The Secure Clinical Image Transfer (SCIT) App

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#hcsconference2019
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.
Use of WhatsApp in NHS 'widespread, say doctors

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. Photograph: Alamy

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

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

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’
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.

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;
- by downloading to a secure (preferably NHS) Wi-Fi network or by cable to a PC that acts as a conduit to a secure network server and not as a storage device;
- 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 ...
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

WHAT IS IT?

The SCIT App enables NHS staff to securely take clinical images on their own mobile devices. The app uses a small amount of linked, de-identified data, the mobile package, to transform images into the Trust's image storage system.

The app then allows access to the images on the mobile device or independent clinical system, and staff can upload them to the Trust's image storage system.

HOW DOES IT WORK?

1. User enters the app, logs in using the NHS Trust to NHS app.
2. The app sends a short message (SMS) to the patient's mobile device to confirm the image.
3. The patient confirms the image and sends it back to the app.
4. The app then sends the confirmed image back to the Trust's image storage system.

INFORMATION GOVERNANCE APPROVED

The system provides an extensive audit trail of all actions which can be monitored. The SCIT app has been independently tested by an independent cyber security company and is in use on a number of Trusts. The service is operated using strong authentication (OAUTH 2.0). The system is designed to protect data, which is processed in a Trust's network and a number of processes within the Trust's systems.
Infrastructure

App

Console

SCI/PAS

Medical Image Manager
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?
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
Terms Of Use

Before using this application for the first time, please ensure you read and agree to the terms of use below.

Ensure you are connected to the Internet when logging in or sending your images.

Images are not stored on the photo roll of your device.

Please check the patient information entered before sending. You will receive email notification when the package is received.

Tick to agree to the terms

Continue

Tips On How To Take Better Photos

Please use the guide below on how to take the best photographs with your phone’s camera.

Hold the phone like a camera

Prevent movement by taking time pressing the camera button gently.
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
Console

NHS - SCIT Admin Console

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.

<table>
<thead>
<tr>
<th>First</th>
<th>Last</th>
<th>Staff Num.</th>
<th>Health Centre</th>
<th>Active</th>
<th>Activity</th>
<th>Edit</th>
<th>Inactive</th>
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<tbody>
<tr>
<td>Matt</td>
<td>Bradley</td>
<td>12345678</td>
<td>GE UHB</td>
<td>✔️</td>
<td>✔️</td>
<td></td>
<td></td>
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<tr>
<td>Claire</td>
<td>Jeffery</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>John</td>
<td>Bradley</td>
<td></td>
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<td>✔️</td>
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<td></td>
</tr>
<tr>
<td>John</td>
<td>Smith</td>
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<td></td>
<td></td>
<td></td>
<td>✔️</td>
<td></td>
</tr>
<tr>
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<tr>
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<tr>
<td>Jane</td>
<td>Tovey</td>
<td></td>
<td></td>
<td></td>
<td>✔️</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jane</td>
<td>Tovey</td>
<td>iPhone</td>
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<td>✔️</td>
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<td>Bradbury</td>
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<td></td>
<td>✔️</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Recent Activity (Top 30)

- Added: 09/09/2015 10:24
  - Comments: Virus Scan Results True
- Added: 09/09/2015 10:24
  - Comments: Login by Jane.Tovey@btinternet.com was rejected - trying to upload image
- Added: 09/09/2015 10:23
  - Comments: Package was sent to system
- Added: 09/09/2015 10:22
  - Comments: Login by Jane.Tovey@btinternet.com was successful
- Added: 09/09/2015 10:20
  - Comments: Image was sent to system
- Added: 09/09/2015 10:20
  - Comments: Virus Scan Results True
- Added: 09/09/2015 10:20
  - Comments: Login by Jane.Tovey@btinternet.com was rejected - trying to upload image
- Added: 09/09/2015 10:20
  - Comments: Package was sent to system
- Added: 09/09/2015 10:20
  - Comments: Login by Jane.Tovey@btinternet.com was successful
- Added: 09/09/2015 10:20
  - Comments: Login by Jane.Tovey@btinternet.com was successful
- Added: 09/09/2015 10:19
  - Comments: Clinician Approved
### Console

**UHB - SCIT Admin Console**

**Reporting**

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

<table>
<thead>
<tr>
<th>Date Added</th>
<th>First Name</th>
<th>Last Name</th>
<th>Staff Number</th>
<th>User Id</th>
<th>Action Comments</th>
<th>IP Address</th>
<th>Meta Data Id</th>
</tr>
</thead>
<tbody>
<tr>
<td>03/09/2014 13:15:30</td>
<td>James</td>
<td>Wallington</td>
<td>12345678</td>
<td>1</td>
<td>Service Started</td>
<td>192.168.1.1</td>
<td>10242153196</td>
</tr>
<tr>
<td>03/09/2014 13:15:30</td>
<td>John</td>
<td>Smith</td>
<td>12345678</td>
<td>2</td>
<td>Service Stopped</td>
<td>192.168.1.1</td>
<td>10242153196</td>
</tr>
<tr>
<td>03/09/2014 13:15:30</td>
<td>Jane</td>
<td>Doe</td>
<td>12345678</td>
<td>3</td>
<td>Login successful</td>
<td>192.168.1.1</td>
<td>10242153196</td>
</tr>
<tr>
<td>03/09/2014 13:15:30</td>
<td>Mike</td>
<td>Bradley</td>
<td>12345678</td>
<td>4</td>
<td>Package sent to system</td>
<td>192.168.1.1</td>
<td>10242153196</td>
</tr>
</tbody>
</table>

**Select Report:**

- All actions recorded within the date criteria

**Start Date Period:**

01/09/2014

**End Date Period:**

10/09/2014

**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