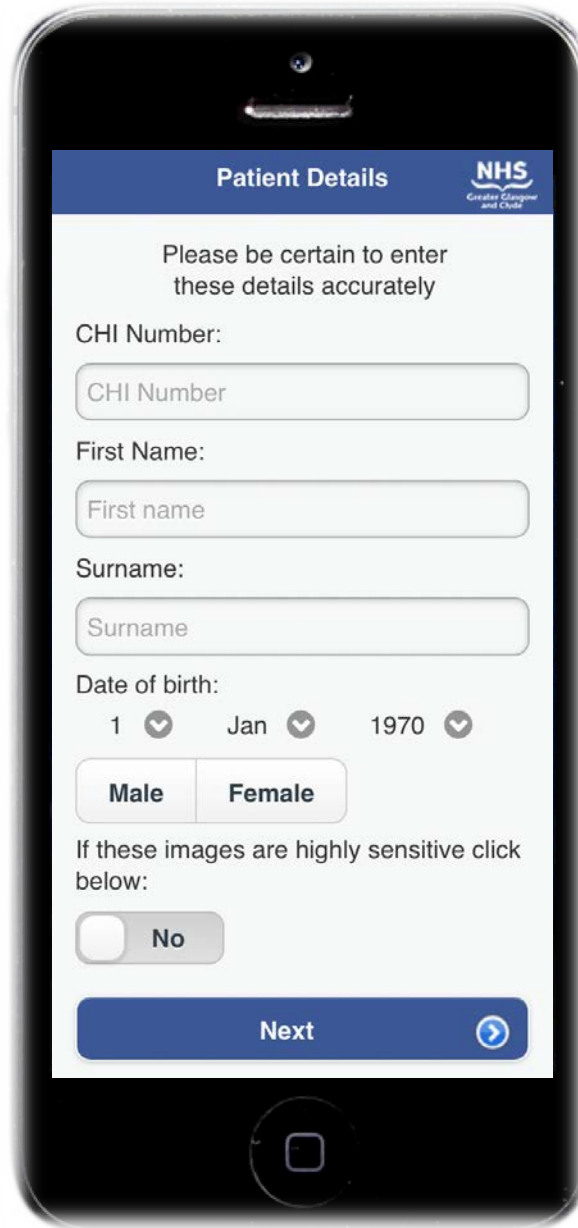
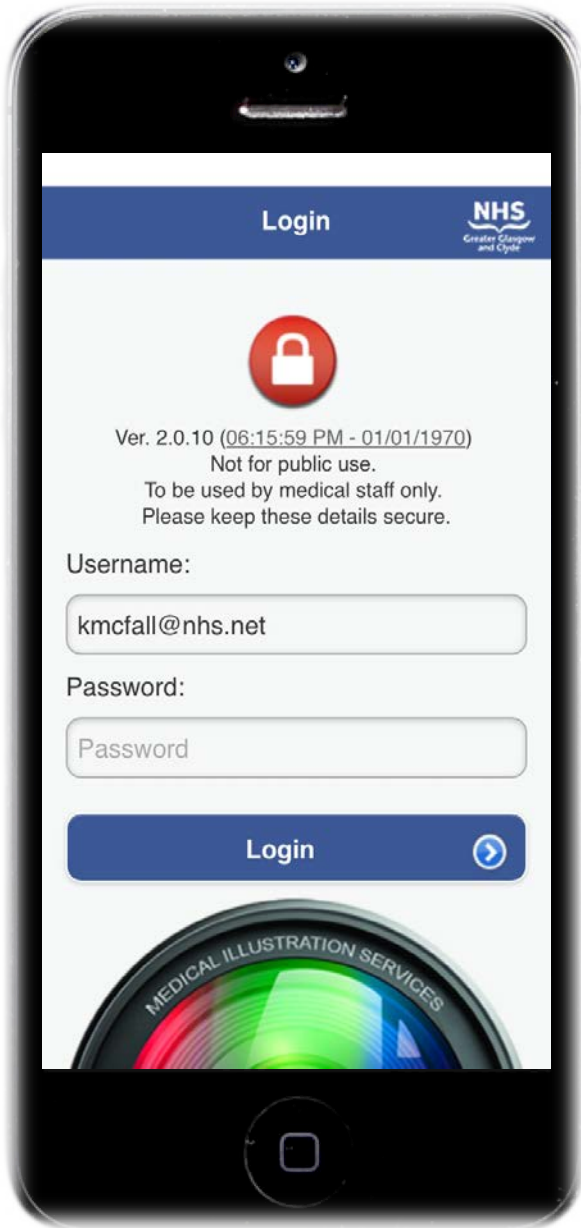
Job Title:

