Supplemental Online Content

Kennedy J, Arey S, Hopkins Z, et al. Dermatologist perceptions of teledermatology implementation and future use after COVID-19: demographics, barriers, and insights. *JAMA Dermatol*. Published online March 31, 2021. doi:10.1001/jamadermatol.2021.0195

eMethods.

This supplemental material has been provided by the authors to give readers additional information about their work.

eMethods

Sample size

In past experience, surveys sent by the American Academy of Dermatology have a 10% response rate. Additionally, as the Academy send multiple surveys per year, the sample size needed to be balanced with minimizing survey fatigue. Thus, 500 respondents were estimated to be required for adequate representations and based on an expected 10% response rate, 5000 dermatologists were randomly selected to receive the survey. The 5000 selected physicians were chosen from the 12,070 total dermatologists available using an excel random function. Invitations were sent via email and two reminders to complete the survey were sent if no response was received.

Response Rate

Response rate was calculated as:

of survey responses

(# of emailed invitations sent - # of surveys that did not reach their intended target)

Reasons for surveys not reaching target recipient included: full inboxes, derelict email accounts, security policies, etc.

Survey Analysis

This survey employed a single-stage, simple random sample without replacement design. Initial comparison of sex, age, and practice type demographics between population, survey sample pool, and survey participants were performed. For all descriptive statistics and regressions, STATA's *svyset* command and *svy*-prefix command were used to apply survey weights, design and finite population corrections. Briefly, descriptive statistics, including unweighted participant counts, weighted counts, weighted proportions, and means, were calculated. Differences in these were compared using linear regression for continuous variables and logistic or ordinal regressions for categorical variables. For Likert scale-based questions, we used item response theory, inter-item correlations, and Cronbach's alpha for internal validity. For Likert scale-based questions, or questions with multiple, ordered answers, relationships to demographic factors were performed using multivariable ordinal regression. For each prespecified ordinal regression model, the assumption of proportional odds, or parallel regression, was tested using the Brant test within the *oparallel* package. If this assumption was rejected (*p*<0.05), the independent variable contributing to rejection of this assumption was identified and a partial proportional odds model was used (*gologit2*). Two-sided p-values were used for all

