

Appendix 1

Specialty Choice Survey Sent to Fourth-year Medical Students at 20 U.S. MD-granting Medical Schools

1: During your years in medical school, which of the following specialties did you seriously consider pursuing as a career? (select up to three)

(Respondents were allowed to choose **multiple** responses)

Response
Anesthesiology
Dermatology
Emergency Medicine
Family Medicine
General Surgery
Internal Medicine
Internal Medicine Subspecialty (specify)
IM/Pediatrics
Medical Genetics
Neurological Surgery
Neurology
Obstetrics-Gynecology
Orthopedic Surgery
Otolaryngology
Pathology
Pediatrics
Pediatrics
Pediatric Subspecialty (specify)
Physical Medicine & Rehab

Plastic Surgery
Preventive Medicine
Psychiatry
Radiation Oncology
Radiology-Diagnostic
Surgical Subspecialty (specify)
Urology
Other (specify)

2: In what specialty will you be entering residency training this July?

(Respondents could only choose a **single** response)

Response
Will still be in medical school
Am graduating but do not plan to enter residency training this July
Anesthesiology
Dermatology
Emergency Medicine
Family Medicine
Internal Medicine (Categorical)
Internal Medicine-Preliminary (PGY-1 Only)
IM/Pediatrics
Medical Genetics
Neurological Surgery
Neurology
Obstetrics-Gynecology
Orthopedic Surgery
Otolaryngology
Pathology
Pediatrics

Physical Medicine & Rehab
Plastic Surgery (Integrated)
Preventive Medicine
Psychiatry
Radiation Oncology
Radiology-Diagnostic
Surgery (Categorical)
Surgery-Preliminary (PGY-1 Only)
Thoracic Surgery
Transitional (PGY-1 Only)
Urology
Vascular Surgery

3: What are your plans after completing medical school?

(Respondents could only choose a **single** response)

Response
Will be doing a research year
Will pursue another graduate degree (PhD, MPH, other)
Taking some personal time off before entering residency training
Pursuing other professional interests before entering residency
Decided against pursuing graduate medical education

4: Did you match into your first choice of specialty?

(Respondents could only choose a **single** response)

Response
Yes
No

5: After completion of your graduate medical education, how likely are you to:

	Very Likely	Somewhat Likely	Not Likely	Don't know/Uncertain
Become a primary care physician				
Pursue subspecialty training				
Become a hospitalist				
Practice in a rural area				

6: Did you complete a Family Medicine clerkship?

(Respondents could only choose a **single** response)

Response
Yes, during my second year
Yes, during my third year
Yes, during my fourth year prior to submitting my match list
Yes, during my fourth year after submitting my match list
No, I did not take a family medicine clerkship

7: In what setting(s) did you do your Family Medicine clerkship? (check all that apply)

(Respondents were allowed to choose **multiple** responses)

Response
Community based private practice
Academic affiliated community practice (e.g. satellite clinic of your academic health center)
Community hospital based outpatient clinic
Academic hospital based outpatient clinic
Other

9: Were you required to take a clerkship aimed at primary care and/or ambulatory care?

(Respondents could only choose a **single** response)

Response
Yes
No

10: How many weeks did you spend in the following settings during your primary care or ambulatory care clerkship: (ENTER ZERO IF NONE) (Family medicine)

(Respondents were limited to **brief** text responses)

Response

10: How many weeks did you spend in the following settings during your primary care or ambulatory care clerkship: (ENTER ZERO IF NONE) (General internal medicine outpatient setting (separate from your IM clerkship))

(Respondents were limited to **brief** text responses)

Response

10: How many weeks did you spend in the following settings during your primary care or ambulatory care clerkship: (ENTER ZERO IF NONE) (General pediatric outpatient setting (separate from your pediatric clerkship))

(Respondents were limited to **brief** text responses)

Response

11: When did you complete your Internal Medicine clerkship?