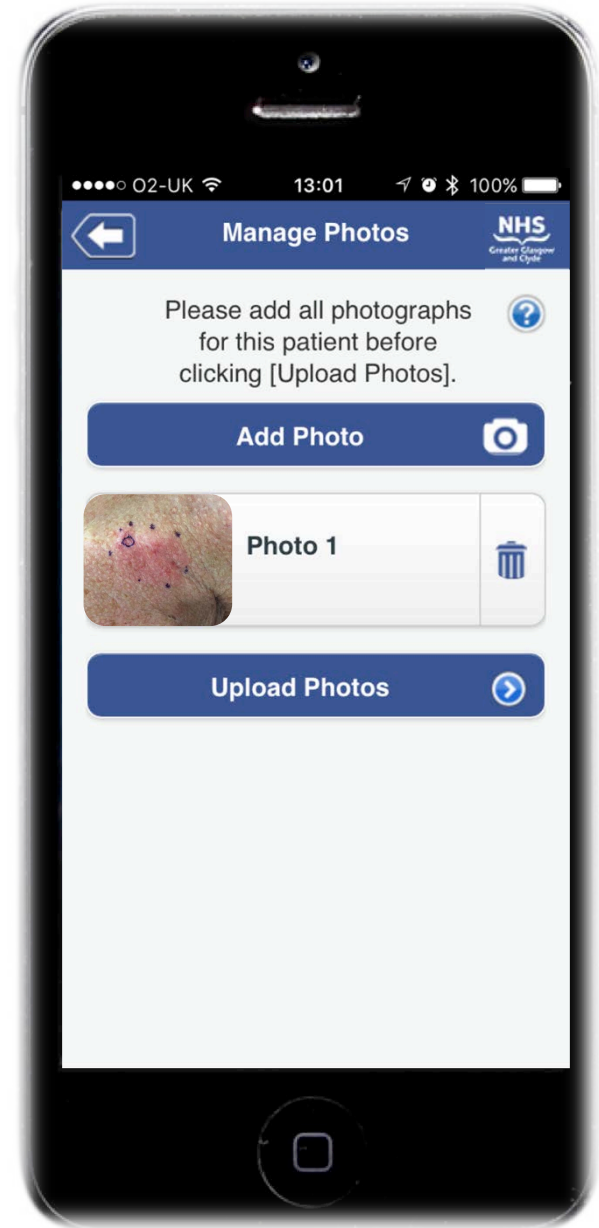
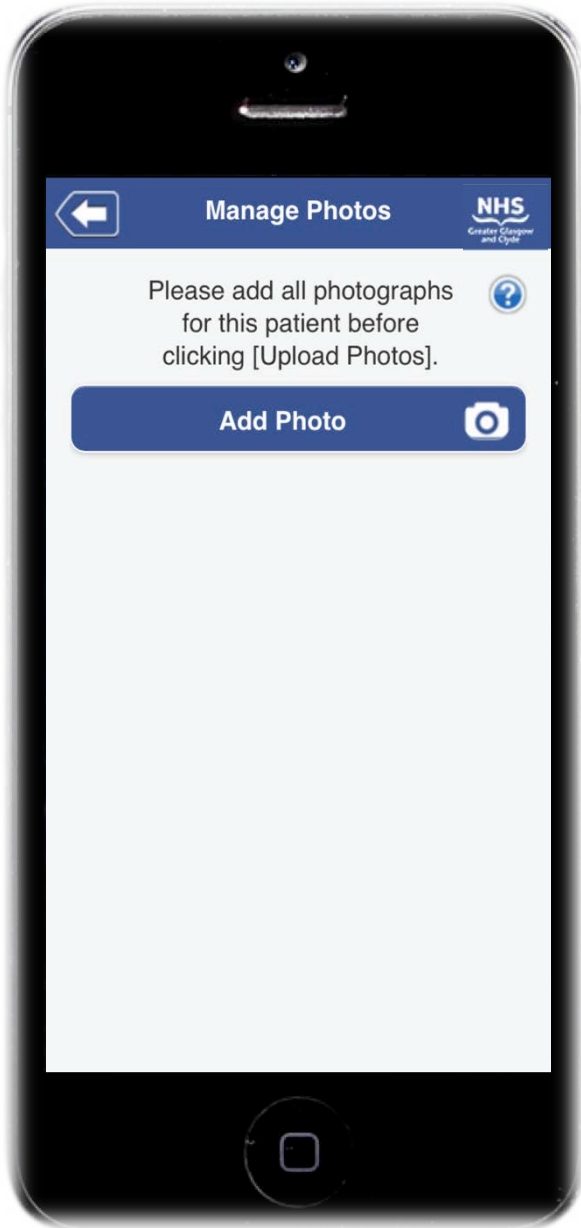
Please supply your job title.

