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## Telehealth for older adults with skin disease: a qualitative exploration of dermatologists' experiences and recommendations for improving care

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DEAR EDITOR, The COVID-19 pandemic has accelerated the use of telehealth, defined as the delivery of healthcare via remote technologies,<sup>1</sup> with widespread adoption of live-interactive video visits across the USA.<sup>2–4</sup> Yet, it is important to avoid exacerbating healthcare disparities for vulnerable populations such as older adults, who traditionally have more technological literacy barriers.<sup>5,6</sup> Our aim was to explore dermatologists' experiences of using telehealth with older adults, in order to identify and summarize recommendations to improve telehealth care.

Author I.d.V.H. conducted 23 in-depth, semistructured interviews (February to August 2021) over video with dermatologists who had self-reported experience of caring for adults age > 65 years using telehealth. We conducted an inductive thematic analysis of the full interview transcripts, using a constant comparison and mind-mapping approach.<sup>7</sup> This study was approved by the Stanford Institutional Review Board.

Of the 23 dermatologists interviewed, 13 were female and 10 were male, with 14 attendings and nine residents from eight different states. Seven participants identified as Asian, four as black or African American and 12 as white. Every dermatologist interviewed for this study thought that telehealth 'is here to stay'. The following core themes regarding

dermatologists' experience (E1–E5) of telehealth use with older adults were extracted.

E1. *Perceived benefits of telehealth for older adults.* The perceived benefits of patients being able to stay in their own home for an appointment stretched beyond the context of the pandemic. Examples cited included the reduction in travel time and associated expense, which could be particularly pertinent to older adults with transport limitations, need for assistance from caregivers or mobility issues. E2. *Works well for 'stable chronic disease', but concerns about diagnosis of malignant lesions.* An inability to perform biopsies or whole-skin exams often made evaluation of potential neoplastic lesions challenging via telehealth. In contrast, situations in which the dermatologist was not dependent on virtual image quality, but rather the subjective patient report, were emphasized as well suited to virtual visits. E3. *Technology presents a barrier for many, but not all, older adults.* There was considerable variation in experiences, with many examples of issues with technological difficulties arising, although some providers reported being 'impressed and surprised' with how older adults adapted to telehealth. E4. *Can't see the whole patient and feel the skin.* Practical issues that limit patient examination and procedures were cited as limitations of telehealth and reasons for transition to in-person care. E5. *Can be more difficult to communicate virtually.* This theme encompasses both personal connection and rapport, and practical communication issues such as 'if the patient speaks a different language', with access to an interpreter being complicated via telehealth.

Five themes summarizing recommendations (R1–R5) for use of telehealth with older adults were identified. R1. *Give comprehensive instructions ahead of time.* This included requests for high-quality photos (and guidelines on how to take them) irrespective of access to video in the telehealth visit, as well as detailed login instructions. R2. *Appropriate appointment triage is crucial.* Interviewees differed in their opinions regarding how this triage should manifest; some expressed a preference 'to see all new patients in person', while others found telehealth visits an effective adjunct to triage in itself. Frustrations around failure of effective triage for both patient and provider were cited. R3. *Don't make assumptions about patient comfort with technology.* Although there were many accounts of technological issues arising with elderly patients, many of the providers' preconceptions about older adults' ability to use telehealth were not borne out in practice. R4. *Important to manage patient expectations about what can be achieved in a telehealth visit.* The importance of patient education regarding what can be achieved in a telehealth visit was emphasized: 'the patient's perception was suddenly [that] we could take care of things on the computer and they didn't have to come in, which of course turns out not to be true'. R5. *Need to make telehealth accessible for all.* There is a potential paradox to telehealth access: although telehealth offers tremendous capacity to improve healthcare access, those who might benefit most are often least well equipped to access the technology required. Some participants felt optimistic about the ability of the future telehealth landscape to increase

