Medical School Year Two Questionnaire

2017 All Schools Summary Report

March 2018

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2017 AAMC Medical School Year Two Questionnaire
All Schools Summary Report & Individual School Report

Executive Summary

Background

The Association of American Medical Colleges (AAMC) developed the Medical School Year Two Questionnaire (Y2Q) as a means for the AAMC, medical schools, and other organizations to identify and address issues critical to the future of medical education and the well-being of medical students. These issues include satisfaction with medical education, career and specialty plans, and perceptions of the medical school learning environment. The Y2Q can be used by medical schools, faculty, students, and researchers for benchmarking purposes and for improving medical education programs.

The *All Schools Summary Report* includes national data from the 2015, 2016, and 2017 Y2Qs for comparison purposes, where comparison data are available. Copies of the *All Schools Summary Report* and the survey instrument are publicly available on the AAMC website at www.aamc.org/data/y2q. In addition to the *All Schools Summary Report*, each medical school is issued a school report displaying data for the school alongside the national data. By request, regional campuses and programs offering specialized medical training under the aegis of an accredited institution are also issued campus reports if the campus or program had five or more respondents. Campus reports display data for the campus alongside data for the parent institution (with combined data for all campuses). School and campus reports are made available to schools' authorized AAMC Student Surveys contacts.

Methodology

The 2017 Y2Q *All Schools Summary Report* provides aggregate data from active second-year students at U.S. medical education programs accredited by the Liaison Committee on Medical Education (LCME). The 2017 Y2Q was open from October 1, 2017 to January 3, 2018. Initial participants were identified by the AAMC Student Records System (SRS). While the survey was open, medical schools could request changes to the list of eligible participants to reflect changes in second-year status.

The data in the 2017 Y2Q *All Schools Summary Report* reflect the responses of 13,467 individuals from the 145 medical schools with second-year students in the 2017-2018 academic year. This represents a 63.5% response rate of the 21,193 individuals identified by SRS as active second-year students at the time the survey closed. Survey data for participating individuals may not be comparable to data for nonparticipants.

The AAMC sent email invitations and reminders to students using email addresses on record in SRS. Due to the impact of hurricanes in 2017, the AAMC did not sent invitations to students at one medical school; the total number of schools with participants in the 2017 Y2Q was thus 144. The response rates varied among the participating medical schools. There were 15 medical schools with a response rate of 90% or above; 16 medical schools with response rates between 80% and 89%; 30 medical schools with response rates between 70% and 79%; 27 medical schools with response rates between 60% and 69%; 19 medical schools with response rates between 50% and 59%; 21 schools with response rates between 40% and 49%; and 16 medical schools with response rates below 40%. The median response rate across participating schools was 66.3%.

The Y2Q included questions regarding the lifestyles, personal characteristics, and learning environments of second-year medical students. Established research scales were included to assess tolerance for ambiguity, empathy, quality of life, perceived stress, perceptions of the learning environment, and burnout. Descriptions of each scale and scoring conventions are provided within the report. Where applicable, a reliability estimate (Cronbach's alpha) is also provided as a measure of internal consistency. A reference list of articles describing these scales is provided at the end of this report.

Percentages displayed in the report may not sum to 100 due to rounding or to questions permitting more than one response. All percentages are rounded. As a result, a percentage of "0.0" does not necessarily indicate that no students responded to that survey option.

Y2Q Content and Report Modifications

The 2017 Y2Q discontinued one question that had been on previous surveys: "Please tell us your estimate of the current average salary for the specialty you selected." This question had been reported as item number 24 in the 2016 Y2Q reports. As a consequence, for items 24 and following, the content in the 2017 reports has different numbering than the corresponding content in the 2016 reports.

For the 2017 Y2Q reports, the display of responses for item 29 have been modified. This item shows the results to the question, "In thinking about a typical week during your pre-clerkship education, please provide the average number of hours per day that you spent doing the following activities" including sleeping, exercising, and working for pay. In previous years, the mean number of hours and standard deviation had been reported for each specified activity. The 2017 reports now display the median number of hours spent doing each activity along with additional time-amount categories that more fully represent the distribution of responses.

Selected Findings

Second-Year Medical Students Report Satisfaction with Their Medical School Education.

More than eight in ten second-year medical students in 2017 reported being satisfied with the quality of their medical education (85.1%). This includes 57.1% who responded "Agree" and 28.0% who responded "Strongly agree" to the statement, "Overall, I am satisfied with the quality of my medical education."

In-Person Class Attendance Continues to Decline as Virtual Class Attendance Rises.

Compared to previous classes, second-year medical students in 2017 were less likely to report attending in-person classes for pre-clerkship courses or lectures. Fewer than half (47.3%) reported having attended in-person pre-clerkship courses or lectures at their medical school "Most of the time" (34.7%) or "Often" (12.6%). This continues a decline observed in prior years: in 2016, the figure was 50.6% and in 2015 it was 52.3%. Nearly a quarter (23.5%) of second-year students in 2017 reported "Almost never" attending in-person courses or lectures. This is an increase of more than five points over what was reported in 2015 (18.2%).

Second-year medical students in 2017 were more likely than their predecessors to report participating in virtual pre-clerkship courses and lectures. The share of second-year medical students who said they attended virtual courses "Most of the time" or "Often" grew to 58.0%. In 2015 the share was 52.6%.

Second-year students' reported use of online videos for their medical education information has also grown in recent years. In 2017, about one in four students (24.2%) reported using online videos on a daily basis. In 2015, the figure reported was 13.4%, or fewer than one in seven students. In 2014, this figure was fewer than one in ten students: 9.1%.

Student Awareness of Mistreatment Policies and Procedures Continues to Increase.

Nearly nine in ten (89.8%) second-year medical students in 2017 reported that they are aware that their school has policies regarding the mistreatment of medical students. The percentage of students reporting awareness of these policies has increased about two points per year in recent years (2016: 88.0%; 2015: 86.0%). Additionally, 68.6% of second-year medical students reported knowing the procedures at their medical school for reporting mistreatment. This also represents an increase compared to what was reported by previous classes (2016: 63.8%; 2015: 61.6%).

Medical Schools Provide Increasingly Effective Tools for Bias Detection.

Second-year medical students in 2017 were more likely than their predecessors to report that, at their medical school, "Students learn effective tools for recognizing their own bias in interacting with people of different identity groups." Students who indicated they "Agree" or "Strongly agree" with this statement were 67.2% of respondents in 2017. By comparison, in 2016 they were 64.4% and in 2015 they were 62.5%. The percentage responding "Strongly agree" was 18.7 percent in 2017 compared to 14.9% in 2015.

