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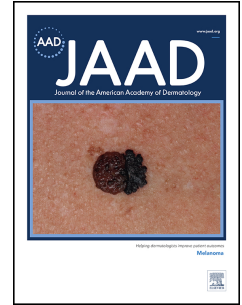
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Cosmetic Directors on ACGME Program Requirements: A Cross-Sectional Survey

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43

44 **IRB approval status:** As this study only included interactions involving survey procedures and because
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46 or civil liability or be damaging to the subjects' financial standing, employability, educational
47 advancement, or reputation, this study did not meet the criteria for human participant research and did not
48 require institutional review board approval or informed consent, in accordance with 45 CFR §46.

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58

59 **Attachments:** CROSS checklist; survey instrument

60

61 **Keywords:** Cosmetic; Director; Accreditation; Council; Graduate; Medical; Education; ACGME; Program;
62 Requirement; Cross; Sectional; Survey; Association; Academic; Cosmetic; Dermatology; Residency; Training;
63 Neurotoxin; Filler; Laser

64 *To the editor:*

65 The Accreditation Council for Graduate Medical Education (ACGME) defines specialty-specific Program
66 Requirements (PRs) for residencies and fellowships.¹ PRs for cosmetic and laser procedures in
67 dermatology are in **Supplemental Table 1**.² Unlike excisions and repairs, which residents must perform
68 50 times, cosmetic/laser procedure minimums can be met through observation alone.

69

70 Studies demonstrate that although over 90% of residents believe hands-on training in cosmetic procedures
71 should be required,^{3,4} 27% of program directors do not recommend such requirements.⁵ Since no studies
72 report the opinions of cosmetic directors, this study aims to describe these opinions.

73

74 This was a cross-sectional survey study of cosmetic and laser directors at ACGME-accredited US
75 dermatology residencies who were members of the Association of Academic Cosmetic Dermatology
76 (AACD). An electronic survey was developed and reviewed for accuracy by the AACD Regulatory,
77 Resident Education, and Advocacy Committees, which included experts in qualitative research and survey
78 design, as well as past members of the ACGME Dermatology Review Committee and the American
79 Board of Dermatology. Participants reported the degree of ease or difficulty for residents at their program
80 to observe versus perform each of the minimum totals pertaining to cosmetic dermatology (15 laser, 5
81 filler, and 10 botulinum toxin procedures) on a 5-point scale (1="extremely difficult", 5="extremely
82 easy"). Participants were also asked to rate their agreement with a list of modified requirements (**Table 1**).

83

84 The primary outcome was the degree of difficulty for residents to meet minimum totals. Secondary
85 outcomes were differences in such difficulty across procedures (Kruskal-Wallis test ($\alpha=0.05$) with Dunn's
86 tests for pairwise comparisons); and frequency of participants agreeing with potential modifications.

87 Statistical analyses used SPSS v29.

88

89 Ninety-six of 113 (85%) completed the survey. Participants were cosmetic directors or co-directors at 71
90 dermatology residencies. Observing 15 laser (mean score 4.30), 5 filler (mean 4.39), and 10 botulinum
91 toxin procedures (mean 4.66), was generally extremely or somewhat easy (83%, 85%, and 93%
92 respectively). Completing hands-on training (**Figure 1**) in laser (mean 3.99), filler (mean 4.27), and toxin
93 procedures (mean 4.27), was also typically extremely or somewhat easy (75%, 68%, and 85%
94 respectively). A minority (<5%) reported extreme difficulty in meeting filler or laser performance
95 minimums.

96
97 There were differences ($p<0.001$) between ease of observation versus performance. Pairwise comparisons
98 found observing 10 toxin procedures was easier than performing these (mean score 4.66 vs. 4.27,
99 $p=0.038$), performing filler injections (4.66 vs. 4.27, $p=0.038$), or performing laser procedures (4.66 vs.
100 3.99, $p=0.000$; **Supplemental Table 2**).

