

Supplemental materials for:

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APPENDIX

Appendix Contents

Historical context of GP and FP

GP and FP Study groups

Table 1. Self-identified GPs and FPs, board certification and inclusion in physician study groups

Activities other than direct patient care.

International Medical Graduate GPs.

Table 2. Country of birth of GPs graduated from non-US medical schools.

GP Graduate Medical Training.

Historical context of GP and FP

In the first half the 20th century in the US, most generalist physicians were called general practitioners and entered practice with one or two years of hospital-based training that was not specifically designed to prepare physicians for primary care practice in the community. In the second half the 20th century, the rapid increase of physician specialization led to fragmentation of care, increasing costs and insufficient supply of generalist physicians to meet the needs of the US population.^{1,2}

The specialty of family medicine was developed from the foundation of general practice specifically to address these problems.^{3,4} The national association of FPs was founded in 1947 as the American Academy of General Practice and changed its name in 1971 to the

American Academy of Family Physicians (AAFP). The AMA Council on Medical Education and the independent American Board of Medical Specialties (ABMS) approved the American Board of Family Practice in 1969, now named the American Board of Family Medicine.⁵ Family medicine is now one of 24 specialties recognized by ABMS, each with its own requirements for residency training, certifying examination and ongoing certification. There is no certification in general practice recognized by the ABMS.⁶ Certification in family medicine by the ABFM requires completion of 3 years of residency training and passing the certification examination.⁷ ABFM was the first board to require physicians to recertify to demonstrate continuing competence.

During the transition from general practice to family medicine, GPs in practice could qualify for ABFM certification through continuing medical education and examination.² In the period 1970-1978, 16,398 did so and earned certification as specialists in family medicine. Of these, 637 are still certified, but may not all be in active practice (unpublished ABFM data). Many GPs chose not to become FPs and continued to practice, calling themselves either GPs or FPs. In the US neither federal nor state laws regulate the specialty physicians choose to call themselves. In many other countries, the term “general practitioner” is the current label for the specialty-trained family doctor.

Board-certified family physicians have grown in number to over 90,000 and currently represent 12.6% percent all physicians and 31.9% of all PC physicians in direct patient care the US.⁸ Those early general practitioners who never became ABFM certified family physicians have aged and left the medical workforce through retirement or death. There is

still, however, a group of physicians who call themselves general practitioners, and that group is the focus of this research.

Taken as a group, GPs outnumber 25 of 44 specialties recognized by ABMS, including medicine/pediatrics, geriatrics and preventive medicine.⁹

Table 1. Self-identified GPs and FPs, board certification and inclusion in physician study groups

Characteristic	Specialty Group ^a				Total
	General Practitioner	Uncertified Group	Family Physician	GP-FP Diff ^e	
Self-Designated Specialty^a	10,179 (7.9%)	-	119,064 (92.1%)		129,243 (100%)
Not Providing Direct Patient care in US^a N, (% of Group)	3,518 (34.6%)		23,121 (19.4%)	p<0.00 1	26,639
Training	4 (0.04%)	-	6,484 (5.4%)	p<0.00 1	
Administration	113 (1.1%)	-	1,398 (1.2%)	p<0.00 1	
Medical teaching	23 (0.2%)	-	1,552 (1.3%)	p<0.00 1	
Medical Research	20 (0.2%)	-	175 (0.15%)	0.2108	
Other non-patient care activity	45 (0.4%)	-	196 (0.16%)	p<0.00 1	
Retired or semi-retired	3,065 (30.1%)	-	8,711 (7.3%)	p<0.00 1	
Other not active	206 (2%)	-	856 (0.72%)	p<0.00 1	
No classification	40 (0.4%)	-	3,735 (3.14%)	p<0.00 1	
Not in US	2 (0.02%)	-	14 (0.01%)	0.4922	
Providing direct Patient care in US^a N, (% of Total)	6,661 (6.5%)	-	95,943 (93.5%)	p<0.00 1	102,604 (100%)
ABFM Certification^b					
Ever	116 ^c	-	79,449		

Yes - Current	76 ^C	-	71,182		
Yes - Past	40 ^C	-	8,267		
Never	6,545	16,494 ^d	16,494 ^d		
Total Study Group N, (% of Total)	6,545 (6.4%)	16,494 (16%)	79,449 (77.6%)	-	102,488 (100%)

GP - general practitioner. FP - family physician. ABFM - American Board of Family Medicine.

a. AMA Masterfile data 2016.

b. ABFM data 2016.

c. Excluded from study: self-designated GPs who were ever ABFM certified.

d. Moved to constitute the uncertified group: Self-designated FPs who were never ABFM certified.

e. Differences between GP and FP groups, Chi-Square test.

Activities other than direct patient care.