Table 1 Summary of themes with illustrative quotations




<b>Experiences.</b> Dermatologists' experience of how telehealth is working for older adults	<b>Recommendations.</b> Approaches recommended for use of telehealth with older adults
<p><b>E1. Perceived benefits of telehealth for older adults</b></p> <ul style="list-style-type: none"> <li>• 'Not everybody has access to transportation. Some people are taking four city buses to get to my office.' (22)</li> <li>• 'I think it really does make it so that patients who otherwise would have to decide between going to work and making it to the doctor will now be able to do both.' (2)</li> </ul>	<p><b>R1. Give comprehensive instructions ahead of time</b></p> <ul style="list-style-type: none"> <li>• 'The resolution of video photography still doesn't approach still photography, so even when we book a video visit, we always request the patients to take still pictures first and send them to us.' (14)</li> <li>• 'I think the technology...it's working really well for us. It's just the barrier of...logging on.' (15)</li> </ul>
<p><b>E2. Works well for 'stable chronic disease', but concerns about diagnosis of malignant lesions</b></p> <ul style="list-style-type: none"> <li>• 'A full-body skin exam should not be done virtually.' (9)</li> <li>• 'It's a lot easier if you're just trying to get their subjective is it better, is it worse, how do you feel, is it itchy, is it painful, etc.' (12)</li> </ul>	<p><b>R2. Appropriate appointment triage is crucial</b></p> <ul style="list-style-type: none"> <li>• 'I wish we had a better triaging system.' (1)</li> <li>• 'I just don't think that it's a good use of resources for the patient or for us to take up an in-person clinic spot if they can just as easily and efficiently be seen at home.' (12)</li> </ul>
<p><b>E3. Technology presents a barrier for many, but not all, older adults</b></p> <ul style="list-style-type: none"> <li>• 'The patient just couldn't really figure out what's going on with the camera, so instead of a video visit we just talk on the phone.' (17)</li> <li>• 'I'm surprised that a lot of them have been able to.' (15)</li> <li>• 'I would say at least 50% of the patients in this older adult category either have help during the virtual encounter or...someone else to take photos.' (7)</li> </ul>	<p><b>R3. Don't make assumptions about patient comfort with technology</b></p> <ul style="list-style-type: none"> <li>• 'Please do not assume that they do not use technology. It is condescending to assume or to state that I wonder if you are using telephotos. Assume that they all do and go from there.' (14)</li> <li>• 'There will be technology issues regardless of age sometimes.' (11)</li> </ul>
<p><b>E4. Can't see the whole patient and feel the skin</b></p> <ul style="list-style-type: none"> <li>• 'I'm only able to see the parts that they show me and not necessarily all of the other parts that I would be able to see if they were here.' (18)</li> <li>• 'A lot of dermatology is very tactile, you want to feel, you want to cut, you want to biopsy, you want to freeze.' (9)</li> <li>• 'She was angry at the end of the encounter because she felt like if she had to do a biopsy then why were we having this telederm appointment.' (10)</li> </ul>	<p><b>R4. Important to manage patient expectations about what can be achieved in a telehealth visit</b></p> <ul style="list-style-type: none"> <li>• 'The patient's perception was suddenly we could take care of things on the computer and they didn't have to come in, which of course turns out not to be true.' (21)</li> <li>• 'Because it's on the telephone...some patients get upset if they get a bill.' (8)</li> </ul>
<p><b>E5. Can be more difficult to communicate virtually</b></p> <ul style="list-style-type: none"> <li>• 'When there's a language barrier it becomes that much more difficult, so if...an interpreter is needed, it adds like another layer of complexity to something that's already fairly complicated.' (20)</li> <li>• 'Speaking from the doctor's side also, I'm now at the stage of my life where my patients also give me a lot of emotional comfort. To take care of patients is very life-sustaining. They are thankful and the nonverbal communication and nonverbal succour that I get from my patients, I don't get it in telephone visits.' (14)</li> </ul>	<p><b>R5. Need to make telehealth accessible for all</b></p> <ul style="list-style-type: none"> <li>• 'It's beneficial for them, but it's still difficult to actually accomplish, so I think we're all kind of feeling a slight frustration with the current system. Like in theory it's great, but in reality, it's not panning out that way.' (1)</li> <li>• 'Ultimately I think just figuring out how to have older adults navigate technology will be...the link that we're missing...I think that's probably the hardest part of it all, but I do think that they're some of the patients that benefit the most with having telederm appointments.' (11)</li> </ul>

The identifier of the respondent is given in brackets.

accessibility, particularly in rural areas, for example with use of 'telemedicine kiosks' in pharmacies suggested. See Table 1 for categorization of themes and illustrative quotations.

