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3 **Title:** Evaluating Dermatology Curricula in US Medical Schools

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47 **Body of manuscript:** The last comprehensive description of dermatology curricula in United  
48 States (US) medical schools found that responding programs offered an average of 16.3 hours  
49 of dermatology instruction, and 8% required no dermatology instruction<sup>1</sup>. A decade later, our  
50 study sought to characterize the current state of dermatology curricula in US medical schools.

51 Medical school curriculum leaders at the 151 US allopathic medical schools holding  
52 accreditation status by the Liaison Committee on Medical Education on June 28, 2018 were  
53 emailed invitations for participation in a survey assessing their school's dermatology curriculum  
54 via the Research Electronic Data Capture system (REDCap). Survey responses were received  
55 from 79 of 151 medical schools (52%). Schools reporting total hours greater than three standard  
56 deviations from the mean were contacted to confirm accuracy of data.

57 Among the responding schools, 97.4% had a required dermatology curriculum, and 62 of  
58 79 (78.5%) were associated with a dermatology department. Most schools incorporated lectures  
59 (97.4%) or small groups (74.7%) as part of their required dermatology curriculum. Three schools  
60 required clinical hours of instruction in dermatology. Although 79 schools responded to the  
61 survey, only 69 completed fields indicating number of hours of dermatology instruction. The  
62 mean number of hours of dermatology instruction was 12.6 hours (median=10, range 0-34) of  
63 lecture and 4.9 hours (median=4, range 0-33) of small group over all four years of medical  
64 school. Total instruction, including lecture and small group instruction, averaged 17.5 hours  
65 (median=14, range 0-42) over four years, indicating approximately one additional hour of  
66 dermatology instruction compared to the average in 2009. Many responding schools offered  
67 optional clinical hours in dermatology (68.6%), and 97.5% offered optional dermatology  
68 electives. Schools without required dermatology curricula cited limited time and status as  
69 elective. Eleven respondents indicated instruction was inadequate due to limited time and  
70 administrative emphasis on subjects other than dermatology.

71 The reliability of this survey was limited by the 52% response rate, as response bias in schools  
72 with strong dermatology curricula may have led to an overestimate of the mean number of  
73 dermatology instructional hours. In addition, the study relied upon self-reported data and self-  
74 reported identification of respondents to confirm that an appropriate recipient had filled out the  
75 survey.

76 Given the burden of dermatologic disease in primary care,<sup>3,4</sup> it is reasonable to suggest  
77 a minimum standard of dermatology curriculum during medical school to adequately prepare  
78 future clinicians to treat dermatologic disease. Our study identified competition for curriculum  
79 time as a barrier to additional dermatology instruction for some schools. Prioritizing clinical  
80 exposure to dermatologic diseases in medical school and utilizing standardized educational  
81 modules may be strategies to improve dermatology education in a time-efficient but effective  
82 manner.

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