

# Perceptions of Community Service in Dermatology Residency Training Programs: A Survey-Based Study of Program Directors, Residents, and Recent Dermatology Residency Graduates

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## PRACTICE POINTS

- Participation of dermatology residents in service-learning experiences increases awareness of health disparities and social factors impacting dermatologic care and promotes a lifelong commitment to serving vulnerable populations.
- Integrating service learning into the dermatology residency program curriculum enhances trainees' cultural sensitivity and encourages the prioritization of skin health equity.
- Service learning will help bridge the gap in access to dermatologic care for patients in medically marginalized communities.

Integrating community service (CS) into the dermatology residency program curriculum creates a rewarding training environment that promotes an interest in health disparities, increases skin health equity, and augments the cultural sensitivity of its trainees. To better understand the importance of CS activities in dermatology residency programs, program directors, residents, and recent dermatology residency graduates were surveyed about their perceptions and participation in CS—defined as participation in activities to

increase dermatologic access, education, and resources in underserved communities.

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Community service (CS) or service learning in dermatology (eg, free skin cancer screenings, providing care through free clinics, free teledermatology consultations) is instrumental in mitigating disparities and improving access to equitable dermatologic care. With the rate of underinsured and uninsured patients on the rise, free and federally qualified clinics frequently are the sole means by which patients access specialty care such as dermatology.<sup>1</sup> Contributing to the economic gap in access, the geographic disparity of dermatologists in the United States continues to climb, and many marginalized communities remain without dermatologists.<sup>2</sup> Nearly 30% of the total US population resides in geographic areas that are underserved by dermatologists, while there appears to be an oversupply of dermatologists in urban areas.<sup>3</sup> Dermatologists practicing in rural areas make up only 10% of the dermatology workforce,<sup>4</sup> whereas 40% of all dermatologists practice in the most densely populated

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US cities.<sup>5</sup> Consequently, patients in these underserved communities face longer wait times<sup>6</sup> and are less likely to utilize dermatology services than patients in dermatologist-dense geographic areas.<sup>7</sup>

Service opportunities have become increasingly integrated into graduate medical education.<sup>8</sup> These service activities help bridge the health care access gap while fulfilling Accreditation Council of Graduate Medical Education (ACGME) requirements. Our study assessed the importance of CS to dermatology residency program directors (PDs), dermatology residents, and recent dermatology residency graduates. Herein, we describe the perceptions of CS within dermatology residency training among PDs and residents.

## Methods

In this study, CS is defined as participation in activities to increase dermatologic access, education, and resources to underserved communities. Using the approved Association of Professors of Dermatology list-serve and direct email communication, we surveyed 142 PDs of ACGME-accredited dermatology residency training programs. The deidentified respondents voluntarily completed a 17-question Qualtrics survey with a 5-point Likert scale (extremely, very, moderately, slightly, or not at all), yes/no/undecided, and qualitative responses.

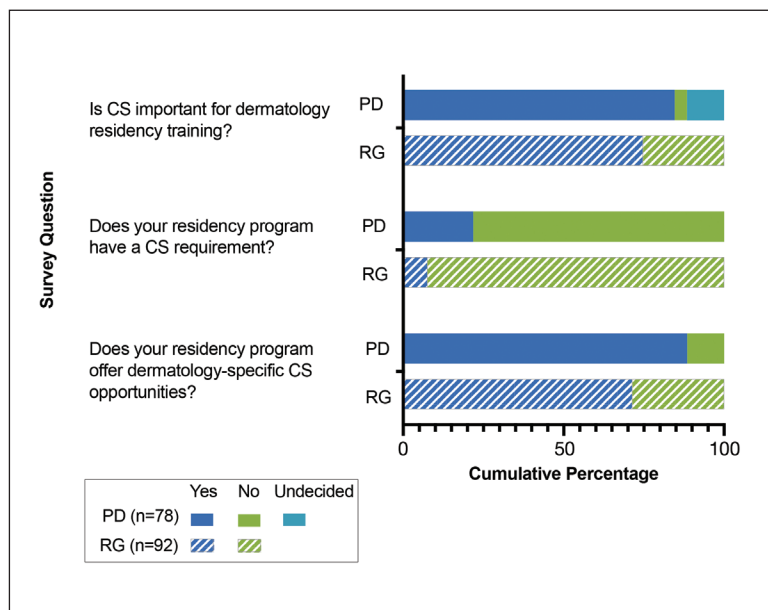
We also surveyed current dermatology residents and recent graduates of ACGME-accredited dermatology residency programs via PDs nationwide. The deidentified respondents voluntarily completed a 19-question Qualtrics survey with a 5-point Likert scale (extremely, very, moderately, slightly, or not at all), yes/no/undecided, and qualitative responses.

