

# Physician Specialty Data: A Chart Book

## Center for Workforce Studies

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## Introduction

This report compares a range of characteristics of practicing physicians and physicians in training across the largest specialties. The AAMC has compiled this report for the medical education community, specialty associations, health researchers, policy makers and the public, who often request data on the physician workforce by specialty. This report is a companion to “Key Physician Data by State” which ranks states according to various physician characteristics.

This publication provides readers with easily understandable characteristics of active physicians and residents/fellows in Graduate Medical Education (GME) training programs. With the exception of the first two figures, which present data for the nation as a whole, the figures in the report rank each of the largest specialties on a variety of characteristics. In most charts, the national average is also provided. Figures 3 through 11 present data on active physicians; figures 13 through 20 present data on physicians in training in ACGME accredited residency/fellowship programs. Figure 12 compares the number of physicians entering training in a specialty to the total number of active physicians in the specialty.

Data sources include the American Medical Association (AMA) Physician Masterfile (January 2006), *AMA Physician Characteristic and Distribution (PCD)* (1996/97 and 2006 editions), *Journal of American Medical Association (JAMA)* Medical Education theme issues (1996 and 2005), and reports of the National Resident Matching Program (1995 and 2004). US population counts are based on the US Census Bureau. In all figures except Figures 11 and 12, all active physicians, regardless the type of degree or country of undergraduate medical education, are included. Figures 11 and 12 do not include osteopaths (DOs). In addition, DOs and other physicians in non-ACGME accredited training programs are not included in the analyses of residents/fellows, whereas DOs in ACGME-accredited programs are included.

For the purpose of this report, terms were defined as follows:

**Active Physicians:** Includes federal and non-federal physicians who are working more than 20 hours per week, are not in graduate medical training, are residing in one of the 50 states or District of Columbia, and report their primary specialty as one of the 36 largest specialties or combination of specialties in the 2006 AMA Masterfile. Physicians who are retired, semi-retired, or otherwise inactive are excluded as are US physicians living outside of the 50 states and the District of Columbia. Specialties are self-reported in the MasterFile.

**USMD:** Physicians who received medical doctorates (MD) from US medical schools.

**DO:** Physicians who received their Doctor of Osteopathy (DO) degrees from US osteopathic schools.

**IMGs (International Medical Graduates):** Physicians who received their medical degrees from schools outside the US or Canada, including US citizens receiving their medical education outside of the US.

**Primary Care Physicians:** Active physicians who self-reported their primary specialty as General Internal Medicine, Family Medicine/Family Practice/General Practice, General Pediatrics, Geriatric Medicine, or Internal Medicine-Pediatrics (Combined). For residents, this includes physicians in ACGME-accredited programs in Internal Medicine (Categorical), Family Medicine/Family Practice, Pediatrics, and Internal Medicine-Pediatrics (Combined) though many may eventually subspecialize. Fellows in Geriatrics are also considered primary care for the purpose of these analyses. Primary care specialties are highlighted in the figures.

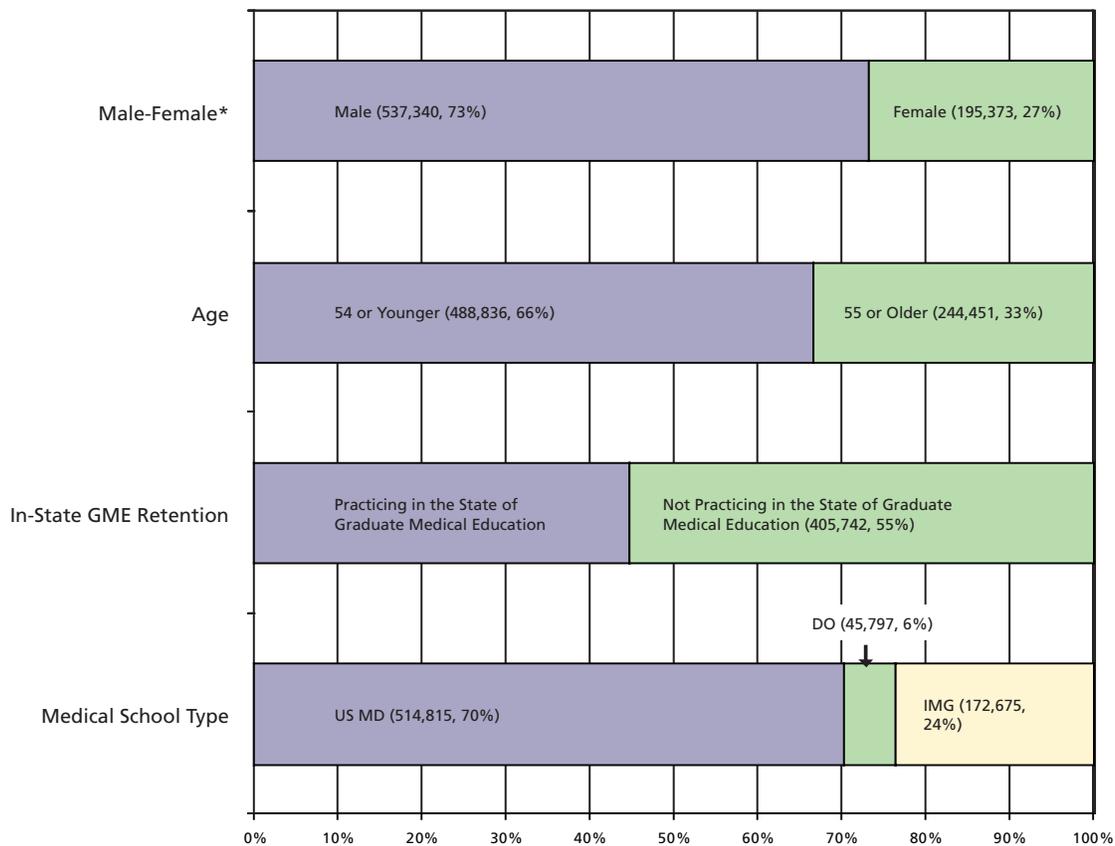
To simplify the analysis, we combined several specialties where classification changed over time or in order to maintain consistency in specialty classification between active physicians (Masterfile) and residents/fellows (JAMA). These specialties include:

*Family Medicine/General Practice:* Includes Family Medicine, Family Practice, and General Practice;  
*Hematology and Oncology:* Includes Hematology (Internal Medicine), Hematology/Oncology, and Medical Oncology;  
*Obstetrics and Gynecology:* Includes Gynecology, Obstetrics, and Obstetrics & Gynecology;  
*Preventive Medicine:* Includes General Preventive Medicine, Occupational Medicine, Aerospace Medicine, and Public Health;  
*Pulmonary Disease and Critical Care Medicine:* Includes Critical Care (Internal Medicine), Pulmonary Disease, and Pulmonary Disease/Critical Care Medicine;  
*Radiology and Diagnostic Radiology:* Includes Radiology and Diagnostic Radiology;  
*Thoracic Surgery:* Includes Thoracic Surgery, Cardiac Surgery, and Cardiothoracic Surgery.

The AAMC Center for Workforce Studies gratefully acknowledges the AMA for granting use of their data. Any questions/comments regarding these analyses should be directed to:

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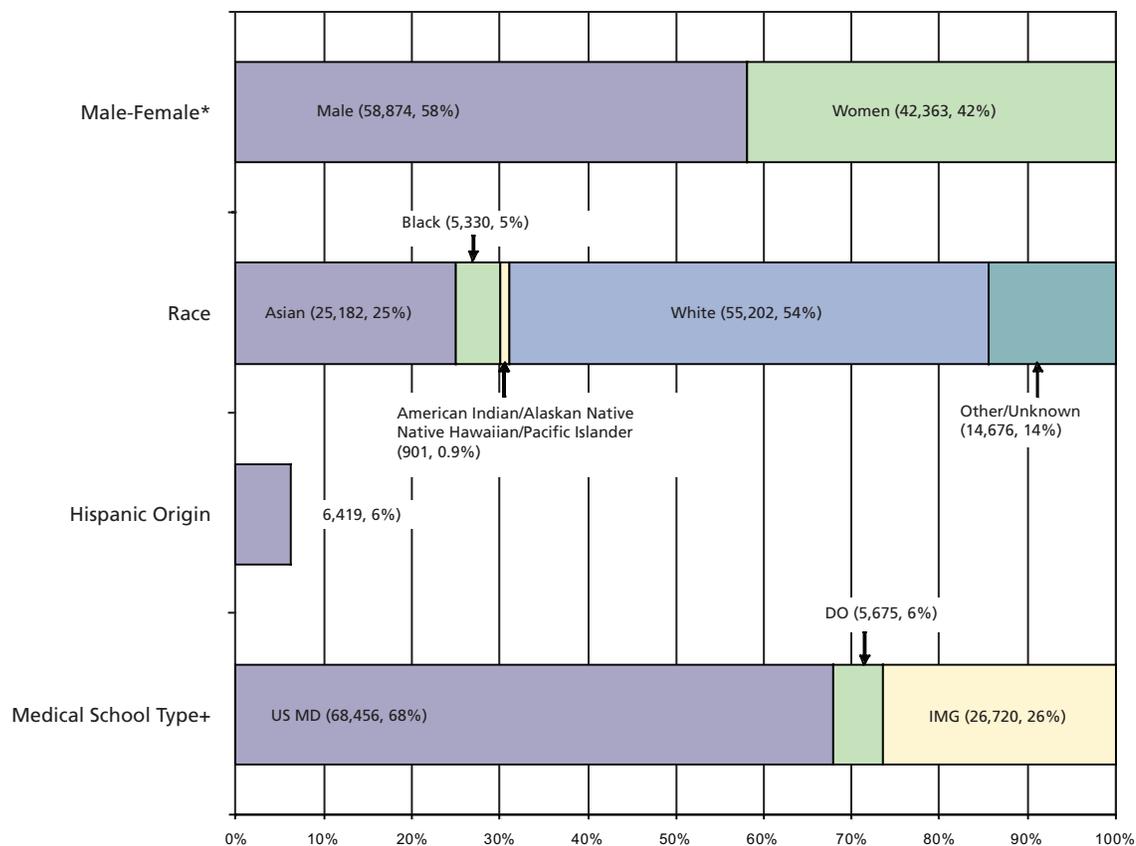
Figure 1. Characteristics of Active Physicians in the United States



Source: AMA Physician Masterfile, January 2006.

\* Excludes 574 physicians whose sex is unknown.

