

Session/Poster#

Presenter

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Justin Marson

Dermatology Resident

Advisor(s): Dr. Daniel Siegel, Dermatology

Teledermatology adoption patterns in the COVID-19 era: a national cross-sectional study and real-world healthcare implications

Background: Studies have raised concerns regarding heterogeneity in telemedicine adoption and healthcare inequity exacerbation.

Methods: A prevalidated anonymous survey was emailed to a purchased listserv of practicing US dermatologists. Completed results were stratified by teledermatology-adoption timepoint(TAT). Data analysis performed using chi-square and odds ratios(OR) with 95% confidence intervals(95%CI) for categorical data and single-factor ANOVA with post-hoc Tukey-Kramer for continuous data.

Results: Data from 338 practicing US dermatologists was analyzed. Academic/Government dermatologists were 4.08-times more likely(OR 4.08, 95%CI 2.37-7.03) to adopt teledermatology pre-COVID(early-adopter,EA) than private-practice dermatologists. Dermatologists with ≥ 10 years of experience(YoE) were 1.8-times(95%CI 1.01-3.18) and 2.82-times more likely(95%CI 0.78-10.25) to be EAs or adopt teledermatology at all, respectively, compared to dermatologists with ≤ 20 -YoE. No significant relationship existed between TAT and practice location($\chi^2(14, n=338)=10.87, p=.70$). EAs/post-COVID-adopters(CAs) practiced more medical-dermatology($p<.0001$) than non-adopters(NAs), who reported more dermatologic surgery($p=.003$;Tukey-Kramer $\delta > .05$) and dermatopathology($p<.0001$;Tukey-Kramer $\delta > .05$).

EAs were 4.69-times more likely(95%CI 1.46-15.07) to use live-interactive(LI)-only teledermatology post-COVID-19. CAs were 6.09-times more likely(95%CI 3.36-11.06) to utilize LI than EAs. While EAs currently use teledermatology for a larger proportion of patient visits(19.6% v. 10.4%, $P<.0001$), they were 3.43-times more likely(95%CI 1.82-6.46) to report decreased future usage compared to CAs.

Limitations: Cross-sectional survey. Response bias.

Conclusion: Currently, teledermatology may be better suited for medical-dermatology practices compared to procedural practices. Future studies should investigate these financial and logistic barriers to maximize equitable access to dermatological care.