Most Students Sleep Seven Hours or More Each Day.

The median daily amount of sleep reported by second-year medical students in 2017 was seven hours. Nearly a third of all respondents (32.5%) said they get eight or more hours of sleep each day. About one in eleven students (9.2%) reported doing paid work while also being in medical school. For those students who did report doing paid work, about half of them (4.3%) said they worked between one to two hours each day.

Second-Year Medical Students Self-Report Their Marital Status, Sexual Orientation, and Gender Identity.

About one in eight second-year medical students in 2017 said they were married (12.4%) or in a common law or civil union (0.4%) relationship. Those with dependents other than a spouse totaled 3.7% of respondents. Respondents most frequently self-identified as heterosexual or straight (92.1%), with 4.1% identifying as gay or lesbian and 3.8% as bisexual. Those who identified as having a gender identity that differed from the sex they had been assigned at birth were 0.6% of all respondents.

Providing Feedback

We encourage constituents to provide feedback regarding the Y2Q reports. If you would like to provide feedback, please contact Y2Q@aamc.org, or David Matthew, Senior Research and Data Analyst, Data Operations and Services (dmatthew@aamc.org).

	All Schools		
	2015	**2016**	**2017**
Total number of students who responded to the questionnaire:	11,586	12,457	13,467

1. Gender:
Note: This information is populated from other AAMC data sources (e.g., SRS).

	Percent	Percent	Percent
Male	49.2	49.0	47.3
Female	50.8	51.0	52.7
Number of respondents	11,586	12,455	13,465

2. Age during second-year:
Note: This information is populated from other AAMC data sources (e.g., SRS).

	Percent	Percent	Percent
Under 21	0.2	0.1	0.2
21 through 23	36.9	36.6	37.3
24 through 26	44.3	45.5	45.9
27 through 29	12.1	11.6	10.8
Over 29	6.6	6.1	5.7
Number of respondents	11,586	12,457	13,467
Median age at second-year	24	24	24

3. How do you self-identify?
Note: Percentages may not sum to 100% as multiple responses are allowed. This information is populated from other AAMC data sources (e.g., SRS).

	Percent	Percent	Percent
American Indian or Alaska Native	1.0	0.8	1.0
Asian	20.1	22.0	22.8
Black or African American	6.9	7.0	7.7
Hispanic, Latino, or of Spanish origin	8.7	8.8	8.9
Native Hawaiian or Other Pacific Islander	0.3	0.4	0.3
White	65.4	63.4	64.2
Other	3.5	3.5	3.3
Non-U.S. citizen and Non-permanent resident	1.7	1.8	1.3
Number of respondents	10,884	11,895	13,237

4. What is your current marital status?

	Percent	Percent	Percent
Single (never legally married)	85.2	86.0	86.5
Legally married	13.4	12.8	12.4
Common law or civil union	0.5	0.3	0.4
Divorced	0.6	0.7	0.4
Separated, but still legally married	0.2	0.2	0.2
Widowed	0.0	0.0	0.0
Number of respondents	10,481	11,370	12,286

All Schools

	2015	2016	2017

5. How many dependents do you have (not including a spouse/partner)?

	Percent	Percent	Percent
None	95.5	95.8	96.3
One	2.7	2.3	2.2
Two	1.2	1.2	1.0
Three	0.4	0.4	0.3
Four or more	0.2	0.2	0.1
Number of respondents	10,483	11,371	12,290

6. Please indicate the extent to which you agree with the following statement:

		Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Count
Percentage of Respondents Selecting Each Rating							

		Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Count
Overall, I am satisfied with the quality of my medical education							
All Medical Schools	2017	1.0	4.6	9.3	57.1	28.0	13,460
All Medical Schools	2016	1.1	4.2	9.4	55.0	30.4	12,450
All Medical Schools	2015	1.3	4.2	9.1	56.4	29.1	11,583

7. Please describe how often you attend:

Percentage of Respondents Selecting Each Rating

		Almost never	Occasionally	Somewhat often	Often	Most of the time	Count
In-person pre-clerkship courses/lectures at YOUR medical school							
All Medical Schools	2017	23.5	17.4	11.8	12.6	34.7	13,234
All Medical Schools	2016	20.3	17.2	11.9	14.1	36.5	12,236
All Medical Schools	2015	18.2	16.7	12.9	14.7	37.6	11,318
Virtual pre-clerkship courses/lectures (e.g., podcast or video) at YOUR medical school							
All Medical Schools	2017	17.0	14.0	11.0	15.6	42.4	13,128
All Medical Schools	2016	17.5	14.3	10.9	15.7	41.6	12,142
All Medical Schools	2015	20.3	15.9	11.3	15.8	36.7	11,202

8. Please describe how often you utilize the following online resources:

Percentage of Respondents Selecting Each Rating

		Never	Less than once a month	At least once a month	At least once a week	Daily	Count
Online medical education courses/lectures from OTHER medical schools							
All Medical Schools	2017	42.4	27.2	13.4	10.6	6.4	13,257
All Medical Schools	2016	40.2	29.8	14.3	10.8	4.9	12,254
All Medical Schools	2015	37.5	29.5	16.9	11.7	4.4	11,344
Online videos for medical education information (e.g., YouTube)							
All Medical Schools	2017	3.6	13.5	21.8	36.9	24.2	13,265
All Medical Schools	2016	4.5	17.2	26.3	35.8	16.2	12,263
All Medical Schools	2015	4.6	18.4	29.4	34.3	13.4	11,328

8. Please describe how often you utilize the following online resources: (Continued)

		Never	Less than once a month	At least once a month	At least once a week	Daily	Count
				Percentage of Respondents Selecting Each Rating			

Other online content for medical education information (e.g., Wikipedia)

		Never	Less than once a month	At least once a month	At least once a week	Daily	Count
All Medical Schools	2017	1.7	5.2	10.7	37.7	44.7	13,188
All Medical Schools	2016	1.3	4.3	11.0	39.3	44.1	12,221
All Medical Schools	2015	1.1	3.2	10.0	36.0	49.7	11,312

	All Schools		
	2015	**2016**	**2017**

9. When did you take, or when do you expect to take, the USMLE Step 1 exam?

	Percent	Percent	Percent
I have already taken Step 1	0.2	0.2	0.2
I will take Step 1 before the end of the current calendar year	0.8	1.1	0.8
I will take Step 1 sometime from January to March of next year	14.4	16.0	18.6
I will take Step 1 sometime after March of next year	84.6	82.7	80.4
Number of respondents	11,356	12,272	13,281

10. Are you aware that your school has policies regarding the mistreatment of medical students?

	Percent	Percent	Percent
Yes	86.0	88.0	89.8
No	14.0	12.0	10.2
Number of respondents	11,351	12,270	13,275

