Digital skin surveillance of healthcare workers in the NHS

Submission date	Recruitment status Not yet recruiting	[X] Prospectively registered		
11/07/2025		[X] Protocol		
Registration date	Overall study status Ongoing Condition category	Statistical analysis plan		
14/07/2025		Results		
Last Edited		Individual participant data		
14/07/2025	Skin and Connective Tissue Diseases	[X] Record updated in last year		

Plain English summary of protocol

Background and study aims

Occupational hand dermatitis is the most frequently recognized occupational skin disease in the United Kingdom, particularly among healthcare workers. There is a statutory responsibility under the COSHH Regulations 2002 for employers to carry out health surveillance for hand dermatitis in workers exposed to a known hazard in the workplace and where there is potential for significant exposure. The reality of introducing such a programme in the healthcare setting is a challenge, not least because it raises practical and logistical issues which need to be carefully considered; for example which questionnaire should be used for health surveillance or, who should do the visual inspection of a worker's skin if dermatitis is suspected?

Who can participate?

NHS staff employed at participating NHS organisations

What does the study involve?

Participants will be required to complete a single item self-assessed skin questionnaire and provide selfie hand photographs using a standardise method. These will be assessed by a trained dermatology nurse (with back-up assessment by a dermatologist) for the presence of hand dermatitis.

What are the possible benefits and risks of participating?

Benefits: By taking part in this study, participants will be provided with a remote digital assessment of hand dermatitis based on the data they provide (i.e. hand photographs). Therefore, if this assessment indicates that they may have hand dermatitis then we will recommend that they self-refer for follow-up advice and support from either their local occupational health, GP or pharmacist. Conversely, where applicable participants will also benefit by receiving confirmation that they do not have hand dermatitis. Furthermore, the potential to implement this screening tool more widely across the NHS workforce and to other high risk worker groups will lead to improvements in the early detection and management of workers hand dermatitis, and such favourable outcomes will have wider benefits to the NHS. Risk: This is a low risk study and we do not anticipate participants will experience any burden and adverse effects from taking part in this study. While the participants assessed as having hand

dermatitis (positive case) will be strongly recommended to seek follow-up confidential advice and management from their local occupational health department, general practitioner (GP) or pharmacy as soon as possible, the researchers are unable to mandate that such action is taken by participants. However, as per existing NHS staff policy and statutory regulation, if staff suspect they may have hand dermatitis then they are expected to report it to their employer, therefore the onus is on the participants to fulfil this requirement.

Where is the study run from?

The study will be implemented at four NHS organisations (Aneurin Bevan University Health Board (Wales), Guy's and St Thomas' NHS Foundation Trust (England), University Hospital of Leicester NHS Trust and Hampshire and Isle of Wright Healthcare NHS Foundation Trust.

When is the study starting and how long is it expected to run for? September 2024 to August 2026

Who is funding the study? The Colt Foundation (UK)

Who is the main contact?
Dr Vaughan Parsons, vaughan.parsons@nhs.net

Contact information

Type(s)

Public, Scientific, Principal Investigator

Contact name

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Additional identifiers

EudraCT/CTIS number

Nil known

IRAS number

ClinicalTrials.gov number

Nil known

Secondary identifying numbers

CPMS 65524

Study information

Scientific Title

Assessing the feasibility, acceptability, and effectiveness of using a hand dermatitis self assessment screening questionnaire in a workplace health surveillance programme

Study objectives

We postulate that screening by a single-item questionnaire with follow-up of those reporting possible hand dermatitis by teledermatology using selfies taken with a mobile phone camera, would be a novel, and time- and cost-effective, approach to optimise and improve health surveillance for hand dermatitis in healthcare staff. If our suggested method is found to be feasible, acceptable, and effective, it has the potential to revolutionise the early detection and management of hand dermatitis in the healthcare sector.

Ethics approval required

Ethics approval required

Ethics approval(s)

Submitted 11/07/2025, HRA and Health and Care Research Wales (HCRW) (Castlebridge 4, 15-19 Cowbridge Road East, Cardiff, CF11 9AB, United Kingdom; -; HCRW.approvals@wales.nhs.uk), ref: 25/HRA/2155

Study design

Interventional non-randomized

Primary study design

Interventional

Secondary study design

Non randomised study

Study setting(s)

Other

Study type(s)

Treatment

Participant information sheet

Not available in web format, please use contact details to request a participant information sheet.

Health condition(s) or problem(s) studied

Occupational hand dermatitis

Interventions

To explore our research question, we propose to invite either clinical or non-clinical staff from three different Trusts who are at risk of developing occupational hand dermatitis because of

their work (washing their hands more than 10 times a day at work), to take part in our research. We will identify workers by liaising with the Trust occupational health services and Trust managers. Staff who wish to be involved will be asked to complete a short on-line questionnaire asking them some simple questions including whether they think that they currently have hand or wrist dermatitis and in which location on their hands or wrists.