Figure 2. Characteristics of Residents/Fellows in ACGME-Accredited Programs

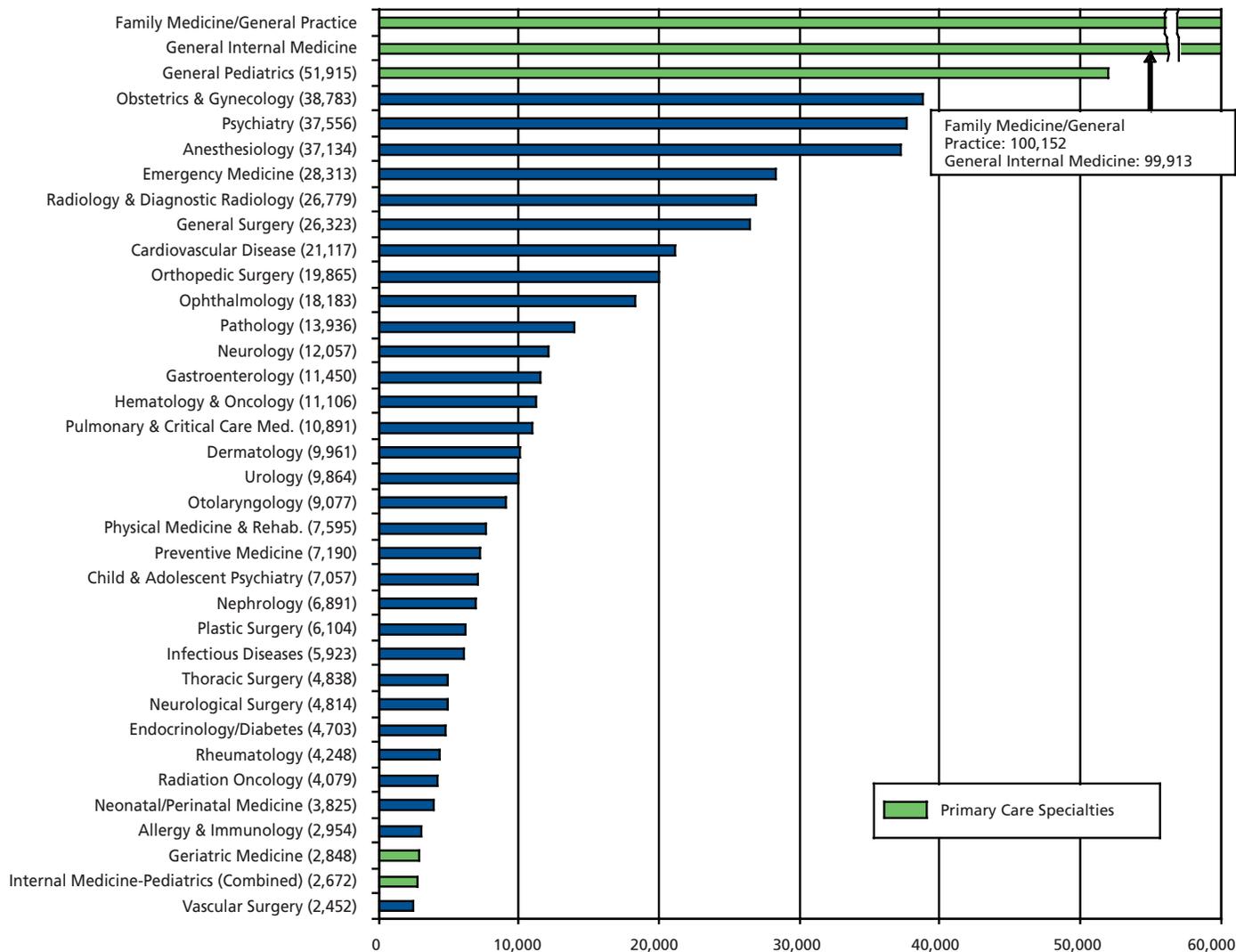


Source: Graduate Medical Education (Appendix II, Tables 1 & 8) JAMA. 2005;294:1129-33, 1137-40.

\* Excludes 54 physicians whose sex is unknown.

+ Excludes 440 physicians who graduated from Canadian medical schools (413), 23 whose medical school type is unknown, and 4 who graduated from unaccredited US medical schools.

Figure 3. Specialties with the Largest Number of Active Physicians\*

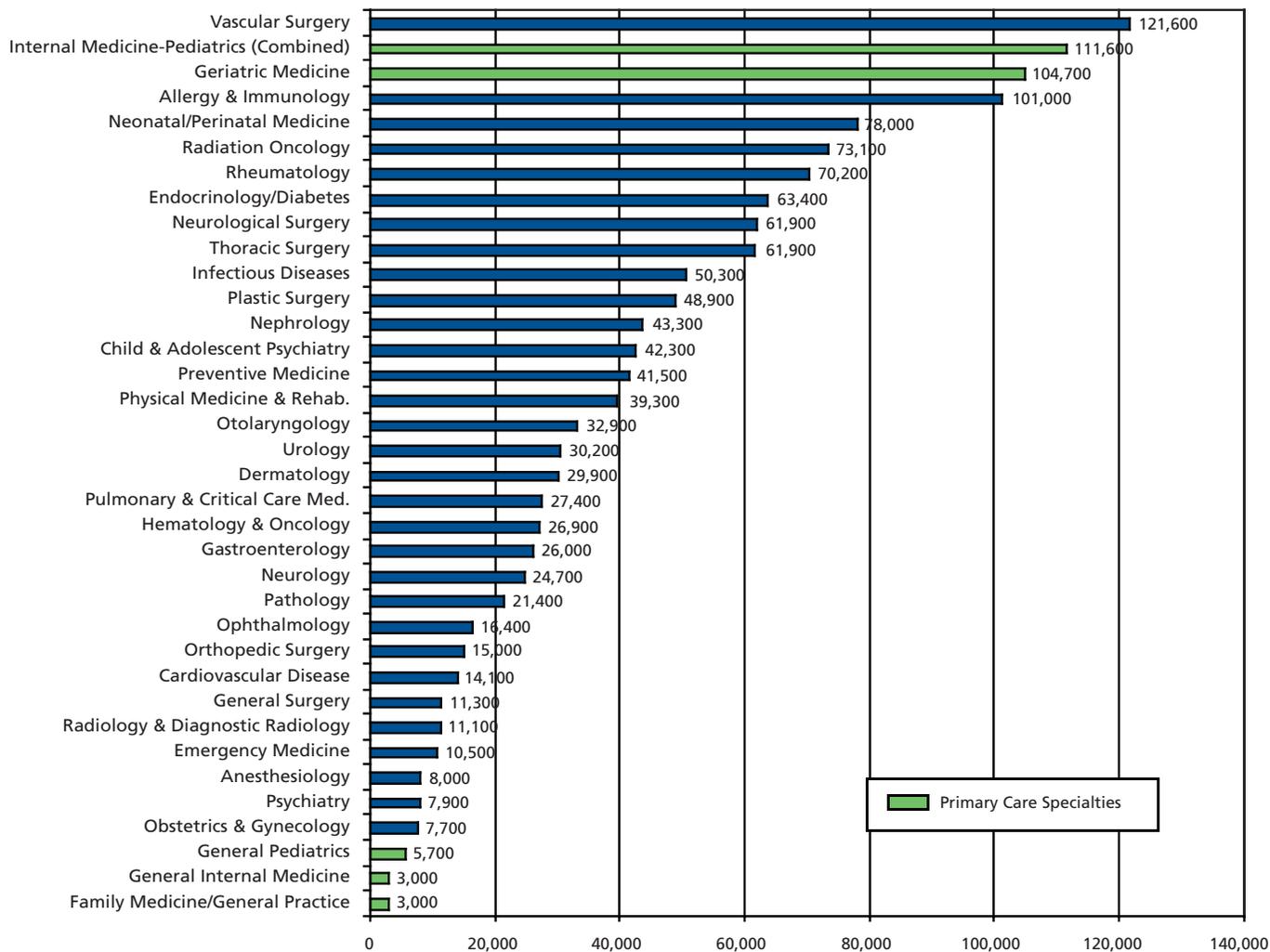


Source: AMA Masterfile, January 2006

\* See Introduction for notes on specialty classification and the definition of “Active Physicians.”

The number in parentheses is the number of active physicians in the specialty.

Figure 4. Number of People per Active Physician by Specialty\*

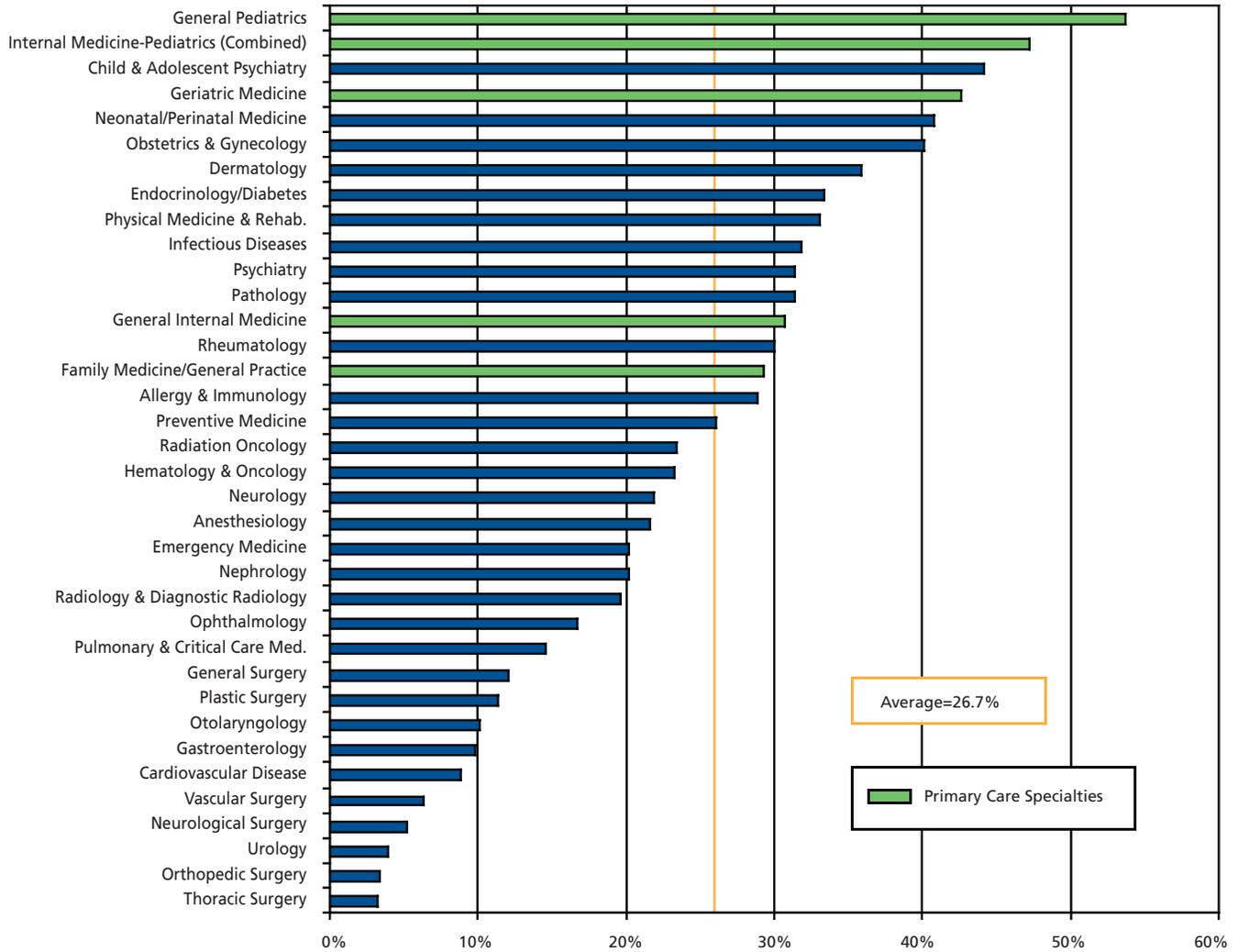


Sources: AMA Masterfile, January 2006

U.S. Census Bureau, U.S. Interim Projections by Age, Sex, Race, and Hispanic Origin

\* See Introduction for notes on specialty classification and the definition of “Active Physicians.”

