Characterizing the Prevalence and Types of Curricular Tracks in Internal Medicine Residency Training Programs

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INTRODUCTION

Internal Medicine (IM) residency programs have traditionally provided similar, generalized training for all residents. However, in recent decades, specialized training “tracks” have emerged within IM residencies. In response to national shortages and supported by funding from the Health Resources and Services Administration’s Primary Care Training and Enhancement: Residency Training in Primary Care Programs, primary care tracks (PCTs) were introduced in the 1970s to attract skilled primary care physicians.^{1, 2} In the 1990s, the field of “hospital medicine” was established, catalyzing the development of hospitalist tracks.³ Research tracks, clinician-educator tracks, and others soon followed.^{4, 5} Though PCTs have been characterized in the literature,⁶ a recent report on all available tracks is lacking. We investigated the prevalence and types of curricular tracks offered across all US Accreditation Council for Graduate Medical Education (ACGME)–accredited IM residency programs. Our goal was to better inform current and future discussions on iterative changes to residency curricula.

METHODS

We compiled a list of all US ACGME-accredited IM programs from the ACGME website ($n = 539$). From December 2019 to June 2020, we used a data abstraction tool to review each program for track offerings in two publicly available sources: (1) American Medical Association’s Fellowship and Residency Electronic Interactive Database Access System (FREIDA™), and (2) residency program websites. Understanding the potential for outdated information, we included all reported tracks from either source and did not directly contact programs for data clarification. In FREIDA™, we used the program search feature to identify IM programs with primary care, hospitalist, women’s health, and rural health tracks; we reviewed each program’s individual FREIDA™ webpage for presence of research and “other” tracks. In program website reviews, we

considered any listed “pathway,” “track,” “area of distinction,” or focused program offered within the residency to be a track. We collectively reviewed 10 program websites to revise our data abstraction tool and train reviewers. Three investigators (E.H., J.C., E.R.) independently reviewed the remaining programs, with regular adjudication sessions to reconcile challenges.

RESULTS

Of the 539 US IM residency programs, 529 (98%) had program websites for review, 435 (81%) had track information included on FREIDA™, 431 (80%) had information in both sources, and 6 (1%) had no data available for review. Of the 533 reviewed programs, 258 (48%) reported no tracks, 99 (19%) had 1 track, 85 (16%) had 2 tracks, 79 (15%) had 3–5 tracks, and 12 (2%) had 6 or more tracks. The most prevalent track types were primary care ($n = 228$, 43%), hospitalist ($n = 115$, 22%), and research ($n = 82$, 15%) (Table 1). Of programs with ≥ 1 track, 83% included a PCT, and 64% offered multiple track types. There was notable discordance between the data identified from program websites and FREIDA™ (Fig. 1). Out of the 654 total distinct tracks identified, 192 (29%) were reported on both FREIDA™ and program websites, 294 (45%) were reported only on FREIDA™, and 168 (26%) were reported only on program websites.

DISCUSSION

Our findings highlight the individualization of US IM residency training, as greater than 50% of programs offered at least one track, and 21 different track types were reported. Most programs offering track(s) included one in primary care, suggesting that, with the Health Resources and Services Administration’s support, many IM residency programs are striving to fill primary care needs. Programs with any track were likely to have two or more tracks, which may reflect the start-up resources and experience necessary to create specialized curricular opportunities. Potential drivers for track development include diverse workforce needs, learner attraction, and funding support. Tracks may better prepare residents for their specific career goals, encourage trainees to fill workforce gaps, and attract residency and faculty candidates with particular areas of interest and expertise. The significant discrepancies in track reporting between the two sources present a challenge and

Table 1 Results of US Internal Medicine Residency Track Type and Prevalence (2020)

Track type	Number of programs with track reported, <i>n</i> (% of programs)		
	Website review (<i>n</i> = 529 programs)	FREIDA™ review (<i>n</i> = 435 programs)	Total distinct tracks (<i>n</i> = 533 programs) ^a
Primary care	104 (20)	219 (50)	228 (43)
Hospitalist	33 (6)	107 (25)	115 (22)
Research	61 (12)	46 (11)	82 (15)
Clinician educator	45 (9)	-	45 (9)
Global health	42 (8)	-	42 (8)
Women's health	9 (2)	23 (5)	25 (5)
Rural health	2 (1)	22 (5)	22 (4)
Quality improvement	13 (2)	-	13 (2)
Leadership	12 (2)	-	12 (2)
Urban health	7 (1)	-	7 (1)
Human immunodeficiency virus (HIV)	7 (1)	-	7 (1)
Geriatrics	5 (1)	-	5 (1)
Subspecialty	4 (1)	-	4 (1)
Equity/inclusion medicine	4 (1)	-	4 (1)
Community health/social medicine	3 (1)	-	3 (1)
Ethics	2 (1)	-	2 (1)
Innovation and design	2 (1)	-	2 (1)
Integrative medicine	2 (1)	-	2 (1)
Critical care	1 (1)	-	1 (1)
Osteopathic manipulative medicine	1 (1)	-	1 (1)
Procedures	1 (1)	-	1 (1)
Other	-	69 (16)	31 (6) ^b
Total number of tracks	360	486	654

^aWhen the same track type was reported on both website and FREIDA™ reviews, a single track was counted in the "Total Distinct Tracks" column

^bWhen the presence of an "other track" was listed on FREIDA™, these were assumed to correspond with tracks detailed on websites when possible (e.g., "other track" designated in FREIDA™, and a leadership track identified on the website). In 31 cases, there was an "other track" listed on FREIDA™ without any clear corresponding track detailed on the website so these were unable to be classified further but were included in the total track count

highlight a limitation. Inaccurate or outdated material could not be reconciled without directly contacting each program. This presents an obstacle to student, resident, and faculty consumers of these resources as they explore training opportunities offered

by residency programs. Despite its limitations, this study characterizes an evolving trend in US IM residency programs to further individualize training and prepare residents to meet the increasingly complex needs of patients and health systems.

Figure. 1 Distribution of reported track types from US Internal Medicine Residency Program websites and FREIDA™ (2020). The figure depicts the distribution of reported tracks in US Internal Medicine Residency Programs as identified by review of program websites and the Fellowship and Residency Electronic Interactive Database Access System (FREIDA™) database. Track types are listed under each column (x-axis), and the number of tracks from each data source (e.g., FREIDA™, website, or both) is depicted within each column (y-axis). The total number of tracks identified of each type is reported as "n" atop each column.

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