11. Do you know the procedures at your school for reporting the mistreatment of medical students?

	Percent	Percent	Percent
Yes	61.6	63.8	68.6
No	38.4	36.2	31.4
Number of respondents	11,356	12,273	13,281

12. Please indicate the extent to which you agree with the following statements about your medical school:

		Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Count
				Percentage of Respondents Selecting Each Rating			

My medical school prepares students to effectively communicate with people across a broad spectrum of backgrounds

		Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Count
All Medical Schools	2017	0.7	2.7	8.2	46.9	41.4	13,152
All Medical Schools	2016	0.7	2.8	9.0	46.3	41.3	12,151
All Medical Schools	2015	0.8	3.3	10.4	48.2	37.3	11,218

I often feel isolated at school

		Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Count
All Medical Schools	2017	28.7	41.1	15.3	11.5	3.4	13,080
All Medical Schools	2016	29.3	41.1	14.8	11.4	3.4	12,109
All Medical Schools	2015	28.6	42.0	15.1	10.9	3.4	11,188

12. Please indicate the extent to which you agree with the following statements about your medical school: (Continued)

		Percentage of Respondents Selecting Each Rating					
		Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Count
My teachers and mentors have told me that they have high standards for my performance							
All Medical Schools	2017	1.5	8.3	28.6	46.1	15.5	13,078
All Medical Schools	2016	1.5	8.1	28.7	45.9	15.8	12,062
All Medical Schools	2015	1.3	7.1	27.2	47.1	17.3	11,177
I often feel that my performance is being judged more closely than others							
All Medical Schools	2017	29.2	47.6	15.1	6.2	1.9	13,125
All Medical Schools	2016	29.8	47.4	14.7	6.3	1.9	12,138
All Medical Schools	2015	27.4	47.8	16.5	6.2	2.1	11,200
My teachers and mentors have told me that they feel sure that I can perform well against high standards							
All Medical Schools	2017	1.9	9.3	27.6	43.5	17.6	13,123
All Medical Schools	2016	2.2	8.8	28.6	42.7	17.7	12,116
All Medical Schools	2015	2.3	8.5	28.3	43.2	17.7	11,188
I closely share the professional values and interests of most of my classmates							
All Medical Schools	2017	1.5	7.0	18.9	55.8	16.8	13,062
All Medical Schools	2016	1.4	7.1	19.3	55.5	16.7	12,074
All Medical Schools	2015	1.5	7.4	19.6	55.4	16.1	11,155
I often feel as if my performance is being judged as a member of the identity group that I belong to more than as an individual							
All Medical Schools	2017	30.9	35.8	18.4	11.2	3.7	13,107
All Medical Schools	2016	31.2	35.4	19.1	11.3	3.1	12,110
All Medical Schools	2015	28.7	34.0	21.4	12.5	3.5	11,178
Students learn effective tools for recognizing their own bias in interacting with people of different identity groups							
All Medical Schools	2017	2.6	9.1	21.1	48.5	18.7	13,071
All Medical Schools	2016	2.7	10.0	22.9	47.4	17.0	12,077
All Medical Schools	2015	3.0	10.3	24.2	47.6	14.9	11,159
The medical school experience, to this point, contributes to students' ability to work in disadvantaged communities							
All Medical Schools	2017	2.1	8.3	19.5	47.7	22.4	13,136
All Medical Schools	2016	2.4	8.9	20.4	46.9	21.4	12,128
All Medical Schools	2015	2.8	9.5	22.6	45.2	19.9	11,194

13. Learning Environment Scales

A shortened version of the Medical School Learning Environment Survey (MSLES) instrument consists of 11 items measuring three dimensions of the learning environment – emotional climate, student-faculty interaction, and student-student interaction. Each subscale is calculated by summing across the items, which are measured on a 0-5 point scale. **Higher scores for each subscale indicate more positive perceptions of the learning environment.** Only participants who responded to every item on the scale are included in the summary statistics. For each subscale, the mean score, the standard deviation, and the number of respondents are displayed below. Additionally, a reliability estimate (Cronbach's alpha) is shown as a measure of internal consistency. The measure varies from 0 to 1, and an instrument is often considered to be reliable if the estimate is 0.7 or higher.

Emotional Climate

The emotional climate subscale combines the responses of three items assessing a student's affective response to the learning environment. These questions ask to what extent [or, how often] the educational experience leads to a sense of achievement, valuing oneself, and confidence in one's academic abilities. The possible range of responses for the emotional climate subscale is 0 to 15, and higher scores are correlated with positive perceptions of the learning environment.

		Reliability Estimate	Mean	Standard Deviation	Count
All Medical Schools	2017	0.9	9.1	3.1	12,522
All Medical Schools	2016	0.9	9.2	3.1	11,627
All Medical Schools	2015	0.9	9.2	3.1	10,688

Student-Student Interaction

The student-student interaction subscale combines responses to four items assessing peer relations at the medical school. In addition to asking about perceived distance among students, these questions ask to what extent students get to know each other well, spend time assisting each other, and gather in informal activities. The possible range of responses for the student-student interaction subscale is 0 to 20, and higher scores are correlated with positive perceptions of the learning environment.

		Reliability Estimate	Mean	Standard Deviation	Count
All Medical Schools	2017	0.8	14.8	3.1	12,497
All Medical Schools	2016	0.9	14.9	3.2	11,626
All Medical Schools	2015	0.8	15.1	3.0	10,677

Student-Faculty Interaction

The student-faculty interaction subscale combines responses to four items assessing a student's perception of faculty supportiveness. In addition to asking about perceived distance between faculty and students, these questions ask to what extent students feel that faculty are helpful when providing academic advice, when providing non-academic advice, and when answering questions and providing criticism. The possible range of responses for the student-faculty interaction subscale is 0 to 20, and higher scores are correlated with positive perceptions of the learning environment.

		Reliability Estimate	Mean	Standard Deviation	Count
All Medical Schools	2017	0.8	14.8	3.2	12,518
All Medical Schools	2016	0.8	14.7	3.2	11,646
All Medical Schools	2015	0.8	14.8	3.2	10,710

14. Think about how often you experience the following at your medical school. Determine your response by choosing one of the categories of frequency given below. Choose the category that best approximates your perceptions.

		Percentage of Respondents Selecting Each Rating						
		Never	Almost never	Sometimes	Fairly often	Very often	Always	Count
There are disconnects between what I am taught about professional behaviors/attitudes and what I see being demonstrated by faculty								
All Medical Schools	2017	18.6	46.2	24.0	5.5	4.1	1.5	12,705
All Medical Schools	2016	18.0	47.5	24.0	5.4	3.6	1.5	11,801
All Medical Schools	2015	17.7	46.4	24.3	5.9	4.3	1.4	10,837

15. Please rate how often the following professional behaviors/attitudes are demonstrated by your medical school's faculty.

