Teledermatology in North Devon

The North Devon District Hospital Dermatology Department has launched a teledermatology service. This service allows GPs to seek advice from a consultant dermatologist by sending a secure email with relevant clinical information along with digital photographs of the area/s of concern. This service provides an alternative to out-patient referral for selected patients and can be used to obtain rapid advice from a consultant dermatologist within 5 working days.

The service should be particularly useful for elderly patients living in nursing or residential homes who may find it difficult to travel. For these patients GPs should consider taking a digital camera or smartphone with a camera to their consultations (note the photography guidelines in Appendix B).

With consent from the patient (see consent form at Appendix D), clinical photographs can be taken in the consultation using either a home or practice digital camera or a smartphone camera. The photograph/s should then be attached and sent from a secure email (such as NHS mail) with the relevant clinical information to D-CCG.Dermatology@nhs.net

The teledermatology service can be used to:-

- obtain rapid diagnosis and management advice from a Consultant Dermatologist
- triage patients with basal cell carcinomas for skin surgery - patients will be sent preoperative information in the post and may be booked directly onto an appropriate surgical list, avoiding the need for a dermatology clinic appointment.

Exclusions:

- 2-week wait skin cancer referrals (suspected melanoma and squamous cell carcinoma)
- Pigmented lesions (please refer to the pigmented lesion clinic for dermoscopic evaluation).

Teledermatology and Dermatology Service information

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Dermatology website:
http://www.litchdonmedicalgroup.co.uk/dermatology_p3456.html?a=0

See the following appendices for more information:
• Appendix A – Pathway for North Devon Teledermatology Pilot
• Appendix B – Photography protocol
• Appendix C – Recommended referral information
• Appendix D – Teledermatology patient consent form
Appendix A: Pathway for North Devon Teledermatology Pilot

1. **GP sees patient suitable for teledermatology service**

2. **GP explains teledermatology service to patient – consent form completed and signed by GP and patient**

3. **Photo/s taken of relevant area using either digital camera or smartphone camera following photography requirements**

4. **Photo/s sent via secure email (@nhs.net) to dermatology service at Litchdon Medical Centre D-CCG.Dermatology@nhs.net**

5. **Photo/s and patient information reviewed by dermatology consultant and email response sent to GP within 5 working days. Reply will be copied to practice admin. email account as safety net (in case GP is away). There are 3 possible outcomes from consultant advice:**

   - **Patient needs surgery for removal of BCC/lesion**
     - For simple procedures with good quality images, the patient may be booked directly to surgical list by dermatology service. GP informed – advises patient and offers Choice at that stage (e.g. on NDHT surgical list but can go elsewhere if would prefer)

   - **Consultant wants to review patient face to face**
     - **Urgent**
       - NDHT contact patient directly to book urgent appointment – GP advised (same booking process as for urgent referrals under current
     - **Routine**

   - **Consultant considers no secondary care intervention needed**
     - Advice provided to GP - patient continues to be cared for in primary care

   - **GP advised to refer patient through DRSS as normal for outpatient appointment**
Appendix B - Photography protocol

Digital cameras, including digital cameras on smartphones, can be used to take images for the teledermatology service. If a camera on a smartphone is to be used then the smartphone must be encrypted (protected by a password or passcode) and capable of having images deleted remotely if the smartphone is lost or stolen.

1. Patient consents to teledermatology process.

2. Photography session.

Patient identification shot
To avoid risk of misidentification, each individual patient session should begin and end with a photograph to identify the patient. Take one photograph of something to identify the images as belonging to an individual patient, e.g. unique identification number. This should not be a full set of patient identifiable data (PID). Repeat at the end of the individual patient session.

Backgrounds
A neutral coloured, plain background, such as a dressing towel, should be used to isolate the subject from any distractions.