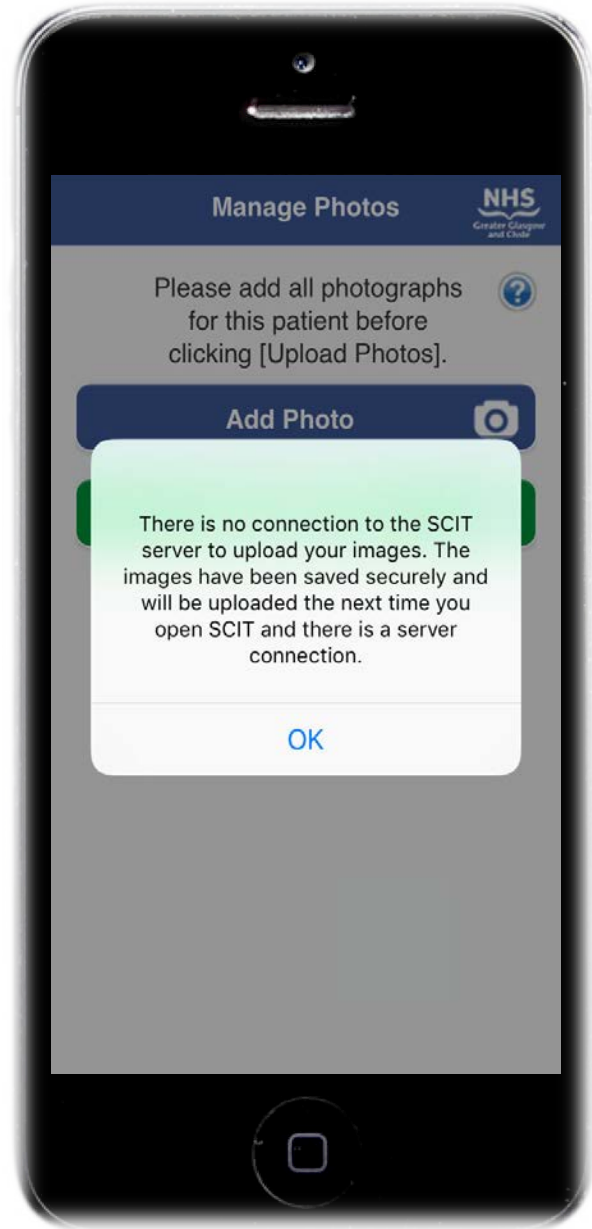
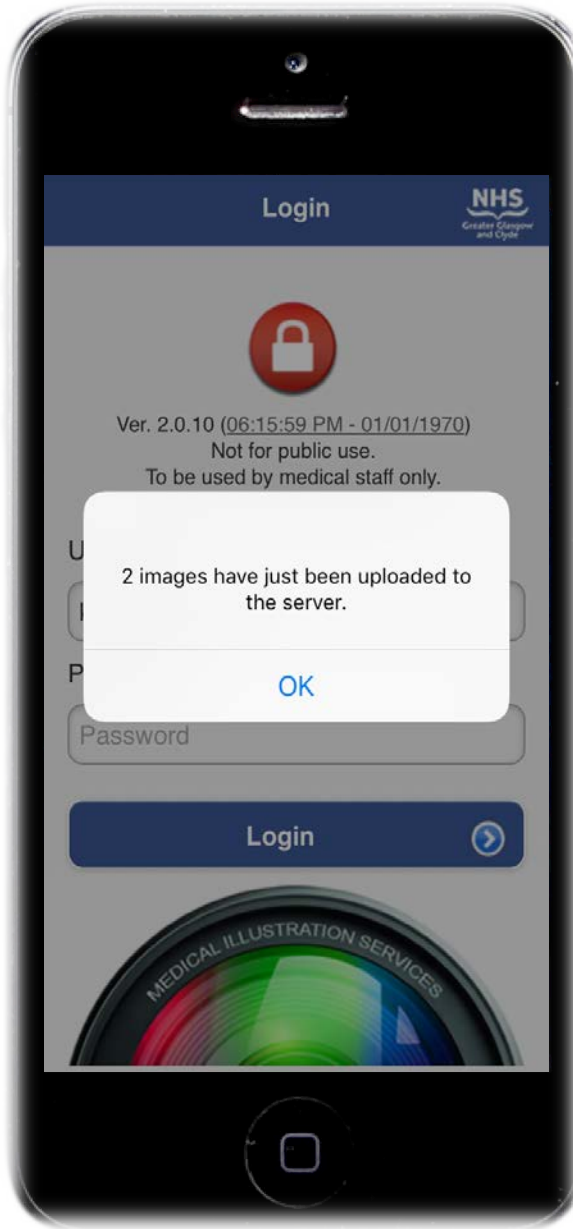