We will ask them to take selfie photographs of their hands and wrists using smart phones using a standard method (procedure). These will be uploaded on to the electronic portal at the same time they complete their questionnaire (or within a 3 day window period). We will ask staff and managers how easy it was to administer and use the questionnaire and take the hand photographs and send them back to the study team.

The photographs will then be accessed by a trained dermatology nurse, to assess whether the staff participants have dermatitis using the Validated Investigator Global Assessment for Atopic Dermatitis (vIGA-AD) tool. The nurse's assessment will further be corrected for the dermatologists' expert opinion where needed, in the cases that the vIGA-AD assessment differs from participants' self-reports of dermatitis. The nurse's assessment of participants' dermatitis (corrected by dermatologist if required) (gold standard) will then be compared with whether the staff participants thought that they had hand dermatitis (new proposed screening tool).

Using the findings from this study, we will then be able to determine how accurate the participants are in knowing whether they have hand dermatitis, and whether this is for non-clinical as well as clinical staff and for staff with different skin colours. Additionally, we will also assess how feasible it would be to use our screening questionnaire and hand photographs for NHS staff in other Trusts and potentially other workers who are at high risk of developing hand dermatitis at work.

Intervention Type

Other

Phase

Not Specified

Primary outcome measure

The specificity, positive and negative predictive value of the screening questionnaire taken at one time point (baseline)

Secondary outcome measures

There are no secondary outcome measures

Overall study start date

01/09/2024

Completion date

31/08/2026

Eligibility

Key inclusion criteria

1. NHS staff (clinical and non-clinical) who are at increased risk of developing occupational hand dermatitis, here defined as staff who on average wash their hands with soap and water for a

minimum of 10 times a day at work. Examples of staff we will include are nurses (with the exception of ICU nurses - as this occupational group were part of the original SCIN study), operating department practitioners, mortuary staff, clinical scientists and bench staff working in laboratories.

We will aim at recruiting participants representing different skin phototypes.

- 2. Additionally, to be eligible participants will need to employed by the participating NHS organisation AND have access to a smart phone or tablet device for the purpose of taking and sending in hand photographs.
- 3. All participants must be aged 16-80 years and have a valid NHS email address to be eligible for entry into the study.

Participant type(s)

Patient

Age group

Adult

Lower age limit

16 Years

Upper age limit

80 Years

Sex

Both

Target number of participants

1386

Key exclusion criteria

- 1. Individuals with current dermatitis as diagnosed by a medical practitioner
- 2. Individuals who have used topical steroid cream to their hands in the past six weeks
- 3. Visiting or temporary personnel who are undertaking duties on NHS premises including students on placements
- 4. Contractors and anyone not directly employed by the participating NHS organisation
- 5. Individuals on long term sick leave (4 weeks or longer)

Date of first enrolment

01/10/2025

Date of final enrolment

30/06/2026

Locations

Countries of recruitment

England

United Kingdom

Study participating centre University Hospitals of Leicester NHS Trust

Leicester Royal Infirmary Infirmary Square Leicester United Kingdom LE1 5WW

Study participating centre Aneurin Bevan University Lhb

Headquarters - St Cadoc's Hospital Lodge Road Caerleon Newport United Kingdom NP18 3XQ

Study participating centre Guys and St Thomas' NHS Foundation Trust

249 Westminster Bridge Road London United Kingdom SE1 7EH

Study participating centre

Hampshire and Isle of Wight Healthcare NHS Foundation Trust

Tatchbury Mount Hospital Calmore Southampton United Kingdom SO40 2RZ

Sponsor information

Organisation

Guy's and St Thomas' NHS Foundation Trust

Sponsor details

St Thomas' Hospital, Westminster Bridge Road London England United Kingdom SE1 7EH +44 207188 7188 ext. 54426 R&D@gstt.nhs.uk

Sponsor type

Hospital/treatment centre

Website

http://www.guysandstthomas.nhs.uk/Home.aspx

ROR

https://ror.org/00j161312

Funder(s)

Funder type

Charity

Funder Name

Colt Foundation

Alternative Name(s)

The Colt Foundation

Funding Body Type

Private sector organisation

Funding Body Subtype

Trusts, charities, foundations (both public and private)

Location

United Kingdom

Results and Publications

Publication and dissemination plan

Planned publication in a peer-reviewed journal

Intention to publish date

Individual participant data (IPD) sharing plan

At the end of the study and with consent from participants, the final anonymised dataset will be uploaded to OSF data repository for future ethnically approved research. This has been highlighted on the PIS and the ICF, and participants will have the option to with-hold their anonymised data if they desire.

IPD sharing plan summary

Stored in publicly available repository

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Protocol file	version 1.0	15/05/2025	14/07/2025	No	No