		Percentage of Respondents Selecting Each Rating						
		Never	Almost never	Sometimes	Fairly often	Very often	Always	Count
Respecting patient confidentiality								
All Medical Schools	2017	0.0	0.1	1.3	4.9	26.4	67.4	12,600
All Medical Schools	2016	0.1	0.1	1.3	4.9	27.2	66.4	11,645
All Medical Schools	2015	0.0	0.2	1.4	5.4	28.0	65.0	10,697
Using professional language/avoiding derogatory language								
All Medical Schools	2017	0.7	0.6	2.4	8.3	38.1	49.9	12,591
All Medical Schools	2016	0.7	0.7	2.2	8.6	37.7	50.1	11,631
All Medical Schools	2015	0.5	1.0	2.6	8.9	38.3	48.6	10,684
Dressing in a professional manner								
All Medical Schools	2017	0.0	0.2	1.2	5.1	30.2	63.2	12,554
All Medical Schools	2016	0.1	0.1	1.2	5.6	31.1	61.9	11,614
All Medical Schools	2015	0.0	0.1	1.3	5.4	32.5	60.7	10,667
Resolving conflicts in ways that respect the dignity of all involved								
All Medical Schools	2017	0.2	0.7	4.6	11.2	37.3	45.9	12,529
All Medical Schools	2016	0.2	0.6	4.0	10.6	38.1	46.5	11,571
All Medical Schools	2015	0.2	0.5	4.3	11.0	39.0	45.0	10,627
Being respectful of house staff and other physicians								
All Medical Schools	2017	0.1	0.2	1.9	7.2	34.7	55.9	12,564
All Medical Schools	2016	0.1	0.2	2.1	7.4	35.7	54.6	11,600
All Medical Schools	2015	0.0	0.2	2.1	7.9	36.6	53.1	10,649
Respecting diversity								
All Medical Schools	2017	0.1	0.5	4.7	10.6	33.4	50.7	12,519
All Medical Schools	2016	0.2	0.6	4.5	10.5	33.7	50.5	11,539
All Medical Schools	2015	0.1	0.6	5.2	10.4	33.8	49.9	10,581
Being respectful of other health professions								
All Medical Schools	2017	0.1	0.2	2.7	9.3	35.7	52.1	12,595
All Medical Schools	2016	0.1	0.4	2.9	9.7	37.0	50.0	11,632
All Medical Schools	2015	0.0	0.3	3.6	11.8	38.1	46.0	10,692
Being respectful of other specialties								
All Medical Schools	2017	0.1	0.3	3.7	11.9	37.7	46.3	12,559
All Medical Schools	2016	0.1	0.4	3.6	12.5	38.7	44.6	11,596
All Medical Schools	2015	0.1	0.4	4.5	14.3	39.7	41.0	10,661

15. Please rate how often the following professional behaviors/attitudes are demonstrated by your medical school's faculty. (Continued)

		Percentage of Respondents Selecting Each Rating						
		Never	Almost never	Sometimes	Fairly often	Very often	Always	Count
Being on time and managing a schedule well								
All Medical Schools	2017	0.3	1.2	7.0	18.9	40.4	32.2	12,572
All Medical Schools	2016	0.2	1.1	6.5	18.3	42.4	31.5	11,611
All Medical Schools	2015	0.3	1.0	7.1	19.0	42.5	30.1	10,682
Providing direction and constructive feedback								
All Medical Schools	2017	0.4	1.8	9.0	18.6	37.8	32.3	12,554
All Medical Schools	2016	0.4	1.9	9.1	18.3	38.8	31.5	11,586
All Medical Schools	2015	0.3	2.0	9.4	19.2	38.7	30.3	10,658
Showing respectful interaction with students								
All Medical Schools	2017	0.2	0.4	3.4	10.9	40.9	44.2	12,568
All Medical Schools	2016	0.2	0.5	3.6	10.4	41.6	43.7	11,620
All Medical Schools	2015	0.1	0.4	3.8	11.3	42.3	42.0	10,668
Showing empathy and compassion								
All Medical Schools	2017	0.2	0.9	4.9	13.5	40.2	40.2	12,570
All Medical Schools	2016	0.3	0.8	5.2	13.8	40.9	39.0	11,611
All Medical Schools	2015	0.2	0.9	5.6	14.7	41.7	36.9	10,670

16. Indicate whether you agree or disagree with the following statement.

		Percentage of Respondents Selecting Each Rating					
		Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Count
My medical school has done a good job of fostering and nurturing my development as a person							
All Medical Schools	2017	2.1	6.4	20.0	44.9	26.6	12,020
All Medical Schools	2016	2.2	6.4	20.0	44.0	27.4	11,073
All Medical Schools	2015	2.2	6.5	20.6	44.9	25.8	10,130
My medical school has done a good job of fostering and nurturing my development as a future physician							
All Medical Schools	2017	0.6	1.6	5.9	48.5	43.3	12,606
All Medical Schools	2016	0.5	1.6	5.9	47.8	44.1	11,667
All Medical Schools	2015	0.6	1.7	6.4	47.9	43.4	10,746

17. Tolerance for Ambiguity (TFA) Scale

Tolerance for Ambiguity (TFA) is a measure of one's ability to cope with situations of uncertainty. Scales measuring TFA have been used in prior research to show how ambiguity impacts medical education and medical care. TFA scores are calculated by summing across 7 items, which are measured on a 1-6 point scale. **The possible range of scores is 7 to 42, and higher scores are correlated with higher tolerance for ambiguity.** Only participants who responded to every item on the scale are included in the summary statistics. The mean TFA score, the standard deviation, and the number of respondents are displayed below. Additionally, a reliability estimate (Cronbach's alpha) is shown as a measure of internal consistency. The measure varies from 0 to 1, and an instrument is considered to be reliable if the estimate is 0.7 or higher.

