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## Fighting COVID-19: Early teledermatology lessons learned



*To the Editor:* Coronavirus disease 2019 (COVID-19) has exacerbated the unequal access to medical care experienced by historically marginalized patient populations.<sup>1</sup> Early data demonstrate that the infection and death rates in predominantly black neighborhoods are 3-fold and 6-fold higher, respectively, than in predominantly white neighborhoods.<sup>2</sup> In response to the pandemic, academic and private dermatology practices have both quickly rolled out teledermatology service in an effort to continue access to care. Our study evaluated early practice patterns to identify any variations in the quality of and access to teledermatology services.

We randomly selected 274 teledermatology visits conducted during the month of April 2020 in the Department of Dermatology at Beth Israel Deaconess Medical Center. We reviewed each visit and extracted the following information: age, preferred language, diagnoses, disposition, visit type (telephone vs video), and visit duration. In addition, we randomly selected 250 in-person visits conducted during the month of February 2020 for a pre-pandemic comparison.

Before the pandemic, 32% of patients seen in person were older than 65 years, and 7% of patients seen in person were non-English speaking, those defined as necessitating interpreter service (Table D). During the pandemic, 23% of patients seen in teledermatology were older than 65 years, and 3% of patients seen in teledermatology were non-English speaking (Table I).

The 2 most common diagnoses seen in teledermatology, other than a lesion of concern, were acne at 19% and dermatitis at 18% of total visits (Table II). Nearly all teledermatology visits with these diagnoses led to a recommendation for discharge or follow-up via subsequent teledermatology visits. In contrast, 60% of teledermatology visits for evaluation of lesion(s) led to a recommendation to follow-up in person for re-evaluation or biopsy, or both. Lastly, 75% of teledermatology visits with durations of 20 minutes or greater were conducted

**Table I.** Prepandemic versus postpandemic patient demographic information

| Variable                         | Prepandemic (in person), % | Postpandemic (teledermatology), % | Reduction, % |
|----------------------------------|----------------------------|-----------------------------------|--------------|
| Elderly patients (>65 years old) | 32                         | 23                                | 28           |
| Non-English-speaking patients    | 7                          | 3                                 | 57           |

**Table II.** Common diagnoses for teledermatology service

| Common diagnoses  | No. (%) |
|-------------------|---------|
| Lesion of concern | 65 (24) |
| Acne              | 52 (19) |
| Dermatitis        | 49 (18) |
| Eczema            | 11 (4)  |
| Psoriasis         | 6 (2)   |

via telephone rather than with a video-based platform.

Limitations of this study include a small sample size, narrow scope, and a single institution. Our study suggests that elderly patients and non-English-speaking patients may be experiencing unequal access to teledermatology care during the pandemic. Limited proficiency with technology, administrative burden to mobilize an interpreter service, and hesitancy of patients to receive medical care via virtual platforms can all contribute to these findings.

On one hand, our study suggests that teledermatology is best suited for acne and nonspecific dermatitis. On the other hand, evaluations of lesion(s) may be best suited for in-person visits to avoid generating extra visits and unnecessary costs. Lastly, our study found that longer visits were more likely to be conducted by telephone rather than by video. This finding raises a possibility that visual cues may be an important consideration in teledermatology visits.

Moving forward, we are tasked with creating a new practice model that is likely to be a hybrid of both in-person and teledermatology visits. Our early data support allocating teledermatology resources for certain diagnoses, including acne and rashes. However, we need further studies to understand the operational and financial implications of having extra teledermatology visits for the evaluation of lesion(s).

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