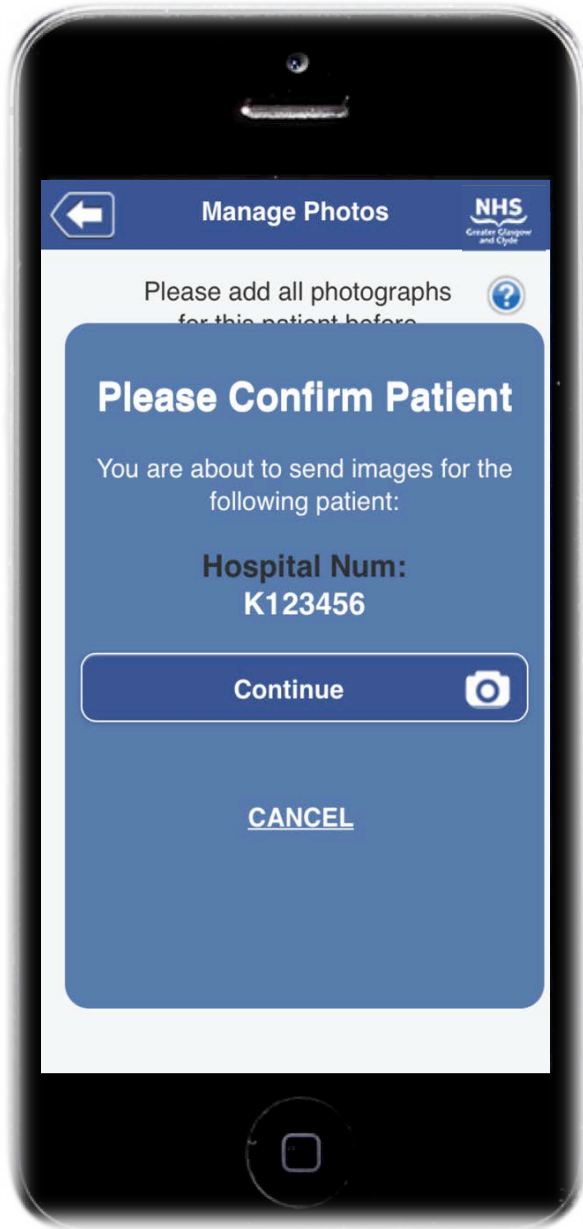
Domain User ID:

