

Health Policy Education in U.S. Dermatology Residency Programs: A Nationwide Survey of Program Leadership

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INTRODUCTION

Amidst the ongoing COVID-19 pandemic, widening health disparities, and uncertainty surrounding the future of healthcare reform, physicians have a unique opportunity to affect health policy and advocate on behalf of their patients. However, formal health policy and advocacy training throughout graduate medical education is limited.^{1,2} Studies across specialties suggest that while trainees feel it is important for physicians to participate in advocacy and policymaking, their perceived ability to do so is limited by knowledge gaps.³⁻⁵ In one survey of trainees across specialties, 94% of respondents agreed that "as a physician I have a duty to advocate," but only 12% of respondents indicated receiving adequate advocacy training in residency.⁴ Within dermatology, residents have expressed dissatisfaction with their training in business management and health policy.³ Given these gaps, we sought to understand the current landscape of formal health policy instruction and opportunities available to residents in dermatology programs across the U.S.

MATERIALS AND METHODS

Between March-August 2020, a 30-question electronic Redcap survey assessing health policy education and curricular opportunities was distributed to program leadership, composed of program directors, associate program directors, and chief residents, at Accreditation Council for Graduate Medical Education (ACGME)-accredited dermatology residency programs. Statistical analyses were completed using Stata/SE 15.1 (StataCorp). The Partners Institutional Review Board approved this study.

RESULTS

There were 94 responses from 144 programs (65% response rate) with roughly equal geographic distribution across the United States (Table 1). While a majority of programs reported presence of at least one faculty member with health policy expertise at their institution (n=48, 51%), a minority reported offering formal health policy curricula (n=14, 15%), elective opportunities (n=34, 36%), or research opportunities (n=43, 46%) in health policy. While most programs were affiliated with institutions that had other non-medical graduate schools (n=71, 76%), a minority reported definitive presence of a division or

TABLE 1.

Residency Program Characteristics and Health Policy-Specific Curricula/ Opportunities		
	#	(n=94) %
Region		
Northeast	26	27.7
South	28	29.8
Midwest	25	26.6
West	15	16.0
Setting		
Urban	57	60.6
Suburban	32	34.0
Rural	5	5.3
Hospital Type		
Academic Medical Center	76	80.9
Community Hospital	17	18.1
Veteran's Affairs Hospital	1	1.1
Presence of:		
Formal health policy curriculum		
Yes	14	14.9
No	80	85.1
Health policy elective opportunities		
Yes	34	36.2
No	60	63.8
Health policy research opportunities		
Yes	43	45.7
No	51	54.3
Faculty members with health policy expertise		
Yes	48	51.1
No	46	48.9
Division/department of health policy within affiliated medical school		
Yes	45	47.9
No	14	14.9
I don't know	35	37.2
Non-medical graduate schools at affiliated university		
Yes	71	75.5
No	19	20.2
I don't know	4	4.3

TABLE 2.

Health Policy Topics and Frequency of Instruction by Presence of Formal Health Policy Curricula			
	No (n=80)	Yes (n=14)	P-value*
Affordable Care Act			
Never	58 (72.5%)	5 (35.7%)	--
1-2x in residency	20 (24.1%)	5 (35.7%)	--
1-2x/year	2 (2.5%)	3 (21.4%)	--
3x/year	0 (0%)	0 (0%)	--
More than 3x/year	0 (0%)	1 (7.1%)	--
Medicare & Medicaid			
Never	46 (57.5%)	4 (28.6%)	--
1-2x in residency	29 (36.3%)	5 (35.7%)	--
1-2x/year	4 (5.0%)	3 (21.4%)	--
3x/year	0 (0%)	0 (0%)	--
More than 3x/year	1 (1.3%)	2 (14.3%)	--
Medicare Access and CHIP Reauthorization Act of 2015 (MACRA) & Merit-based Incentive Payment System (MIPS)			
Never	48 (60.0%)	3 (21.4%)	--
1-2x in residency	24 (30.0%)	8 (57.1%)	--
1-2x/year	8 (10.0%)	2 (14.3%)	--
3x/year	0 (0%)	0 (0%)	--
More than 3x/year	0 (0%)	1 (7.1%)	--
Drug pricing			
Never	30 (37.5%)	5 (35.7%)	--
1-2x in residency	37 (46.3%)	4 (28.6%)	--
1-2x/year	11 (13.8%)	2 (14.3%)	--
3x/year	0 (0%)	0 (0%)	--
More than 3x/year	2 (2.5%)	3 (21.4%)	--
Billing & coding			
Never	1 (1.3%)	0 (0%)	--
1-2x in residency	13 (16.3%)	5 (35.7%)	--
1-2x/year	49 (61.3%)	7 (50.0%)	--
3x/year	8 (10.0%)	0 (0%)	--
More than 3x/year	9 (11.3%)	2 (14.3%)	--
U.S. healthcare costs			
Never	37 (46.3%)	3 (21.4%)	--
1-2x in residency	31 (40.0%)	6 (42.9%)	--
1-2x/year	6 (7.5%)	3 (21.4%)	--
3x/year	5 (6.3%)	0 (0%)	--
More than 3x/year	0 (0%)	2 (14.3%)	--
Health insurance plans/networks			
Never	53 (66.3%)	6 (42.9%)	--
1-2x in residency	20 (25.0%)	3 (21.4%)	--
1-2x/year	6 (7.5%)	3 (21.4%)	--
3x/year	0 (0%)	0 (0%)	--
More than 3x/year	1 (1.3%)	2 (14.3%)	--

TABLE 2. (CONTINUED)

