



Plain Language Summary

Store-and-forward teledermatology for triage of primary care referrals

SHTG Assessment | February 2023

What is dermatology?

Dermatology is the medical specialty that deals with the skin. Dermatologists assess and treat patients with skin problems including skin cancers. Most dermatologists are hospital based. Patients can be referred by their general practitioner (GP) to a dermatologist.

What is store-and-forward teledermatology

Store-and-forward (SAF) teledermatology (TD) is where digital photographs of skin problems are sent to dermatologists for assessment. It can be used by GPs when they think that a patient needs to be referred to a dermatologist. Photographs are sent along with a description of the skin problem and the patient's history. Dermatologists review the photographs and history and decide which patients need to be seen quickly and which patients can be safely treated by their GP following specialist advice and avoid a hospital visit.

This process of considering the urgency of a patient's need is called triage. Photographs for SAF TD triage can be taken by GPs, patients or carers, or by medical photographers. They are sent to the dermatologist using a secure data system.

Why is this important?

Patients with skin cancer need to have rapid diagnosis and start treatment quickly. At the moment waiting times for dermatology services in Scotland are very long.

What we did

We looked for studies on the effects of using SAF TD compared with the usual way of referring patients to see a dermatologist. We considered if it was safe, effective and a good use of NHS

resources. We also looked to see if there was a risk that it might benefit some patients more than others.

We conducted our own study looking at the potential impact of using SAF TD on healthcare resource use, patient travel requirements and carbon emissions.

What we found

We did not find many studies which looked at the effect of sending a photograph with every referral to dermatology.

Some studies excluded patients who needed urgent care.

Some studies focused just on referrals of patients who had suspected skin cancer. The majority of these studies included magnified images (dermatoscopic images).

In some studies, using SAF TD triage meant that about half of the patients could be treated by their GP. Since fewer hospital appointments were needed, waiting times came down and important treatments such as surgery could take place more quickly.

Patient and staff satisfaction with SAF TD triage was high.

The main safety concern was that skin problems could be missed with fewer patients having all of their skin examined by dermatologists. No evidence on this was identified.

It wasn't clear whether or not patients with pigmented skin may benefit less from SAF TD as it can be difficult to assess some skin conditions from photographs in this patient group. More evidence is needed in this area.

Most, but not all, studies which looked at whether SAF TD was good value for money found that costs were similar or better where SAF TD triage was used. This was consistent with the results of our own study. Patients saved on travel costs and this reduced carbon emissions.

What is our conclusion?

In published studies, SAF TD triage reduces waiting times for dermatology and means that patients with urgent care needs have faster access to diagnosis and treatment. There is a risk that important skin conditions could be missed and that SAF TD triage may not be appropriate for people with pigmented skin.

What next?

The Accelerated National Innovation Adoption (ANIA) collaborative and the Dermatology AI (artificial intelligence) Consortium will use this evidence assessment in their decision making on the use of SAF TD triage TD across Scotland.

This plain language summary has been produced based on SHTG Assessment Store-and-forward teledermatology for triage of primary care referrals, February 2023