Descriptive statistics were used for data analysis for both Qualtrics surveys. The University of Pittsburgh institutional review board deemed this study exempt.

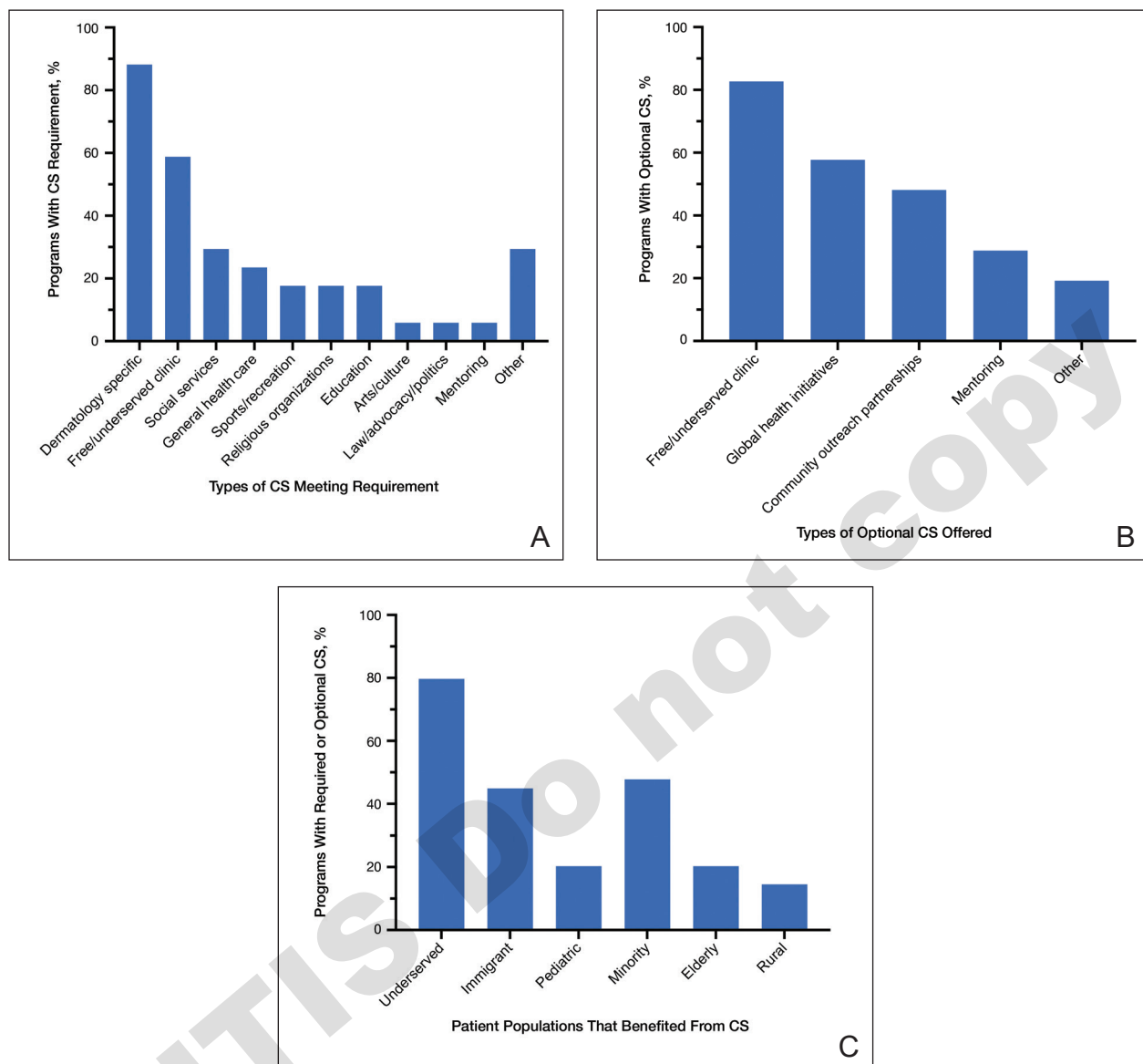
## Results

**Feedback From PDs**—Of the 142 PDs, we received 78 responses (54.9%). For selection of dermatology residents, CS was moderately to extremely important to 64 (82.1%) PDs, and 63 (80.8%) PDs stated CS was moderately to extremely important to their dermatology residency program at large. For dermatology residency training, 66 (84.6%) PDs believed CS is important, whereas 3 (3.8%) believed it is not important, and 9 (11.5%) remained undecided (Figure 1). Notably, 17 (21.8%) programs required CS as part of the dermatology educational curriculum, with most of these programs requiring 10 hours or less during the 3 years of residency training. Of the programs with required CS, 15 (88.2%) had dermatology-specific CS requirements, with 10 (58.8%) programs involved in CS at free and/or underserved clinics and some programs participating in other CS activities, such as advocacy, mentorship, educational outreach, or sports (Figure 2A).

Community service opportunities were offered to dermatology residents by 69 (88.5%) programs, including the 17 programs that required CS as part of the dermatology educational curriculum. Among these programs with optional CS, 43 (82.7%) PDs reported CS opportunities at free and/or underserved clinics, and 30 (57.7%) reported CS opportunities through global health initiatives (Figure 2B). Other CS opportunities offered included partnerships with community outreach organizations and mentoring underprivileged students. Patient populations that benefit from CS offered by these dermatology residency programs included 55 (79.7%) underserved, 33 (47.8%) minority, 31 (44.9%) immigrant, 14 (20.3%) pediatric, 14 (20.3%) elderly, and 10 (14.5%) rural populations (Figure 2C). At dermatology residency programs with optional CS opportunities, 22 (42.3%) PDs endorsed at least 50% of their residents participating in these activities.



