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Trends in teledermatology use during clinic reopening after COVID-19 closures



To the Editor: Teledermatology has provided vital dermatology care as the COVID-19 pandemic forced ambulatory clinics to cease or limit in-person visits.¹ Despite rapid large-scale implementation of teledermatology, the optimal use of telemedicine for specific dermatologic conditions remains unclear.² As clinics reopen, telemedicine use, although decreased, continues to account for a substantial proportion of overall visits.³ This period of reopening provides an opportunity to monitor teledermatology trends when virtual and in-person visits are both available and have reimbursement parity. These findings can help guide future decisions regarding which types of dermatologic conditions may be preferentially addressed via teledermatology.

We extracted all adult teledermatology encounters billed within our department from May through July 2020. This includes a period when ambulatory dermatology clinics were closed to all nonurgent in-person visits and a phased reopening of clinics beginning May 26, 2020. For each month, teledermatology visits were tabulated and divided into categories based on the primary billing diagnosis. Baseline characteristics differed for patients completing teledermatology visits across May, June, and July (Table I). From May to July, the proportion of teledermatology visits completed by younger

(ages 18-44 years), Asian, and privately insured patients increased, whereas those completed by older (ages ≥ 65 years), White, and Medicare patients decreased. The total number of teledermatology visits decreased from 1650 in May to 1514 in June to 818 in July (Table II).⁴

Several trends in teledermatology use for certain categories of diagnoses emerged. As the option for in-person evaluation and management became available, teledermatology visits for skin lesions and named cutaneous malignancies decreased. Interestingly, teledermatology visits for benign skin lesions did not decrease significantly, indicating that teledermatology may be acceptable for initial evaluation of low-risk lesions (as perceived by the patient) and reassurance for benign lesions. As clinics reopened, the proportion of teledermatology visits for common dermatoses (acne, rosacea, psoriasis, atopic dermatitis, and eczema) increased, while visits for unspecified or less common rashes did not change significantly. This suggests patients and/or dermatologists may feel comfortable managing common dermatoses via teledermatology even when in-person evaluation is an option.

Our observations at a single urban academic institution may not generalize across all ambulatory settings, but we think monitoring telemedicine trends will help dermatology practice models to evolve in the era of telemedicine. While underlying differences in patient characteristics may affect visit diagnoses, our survey can serve as a starting point for telemedicine optimization. Studies will be

Table I. Teledermatology patient characteristics, by month

Characteristics	May	June	July	P value*
Age, mean (SD), y	51.5 (19.4)	49.4 (19.3)	48.2 (19.4)	.0006
18-24, No. (%)	140 (8.5)	155 (10.2)	100 (12.2)	
25-44, No. (%)	525 (31.8)	507 (33.5)	287 (35.1)	
45-64, No. (%)	464 (28.1)	455 (30.1)	230 (28.1)	
≥ 65 , No. (%)	521 (31.6)	397 (26.2)	201 (24.6)	
Female sex, No. (%)	1073 (65.0)	964 (63.7)	535 (65.4)	.627
Race/ethnicity, No. (%)				.0003
White	1337 (81.0)	1207 (79.7)	627 (76.7)	
Hispanic	3 (0.2)	6 (0.4)	2 (0.2)	
African American	61 (3.7)	49 (3.2)	23 (2.8)	
Asian	72 (4.4)	92 (6.1)	79 (9.7)	
Other	177 (10.7)	160 (10.6)	87 (10.6)	
Insurance, No. (%)				.015
Private	995 (60.3)	973 (64.3)	540 (66.0)	
Medicare	508 (30.8)	398 (26.3)	203 (24.8)	
Medicaid	130 (7.9)	123 (8.1)	60 (7.3)	
Other/unknown	17 (1.0)	20 (1.3)	15 (1.8)	

N/A, Not applicable; No., number; SD, standard deviation.

*P value from χ^2 test.

Table II. Trends in teledermatology use

Category	May, No. (%)	June, No. (%)	July, No. (%)	P value*	Adjusted P value†
Common dermatoses‡	458 (27.8)	485 (32.0)	264 (32.3)	.0082	.0482
Unspecified and other rashes	290 (17.6)	219 (14.5)	159 (19.4)	.632	.8646
Skin lesion and named malignancy	211 (12.8)	146 (9.6)	79 (9.7)	.0062	.0426
Actinic keratosis	102 (6.2)	96 (6.3)	31 (3.8)	.0379	.1614
Benign neoplasm	183 (11.1)	188 (12.4)	89 (10.9)	.9626	.9626
Infection	68 (4.1)	86 (5.7)	48 (5.9)	.0346	.1614
Other	201 (20.5)	159 (19.4)	93 (18.1)	.1551	.3969
Total	1650 (100)	1514 (100)	818 (100)	N/A	N/A

N/A, Not applicable; No., number.

*P value from Cochran-Armitage trend test. Analyses were conducted in R 4.0.2 software (R Foundation for Statistical Computing) using the DescTools package.⁴

†Adjusted P value from Holm-Šidák multiple comparison test.

‡Acne, rosacea, psoriasis, atopic dermatitis, and eczema.

needed to distinguish whether case trends are driven by institutional constraints, dermatologists, or patients.

The United States federal government has signaled sustained enthusiasm for telehealth by adding new permanent telemedicine codes in August 2020.⁵ Consequently, dermatology practices will need to optimize teledermatology use to balance in-person clinic volume limitations and access constraints. Our initial analyses suggest that from a practice perspective, common dermatoses have a place in core teledermatology offerings moving forward. Continued monitoring of teledermatology trends will enhance our understanding of best practices.

Mack Y. Su, PhD, Gideon P. Smith, MD, PhD, MPH, and Shinjita Das, MD

From the Department of Dermatology, Massachusetts General Hospital, Harvard Medical School, Boston, Massachusetts.

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Correspondence and reprint requests to: Shinjita Das, MD, Department of Dermatology, Massachusetts

General Hospital, 50 Staniford St, Rm 292, Boston, MA 02114

E-mail: sdas4@mgh.harvard.edu

Conflicts of interest

None disclosed.

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