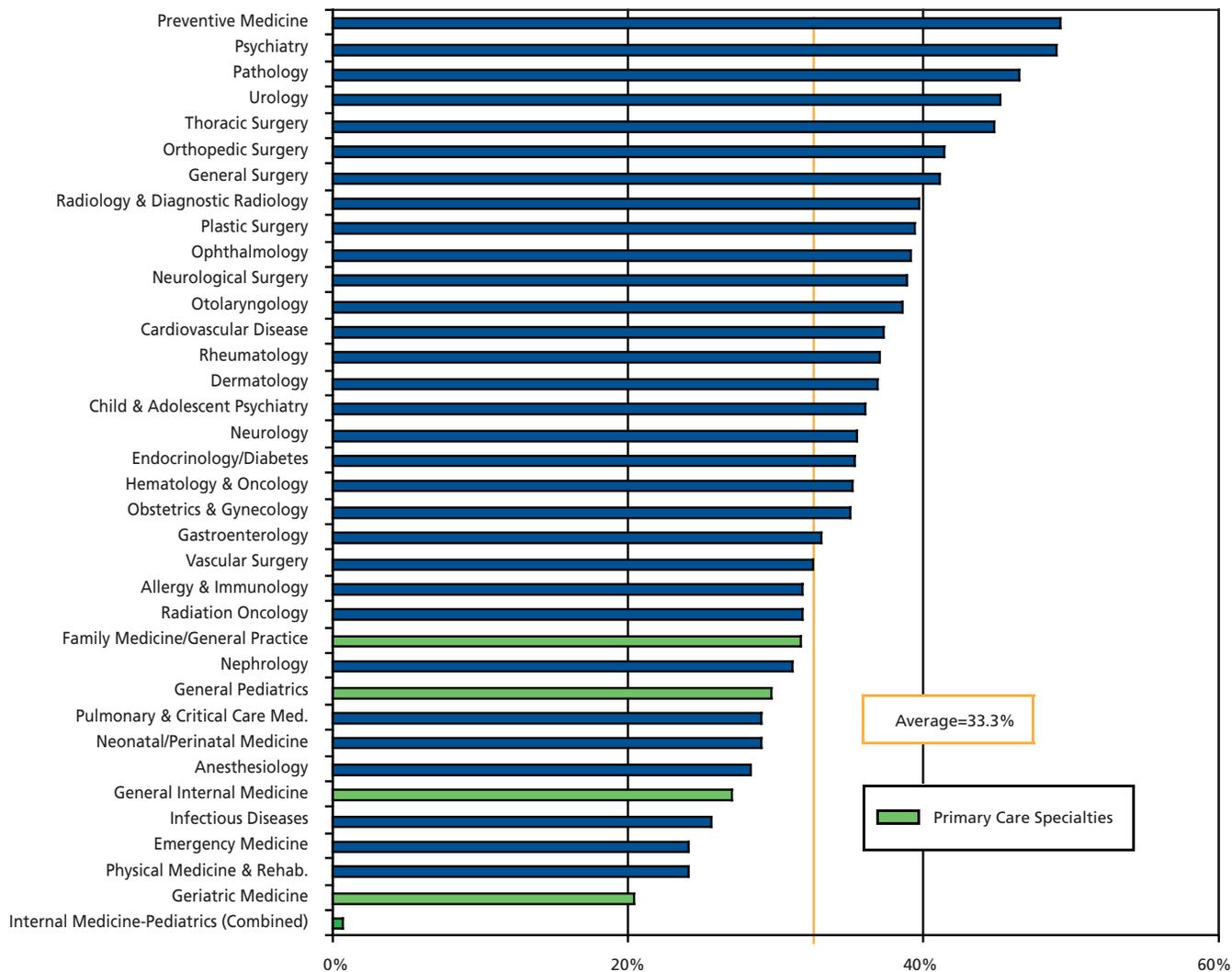
Figure 5. Proportion of Active Physicians Who are Female by Specialty\*



Sources: AMA Masterfile, January 2006

\* Excludes 574 physicians whose sex is unknown. See Introduction for notes on specialty classification and the definition of “Active Physicians.”

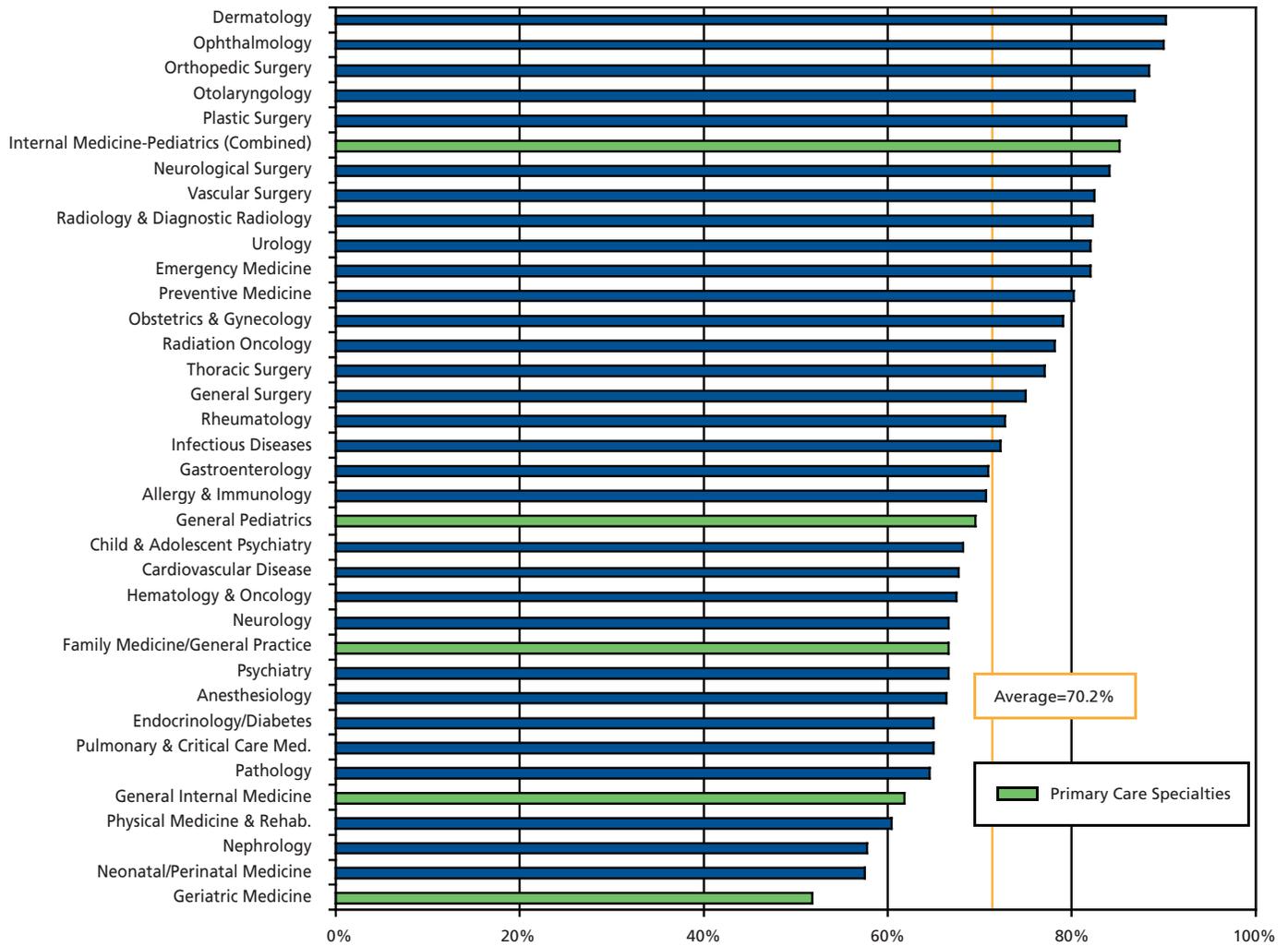
Figure 6. Proportion of Active Physicians Aged 55 or Older by Specialty\*



Sources: AMA Masterfile, January 2006

\* See Introduction for notes on specialty classification and the definition of “Active Physicians.”