101
102 Most cosmetic directors believed that the ACGME should require hands-on minimums for laser (54%),
103 filler (60%), and botulinum toxin procedures (59%; **Table 1**), and that observation alone was inadequate.
104 Respondents noted that hands-on training may provide residents with sufficient confidence to perform
105 these services after residency. Limitations include that this study queried only cosmetic dermatology
106 directors.

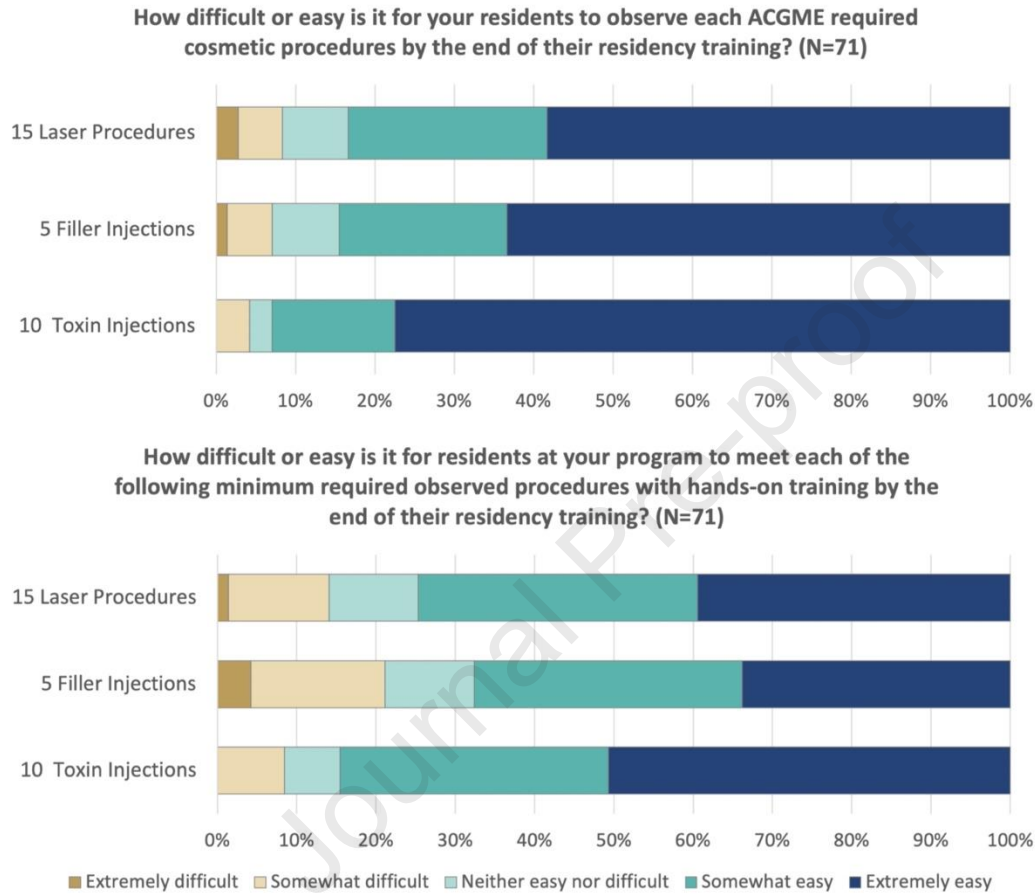
107
108 Changing dermatology residency requirements to include hands-on cosmetic training may better align
109 with the needs of residents and residency training programs in comparable specialties. ACGME
110 minimums for cosmetic procedures were established 20 years ago and may need to be updated to reflect
111 current practice.