Tolerance for Ambiguity (TFA) Scale		Reliability Estimate	Mean	Standard Deviation	Count
All Medical Schools	2017	0.8	23.9	5.8	12,244
All Medical Schools	2016	0.8	24.0	5.8	11,323
All Medical Schools	2015	0.8	23.8	5.9	10,437

18. **Interpersonal Reactivity Index (IRI)**

The Interpersonal Reactivity Index (IRI) is a measure of individual differences in empathy. Scales measuring empathy have been used in prior research to show how levels of empathy may change throughout medical education. For Y2Q purposes, the IRI consists of 8 items. These include 4 items from each of the IRI subscales – perspective taking and empathic concern. IRI scores are calculated by summing across the 8 items, which are measured on a 0-4 point scale. **The possible range of scores is 0 to 32, and higher scores are correlated with higher levels of empathy.** Only participants who responded to every item on the scale are included in the summary statistics. The mean IRI score, the standard deviation, and the number of respondents are displayed below. Additionally, a reliability estimate (Cronbach's alpha) is shown as a measure of internal consistency. The measure varies from 0 to 1, and an instrument is considered to be reliable if the estimate is 0.7 or higher.

Interpersonal Reactivity Index (IRI)		Reliability Estimate	Mean	Standard Deviation	Count
All Medical Schools	2017	0.8	24.1	4.4	12,164
All Medical Schools	2016	0.8	23.9	4.5	11,213
All Medical Schools	2015	0.8	23.9	4.5	10,313

	All Schools		
	2015	**2016**	**2017**

19. **In which of the following activities do you plan to participate during your career?**
Note: Percentages may not sum to 100% as multiple responses are allowed.

	Percent	Percent	Percent
Patient Care	98.3	98.2	98.2
Research	47.0	48.1	48.1
Teaching	62.7	62.1	62.7
Medical School Faculty	33.9	33.2	33.4
Administration (e.g., Department Chair, Dean)	21.5	22.0	22.2
Military Service	4.8	4.7	4.7
Public Health	30.1	32.0	32.2
Other	3.0	3.4	3.2
Number of respondents	10,554	11,454	12,398

20. **Do you anticipate providing patient care full-time or part-time?**
Note: Only those who selected "Patient Care" at Q19 could respond to this item.

	Percent	Percent	Percent
Full-time (at least 36 hours a week)	86.2	87.3	87.4
Part-time (less than 36 hours a week)	13.8	12.7	12.6
Number of respondents	10,340	11,226	12,153

21. **How exclusively do you expect to be involved in research?**
Note: Only those who selected "Research" at Q19 could respond to this item.

	Percent	Percent	Percent
Full-time	2.8	2.7	2.8
Significantly involved	41.3	41.9	40.6
Involved in a limited way	55.9	55.5	56.7
Number of respondents	4,953	5,504	5,955

	All Schools		
	2015	**2016**	**2017**

22.   What general specialty are you considering?

	Percent	Percent	Percent
Anesthesiology or subspecialty	2.4	2.4	2.4
Dermatology or subspecialty	1.6	1.5	1.9
Emergency Medicine or subspecialty	9.7	9.8	10.1
Family Medicine or subspecialty	6.7	5.9	5.3
Internal Medicine or subspecialty	17.3	17.2	17.5
Internal Medicine/Pediatrics	2.7	2.9	2.8
Medical Genetics or subspecialty	0.1	0.2	0.1
Neurological Surgery	1.7	1.5	1.7
Neurology or subspecialty	2.7	2.8	2.8
Nuclear Medicine	0.0	0.0	0.0
Obstetrics and Gynecology or subspecialty	4.8	5.2	5.1
Ophthalmology or subspecialty	2.2	2.0	2.3
Orthopaedic Surgery or subspecialty	5.2	5.0	4.8
Otolaryngology or subspecialty	1.4	1.5	1.7
Pathology or subspecialty	1.0	0.8	0.8
Pediatrics or subspecialty	10.1	10.5	9.5
Physical Medicine and Rehabilitation or subspecialty	1.0	0.8	0.8
Plastic Surgery or subspecialty	0.9	0.9	1.1
Preventive Medicine or subspecialty	0.2	0.1	0.1
Psychiatry or subspecialty	2.1	2.2	2.6
Radiation Oncology	0.9	0.8	0.7
Radiology or subspecialty	2.2	2.2	2.4
Surgery or subspecialty	7.1	7.9	8.0
Thoracic Surgery or subspecialty	0.9	0.8	0.7
Urology or subspecialty	1.0	1.0	0.9
Vascular Surgery or subspecialty	0.3	0.1	0.3
Undecided	13.8	13.8	13.5
I do not plan to practice medicine	0.1	0.1	0.1
Number of respondents	10,560	11,472	12,424

23.   You selected an interest in Family Medicine, Internal Medicine, Internal Medicine/Pediatrics, Obstetrics and Gynecology, or Pediatrics. What career are you considering?
Note: Only those who responded "Family Medicine," "Internal Medicine," "Internal Medicine/Pediatrics," "Obstetrics and Gynecology," or "Pediatrics" to Q22 could respond to this item.

	Percent	Percent	Percent
Primary care practice (i.e., office-based continuing care in general Family Medicine, general Internal Medicine, or general Pediatrics)	26.5	25.3	23.6
Hospitalist (i.e., salaried, full-time care of hospitalized patients)	7.0	7.1	7.5
Sub-specialty (e.g., Cardiology, Pediatric Oncology, Family Medicine/Sports Medicine)	46.1	47.3	48.6
Undecided	20.4	20.3	20.3
Number of respondents	4,385	4,788	4,993

24. **When thinking about your career path after medical school, how important are the following considerations?**

		Percentage of Respondents Selecting Each Rating				
		Not important	Somewhat important	Very important	Essential	Count
Working for social change						
All Medical Schools	2017	8.1	35.8	36.4	19.7	12,374
All Medical Schools	2016	9.4	36.9	34.7	19.0	11,426
All Medical Schools	2015	9.5	38.8	34.0	17.6	10,516
High income potential						
All Medical Schools	2017	13.9	51.1	29.0	6.0	12,367
All Medical Schools	2016	16.3	51.5	27.4	4.8	11,413
All Medical Schools	2015	17.3	51.9	26.2	4.7	10,512
Social recognition or status						
All Medical Schools	2017	38.0	44.8	14.8	2.4	12,368
All Medical Schools	2016	37.4	46.2	14.5	1.9	11,415
All Medical Schools	2015	36.6	46.4	14.9	2.1	10,510
Stable, secure future						
All Medical Schools	2017	0.9	12.2	44.9	42.0	12,383
All Medical Schools	2016	1.0	11.0	45.5	42.5	11,437
All Medical Schools	2015	0.8	11.9	43.4	43.8	10,528
Creativity and initiative						
All Medical Schools	2017	4.9	33.2	42.7	19.1	12,371
All Medical Schools	2016	4.9	32.4	42.8	19.9	11,425
All Medical Schools	2015	4.3	31.4	43.7	20.6	10,530
Expression of personal values						
All Medical Schools	2017	4.0	23.8	43.4	28.7	12,370
All Medical Schools	2016	4.6	24.1	42.9	28.3	11,408
All Medical Schools	2015	4.7	24.0	42.7	28.6	10,513
Availability of jobs						
All Medical Schools	2017	3.0	24.9	49.6	22.4	12,382
All Medical Schools	2016	2.3	23.4	50.1	24.2	11,432
All Medical Schools	2015	2.4	23.7	47.9	25.9	10,526
Leadership potential						
All Medical Schools	2017	7.7	34.0	40.9	17.4	12,371
All Medical Schools	2016	7.4	34.4	40.9	17.3	11,422
All Medical Schools	2015	7.3	34.5	40.5	17.8	10,513
Work/life balance						
All Medical Schools	2017	1.3	12.5	35.8	50.4	12,382
All Medical Schools	2016	1.4	13.1	35.0	50.6	11,437
All Medical Schools	2015	1.3	12.0	34.7	52.0	10,527
Ability to pay off debt						
All Medical Schools	2017	12.5	17.1	31.9	38.5	12,376
All Medical Schools	2016	13.1	17.1	30.3	39.5	11,431
All Medical Schools	2015	12.6	17.2	29.7	40.5	10,517