**FIGURE 1.** Perceptions of community service (CS) among US dermatology residency program directors (PDs)(n=78) as well as residents and recent graduates (RGs)(n=92)(selected yes/no/undecided survey questions).



**FIGURE 2.** A, Types of community service (CS) that meet program-specific CS requirements, as reported by US dermatology residency program directors (PDs) (n=17). Education and mentoring activities were defined as CS that benefited underprivileged students (excluding undergraduate and medical students). B, Types of optional CS opportunities offered by US dermatology residency programs as reported by PDs (n=52). Mentoring activities were defined as CS that benefited underprivileged students (excluding undergraduate and medical students). C, Patient populations that benefited from CS opportunities offered by US dermatology residency programs as reported by PDs (n=69).

Qualitative responses revealed that some PDs view CS as “a way for residents to stay connected to what drew them to medicine” and “essential to improving perceptions by physicians and patients about dermatology.” Program directors perceived lack of available time, initiative, and resources as well as minimal resident interest, malpractice coverage, and lack of educational opportunities as potential barriers to CS involvement by residents (Table). Forty-six (59.0%) PDs believed that CS should not be an ACGME requirement for dermatology training, 23 (29.5%) believed it should be required, and 9 (11.5%) were undecided.

*Feedback From Residents*—We received responses from 92 current dermatology residents and recent dermatology residency graduates; 86 (93.5%) respondents were trainees or recent graduates from academic dermatology residency training programs, and 6 (6.5%) were from community-based training programs. Community service was perceived to be an important part of dermatology training by 68 (73.9%) respondents, and dermatology-specific CS opportunities were available to 65 (70.7%) respondents (Figure 1). Although CS was required of only 7 (7.6%) respondents, 36 (39.1%) respondents volunteered at a free dermatology clinic during residency

### Qualitative Responses From US Dermatology Residency PDs on Perceived Benefits of and Barriers to Increased CS by Dermatology Residents