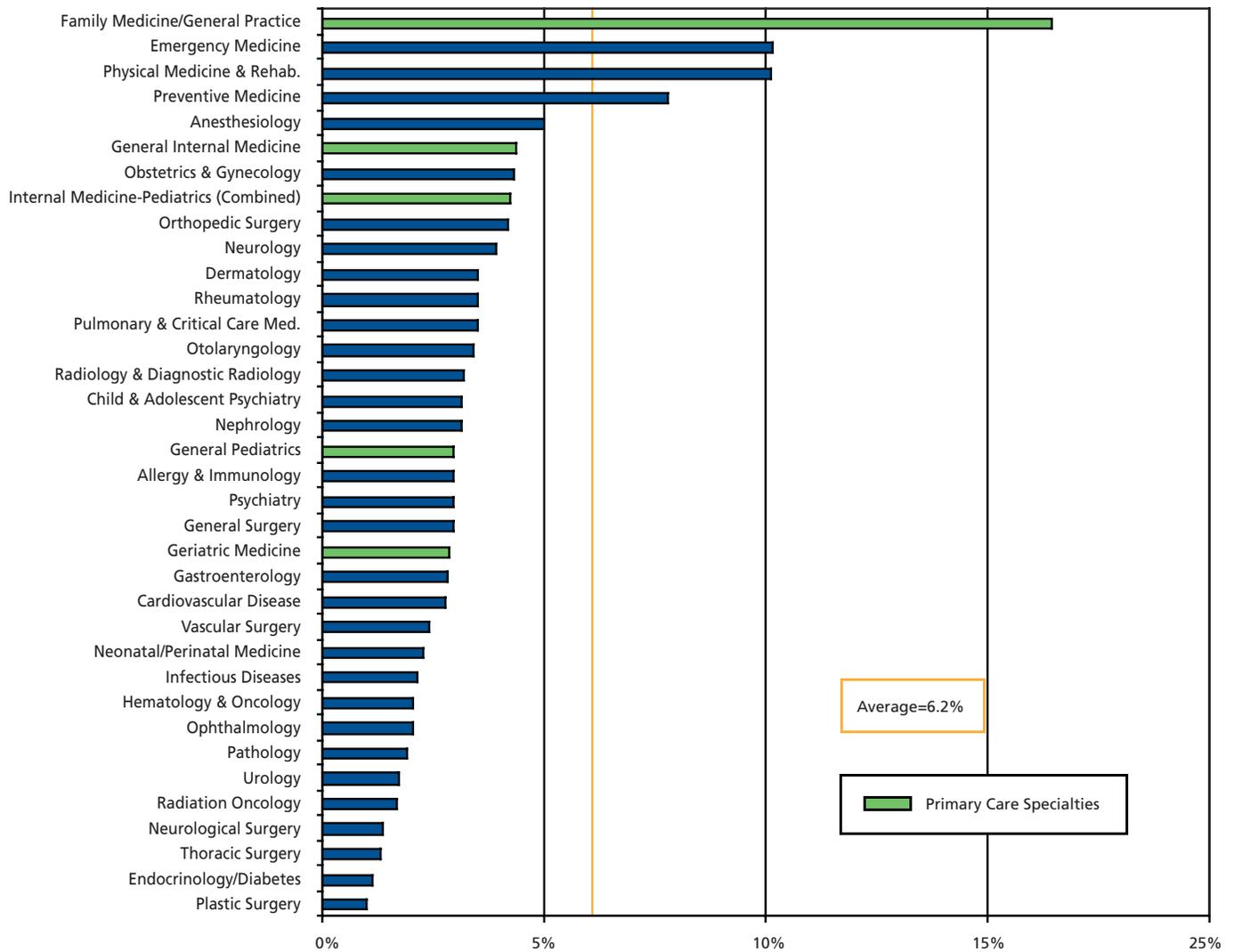
Figure 7. Proportion of Active Physicians with US Medical Doctorates (MD) by Specialty\*



Sources: AMA Masterfile, January 2006

\* See Introduction for notes on specialty classification and the definition of “Active Physicians.”

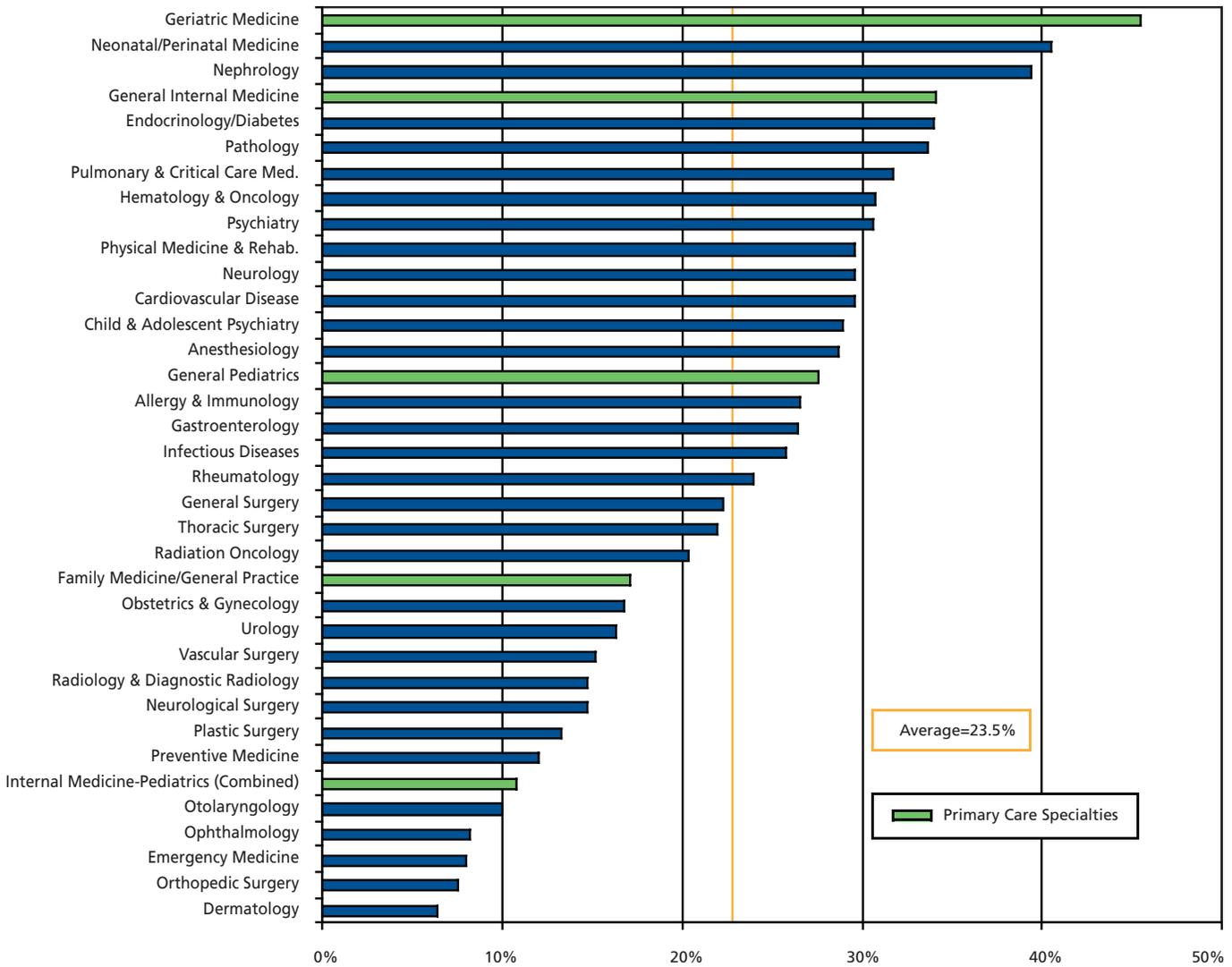
Figure 8. Proportion of Active Physicians with DO Degrees by Specialty\*



Sources: AMA Masterfile, January 2006

\* See Introduction for notes on specialty classification and the definition of “Active Physicians.”

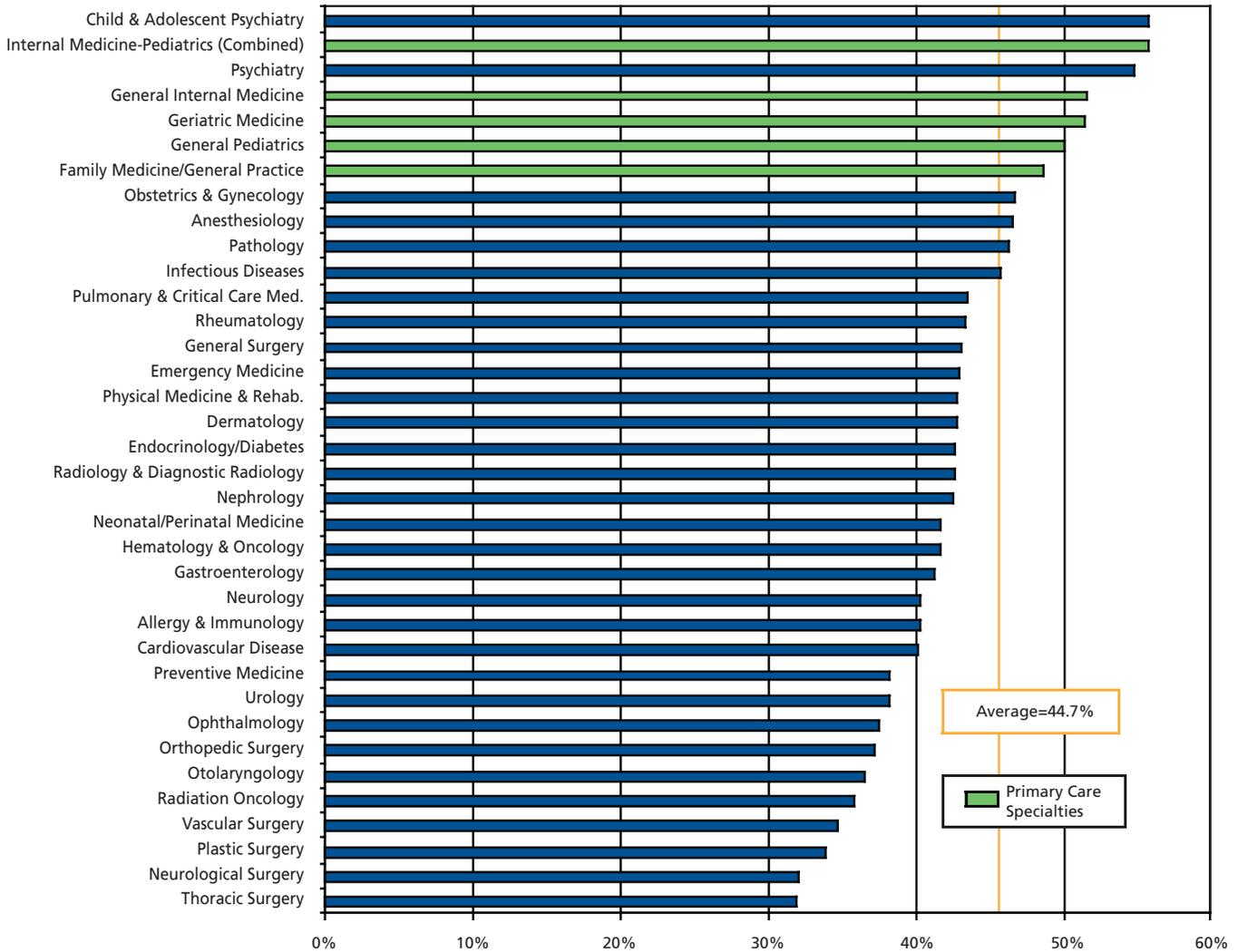
Figure 9. Proportion of Active Physicians with Foreign Medical Degrees by Specialty\*



Sources: AMA Masterfile, January 2006

\* See Introduction for notes on specialty classification and the definition of “Active Physicians.”