Photographing lesions
• Produce a mid-close-up image to include some anatomical marker, establishing the location and providing some general context for the lesion
• Produce at least one macro (close-up) image of the lesion. A second photograph can be taken from a different angle to supplement this. A third image, with a centimetre scale can also be taken. A close-up without a scale is important, as scales will cover an area of the surrounding skin and could hide some salient features.
• Where there are multiple lesions or where a lesion is not obvious, the area can be identified on the skin using surgical tape, sticky label or a washable marker (an alternative would be to add a circle, box, arrow or number markers to the digital image, if the program permits).

Photographing rashes
• A wider, regional view, or series of views, is useful in illustrating the general distribution
• A couple of detailed macro views are useful in illustrating the detailed, textural features of the condition.

3. Download and store the images within the practice

• Images should be downloaded to a secure, backed-up server and stored within a file structure that identifies each individual patient, and, within that, each episode
• Where possible, images should be attached to the patient’s individual electronic practice record.
• Once images have been downloaded to a server, the original images should be deleted permanently from the mobile device (including any links to the image).
• Images should not be duplicated, so if images are stored in the record, the original downloads can be deleted. Care should be taken to ensure the image itself and not simply the path to the downloaded image is stored

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• Images should not be stored in the practice on unencrypted individual personal computers or on memory sticks or other portable media, such as CDs/DVDs
• Post-capture processing of images, through image editing software, such as Adobe Photoshop should be avoided unless it is part of a planned image management workflow, initiated and overseen by an imaging professional.
Appendix C – Recommended referral information

Patient demographic data

The following patient demographic data should be collated as standard:

• Date of birth
• Gender
• Ethnic group
• Address and contact telephone number.

Required information for skin lesion referrals

The minimum information required for a teledermatology referral for skin lesions is:

• Date of onset/duration
• Whether single or multiple
• Location/s on body
• Changes in size, shape, colour
• Any bleeding and/or ulceration
• Symptoms
• Any personal and/or family history of skin cancers
• Other risk factors, i.e. excessive sun exposure, fair skin, large number of naevi, immunosuppression, outdoor occupation etc.
• Repeat and recent medications
• Other medical conditions.

Required information for inflammatory dermatosis referrals

The minimum information required for a teledermatology referral for inflammatory dermatosis is:

• Date of onset/duration
• Location/s on the body
• Symptoms
• Previous treatment for this condition and its response to medications
• Personal and family history of skin disease
• Personal and family history of atopy
• Relevant medical history
• Known allergies
• Repeat and recent medications
• Active problem list.

A body map is also recommended to show the site of the lesion/s and/or the site/s and extent of inflammation.

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Appendix D – Consent for Teledermatology using NHS Electronic Referral

Statement of the patient
I have had the process of teledermatology and photography explained to me and I have had the opportunity to ask questions. I understand that:

- teledermatology is not always a substitute for seeing a hospital consultant.
- there may be a difference between the accuracy of clinical care using photographs as compared to face-to-face clinical assessment.
- the accuracy of the advice given to my GP may be limited by the system.
- the photographs will be securely stored with in the NHS electronic referral system.
- the photographs may be temporarily stored on a mobile device until they are transferred to the NHS electronic referral system.
- the photographs will not be used for any other purpose without seeking additional consent.
- I have the right to withhold or withdraw my consent to teledermatology at any time without this affecting my right to future care or treatment.

I consent to photographs being taken which will form part of my health records.

I agree to my image(s) being used for teaching Health Care Professionals.

Name: …………………………………………………..Date: ……………………………
Signature: ………………………………………………………………………………...

A witness should sign below if the patient is unable to sign but has indicated their consent. A parent / guardian should sign on behalf of children.

Name: …………………………………………………..Date: ……………………………
Signature…………………………………………..Relation to patient………………....

Statement of healthcare professional
I have discussed the teledermatology service with the patient and provided them with the opportunity to ask questions.
If using a mobile photographic device I have discussed the reasons for taking clinical photos using a mobile device, and how the images will be used, transmitted and stored, and have explained the inherent risks and benefits. I understand the risks of data transfer from a mobile device and have taken appropriate steps to mitigate these risks.

Name: …………………………………………………..Date: ……………………………
Signature: …………………………………………. Role………………………………..