24. **When thinking about your career path after medical school, how important are the following considerations? (Continued)**

		Percentage of Respondents Selecting Each Rating				
		Not important	Somewhat important	Very important	Essential	Count
Opportunity for innovation						
All Medical Schools	2017	6.5	37.0	37.8	18.6	12,357
All Medical Schools	2016	6.6	36.8	37.3	19.3	11,422
All Medical Schools	2015	6.3	36.6	36.6	20.5	10,522

25. **Indicate whether you agree or disagree with the following statement:**

		Percentage of Respondents Selecting Each Rating					
		No	Probably not	Neutral	Probably yes	Yes	Count
If you could revisit your career choice, would you choose to attend medical school again?							
All Medical Schools	2017	1.0	3.1	6.2	29.0	60.8	12,414
All Medical Schools	2016	0.9	2.7	6.6	28.5	61.3	11,467
All Medical Schools	2015	1.0	3.1	6.7	28.5	60.7	10,558

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26. Quality of Life (QOL) Scale

The Quality of Life (QOL) scale, which includes items from the Linear Analogue Self-Assessment Scale (LASA-6), is a measure of the following aspects of life: overall quality of life, mental (intellectual) well-being, physical well-being, emotional well-being, level of social activity, and spiritual well-being. The QOL questions ask about feelings that respondents experienced in the past week. QOL scores are calculated by summing across the six items, which are measured on a 0-10 point scale. **The possible range of responses is 0 to 60, and higher scores are correlated with higher quality of life.** Only participants who responded to every item on the scale are included in the summary statistics. The mean QOL score, the standard deviation, and the number of respondents are displayed below. Additionally, a reliability estimate (Cronbach's alpha) is shown as a measure of internal consistency. The measure varies from 0 to 1, and an instrument is often considered to be reliable if the estimate is 0.7 or higher.

		Reliability Estimate	Mean	Standard Deviation	Count
All Medical Schools	2017	0.9	40.2	10.1	12,258
All Medical Schools	2016	0.9	40.6	10.1	11,311
All Medical Schools	2015	0.9	40.1	10.2	10,402

Additional Quality of Life (QOL) Scales

Additional Quality of Life (QOL) items are also taken from the Linear Analogue Self-Assessment Scale (LASA) and are distinct measures of the following aspects of life: level of fatigue, level of social support from family and friends, and level of financial concerns. The QOL questions ask about feelings that respondents experienced in the past week, and the scores are calculated individually on 0-10 point scales. **The possible range of responses is 0 to 10, and higher scores represent more positive outcomes: no fatigue, higher levels of social support from family and friends, and no financial concerns.** The summary statistics displayed below include the mean score, the standard deviation, and the number of respondents. Because the additional QOL items are calculated individually, the internal consistency estimate is not provided.

		Mean	Standard Deviation	Count
QOL - Level of fatigue (0 = Constant tiredness, 10 = No fatigue)				
All Medical Schools	2017	4.8	2.3	12,380
All Medical Schools	2016	4.8	2.3	11,431
All Medical Schools	2015	4.8	2.3	10,513

		Mean	Standard Deviation	Count
QOL - Level of social support from family and friends (0 = No support, 10 = Highest level of support)				
All Medical Schools	2017	8.1	1.9	12,374
All Medical Schools	2016	8.1	2.0	11,415
All Medical Schools	2015	8.0	2.0	10,500

		Mean	Standard Deviation	Count
QOL - Level of financial concerns (0 = Constant concerns, 10 = No concerns)				
All Medical Schools	2017	5.5	3.0	12,382
All Medical Schools	2016	5.5	3.0	11,437
All Medical Schools	2015	5.4	3.0	10,529

27. Perceived Stress Scale - 4

The Perceived Stress Scale - 4 (PSS-4) is a four-item version of a widely used instrument for measuring the perception of stress. The scale measures the degree to which situations in one's life are considered stressful. The scale also includes a number of direct questions about current levels of experienced stress. The PSS-4 also includes questions that ask about feelings and thoughts that respondents experienced during the last month. In each case, respondents are asked how often they felt a certain way. PSS-4 scores are calculated by summing across four items, which are measured on a 0-4 point scale. **The possible range of scores is 0 to 16, and higher scores are correlated with higher perceived levels of stress.** Only participants who responded to every item on the scale are included in the summary statistics. The mean PSS-4 score, the standard deviation, and the number of respondents are displayed below. Additionally, a reliability estimate (Cronbach's alpha) is shown as a measure of internal consistency. The measure varies from 0 to 1, and an instrument is often considered to be reliable if the estimate is 0.7 or higher.

		Reliability Estimate	Mean	Standard Deviation	Count
All Medical Schools	2017	0.8	5.8	2.9	12,286
All Medical Schools	2016	0.8	5.7	2.9	11,326
All Medical Schools	2015	0.8	5.8	2.9	10,419

28. Oldenburg Burnout Inventory for Medical Students Scale

The Oldenburg Burnout Inventory for Medical Students (OLBI-MS) is a modified and shortened version of the Oldenburg Burnout Inventory (OLBI). The OLBI-MS instrument consists of 16 items measuring two dimensions of burnout – exhaustion and disengagement. Each subscale is calculated by summing across the items, which are measured on a 0-3 point scale. **Higher scores are correlated with higher levels of burnout.** Only participants who responded to every item on the scale are included in the summary statistics. For each subscale, the mean score, the standard deviation, and the number of respondents are displayed below. Additionally, a reliability estimate (Cronbach's alpha) is shown as a measure of internal consistency. The measure varies from 0 to 1, and an instrument is often considered to be reliable if the estimate is 0.7 or higher.