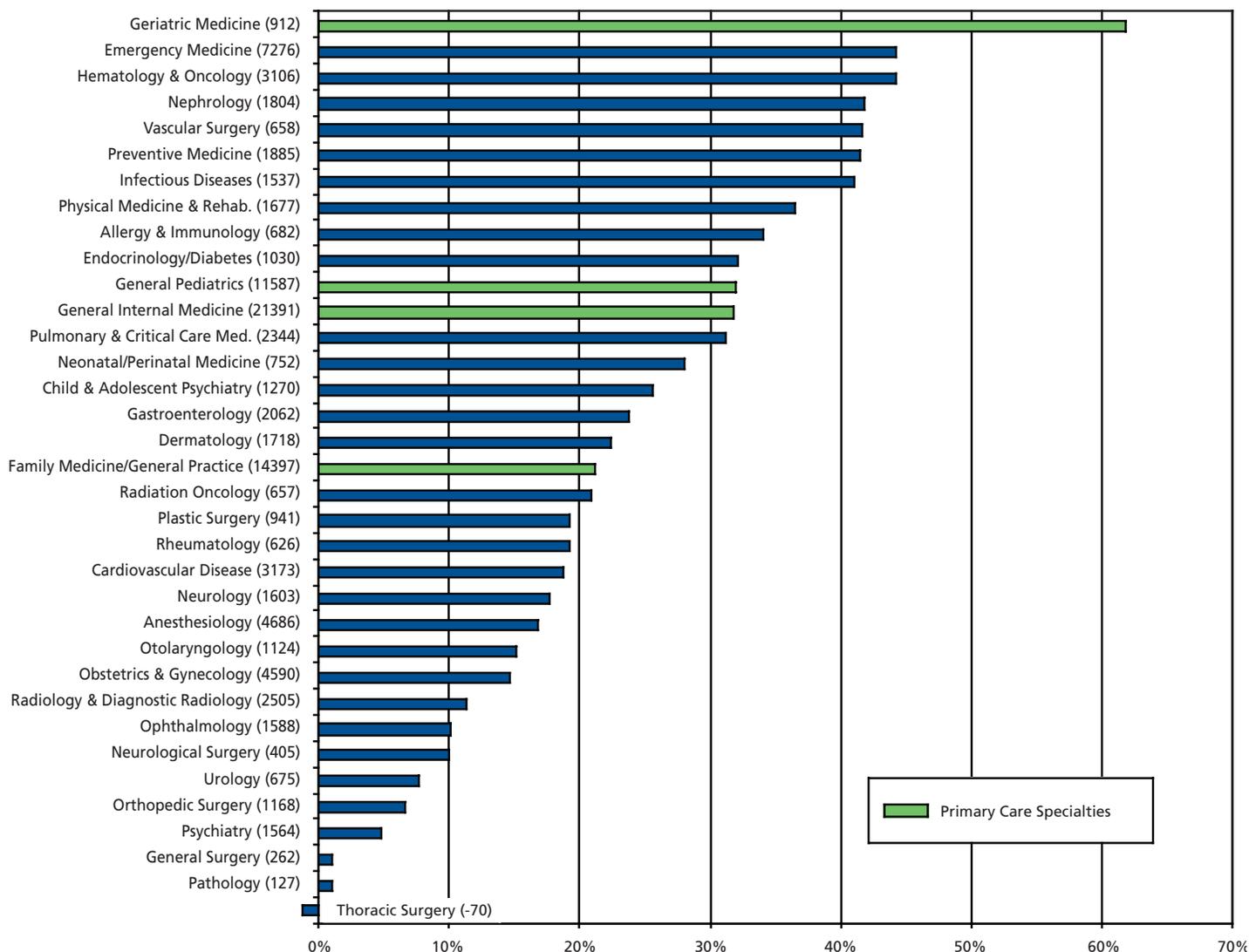
**Figure 10. Proportion of Active Physicians Practicing in the State Where They Trained by Specialty\***



Sources: AMA Masterfile, January 2006

\* See Introduction for notes on specialty classification and the definition of “Active Physicians.” Physicians’ primary practice state or their preferred mailing address state was used to determine the state in which they practice.

Figure 11. Percent Change in the Number of Active Physicians by Specialty (1995-2004)\*

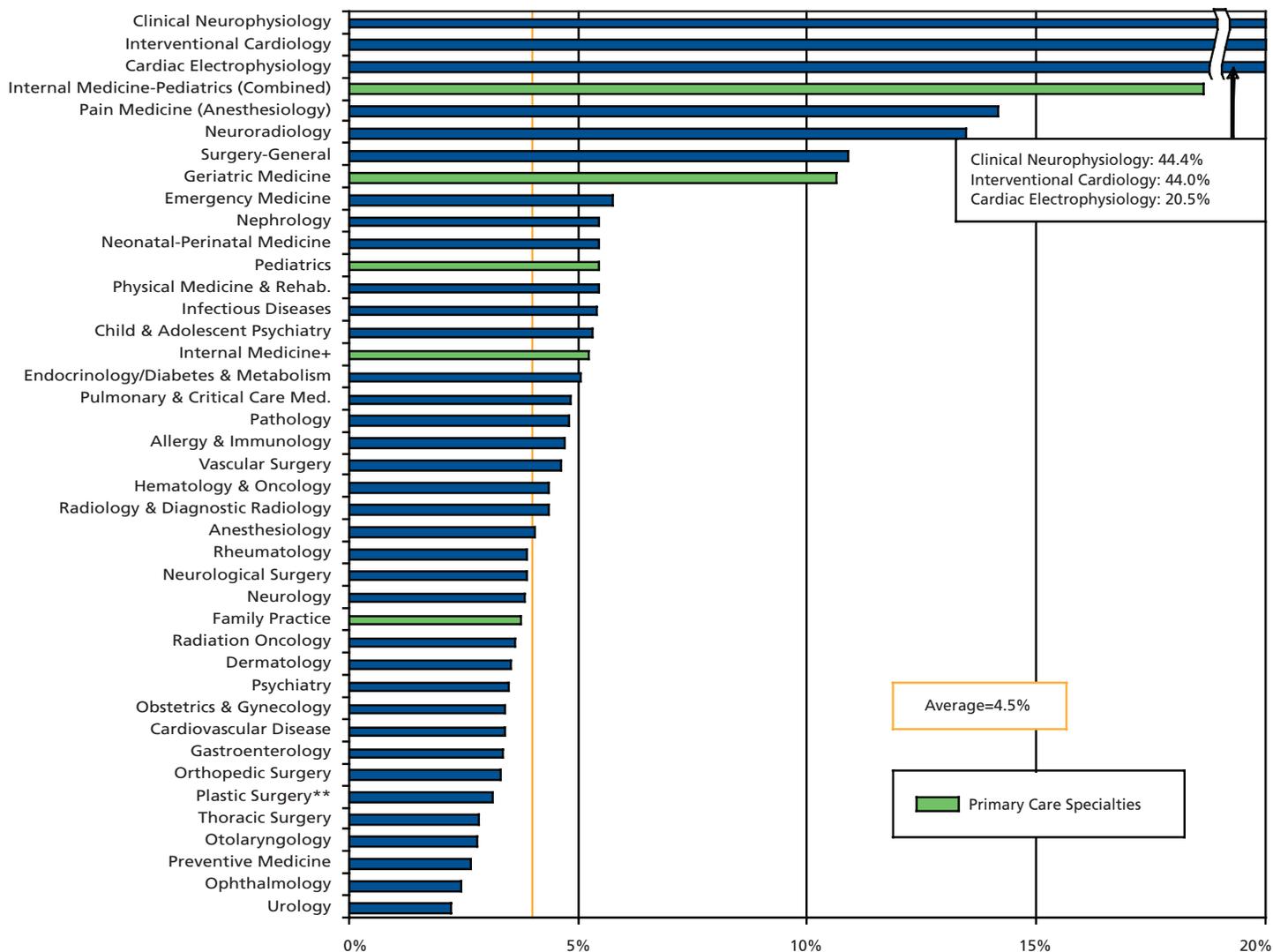


Source: AMA Physician Characteristics and Distribution, 1996/7 (Table B-8, pp. 56-58) and 2005 (Table 1.9, pp. 20-24)

\* See Introduction for notes on specialty classification and the definition of “Active Physicians.” Excludes physicians with primary specialty in Internal Medicine-Pediatrics (combined), which is not reported in the 1996/97 PCD.

The number in parentheses reflects the absolute change in physician count between 1995 and 2004.

Figure 12. Production Rate of Physicians by Specialty (August, 2004)\*



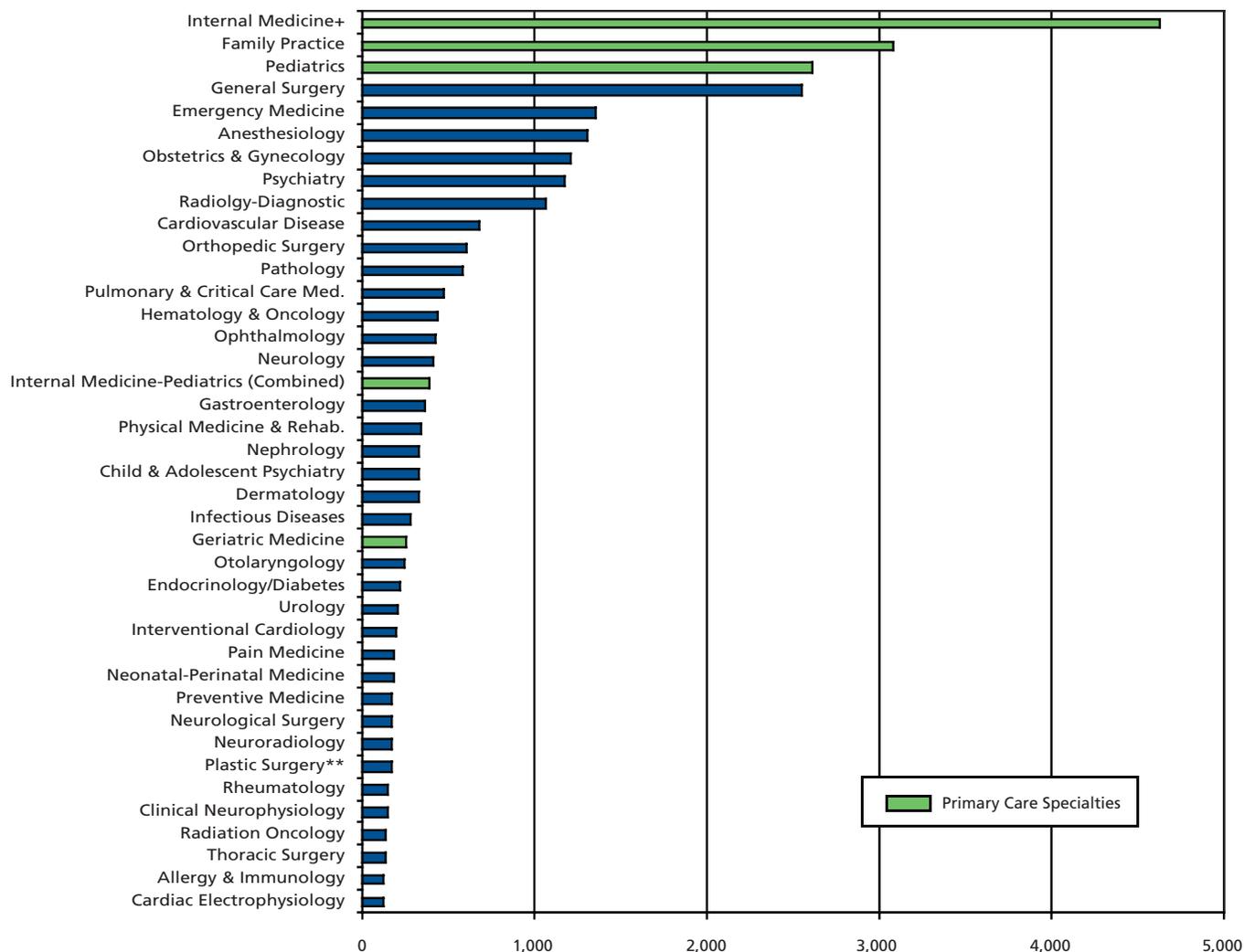
Sources: *AMA Physician Characteristics and Distribution* (Table 1.9, pp. 20-24), *Graduate Medical Education* (Appendix II, Tables 3 & 9) *JAMA* 2005;294:1133-35, 1141-42.