(Respondents could only choose a **single** response)

Response

During my second year

During my third year

During my fourth year prior to submitting my match list

During my fourth year after submitting my match list

12: How many weeks of your Internal Medicine clerkship took place in an outpatient setting? (ENTER ZERO IF NONE) (Weeks in a general internal medicine outpatient setting)

(Respondents were limited to **brief** text responses)

Response

12: How many weeks of your Internal Medicine clerkship took place in an outpatient

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setting? (ENTER ZERO IF NONE) (Weeks in a subspecialty outpatient setting)

(Respondents were limited to **brief** text responses)

Response

13: In what setting(s) did your outpatient experience(s) in general internal medicine take place? (check all that apply)

(Respondents were allowed to choose **multiple** responses)

Response

Community based private practice

Academic affiliated community practice (e.g. satellite clinic of your academic health center)

Community hospital based outpatient clinic

Academic hospital based outpatient clinic

Other

14: When did you complete your Pediatric clerkship?

(Respondents could only choose a **single** response)

Response

During my second year

During my third year

During my fourth year prior to submitting my match list

During my fourth year after submitting my match list

15: How many weeks of your Pediatric clerkship took place in an outpatient setting? (ENTER ZERO IF NONE) (Weeks in a general pediatric outpatient setting)

(Respondents were limited to **brief** text responses)

Response

15: How many weeks of your Pediatric clerkship took place in an outpatient setting? (ENTER ZERO IF NONE) (Weeks in a pediatric subspecialty outpatient setting)

(Respondents were limited to **brief** text responses)

Response

16: In what setting(s) did your outpatient experience(s) in general pediatrics take place? (check all that apply)

(Respondents were allowed to choose **multiple** responses)

Response
Community based private practice
Academic affiliated community practice (e.g. satellite clinic of your academic health center)
Community hospital based outpatient clinic
Academic hospital based outpatient clinic
Other

17: During your family medicine, general internal medicine or pediatric clerkships, did you experience or observe any of the following? (check all that apply)

	Family Medicine or Equivalent Clerkship	Internal Medicine Clerkship	Pediatrics Clerkship
Preceptors who discouraged you from pursuing a career in primary care			
Preceptors who encouraged you to pursue a career in primary care			
Strong long-term doctor patient relationships			
Rushed/high volume practice			
Challenges with keeping the practice financially viable			
Exposure to a well-run practice			
Repeated frustration with paper-work/insurance requirements			
Team-based medicine (collaboration with NPs, PAs, or nurse-coordinator, etc)			
Large numbers of non-compliant patients			
Primary care physicians with good work life balance			
Physician for whom primary care was a calling			

18: Please rate your change in interest for the following.

	More interested	No change	Less interested	N/A
Did your family medicine clerkship make you more or less interested in a career in family medicine?				
Did your internal medicine clerkship make you more or less interested in a career in general internal medicine?				
Did your pediatric clerkship make you more or less interested in a career in general pediatrics?				

19: When did you complete your surgical clerkship?

(Respondents could only choose a **single** response)

Response
During my second year
During my third year
During my fourth year prior to submitting my match list
During my fourth year after submitting my match list

20: How many weeks of your surgery clerkship were in general surgery? (ENTER ZERO IF NONE) (Weeks in general surgery)

(Respondents were limited to **brief** text responses)

Response

21: What was the setting of your general surgery clerkship experience (check all that apply):

(Respondents were allowed to choose **multiple** responses)

Response
Inpatient with a general surgery team
Inpatient as a part of a multispecialty surgical team
Outpatient general surgery
Academic health center
Community hospital

Other

22: Please rate your level of agreement with the following statements:

	Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree
One or more of the general surgeons I worked with encouraged me to consider a career in general surgery					
One or more of the surgical specialists I worked with encouraged me to consider a career in their specialty					
I felt like a member of the team during my surgical clerkship					

23: Did your surgery clerkship make you more or less interested in a career in general surgery?

(Respondents could only choose a **single** response)

Response
More interested
No change
Less interested

26: How influential were the following in helping you choose your specialty?

	No influence	Minor Influence	Moderate Influence	Strong Influence	Did not use/ not applicable
Personal experience(s) prior to medical school					
Specialty Interest Group activities					
Participation in in-house extramural electives					
Shadowing opportunity prior to your clerkship experience					
Public health/community outreach activities during medical school					

International experiences during medical school						
Research activities during medical school						

26a: How influential were the following in helping you choose your specialty?