Please supply your domain user ID











SCIT Admin Access

Please complete the sign in form below. (You have 3 login attempts remaining).

Email Address:

Enter your registered email address

Password:

Enter your password

If you have forgotten your password, please contact NHS GGC eHealth to reset it for you.

LOGIN

Version 2.0

Designed / Built by Stormnet Media. Copyright 2009 - 2019.

Console

NHS - SCIT Admin Console

Dashboard Approval Clinicians Reporting Process

Shortcut Options

- ▶ Clinician Approval
- ▶ Back To Dashboard

Clinician Management

Audit and Activity

The following lists all clinicians who have been approved to use the application with the option to view their audit usage history.

| First | Last | Staff Num. | Health Centre | Active | Activity | Edit | Inactive |
|---------|----------|------------|---------------|--------|----------|------|----------|
| Matt | Bradley | 12345678 | QE UHB | ✓ | | | |
| Claire | Jeffery | | | ✗ | | | |
| John | Bradley | - | - | ✗ | | | |
| John | Smith | | | ✗ | | | |
| Tony | Fogarty | | | ✓ | | | |
| Tom | Jones | | | ✓ | | | |
| clinic1 | clinic1 | pentest | pentest | ✗ | | | |
| Jane | Tovey | | | ✓ | | | |
| Jane | Tovey | | | ✓ | | | |
| Carol | Griffin | 000000 | UHB | ✓ | | | |
| Jill | Bradbury | 000000 | UHB | ✓ | | | |
| Jill | Bradbury | 000001 | UHB | ✓ | | | |
| Jill | Bradbury | | | ✓ | | | |

Recent Activity (Top 30)

| Added | Comments |
|------------------|---|
| 08/06/2015 10:24 | Image was sent to system |
| 08/06/2015 10:24 | Virus Scan Results True |
| 08/06/2015 10:24 | Login by Jane.Tovey@btinternet.com was logged in - trying to upload Image |
| 08/06/2015 10:23 | Package was sent to system |
| 08/06/2015 10:22 | Login by Jane.Tovey@btinternet.com was successful |
| 08/06/2015 10:20 | Image was sent to system |
| 08/06/2015 10:20 | Virus Scan Results True |
| 08/06/2015 10:20 | Login by Jane.Tovey@btinternet.com was logged in - trying to upload Image |
| 08/06/2015 10:20 | Package was sent to system |
| 08/06/2015 10:20 | Login by Jane.Tovey@btinternet.com was successful |
| 08/06/2015 10:03 | Login by Jane.Tovey@btinternet.com was unsuccessful |
| 08/06/2015 10:02 | Login by Jane.Tovey@btinternet.com was unsuccessful |
| 26/03/2015 15:11 | Clinician Approved |

Console

Shortcut Options

▶ Back To Dashboard

Clinician Approval

Clinicians

The following lists all clinicians who have not yet been approved to used the system.

| First Name | Last Name | Email | Telephone | Staff Number | Health Centre | Date Added | Approve? | Reject? |
|------------|-----------|-----------------------------|-------------|--------------|---------------|------------------|----------|---------|
| Jill | Bradbury | jkbradbury61@googlemail.com | 07759874442 | | | 08/06/2015 11:06 | ✓ | ✗ |

Shortcut Options

▶ Back To Dashboard

Clinician Approval

Clinicians

The following lists all clinicians who have not yet been approved to used the system.

Reject Clinician

Are you sure you wish to reject this Clinician?

YES, REJECT or [Cancel](#)

| First Name | Last Name | Email | Telephone | Staff Number | Health Centre | Date Added | Approve? | Reject? |
|------------|-----------|----------------|-------------|--------------|---------------|------------------|----------|---------|
| John | Smith | john@uhb.co.uk | 07793077538 | 1235567 | Test | 10/09/2014 13:14 | ✓ | ✗ |



- Design
- Photography
- Video

Console

UHB - SCIT Admin Console Welcome Back [Logout](#)

Dashboard Approval Clinicians Reporting Process

Shortcut Options

- Export Report (TAB)
- Back To Reports
- Back To Dashboard

Reporting

Report: All actions recorded within the date criteria (41 found)

Date Start: 03/09/2014
Date End: 10/09/2014

| Date Added | First Name | Last Name | Staff Number | User Id | Action Comments | IP Address | Meta Data Id |
|---------------------|------------|------------|--------------|---------|--|---------------|--------------|
| 10/09/2014 13:15:23 | James | Wallsgrove | 12345678 | 1 | Service Started | 31.24.216.195 | 1 |
| 10/09/2014 13:15:18 | James | Wallsgrove | 12345678 | 1 | Service Stopped | 31.24.216.195 | 1 |
| 10/09/2014 13:14:45 | John | Smith | 1235567 | 13 | Clinican Approved | 31.24.216.195 | Middleware |
| 10/09/2014 13:14:43 | John | Smith | 1235567 | 13 | Clinican Rejected | 31.24.216.195 | 1 |
| 10/09/2014 13:11:58 | James | Wallsgrove | 12345678 | 1 | Login was successful | 31.24.216.195 | 1 |
| 10/09/2014 12:29:21 | Matt | Bradley | 123456 | 10 | Package was sent to system | - | 24 |
| 10/09/2014 12:28:09 | Matt | Bradley | 123456 | 10 | Login by matt@stormnetmedia.com was successful | - | Middleware |

UHB - SCIT Admin Console Welcome Back [Logout](#)

Dashboard Approval Clinicians Reporting Process

Shortcut Options

- Back To Dashboard

Reporting

Reports

Select from the options below to run your report and selection criteria.

