Vaccines and dermatology: Expanding the role of dermatology clinics in the name of public health

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Key words: COVID-19; human papillomavirus; immunization; public health; vaccine hesitance; varicella zoster virus.

Vaccine hesitancy is common and increasingly relevant in the current medical landscape. Several factors provide dermatology practices a unique opportunity to play a role in addressing vaccine resistance through improving education and opportunities for patients. Simply based on volume, dermatology practices intersect with the community more than most medical providers. Exposure to patients at the risk of vaccine-preventable illness is also commonplace in dermatology offices, accounting for ~350,000 visits annually. Thus, we theorized that dermatology clinics could positively impact the public health of the population they serve through point-of-care vaccine administration.

As proof of concept, in May 2021, a multipractice dermatology group, with the support of the local Department of Health and Centers for Disease Control and Prevention, implemented a COVID-19 vaccine outreach program. The details of program execution are provided in Supplementary Material 1 (available via Mendeley at https://data.mendeley.com/datasets/grfvkwxbc6/1.) From July 2021 to September 2021, 152 consecutive, self-identified, nonvaccinated patients were offered a COVID-19 vaccine during their routine dermatology visit (Fig 1) - 116 patients (76%) accepted. After vaccine administration, a survey exploring perspectives and interest in further vaccinations, if offered, was administered to these patients. Compliance with second-dose regimens was also measured. A secondary survey was administered to 9 randomly selected local dermatology providers soliciting perceived barriers to routine vaccine administration in dermatology clinics.

Ninety-nine of the 116 patients (85.3%) and 9 of the 9 providers (100%) responded to the patient- and provider-directed surveys, respectively. The patient survey data showed high degrees of satisfaction with vaccines administered at the dermatology office (Fig 2), and 96.9% of eligible patients followed through with the second-dose regimens. Further, 90.9% of patients stated that they would receive other vaccines at their dermatology clinic if recommended and available. Notably, less than half of patients aged >50 years in the cohort receiving COVID-19 vaccines (48.2%) had been vaccinated with a shingles (varicella zoster virus) vaccine despite being age-eligible.

These data suggest that COVID-19 vaccines provided at dermatology offices are generally well received by patients with remarkably high follow-up dosing compliance. Although the expansion of COVID-19 vaccine lines in dermatology clinics is likely not feasible, this information could be extrapolated to make an argument for the consideration of the administration of other vaccines at dermatology clinics, especially targeted toward conditions salient to everyday dermatology practice (ie, human papilloma virus and varicella zoster virus infections). The reimbursement rates for several vaccines are high and improving.

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Funding sources: None.

IRB approval status: Not applicable.

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because preventive health care is prioritized by payers.\textsuperscript{3} Expanded clinical utility of the human papilloma virus vaccine has been well documented,\textsuperscript{4} whereas the human papilloma virus vaccination rates remain low nationally.\textsuperscript{3} Additionally, with advances in systemic therapies generating an onus to promote live virus vaccination prior to initiation, there exists expanded clinical situations in which having these vaccines readily available at the office would be beneficial. As is evident from our survey, an opportunity exists within vaccine-interested patient

### Fig 1. Patient selection.

### Fig 2. Survey results for patients provided a COVID-19 vaccine through their local dermatology clinic. HPV, Human papilloma virus; VZV, varicella zoster vaccine.
populations being served by dermatologists. The shingles vaccination rates in our provaccine cohort mirrored those reported by national statistics for the varicella zoster vaccine.5

In summary, this study suggests that vaccines at dermatology clinics could be well received, clinically meaningful, and highly utilized. Some resources targeted at overcoming common perceived barriers of implementing in-office vaccine administration, including the consideration of direct and indirect costs to practices, are available in Supplementary Material 1. By playing a proactive role in the vaccination status of patients, dermatologists can positively impact the public health of the community they serve.

Conflicts of interest
None disclosed.

REFERENCES