\* Defined as the ratio of 'First-Year Residents/Fellows' in ACGME-accredited training to 'Active Physicians.' While first-year residents/fellows include physicians with DO degrees, active physicians do not because DO physicians are not reported in the *AMA Physician Characteristics and Distribution*.

+ Includes physicians matched in Internal Medicine-Categorical via NRMP, including those who may subspecialize in the future. Many current residents in General Surgery, Internal Medicine, Pediatrics, and Psychiatry will eventually practice another subspecialty.

\*\* Number of physicians completing training.

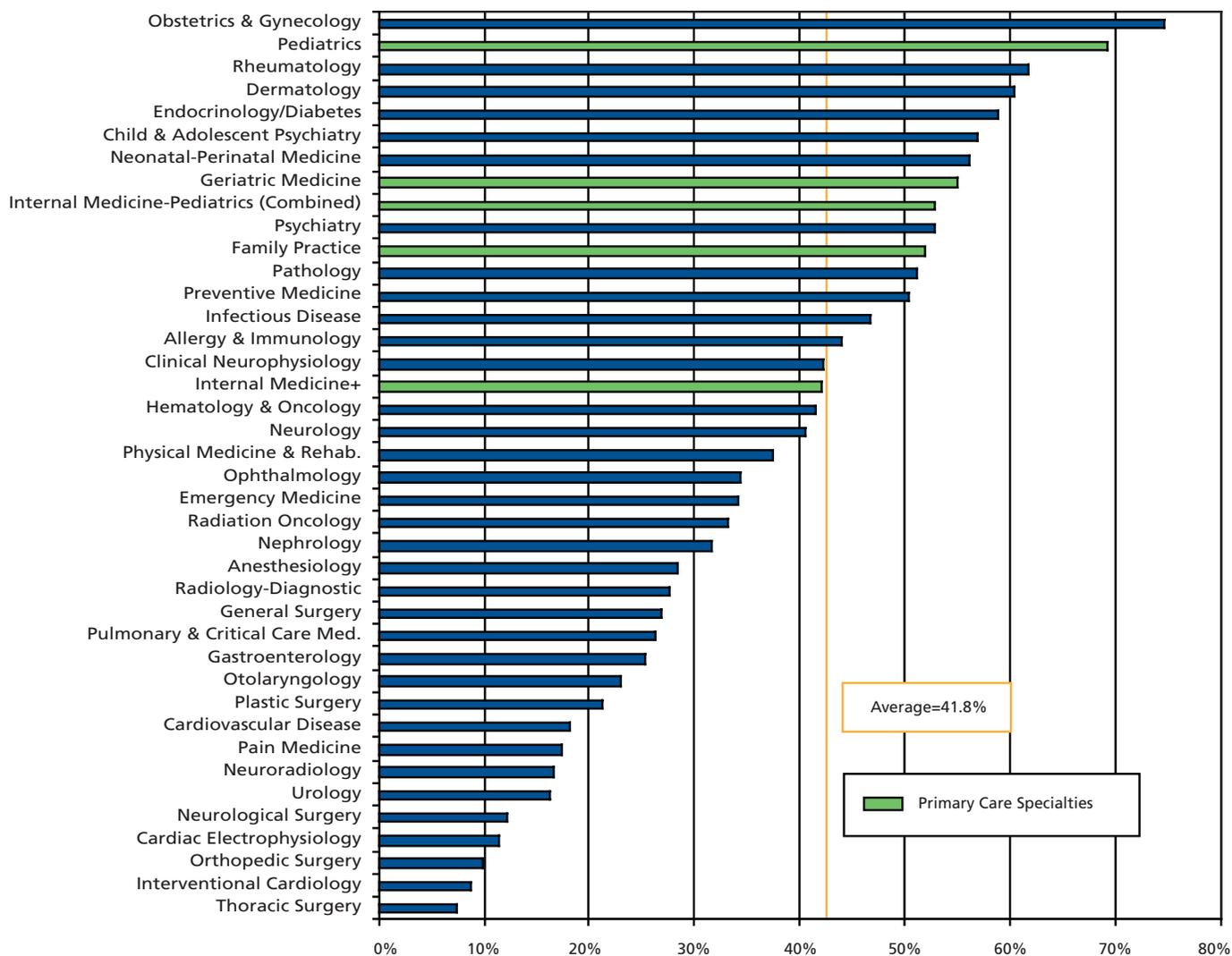
Figure 13. Number of First-Year ACGME Residents/Fellows by Specialty (August, 2004)\*



Sources: Graduate Medical Education (Appendix II, Tables 3 & 9) JAMA 2005;294:1133-35, 1141-42.  
 AAMC, National Resident Matching Program: Results and Data—2005 Match April 2005.

\* Includes physicians who are in Program Year 1 positions of ACGME-accredited graduate medical training as of August 1, 2004.  
 + Includes physicians matched in Internal Medicine-Categorical via NRMP, including those who may subspecialize in the future. Many current residents in General Surgery, Internal Medicine, Pediatrics, and Psychiatry will eventually practice another subspecialty.  
 \*\* The number of fellows completing training.

Figure 14. Proportion of ACGME Residents/Fellows Who Are Female by Specialty (August, 2004)\*

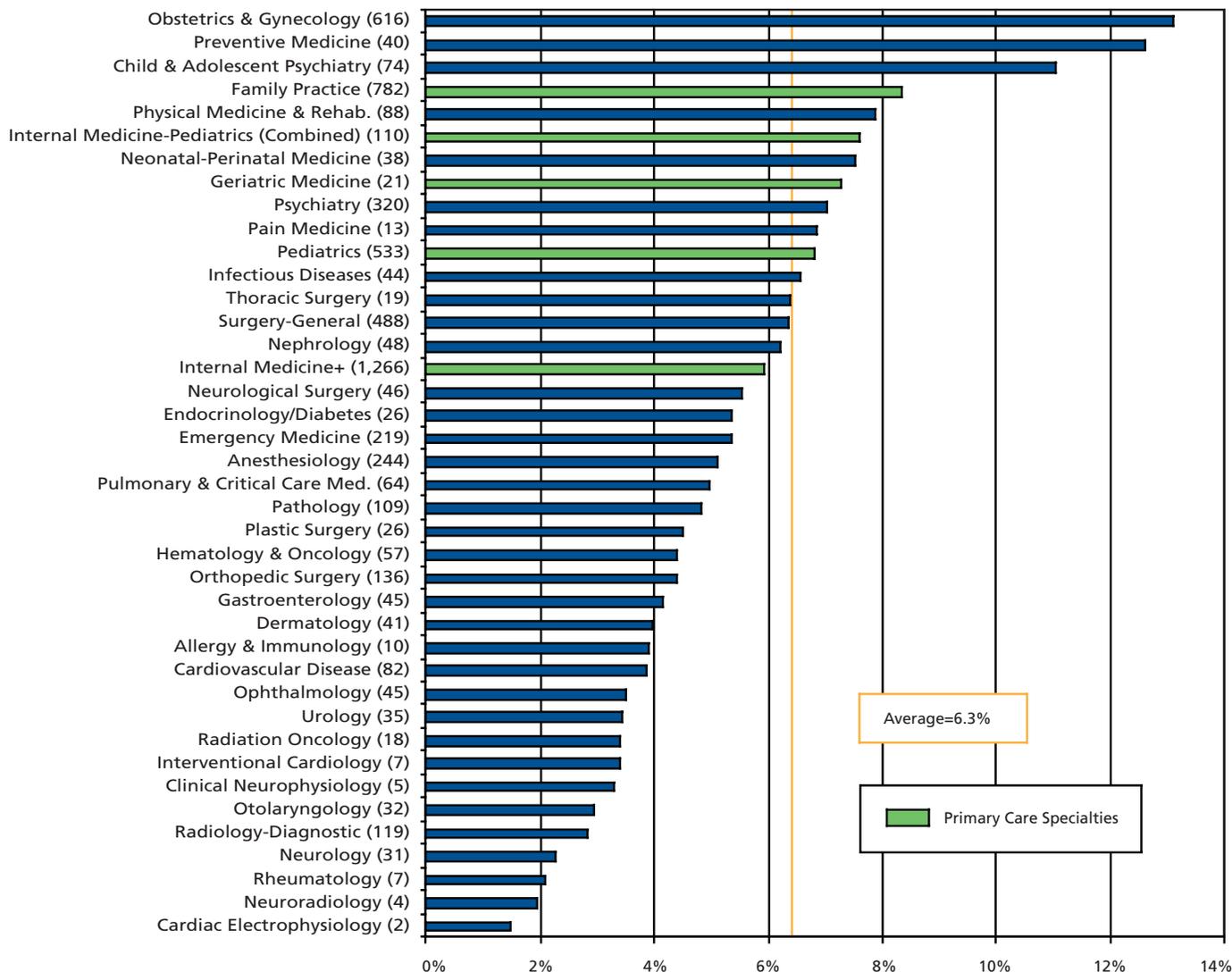


Source: Graduate Medical Education (Appendix II, Table 1) *JAMA*. 2005;294:1129-32.

\* Includes physicians on duty in ACGME-accredited graduate medical training as of August 1, 2004.

+ Includes both residents in Internal Medicine-Preliminary and Internal Medicine-Categorical.

