Exploring the Feasibility of a Remote Acne Service - a report of a pilot study using the MySkinSelfie platform during the COVID-19 pandemic

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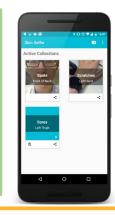
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Introduction

- Acne is a common skin disease and causes significant psychological distress and can lead to scarring
- Waiting times for NHS appointments are unacceptably long
- Isotretinoin is the most effective treatment however it remains a hospital only drug. As a consequence, delays in access to effective treatment are common.
- Female patients at risk of pregnancy must enter a pregnancy prevention plan requiring monthly pregnancy tests
- Pre-pandemic we had designed and started a project to assess the feasibility of acne assessment using mobile-phone images shared via the MySkinSelfie app
- Due to the pandemic the research was adjusted, and a limited proof of concept project was delivered



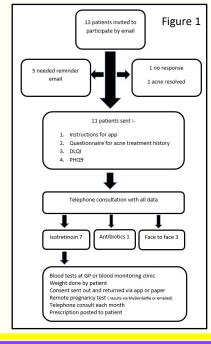
Methods

- Thirteen patients who had been due to attend for NEW consultations were invited to participate
- Instructions on using the MySkinSelfie app were online and other items posted
 - Questionnaire for acne history including treatments, DLQI, PHQ9
- Image quality was assessed, telephone consultations were performed. Info and Consent forms were emailed or posted
- A system for home-based pregnancy testing was setup and approved by the Trust

Figure 1 shows the flow of patients through the study.

Figure 2 is an example of the images that are submitted via the MySKinSelfie app. Patients can submit as many images as they choose in a folder , timed and dated (consented for publication)

Table 1 shows the main study outcomes with medians (IQR). The median DLQI of 11 shows that patients were significantly impacted by their acne. The duration of calls to commence isotretinoin was high. This does not include time spent on emails, image curation, archiving forms, entries on patient record, prescriptions and organising follow up.





DLQI (median (IQR))	11(9) Table 1
PHQ9	4 (3)
(0-4 none, 5-9 mild, 10-14 moderate, 15-19 moderately severe, 20-27 severe)	2783
Number of photos submitted	10 (2)
Image quality	100% acceptable for consulting
Duration of first call in minutes	14.25 (3.73)
Duration of calls to start isotretinoin	21.45 (6.74)
Duration of follow up calls	4
Number of emails during isotretinoin course	10 (9)

Conclusions

- 1. Acne is a significant problem for young people, and we are currently struggling to see patients in a timely way.
- 2. It is possible to manage acne almost entirely remotely (except for blood tests)
- 3. MySkinSelfie mobile-phone images were of good quality, and we could make decisions on acne treatment
- Commencing isotretinoin remotely is time consuming. It is faster to complete in a face-to-face(FTF) appointment
- Follow up appointments (FU) with remote pregnancy testing and MySkinSelfie images works very well

Transformation plan for services as a consequence of the project

- 1. Reduction in FTF clinic appts for women in the PPP needing 6 months isotretinoin from 9 FTF down to 1 FTF
- 2. Patients will arrive at first appt having read info and started on contraception
- 3. The one FTF appt will include counselling and questions, weight, consent, pregnancy test and bloods if needed.
- 4. All subsequent FU via MySkinSelfie images, remote preg test and tele-consult. Bloods at GP or monitoring clinic

To learn more about using the MySkinSelfie platform in clinics please visit www.myskinselfie.org.uk, NHSX Dermatology Digital Playbooks or contact nuth.myskinselfie@nhs.net