



# What Will It Take to Recruit and Train More Underrepresented Minority Physicians in Family Medicine? A CERA Survey Analysis

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**BACKGROUND AND OBJECTIVES:** Both the Society of Teachers of Family Medicine (STFM) and the American Academy of Family Physicians have developed strategic plans to increase the training of underrepresented minority in medicine (URMM) family physicians to meet the needs of an increasingly diverse patient population in the United States. This study examines data from the 2017 Council of Academic Family Medicine (CAFM) Educational Research Alliance (CERA) Program Directors (PD12) Survey to assess whether recruitment strategies increase the diversity of underrepresented minority physicians in family medicine.

**METHODS:** Data were collected from an online electronic survey administered by the CERA of family medicine program directors in 2018. The data included specific questions about the diversity of URMM residents in family medicine programs and about initiatives that were used in their recruitment. We analyzed the data using the Pearson  $\chi^2$  criteria for cause and effect of two variables.

**RESULTS:** Family medicine residency programs that have initiatives dedicated to increasing resident diversity have a higher percentage of URMM residents. Specifically, residency programs that have URMM recruitment strategies are 2.5 to 4 times more likely to have a diverse residency population than those programs without strategies ( $P < .001-.015$ ).

**CONCLUSIONS:** Striving to improve diversity in family medicine residency training in accordance with the ideals of STFM will require programs to design and implement initiatives to increase recruitment of URM residents.

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The Society of Teachers of Family Medicine (STFM) identified diversity as one of its core values in 2015 and presented goals for leadership development and workforce recruitment that would enable residency programs to “proactively respond to the changing health

care landscape.”<sup>1</sup> These ideals were echoed by the American Academy of Family Physicians:

The American Academy of Family Physicians is dedicated to developing a family medicine workforce as diverse as the US population.<sup>2</sup>

Census Bureau data from 2018 indicate that the US population is 60.4% non-Hispanic White, 18.3% Latinx, 13.4% Black, 5.9% Asian, and 1.5% Native American or Pacific Islander.<sup>3</sup> A 2018 retrospective cohort study of 147,815 primary care physicians identified 72% as non-Hispanic White, while only 6.8% were Black, 5.9% were Hispanic, 0.7% were Native American, and 11.2% were Asian.<sup>4</sup> Except for Asian Americans, these numbers are far below the actual population of color in the United States. Although the diversity of family medicine residents had improved in terms of underrepresented minorities in medicine (URMM) from 1990 to 2012, that growth did not keep pace with the increase in the population of these minority groups.<sup>5</sup>

Physicians of color care for a disproportionate share of the underserved population, including 53.5% of minority and 70.4% of non-English speaking patients.<sup>6</sup> A Commonwealth Fund review adduced evidence that patient-provider race concordance is associated with better patient ratings of care among adult primary care patients and better patient-physician communication.<sup>7</sup> In a study of African American and Hispanic patients given a choice, nearly

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one-quarter of those groups chose a physician explicitly based on the physician's race or ethnicity.<sup>8</sup>

The purpose of this study is to examine data from the 2017 CERA Program Directors (PD12) Survey about residency diversity to assess whether initiatives to recruit residents are needed to increase the prevalence of residents from URMM groups. If special processes in recruitment do boost diversity, then residency directors should consider implementing these to meet the needs of the diverse population of the United States.

## Methods

Data were collected through a survey of family medicine program directors sent by CERA administrative personnel that took place between January 10, 2018 and February 28, 2018. The survey was sent online to 558 program directors with 298 respondents (57% response rate).<sup>9</sup> The Institutional Review Board of the American Academy of Family Physicians approved the research.<sup>10</sup> Two questions (#66 and #67) focused on initiatives to increase URMM resident recruitment. The first question asked which programs had diversity initiatives and what those initiatives were. We further examined the data to see if there was a correlation between programs with specific recruitment strategies and those with a number of URMM residents that

approach or mirror the percentage of people of color in the United States. We analyzed the data using Pearson  $\chi^2$  criteria.

## Results

Of the 259 respondents to question 66, 145 (56%) stated that their programs have specific initiatives to increase residency diversity, and 114 (44%) programs indicated that there were no initiatives (Table 1).

The next question (67) asked:

Over the past 5 years, approximately what percentage of the residents in your program are from groups underrepresented in medicine?

For the CERA study, URMM was defined as Black, Mexican-American, Native American and mainland Puerto Rican.<sup>11</sup> These data were pooled into less diverse ( $\leq 25\%$  URMM), moderately diverse (26%-50% URMM) and highly diverse programs (51%-100% URMM). Diversity was based on census data showing the current United States Latinx, Black, and Native American population of 33.2% and projections for people of color to be  $>50\%$  by 2045.<sup>11</sup> Seventy five percent of residency programs were less diverse, 18.4% were moderately diverse, and 6.6% were highly diverse (Table 2).