**Figure 15. Proportion of ACGME Residents/Fellows Who Are Black, American Indian/Alaskan Native, or Native Hawaiian/Pacific Islander by Specialty (August, 2004)\***

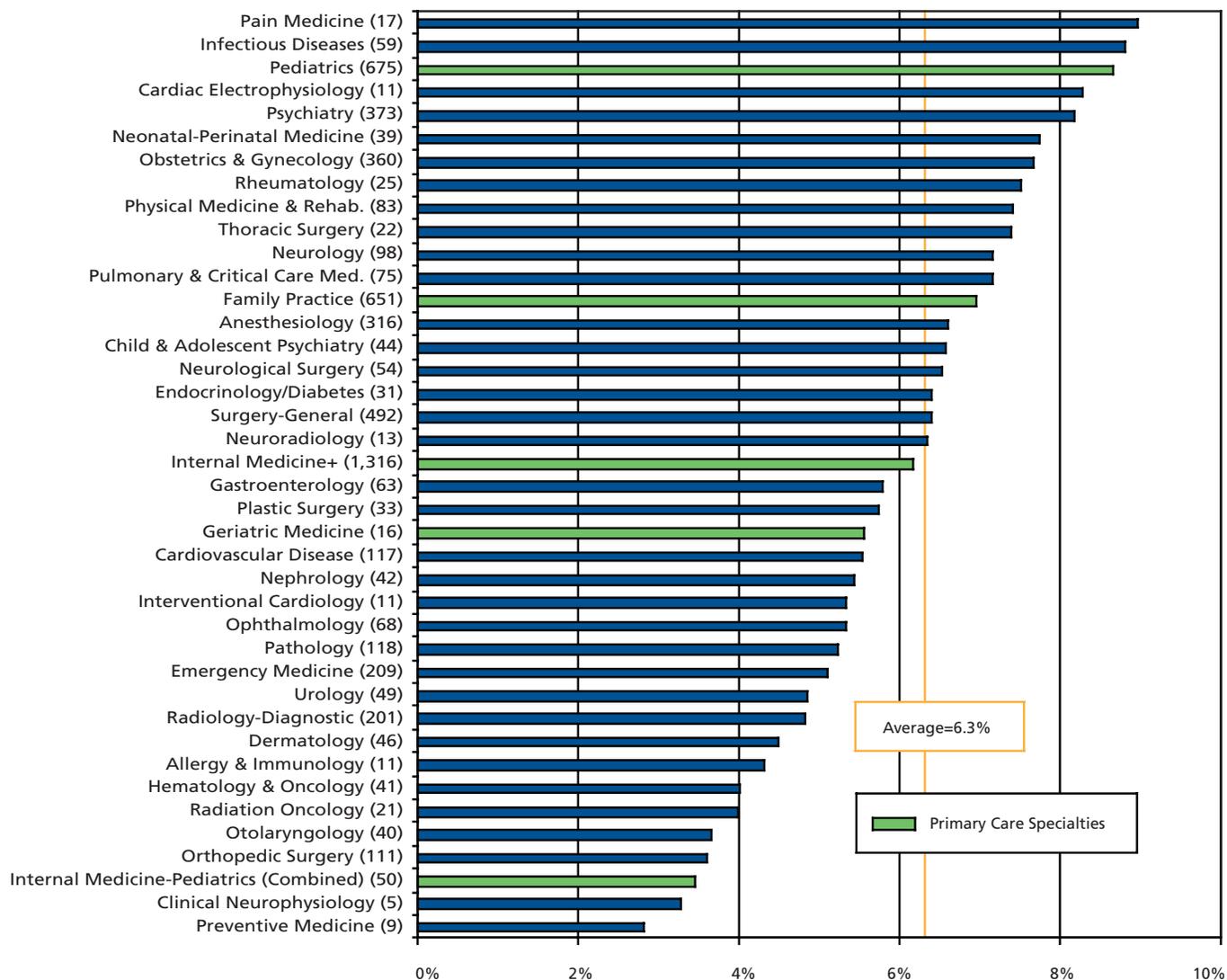


Source: Graduate Medical Education (Appendix II, Table 8) *JAMA*. 2005;294:1137-40.

\* Includes physicians on duty in ACGME-accredited graduate medical training as of August 1, 2004.  
 + Includes both residents in Internal Medicine-Preliminary and Internal Medicine-Categorical.

The number in parentheses indicates the number of residents reporting their race as Black, American Indian/Alaskan Native, or Native Hawaiian/Pacific Islanders.

Figure 16. Proportion of ACGME Residents/Fellows Who Are of Hispanic Origin by Specialty (August, 2004)\*



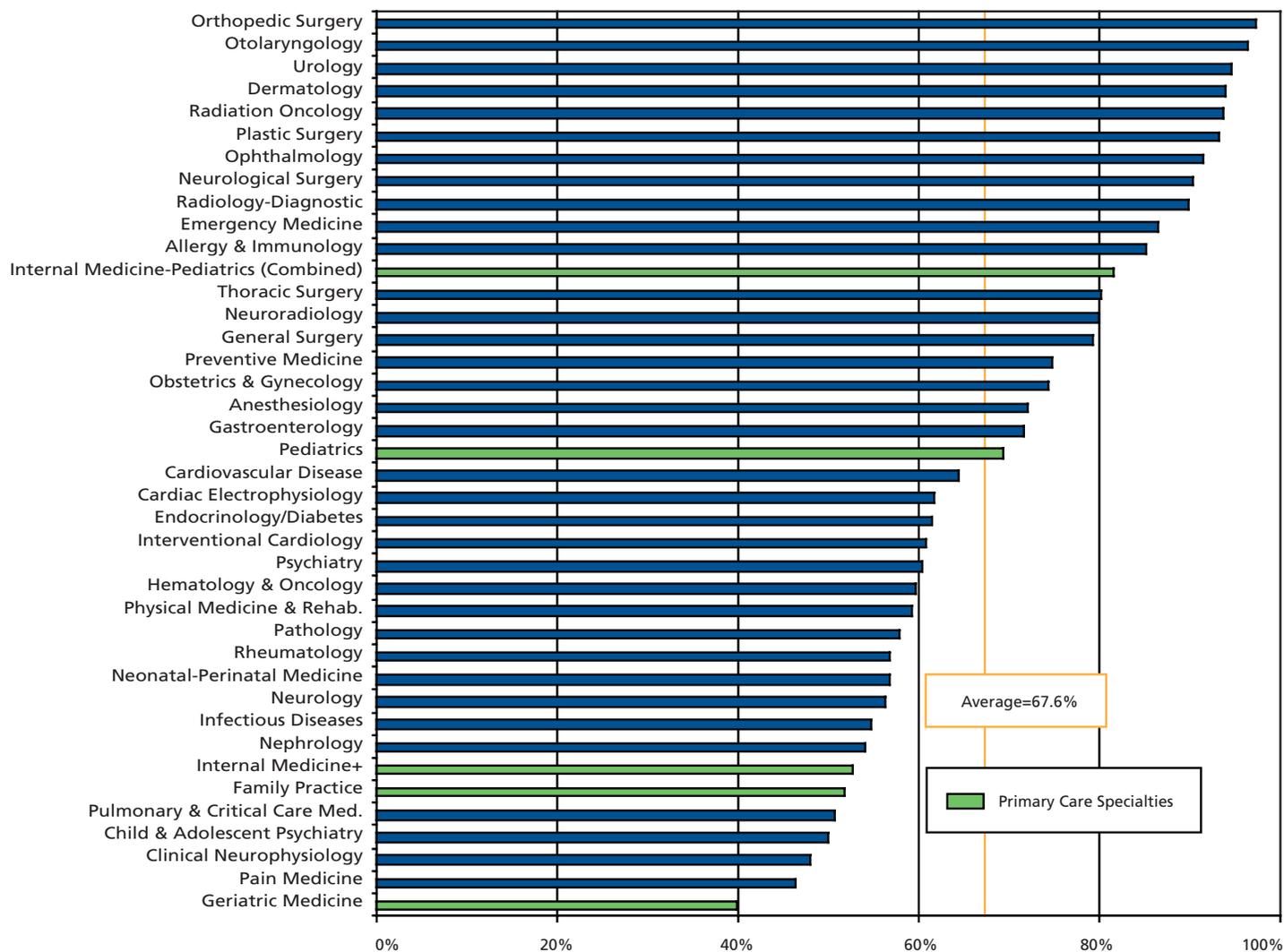
Source: Graduate Medical Education (Appendix II, Table 8) JAMA. 2005;294:1137-40.

\* Includes physicians on duty in ACGME-accredited graduate medical training as of August 1, 2004.

+ Includes both residents in Internal Medicine-Preliminary and Internal Medicine-Categorical.

The number in parentheses indicates the number of physicians indicating that they are of Hispanic Origin.

Figure 17. Proportion of ACGME Residents/Fellows with US Medical Doctorates (MD) by Specialty (August, 2004)\*

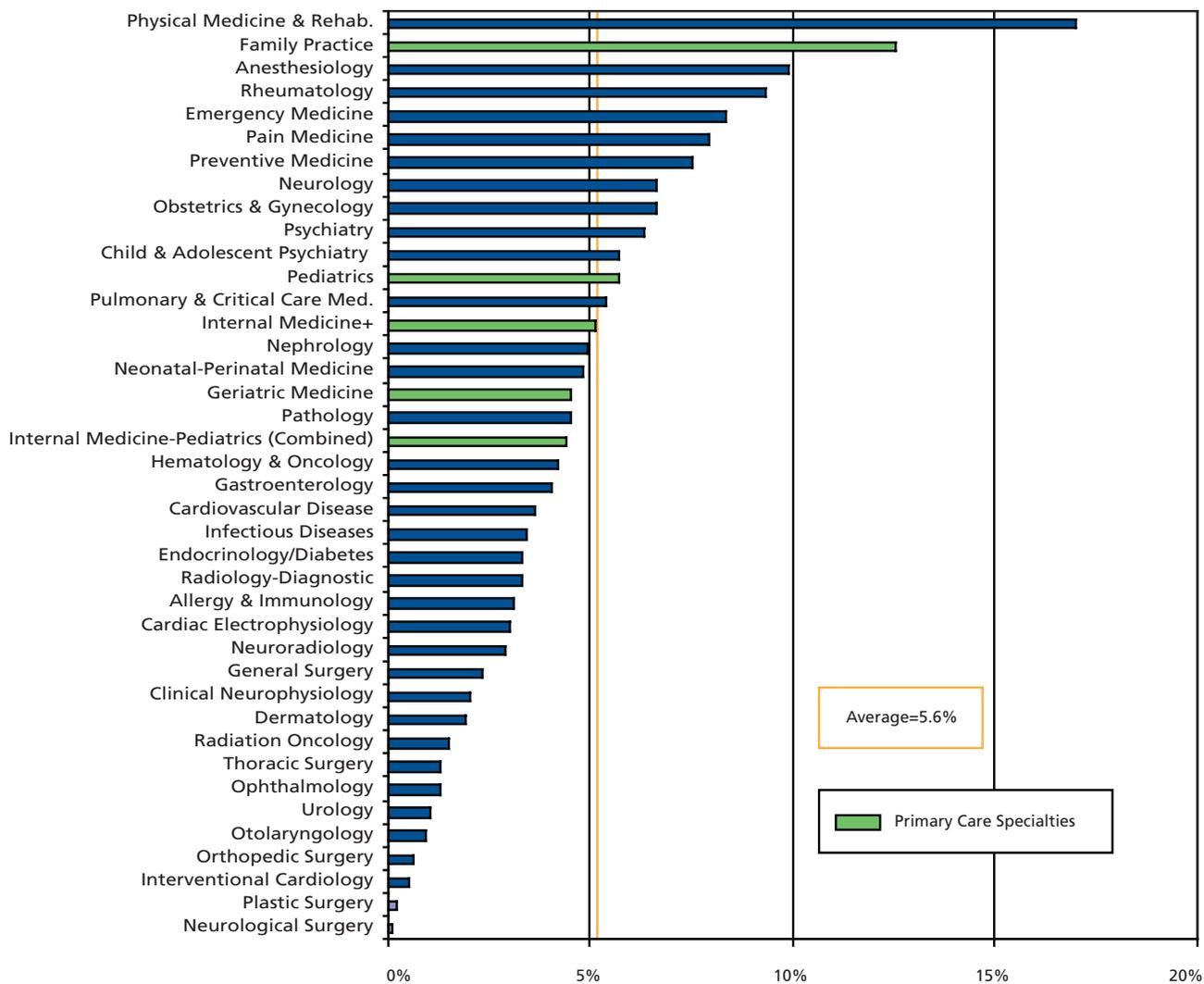


Source: Graduate Medical Education (Appendix II, Table 1) JAMA. 2005;294:1129-32.