Disengagement

The disengagement subscale includes eight items on a 0-3 point scale and refers to distancing oneself from the object and content of medical school work and to negative attitudes toward medical school in general. The possible range of responses for the disengagement subscale is 0 to 24, and higher scores are correlated with higher levels of burnout.

		Reliability Estimate	Mean	Standard Deviation	Count
All Medical Schools	2017	0.8	9.8	3.7	12,074
All Medical Schools	2016	0.8	9.7	3.7	11,145
All Medical Schools	2015	0.8	9.7	3.7	10,215

Exhaustion

The exhaustion subscale includes eight items on a 0-3 point scale and refers to the cognitive and physical strain as a consequence of the demands of medical school. The possible range of responses for the exhaustion subscale is 0 to 24, and higher scores are correlated with higher levels of burnout.

		Reliability Estimate	Mean	Standard Deviation	Count
All Medical Schools	2017	0.8	11.8	3.9	12,055
All Medical Schools	2016	0.8	11.7	3.8	11,066
All Medical Schools	2015	0.8	11.8	3.9	10,206

	All Schools		
	2015	**2016**	**2017**

29. In thinking about a typical week during your pre-clerkship education, please provide the average number of hours PER DAY that you spent doing the following activities.
Note: Responses needed to total 24 hours.

Sleep

	Percent	Percent	Percent
Less than 5 hours	0.7	0.6	0.5
5.0 to 5.9 hours	4.1	3.9	3.7
6.0 to 6.9 hours	24.5	21.8	22.0
7.0 to 7.9 hours	39.7	41.5	41.2
8.0 or more hours	31.0	32.2	32.5
Median hours of sleep	7	7	7

Educational activities (e.g., attending class, studying)

	Percent	Percent	Percent
Less than 7 hours	7.8	8.2	8.0
7.0 to 8.9 hours	19.2	19.2	19.5
9.0 to 10.9 hours	31.0	32.4	32.0
11.0 to 12.9 hours	26.8	25.5	26.1
13.0 or more hours	15.2	14.7	14.5
Median hours of educational activities	10	10	10

Non-educational activities (e.g., being with friends/family, solitary recreation)

	Percent	Percent	Percent
Less than 3 hours	32.5	33.4	32.9
3.0 to 4.9 hours	40.6	40.9	40.8
5.0 to 6.9 hours	18.8	18.1	18.4
7.0 to 8.9 hours	6.2	5.6	6.0
9.0 or more hours	1.8	2.0	1.9
Median hours of non-educational activities	3	3	3

Paid work

	Percent	Percent	Percent
Zero hours	91.2	90.4	90.8
Less than 1 hour	1.5	1.4	1.5
1.0 to 1.9 hours	3.7	4.6	4.3
2.0 to 2.9 hours	2.1	2.2	2.0
3.0 or more hours	1.5	1.5	1.4
Median hours of paid work	0	0	0

Exercise/sports

	Percent	Percent	Percent
Zero hours	16.9	16.6	17.7
Less than 1 hour	14.7	14.1	13.6
1.0 to 1.9 hours	50.1	50.8	49.9
2.0 to 2.9 hours	16.4	16.3	16.7
3.0 or more hours	2.0	2.3	2.2
Median hours of exercise/sports	1	1	1

		All Schools	
	2015	**2016**	**2017**

29. **In thinking about a typical week during your pre-clerkship education, please provide the average number of hours PER DAY that you spent doing the following activities.**
Note: Responses needed to total 24 hours. (Continued)

Other

	Percent	Percent	Percent
Zero hours	33.3	33.2	33.1
Less than 1 hour	1.3	1.3	1.2
1.0 to 1.9 hours	12.4	12.0	11.9
2.0 to 2.9 hours	19.6	19.0	19.5
3.0 or more hours	33.4	34.5	34.3
Median hours of other activities	2	2	2
Number of respondents	10,389	11,261	12,181

30. **For each of the following behaviors, please indicate the frequency you personally experienced that behavior during medical school. Include in your response any behaviors performed by faculty, nurses, residents/interns, other institution employees or staff, and other students. Please do not include behaviors performed by patients.**
During medical school, how frequently have you...

		Percentage of Respondents Selecting Each Rating				
		Never	Once	Occasionally	Frequently	Count
Been publicly embarrassed?						
All Medical Schools	2017	76.5	14.8	8.3	0.4	12,254
All Medical Schools	2016	76.4	14.5	8.8	0.3	11,330
All Medical Schools	2015	75.4	14.8	9.4	0.4	10,427
Been publicly humiliated?						
All Medical Schools	2017	92.1	5.5	2.2	0.2	12,240
All Medical Schools	2016	92.1	5.5	2.2	0.2	11,313
All Medical Schools	2015	91.9	5.5	2.3	0.2	10,417
Been threatened with physical harm?						
All Medical Schools	2017	99.1	0.6	0.3	0.0	12,224
All Medical Schools	2016	99.0	0.7	0.2	0.1	11,306
All Medical Schools	2015	99.2	0.6	0.2	0.0	10,406
Been physically harmed?						
All Medical Schools	2017	99.3	0.4	0.2	0.0	12,234
All Medical Schools	2016	99.3	0.4	0.2	0.1	11,299
All Medical Schools	2015	99.3	0.5	0.2	0.0	10,416
Been required to perform personal services?						
All Medical Schools	2017	97.7	0.6	1.1	0.5	12,249
All Medical Schools	2016	97.5	0.6	1.2	0.6	11,320
All Medical Schools	2015	97.3	0.7	1.3	0.7	10,427

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30. **For each of the following behaviors, please indicate the frequency you personally experienced that behavior during medical school. Include in your response any behaviors performed by faculty, nurses, residents/interns, other institution employees or staff, and other students. Please do not include behaviors performed by patients.**
During medical school, how frequently have you... (Continued)