Significantly more GPs than FPs were excluded from the study for not being in direct patient care. (See Table 1) Physicians who self-identified as GPs totaled 10,179, but 34.6% (3,518) were excluded by study criteria, most commonly for being retired or semi-retired (30.1%, 3,065). Physicians who self-identified as FPs totaled 119,064, but 19.4% (23,121) were excluded, most commonly for being retired or semi-retired (7.3%, 8,117) or in advanced training (5.4%, 6,484).

International Medical Graduate GPs

Of the 6,545 GPs, 41% (2,679) earned their medical degrees outside of the US, compared to 23% of FPs (8,238). To identify their countries of origin, we examined the country of birth of these GPs. (See Table 2.) After excluding US-born GPs, birth country is known for 951. Half of internationally trained GPs were born in the Philippines, Cuba, India and Canada. The largest regional group comes from the Americas outside of the US with 30.6% (288), followed by Southeast Asia, 22.6% (215). The country of birth may not be the country where they received their medical education. Also, physicians with medical degrees from US schools may also have been born outside of the US but are not counted here.

Table 2. Country of Birth of GPs graduated from non-US medical schools

Country of Birth	General Practitioners		Region of Birth	General Practitioners	
	Number	Percent		Number	Percent
N =	951	100%	N =	951	100%
Philippines	148	15.6%	North America	102	10.7%
Cuba	130	13.7%	Central America-Caribbean	130	13.7%
India	127	13.4%	South America	56	5.8%
Canada	80	8.4%	Americas not US - Total	288	30.3%
Vietnam	46	4.8%			
Iran	38	4.0%	South Asia	152	16.0%
Colombia	24	2.5%	East Asia	58	6.1%
Egypt	24	2.5%	Southeast Asia	215	22.6%
South Korea	24	2.5%	Asia - Total	425	44.7%
Pakistan	23	2.4%			
Mexico	22	2.3%	Europe	64	6.7%
China	20	2.1%			
Dominican Rep.	18	1.9%	Middle East	74	7.8%
Haiti	17	1.8%			
Nicaragua	13	1.4%	Africa	43	4.5%
Argentina	12	1.3%			
Taiwan	11	1.2%			
USSR	11	1.2%			
Spain	10	1.1%			
Other	162	17%			

Countries with fewer than 10 GPs are excluded from the list but included in regional totals.

GP graduate medical training.

Of the 3,516 GPs with residency information in the AMA, 1% (41) completed 3 years of family medicine specialty training, and another 8% (291) had less than three years. Instead, 90.5% (3,184) of GPs received their graduate clinical training in specialties different than family medicine. Of these, 1,211 (34%) completed three years and possibly finished residency training in a different specialty. Another 56% (1,973) of GPs completed less than three years of training, not enough to be board eligible in any ABMS specialty. For comparison, among FPs, 91% (71,026) completed 3 years of training in family medicine and another 8% (6,480) completed less than 3 years. The specialties of GP training are detailed in Table 3.

Some GPs, 8.4% (248), did training in general practice programs, which were precursors to family medicine residencies. Another 21.4% (750) of GPs completed one or more years of training in flexible or transitional programs, traditionally used as first year training in preparation for non-primary care specialties. Another 21.5% (695) completed one or more years of training in what might be considered non-family medicine primary care programs: internal medicine (15.0%, 469) and pediatrics (7.1%, 226). However, many trainees in these specialties go on to sub-specialty training and careers. It is hard to see how training in specialties such as urology, ophthalmology or radiology prepares a physician for general practice.

Table 3. GP graduate training in specialties other than family medicine

Specialty Training ^a	General Practitioners	
	Number	Percent
N (%)	3516	100%
Flex Program ^b	726	20.6
General Surgery	528	15.0
Internal Medicine ^b	469	13.3
General Practice ^b	248	8.4
Pediatrics ^b	226	7.1
Pathology – Anat./clinical	155	6.4
Anesthesiology	146	4.4
Psychiatry	118	4.2
Obstetrics & Gynecology	107	3.4
Emergency Medicine	54	3.0
Physical Med. & Rehab	44	1.5
Orthopedic Surgery	42	1.3
Diagnostic Radiology	29	1.2
Transitional Year ^b	24	0.7
Neurology	22	0.7
Ophthalmology	21	0.6
Gen. Preventive Medicine	21	0.6
Urological Surgery	18	0.6
Nuclear Medicine	17	0.5
Radiology	17	0.5
Occupational Medicine	13	0.5
Thoracic Surgery	12	0.4
Neurological Surgery	11	0.4
Otolaryngology	11	0.3
Other Specialties	114	3.2

Training specialties with fewer than 10 GPs are not listed individually.

a. One or more years of graduate training in listed specialty

b. Specialty programs plausibly related to primary care.

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