Health Policy Topics and Frequency of Instruction by Presence of Formal Health Policy Curricula			
	No (n=80)	Yes (n=14)	P-value*
Physician reimbursement			
Never	41 (51.3%)	6 (42.9%)	--
1-2x in residency	29 (36.3%)	3 (21.4%)	--
1-2x/year	9 (11.3%)	3 (21.4%)	--
3x/year	0 (0%)	0 (0%)	--
More than 3x/year	1 (1.3%)	2 (14.3%)	--
Current healthcare reform proposals			
Never	55 (68.8%)	7 (50.0%)	--
1-2x in residency	20 (25.0%)	5 (35.7%)	--
1-2x/year	5 (6.3%)	0 (0%)	--
3x/year	0 (0%)	0 (0%)	--
More than 3x/year	0 (0%)	2 (14.3%)	--
Alternative payment models			
Never	64 (80.0%)	7 (50.0%)	--
1-2x in residency	14 (17.5%)	5 (35.7%)	--
1-2x/year	2 (2.5%)	0 (0%)	--
3x/year	0 (0%)	0 (0%)	--
More than 3x/year	0 (0%)	2 (14.3%)	--
Comparative/international health systems			
Never	67 (84.8%)	9 (64.3%)	--
1-2x in residency	9 (11.4%)	4 (28.6%)	--
1-2x/year	3 (3.8%)	0 (0%)	--
3x/year	0 (0%)	0 (0%)	--
More than 3x/year	0 (0%)	1 (7.1%)	--
Current legislative priorities in dermatology			
Never	43 (53.8%)	4 (28.6%)	--
1-2x in residency	30 (37.5%)	4 (28.6%)	--
1-2x/year	7 (8.8%)	4 (28.6%)	--
3x/year	0 (0%)	0 (0%)	--
More than 3x/year	0 (0%)	2 (14.3%)	--
Importance of advocacy/how to be an effective advocate			
Never	45 (56.3%)	4 (28.6%)	--
1-2x in residency	26 (32.5%)	4 (28.6%)	--
1-2x/year	8 (10.0%)	4 (28.6%)	--
3x/year	1 (1.3%)	0 (0%)	--
More than 3x/year	0 (0%)	2 (14.3%)	--

*P-values calculated from Fisher's exact tests

department of health policy at their affiliated medical school (45, 48%).

Presence of dermatology faculty with health policy expertise was significantly associated with increased health policy research (OR 2.41, 95%CI 1.05–5.54), elective (OR 2.40, 95%CI 1.01–5.72), and enrichment opportunities in health policy (OR 4.55, 95%CI 1.91–10.83). Presence of affiliated health policy department or division was also significantly associated with health policy research opportunities (OR 2.58, 95%CI 1.12–5.93). Programs that had faculty with health policy expertise (OR 3.49, 95%CI 1.49–8.19) and non-medical graduate schools at their affiliated institution (OR 4.15, 95%CI 1.39–12.39) were significantly more likely to have had residents participate in health policy or advocacy work within the past five years.

Programs with health policy curricula provided significantly more frequent instruction on all policy-related topics surveyed except drug pricing, billing, and coding, and physician reimbursement (Table 2). The most common self-reported barriers (n=80) to health policy instruction included lack of time and/or curricular space (n=44, 55%), lack of faculty with relevant expertise (n=40, 50%), lack of resources and funding (n=22, 28%), and lack of interest (n=19, 24%). Nevertheless, the majority of respondents recognized that health policy knowledge is important to residents' future success (n=82, 87%) and that residents are more likely to engage in health policy in the future if exposed in residency (n=80, 85%).

DISCUSSION

Our results reveal a paucity of health policy and advocacy education within dermatology residency programs across the U.S. While practice management topics like drug pricing, billing and coding, and physician reimbursement are covered more widely across dermatology residency programs, other specific policy topics and concepts are given less attention in the absence of formal health policy curricula.

Our results show that elective, research, and other enrichment activities in health policy and advocacy are also uncommon, particularly at institutions lacking faculty with relevant expertise or affiliated departments or divisions of health policy. These resource gaps may be filled through inter-institutional partnerships and American Academy of Dermatology initiatives such as the American Academy of Dermatology Association's annual legislative conference and health policy curricula developed by AAD State Society Committees. Many respondents indicated a willingness to include standardized materials and lectures within their curricula if they were available. Limitations include survey response bias and incomplete characterization of programs.

CONCLUSION

Nevertheless, our study calls to attention the need to improve health policy education to equip future dermatologists with the skills and tools to engage with the complex political and legislative landscape locally and nationally.

DISCLOSURES

The authors have no conflicts of interest to report.

REFERENCES

1. King BF, Kindig RC, Noah WH, Tuteur PG. Internal Medicine chief residents suggest need to improve health care delivery and public policy education. Internal Medicine Center to Advance Research and Education. *Internist*. 1990.
2. Chuang E. Expanding medical student and resident knowledge of health economics, policy, and management. *Acad Med*. 2011. doi:10.1097/ACM.0b013e318231e122
3. Nijhawan RI, Smith LA, Rohrer TE, Mariwalla K. Are dermatology residents adequately prepared for the business of medicine? *J Am Acad Dermatol*. 2013. doi:10.1016/j.jaad.2012.07.017
4. Garg M, Tseng Z, Baird GL, Egan P, McGarry K. Attitudes Toward Advocacy Do Not Match Actions: A Cross-sectional Survey of Residents and Fellows. *R I Med J* (2013). 2019.
5. Horner ME, Kourosh AS, Menter MA. Awareness and engagement in political advocacy among dermatology residents: A needs assessment. *J Am Acad Dermatol*. 2015. doi:10.1016/j.jaad.2014.12.011

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