	No influence	Minor Influence	Moderate Influence	Strong Influence
Competitiveness of specialty				
Level of educational debt				
Role model influence				
Options for fellowship training				
Income expectations				
Length of residency training				
Work/Life balance				
Fit with interests				
Personality of my future peers				

27: From your perspective, what are the likely shortcomings of a career in the following specialties (check all that apply)

	Poor fit with my interests	Income potential	Work schedule	Future colleagues /peers	Patient population	Level of prestige
Em Med						
Fam Med						
Gen Surg						
Gen IM						
Ob/Gyn						
Pediatrics						
Radiology						
Your specialty if not one of the above						

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28: Which of the following best characterizes the majority/prevaling opinion of your peers and others in your medical school regarding the value of a career in primary care?

The prevailing opinion regarding primary care among:

	Primary care is a waste of a mind and/or a fall-back position	Neutral or equal mixture of supporters and detractors	Primary care is respected
Peers			
Faculty			
Residents			
Deans or other administration officials			

29: When you were applying to medical school, did you actively look for schools that had a reputation/record/culture for any of the following (check all that apply):

(Respondents were allowed to choose **multiple** responses)

Response
Producing large numbers of academics/researchers
Producing large numbers of specialists
Producing large numbers of primary care physicians
Offering training in rural settings
None of the above

30: If all specialties were paid the same, would you be more likely to go into a career in primary care?

(Respondents could only choose a **single** response)

Response
Yes
No
Not sure
I am already planning on pursuing a career in primary care

31: Did you have a hard time finding a mentor to talk with in any of the specialties you indicated earlier that you were seriously considering?

	No	Yes
Anesthesiology		
Dermatology		
Emergency Medicine		
Family Medicine		
General Surgery		
Internal Medicine		
IM/Pediatrics		
Medical Genetics		
Neurological Surgery		
Neurology		
Obstetrics-Gynecology		
Orthopedic Surgery		
Otolaryngology		
Pathology		
Pediatrics		
Pediatrics		
Physical Medicine & Rehab		
Plastic Surgery		
Preventive Medicine		
Psychiatry		
Radiation Oncology		
Radiology-Diagnostic		
Urology		

32: Are you a member of the Alpha Omega Alpha (AOA) honor medical society?

(Respondents could only choose a **single** response)

Response
Yes
No

33: Are you a member of the Gold Humanism Honor Society (GHHS)?

(Respondents could only choose a **single** response)

Response
Yes
No

34: How do you self-identify? (check all that apply)

(Respondents were allowed to choose **multiple** responses)

Response
Hispanic, Latino, or Spanish origin
American Indian or Alaska Native
Asian
Black or African American
Native Hawaiian or Other Pacific Islander
White
Other (specify)

35: How would you characterize the setting where you grew up?

(Respondents could only choose a **single** response)

Response
Urban
Suburban
Rural
Mix of settings

43: Did you attend a regional medical campus for a year or more during medical school? If yes, please indicate which year(s). (check all that apply)

(Respondents were allowed to choose **multiple** responses)

Response
First year
Second year
Third year
Fourth year
Took one or more clerkships at a regional campus but did not spend a whole year (please specify the clerkships)
Did not attend a regional medical campus

36: When you graduate from medical school, how much education debt do you anticipate having? (\$)

(Respondents were limited to **brief** text responses)

Response

37: How do you intend to manage your education debt during residency? One option (forbearance) is to make no payments until after residency which would result in interest accruing on your loans and a higher monthly payment after residency. Another option (Income-Based Repayment or IBR) is to make a modest monthly payment in order to reduce the interest that would accrue, keeping your monthly payment after residency lower.

(Respondents could only choose a **single** response)

Response
Make no payments/forbearance
Make a modest monthly payment/IBR
Not sure
Other: (explain)

38: Are you considering a career in biomedical research?

(Respondents could only choose a **single** response)

Response
Yes
No
Not sure

39: Would you be more likely to consider a career in biomedical research if you were selected to participate in one of the NIH Loan Repayment Programs?

(Respondents could only choose a **single** response)

Response
Yes
No
Not sure