Pearson  $\chi^2$  analysis showed that residency programs that had specific initiatives for recruitment were 2.5

(35%: 14%) times more likely to have at least 25% URMM, and 4.0 (10.4%: 2.6%) times more likely to have at least 50% URMM compared to programs without initiatives ( $\chi^2 = 14.9$ ,  $P \leq .001$ , and  $\chi^2 = 5.9$ ,  $P = .015$ , respectively; see Tables 3A and 3B).

## Discussion

From the evidence presented in this analysis, a slight majority of family medicine programs (56%) have initiatives in place to reach the goal of matching URMM to the current population of color in the United States. The CERA data show that programs with recruiting initiatives were 2.5 times more likely to have more than 25% URMM and 4 times more likely to have more than 50% URMM than programs without initiatives. With demographic projections of the United States becoming minority (non-Hispanic) White in 2045, there is significant work that needs to be done to recruit URMM primary care physicians.<sup>11</sup>

There are several limitations of this CERA analysis. First, question 66 asks about diversity initiatives, but does not define that specific to recruitment of URMM as defined in question 67. Also, the definition of URMM used in the study is limited to four racial/ethnic groups and does not embrace the new nomenclature from the AAMC in 2003 defining URMM as:

**Table 1: Family Medicine Program Director Survey Description on Residency Admissions**

Question 66: If the program has specific initiatives to help increase resident diversity, what are the initiatives?			
Q66	Frequency	Percent	Cumulative Percent
Unique evaluation process for applicants of diverse background	49	18.92	18.92
Training for residents and faculty in recruitment of diverse applicants	43	16.60	35.52
Specific information given to applicants regarding inclusion and diversity supports at the institution/program	28	10.81	46.33
Other	25	9.65	55.98
Our program has no specific initiatives to increase resident diversity	114	44.02	100
<b>Total</b>	<b>259</b>	<b>100</b>	

Source: CERA (PD12) Survey.

**Table 2: Percentage of Residents in Family Medicine Programs Who Are URM**

<b>Question 67: Over the past five years, approximately what percentage of the residents in your program are from groups underrepresented in medicine? (Blacks, Mexican-Americans, Native Americans (that is, American Indians, Alaska Natives, and Native Hawaiians), and mainland Puerto Ricans)</b>		
<b>Q67</b>	<b>Frequency</b>	<b>Percent</b>
None	6	2.21
Less than 10%	95	35.06
10%-25%	102	37.64
<b>Total of programs &lt;25%</b>	<b>203</b>	<b>74.91</b>
26-50%	50	18.45
<b>Total of programs &lt;50%</b>	<b>251</b>	<b>93.3</b>
51%-75%	11	4.06
76-100%	7	2.58
<b>Total of programs &gt;25%</b>	<b>68</b>	<b>25.09</b>
<b>Total of programs &gt;50%</b>	<b>18</b>	<b>6.6</b>

Source: CERA (PD12) Survey.

Abbreviation: URM, underrepresented minorities.

**Table 3A: Percentages of Initiatives for Residency Diversity in Admission Between Underrepresented and Represented Programs (25% Cutoff)**

	<b>Has Specific Initiatives</b>	<b>No Specific Initiatives</b>
Underrepresented ( $\leq 25\%$ )	94 (64.83%)	98 (85.96%)
Represented ( $>25\%$ )	51 (35.17%)	16 (14.04%)
<b>Total</b>	<b>145 (100%)</b>	<b>114 (100%)</b>
$\chi^2$	14.87	
Degree of freedom	1	
P value	<.001	
Cramer's V	.24	

**Table 3B: Percentages of Initiatives for Residency Diversity in Admission Between Underrepresented and Represented Programs (50% Cutoff)**

	<b>Has Specific Initiatives</b>	<b>No Specific Initiatives</b>
Underrepresented ( $\leq 50\%$ )	130 (89.66%)	111 (97.37%)
Represented ( $>50\%$ )	15 (10.34%)	3 (2.63%)
<b>Total</b>	<b>145 (100%)</b>	<b>114 (100%)</b>
$\chi^2$	5.8716	
Degree of freedom	1	
P value	.015	
Cramer's V	0.1506	

those racial and ethnic populations that are underrepresented in the medical profession relative to their numbers in the general population.<sup>12</sup>

For example, Mexican Americans and Puerto Ricans comprise only 72% of the Latinx population but were the only ones counted in this study.<sup>13</sup> In addition, the CERA data is limited in that it is a self-report by residency directors of the percentage of URMM and not the actual number of URMM over 5 years. Finally, this analysis does not address the influence of location on resident diversity due to differing regional demographics.

Currently, the United States is battling a pandemic that has placed a “disproportionate burden of illness and death among racial and ethnic minorities,” highlighting long-standing health care disparities.<sup>14</sup> Building a health care workforce that promotes trust and with which patients identify is an important component in addressing these inequalities. Physicians of any race/ethnicity need to recognize and address implicit biases that can hinder patient-provider information.<sup>14</sup> Further work is necessary to determine which recruitment initiatives are successful including improving the URMM pipeline to develop this workforce.

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