The COVID-19 pandemic has transformed healthcare systems. We have the opportunity to bring together technological innovations with a commitment to reducing digital health disparities, so that telehealth meets the

needs of vulnerable groups with lower technological literacy. We call for active optimization of telehealth systems along with patient education to ensure usability for all.

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## Reasons for discontinuation of dupilumab in adult atopic dermatitis in clinical practice

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DEAR EDITOR, Dupilumab, an anti-interleukin-4 $\alpha$  monoclonal antibody, has shown a positive benefit–risk ratio when treating moderate-to-severe atopic dermatitis (AD) in clinical studies.<sup>1</sup> High persistence for patients on dupilumab has recently been reported in a clinical practice setting, with 77% of patients remaining in treatment for 12 months in a retrospective study that included

1963 patients with AD; however, reasons for discontinuation were not investigated.<sup>2</sup> Investigating the reasons for treatment discontinuation in chronic diseases permits the assessment of both the safety and the effectiveness of a given treatment in a clinical practice setting. Our aim was to investigate the frequency and reasons for discontinuation of dupilumab in adults with AD, and the alternative subsequent treatment strategies.

We conducted a retrospective multicentric (16 tertiary referral hospitals) study in adult patients with moderate-to-severe AD for whom dupilumab was discontinued (defined as discontinuation  $\geq$  1 month) between March 2017 and September 2020.

From a total of 968 patients treated with dupilumab during the study period, 150 patients (15.5%) discontinued treatment after a median treatment duration of 5 months [interquartile range (IQR) 3–10]. Among the 150 patients who discontinued treatment, the main reasons for discontinuation were side-effect(s) in 61 patients (40.7%), lack of efficacy in 22 patients (14.7%), lack of efficacy and side-effect(s) in 23 patients (15.3%), planned pregnancy in 12 patients (8%), disease remission in six patients (4%) or various other reasons for 26 patients (17.3%). Among the six patients who stopped treatment owing to AD remission, the median duration of treatment was 57 weeks (IQR 44.25–65.25). One of these patients relapsed 6 months after discontinuation, requiring reintroduction of dupilumab. Side-effects that led to dupilumab discontinuation were, among others, ophthalmological side-effects (36 patients, 24%), facial erythema (12 patients, 8%), diffuse AD exacerbations (10 patients, 6.7%), asymptomatic eosinophilia (six patients, 4%), alopecia areata (four patients, 2.7%) and induced psoriasis (four patients, 2.7%) (Table 1). Although herpes infections were frequently reported as a side-effect, no patient stopped dupilumab treatment for this reason.

Patients with atopic comorbidities (allergic conjunctivitis and asthma) were more likely to discontinue dupilumab because of side-effects rather than lack of efficacy (44.3% vs. 9.1%). Demographic characteristics, such as age, sex, AD phenotype or age at initiation of dupilumab treatment were not associated with any particular reason for discontinuation. Treatment strategies after discontinuation of dupilumab were as follows: initiation of another systemic treatment (60 patients, 40%), topical treatments alone (45 patients, 30%) or reinitiation of dupilumab treatment (31 patients, 20.6%) (Table 1). For this latter strategy, the median time of dupilumab restart was 13 weeks (IQR 8–28), with a single 600-mg loading dose (15 patients, 48.4%) followed in the majority of cases (24 patients, 77.4%) by regular injections at 2-week intervals. Among the 31 patients who restarted dupilumab, full remission was observed in 13 patients (41.9%). In patients who stopped because of side-effects, and subsequently restarted treatment (five of 31 patients), the strategy was to gradually increase the dosage interval to between 3 and 8 weeks depending on the disease control in each patient. There was no recurrence of side-effects and the efficacy was maintained in three of five patients.