\* Includes physicians on duty in ACGME-accredited graduate medical training as of August 1, 2004.

+ Includes both residents in Internal Medicine-Preliminary and Internal Medicine-Categorical.

Figure 18. Proportion of ACGME Residents/Fellows with DO Degrees by Specialty (August, 2004)\*

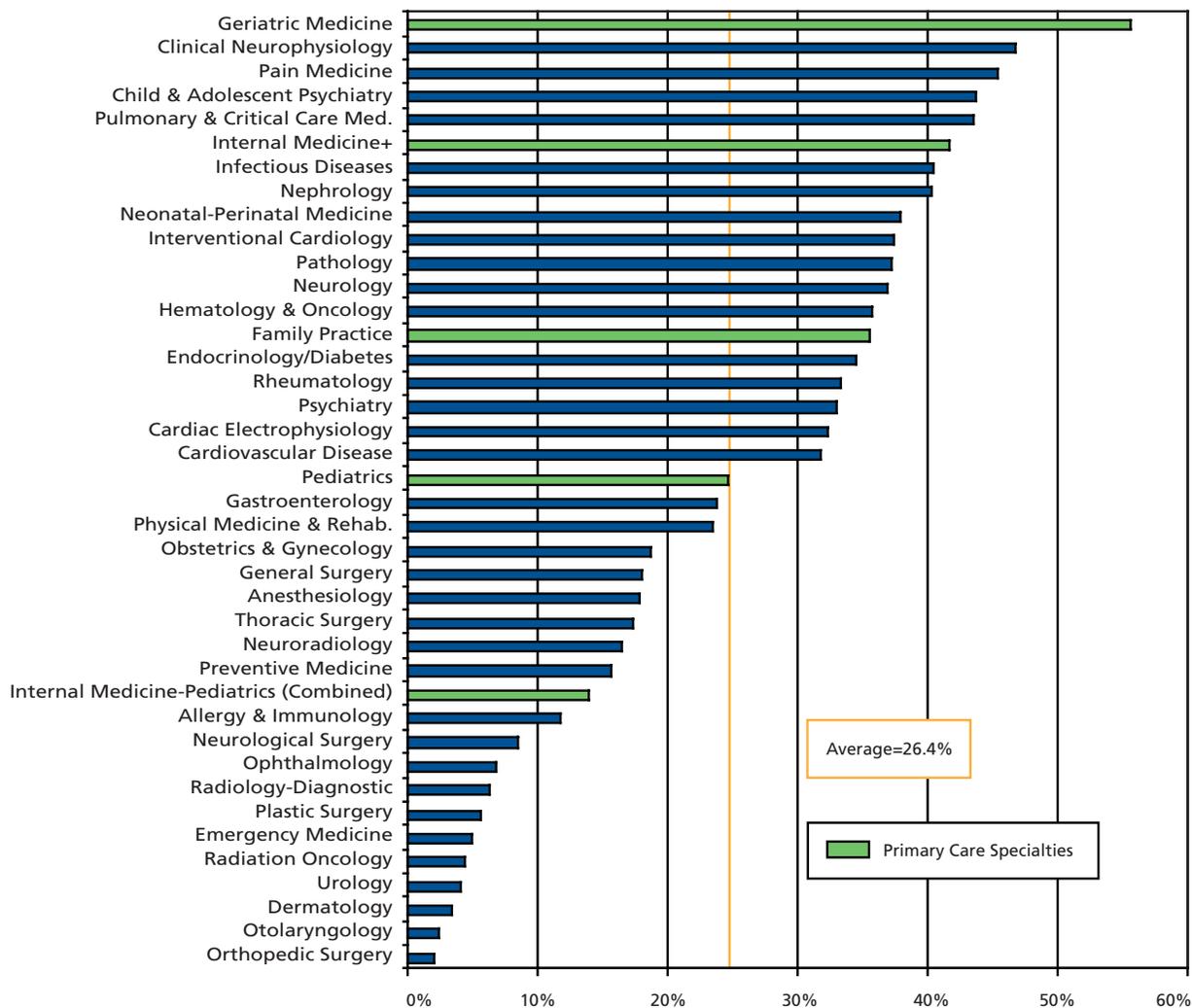


Source: Graduate Medical Education (Appendix II, Table 1) JAMA. 2005;294:1129-32.

\* Includes physicians on duty in ACGME-accredited graduate medical training as of August 1, 2004.

+ Includes both residents in Internal Medicine-Preliminary and Internal Medicine-Categorical.

Figure 19. Proportion of ACGME Residents/Fellows with Foreign Medical Degrees by Specialty (August, 2004)\*

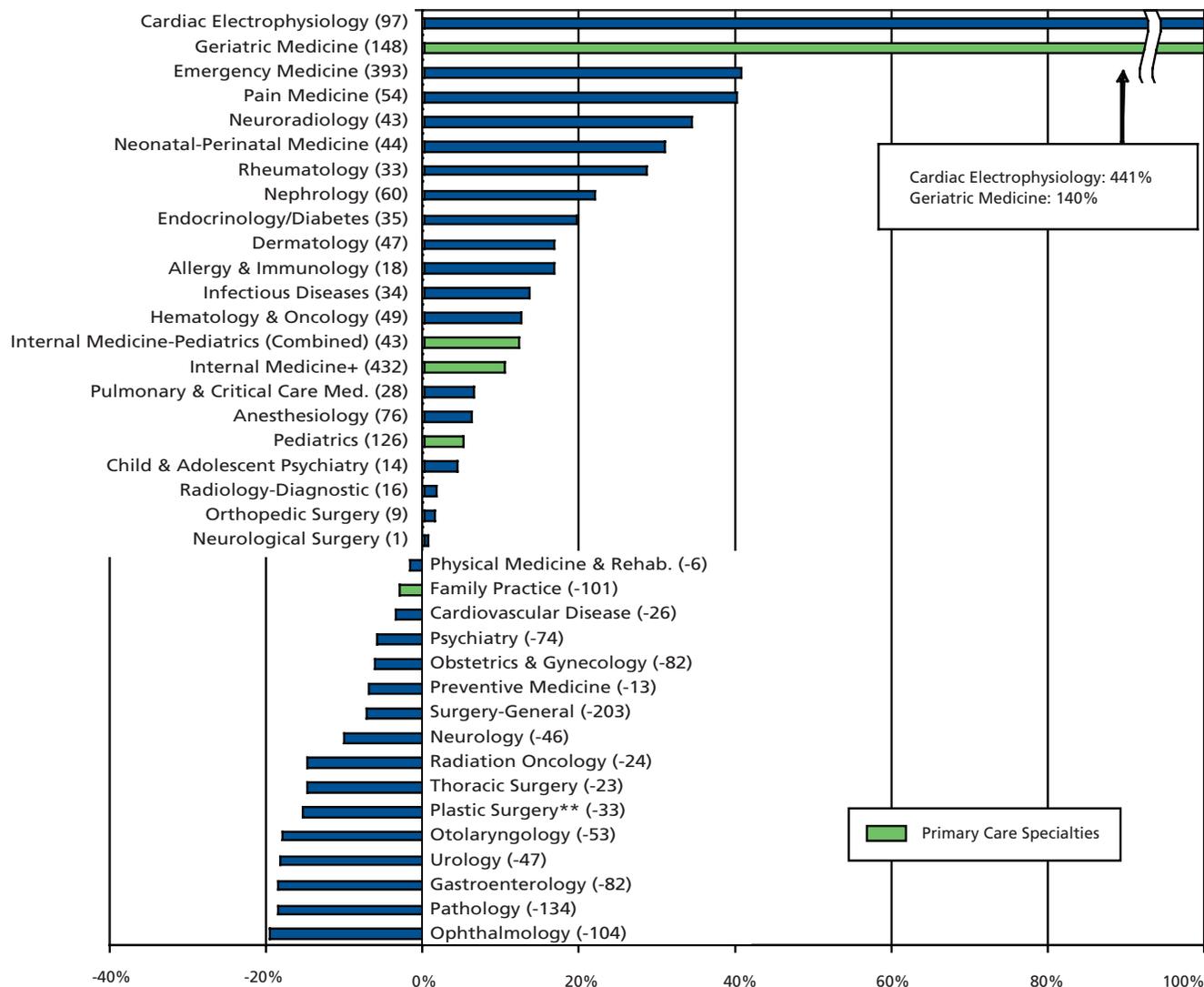


Source: Graduate Medical Education (Appendix II, Table 1) JAMA. 2005;294:1129-32.

\* Includes physicians on duty in ACGME-accredited graduate medical training as of August 1, 2004.

+ Includes both residents in Internal Medicine-Preliminary and Internal Medicine-Categorical.

Figure 20. Percent Change in Number of First-Year ACGME Residents/Fellows by Specialty (1995-2004)\*



Sources: Graduate Medical Education (Appendix II, Tables 3 & 9) JAMA. 2005;294:1133-35, 1141-42 and (Appendix II, (Tables 3 & 8) 1996;276:739-42, 744-45.

AAMC, National Resident Matching Program: Results and Data—2005 Match and 1995 Match.

\* Includes residents on duty in ACGME-accredited graduate medical training as of August 1, 2004. Interventional cardiology was excluded because it was not an ACGME-accredited program in 1995.

\*\* The number of fellows completing training.

+ Excludes residents in Internal Medicine-Preliminary match and includes those matched in Internal Medicine-Categorical via NRMP, including those who may subspecialize in the future.

The number in parentheses indicates the net change in the number of first-year resident/fellows between 1995 and 2004.