What potential benefits do you feel exist as a direct result of increased CS by dermatology residents? <sup>a</sup> , n (%) (n=32)		What barriers do you believe exist that would hinder increased CS by dermatology residents? <sup>a</sup> , n (%) (n=55)	
Overall community benefit	31 (96.9)	Lack of available time	43 (78.2)
Increased sense of purpose	30 (93.8)	Lack of initiative	24 (43.6)
Increased access to care for underserved populations	27 (84.4)	Lack of interest	24 (43.6)
Increased overall "wellness"	15 (46.9)	Lack of resources	24 (43.6)
Decreased physician burnout	12 (37.5)	Perceived lack of educational opportunities	17 (30.9)
Increased competence	6 (18.8)	Other: "Cuts into productivity and insured patient access"	1 (1.8)
Decreased stress/anxiety	3 (9.4)	Other: "Fears of malpractice coverage for residents outside of the university setting"	1 (1.8)
Other: "Essential to improving perceptions by physicians and patients about dermatology"	1 (3.1)	Other: "It wouldn't be fair to discriminate against smaller programs with fewer faculty/residents with an ACGME requirement"	1 (1.8)
Other: "Increased exposure to CS will hopefully increase the proportion of graduates that continue to give back after residency"	1 (3.1)	Other: "Residencies with a lot of county clinic time essentially have built-in CS; this leads to decreased resident interest in pursuing outside opportunities for community engagement"	1 (1.8)
Other: "A way for residents to stay connected to what drew them to medicine"	1 (3.1)	Other: "Be cautious about incentivizing CS; it reduces intrinsic motivation"	1 (1.8)

Abbreviations: ACGME, Accreditation Council for Graduate Medical Education; CS, community service; PD, program director.

<sup>a</sup>Respondents selected all that applied.

training. Among respondents who were not provided CS opportunities through their residency program, 23 (85.2%) stated they would have participated if given the opportunity.

Dermatology residents listed increased access to care for marginalized populations, increased sense of purpose, increased competence, and decreased burnout as perceived benefits of participation in CS. Of the dermatology residents who volunteered at a free dermatology clinic during training, 27 (75.0%) regarded the experience as a "high-yield learning opportunity." Additionally, 29 (80.6%) residents stated their participation in a free dermatology clinic increased their awareness of health disparities and societal factors affecting dermatologic care in underserved patient populations. These respondents affirmed that their participation motivated them to become more involved in outreach targeting underserved populations throughout the duration of their careers.

#### Comment

The results of this nationwide survey have several important implications for dermatology residency programs, with a focus on programs in well-resourced and high socioeconomic status areas. Although most PDs believe that CS is important for dermatology resident training, few programs have CS requirements, and the majority are opposed to ACGME-mandated CS. Dermatology residents and recent graduates overwhelmingly conveyed that participation in a free dermatology clinic during residency training increased their knowledge base surrounding socioeconomic determinants of health and practicing in resource-limited settings. Furthermore, most trainees expressed that CS participation as a resident motivated them to continue to partake in CS for the underserved as an attending physician. The discordance between perceived value of CS by residents and the lack of CS requirements and opportunities by residency programs represents a

realistic opportunity for residency training programs to integrate CS into the curriculum.

Residency programs that integrate service for the underserved into their program goals are 3 times more successful in graduating dermatology residents who practice in underserved communities.<sup>9</sup> Patients in marginalized communities and those from lower socioeconomic backgrounds face many barriers to accessing dermatologic care including longer wait times and higher practice rejection rates than patients with private insurance.<sup>6</sup> Through increased CS opportunities, dermatology residency programs can strengthen the local health care infrastructure and bridge the gap in access to dermatologic care.

By establishing a formal CS rotation in dermatology residency programs, residents will experience invaluable first-hand educational opportunities, provide comprehensive care for patients in resource-limited settings, and hopefully continue to serve in marginalized communities. Incorporating service for the underserved into the dermatology residency curriculum not only enhances the cultural competency of trainees but also mandates that skin health equity be made a priority. By exposing dermatology residents to the diverse patient populations often served by free clinics, residents will increase their knowledge of skin disease presentation in patients with darker skin tones, which has historically been deficient in medical education.<sup>10,11</sup>

The limitations of this survey study included recall bias, the response rate of PDs (54.9%), and the inability to determine response rate of residents, as we were unable to establish the total number of residents who received our survey. Based on geographic location, some dermatology residency programs may treat a high percentage of medically underserved patients, which already improves access to dermatology. For this reason, follow-up studies correlating PD and resident responses with region, program size, and university/community affiliation

will increase our understanding of CS participation and perceptions.

## Conclusion

Dermatology residency program participation in CS helps reduce barriers to access for patients in marginalized communities. Incorporating CS into the dermatology residency program curriculum creates a rewarding training environment that increases skin health equity, fosters an interest in health disparities, and enhances the cultural competency of its trainees.

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