Percentage of Respondents Selecting Each Rating

		Never	Once	Occasionally	Frequently	Count
Been subjected to unwanted sexual advances?						
All Medical Schools	2017	96.7	2.0	1.2	0.1	12,236
All Medical Schools	2016	97.1	1.8	1.0	0.1	11,309
All Medical Schools	2015	97.3	1.5	1.1	0.0	10,419
Been asked to exchange sexual favors for grades or other rewards?						
All Medical Schools	2017	99.8	0.1	0.1	0.0	12,240
All Medical Schools	2016	99.7	0.1	0.2	0.0	11,312
All Medical Schools	2015	99.7	0.1	0.2	0.0	10,423
Been denied opportunities for training or rewards based on gender?						
All Medical Schools	2017	97.2	1.4	1.1	0.3	12,232
All Medical Schools	2016	97.7	1.2	1.0	0.2	11,299
All Medical Schools	2015	97.7	1.2	0.9	0.2	10,397
Been subjected to offensive sexist remarks/names?						
All Medical Schools	2017	88.7	5.6	5.2	0.5	12,184
All Medical Schools	2016	89.9	5.2	4.5	0.4	11,248
All Medical Schools	2015	90.7	4.7	4.3	0.3	10,370
Received lower evaluations or grades solely because of gender rather than performance?						
All Medical Schools	2017	98.4	0.9	0.6	0.0	12,255
All Medical Schools	2016	98.4	0.9	0.5	0.1	11,317
All Medical Schools	2015	98.6	0.8	0.5	0.1	10,418
Been denied opportunities for training or rewards based on race or ethnicity?						
All Medical Schools	2017	96.6	1.2	1.7	0.5	12,243
All Medical Schools	2016	96.8	1.1	1.6	0.5	11,315
All Medical Schools	2015	96.7	1.2	1.7	0.5	10,420
Been subjected to racially or ethnically offensive remarks/names?						
All Medical Schools	2017	93.8	3.3	2.7	0.3	12,230
All Medical Schools	2016	93.8	3.4	2.5	0.3	11,297
All Medical Schools	2015	94.4	2.7	2.6	0.3	10,407
Received lower evaluations or grades solely because of race or ethnicity rather than performance?						
All Medical Schools	2017	98.9	0.5	0.5	0.1	12,234
All Medical Schools	2016	99.0	0.6	0.3	0.1	11,301
All Medical Schools	2015	99.0	0.5	0.4	0.0	10,397
Been denied opportunities for training or rewards based on sexual orientation?						
All Medical Schools	2017	99.4	0.2	0.3	0.0	12,237
All Medical Schools	2016	99.5	0.2	0.3	0.1	11,314
All Medical Schools	2015	99.4	0.3	0.3	0.0	10,422
Been subjected to offensive remarks/names related to sexual orientation?						
All Medical Schools	2017	98.2	0.8	0.8	0.1	12,214
All Medical Schools	2016	98.2	0.9	0.8	0.1	11,287
All Medical Schools	2015	97.9	1.1	1.0	0.1	10,400

30. **For each of the following behaviors, please indicate the frequency you personally experienced that behavior during medical school. Include in your response any behaviors performed by faculty, nurses, residents/interns, other institution employees or staff, and other students. Please do not include behaviors performed by patients.**
During medical school, how frequently have you... (Continued)

		Percentage of Respondents Selecting Each Rating				
		Never	Once	Occasionally	Frequently	Count
Received lower evaluations or grades solely because of sexual orientation rather than performance?						
All Medical Schools	2017	99.7	0.1	0.2	0.0	12,209
All Medical Schools	2016	99.7	0.2	0.1	0.0	11,292
All Medical Schools	2015	99.7	0.1	0.2	0.0	10,393

	All Schools		
	2015	2016	2017

31. **Percent of respondents who indicated they personally experienced any of the listed behaviors, excluding "publicly embarrassed." The data are derived from the responses to the survey question reported in Q30 above.**

	Percent	Percent	Percent
Yes	23.8	24.2	25.9
No	76.2	75.8	74.1
Number of respondents	10,437	11,337	12,267

32. **Gender Identity:**
Note: The results are derived from two questions: "What sex were you assigned at birth?" (response options "Male" or "Female") and "What is your current gender identity?" (response options "Male," "Female," "Trans male/trans man," "Trans female/trans woman," "Genderqueer/gender non-conforming," or "Different identity").

	Percent	Percent	Percent
Same gender identity as the sex assigned at birth		99.5	99.4
Different gender identity from the sex assigned at birth		0.5	0.6
Number of respondents		11,356	12,261

33. **How do you self-identify?**

	Percent	Percent	Percent
Bisexual	3.0	3.7	3.8
Gay or lesbian	3.6	4.0	4.1
Heterosexual or straight	93.4	92.4	92.1
Number of respondents	10,361	11,285	12,175

34. **Control of medical school:**
Note: This information is populated from other AAMC data sources.

	Percent	Percent	Percent
Private	39.1	37.6	38.0
Public	60.9	62.4	62.0
Number of respondents	11,586	12,457	13,467

35. **Region of medical school:**
Note: This information is populated from other AAMC data sources.

	Percent	Percent	Percent
Central	26.9	28.6	26.9
Northeast	28.1	27.9	27.7
South	33.9	33.2	34.7
West	11.1	10.4	10.7
Number of respondents	11,586	12,457	13,467

2017 Y2Q References

Each item number below refers to the question number in the 2017 Y2Q All Schools Summary Report.

Q13. Medical School Learning Environment Survey (MSLES)

Marshall RE. Measuring the medical school learning environment. *Journal of medical education.* 1978;53(2):98-104.

Q17. Tolerance for Ambiguity (TFA)

Geller G, Tambor ES, Chase GA, Holtzman NA. Measuring physicians' tolerance for ambiguity and its relationship to their reported practices regarding genetic testing. *Medical care.* 1993;31(11):989-1001.

Caulfield M, Andolsek K, Grbic D, Roskovensky L. Ambiguity tolerance of students matriculating to U.S. medical schools. *Acad Med.* 2014;89(11):1526-1532.

Q18. Interpersonal Reactivity Index (IRI)

Hojat M, Spandorfer J, Louis DZ, Gonnella JS. Empathic and sympathetic orientations toward patient care: conceptualization, measurement, and psychometrics. *Acad Med.* 2011;86(8):989-995.

Davis MH. Measuring individual differences in empathy: evidence for a multidimensional approach. *Journal of personality and social psychology*. 1983;44:113-126.

Q26: Quality of Life (QOL) Scale

Thomas MR, Dyrbye LN, Huntington JL, et al. How do distress and well-being relate to medical student empathy? A multicenter study. *J Gen Intern Med.* 2007;22(2):177-183.

Q27: Perceived Stress Scale (PSS-4) Scale

Warttig SL, Forshaw MJ, South J, White AK. New, normative, English-sample data for the Short Form Perceived Stress Scale (PSS-4). *Journal of health psychology.* 2013;18(12):1617-1628.

Cohen S, Kamarck T, Mermelstein R. A global measure of perceived stress. *Journal of health and social behavior*. 1983; 24(4):385-396.

Q28. Oldenburg Burnout Inventory for Medical Students Scale

Halbesleben JRB, Demerouti E. The construct validity of an alternative measure of burnout: Investigating the English translation of the Oldenburg Burnout Inventory. *Work and Stress*. 2005;19(3):208-220.