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127 **FIGURE LEGENDS**

128 **Figure 1.** Perceived ease or difficulty of meeting current Accreditation Council for Graduate Medical
 129 Education (ACGME) minimum totals in dermatology for laser (10 procedures required before
 130 graduation), filler (5), and botulinum toxin (15) with observed experiences versus hands-on experiences.
 131



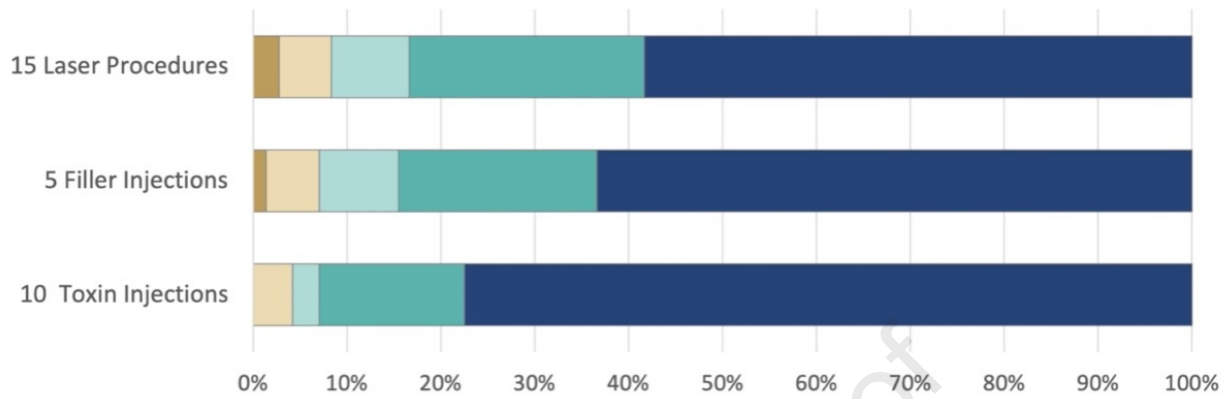
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133 **Table 1.** Opinions of cosmetic directors regarding ACGME requirements pertaining to cosmetic
 134 procedures. Participants were asked to select all of the statements they felt reflected their opinion
 135 regarding program requirements.
 136

Statement Regarding ACGME Requirements	Participants Agreeing with Statement (N=96)
Current ACGME requirements are adequate, and I would prefer these <u>remain the same and not change.</u>	28 (29%)
ACGME requirements should <u>change to be silent on total minimum totals</u> for graduates.	4 (4%)
ACGME requirements should <u>change to include more hands-on</u> cosmetic procedure requirements for graduates.	49 (50%)
Current ACGME requirements are difficult to achieve, and I would <u>prefer minimums totals for laser procedures be eliminated.</u>	1 (1%)
Current ACGME requirements are difficult to achieve, and I would <u>prefer minimums totals for soft tissue augmentation / skin filler procedures be eliminated.</u>	1 (1%)
Current ACGME requirements are difficult to achieve, and I would <u>prefer minimums totals for botulinum toxin procedures be eliminated.</u>	2 (2%)
ACGME requirements <u>should require hands-on minimums for laser procedures;</u> observation alone should not be adequate.	53 (54%)
ACGME requirements <u>should require hands-on minimums for soft tissue augmentation procedures;</u> observation alone should not be adequate.	59 (60%)
ACGME requirements <u>should require hands-on minimums for botulinum toxin;</u> observation alone should not be adequate.	58 (59%)
Different programs have different cosmetic populations and procedural strengths, so <u>programs should be able to calculate cosmetic experience totals from a group of cosmetic procedures rather than from each individual procedure type.</u>	25 (26%)
Dermatology <u>residency programs should be required to designate a faculty member as director of cosmetic dermatology,</u> like they do for dermatologic surgery and dermatopathology.	34 (35%)

137

How difficult or easy is it for your residents to observe each ACGME required cosmetic procedures by the end of their residency training? (N=71)



How difficult or easy is it for residents at your program to meet each of the following minimum required observed procedures with hands-on training by the end of their residency training? (N=71)