Select Report:

All actions recorded within the date criteria

Select the report you wish to run

Start Date Period:

03/09/2014

Select the start date for the reporting period (DD/MM/YYYY)

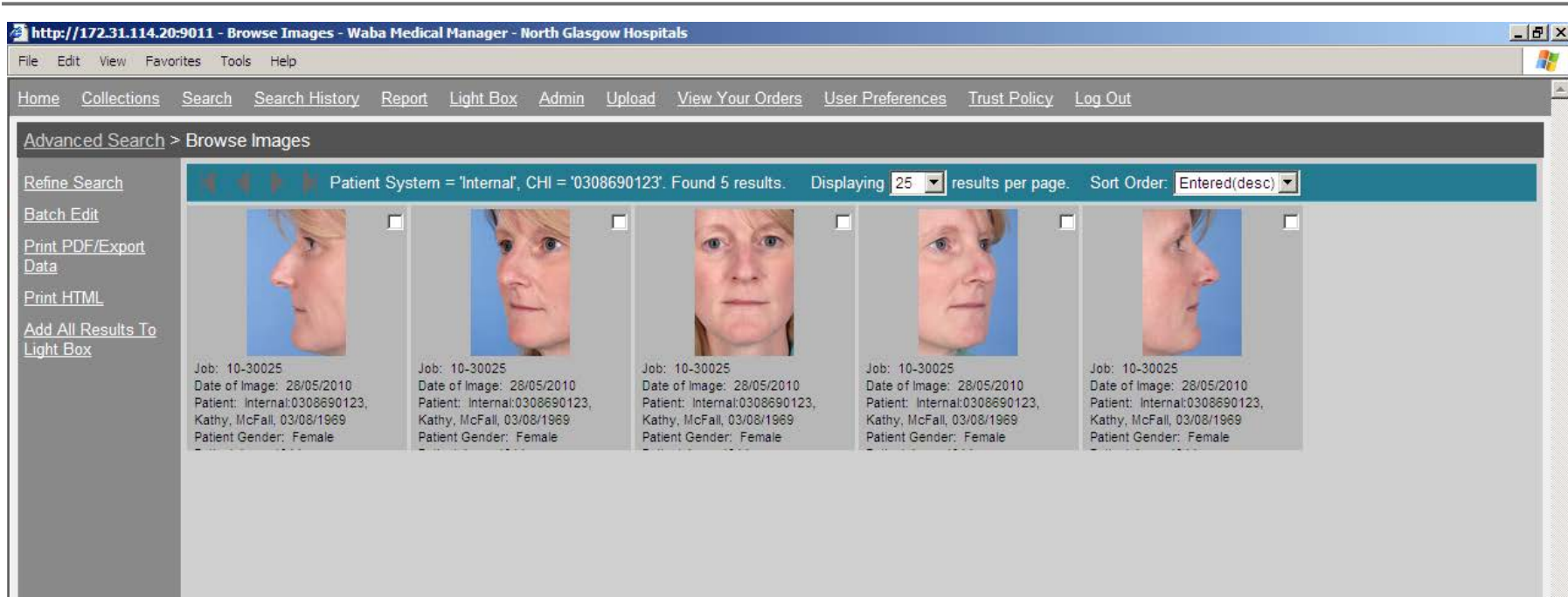
End Date Period:

10/09/2014

Select the end date for the reporting period (DD/MM/YYYY)

RUN REPORT

Medical Image Manager



Early adopters

- A&E / Burns Unit
- Spinal Injuries Unit
- Tissue Viability / Diabetic Nurses
- Dermatology

Where are we now?

- Approval granted for app in March 2018
- Integration issues delayed the project
- Final testing underway
- Implementation in July for early adopters

Limitations

- Does not support text messaging
- No video capability
- Not truly real-time
(time to upload, requires access to hospital system)

To close ...

Thank you