**Appendix 2.** National demographics of health professionals in training.

A link to the survey instrument was distributed via email. Potential respondents were identified through professional societies of health profession students in the US. These groups included the American Medical Student Association, Student Nurses Association, Student Osteopathic Medical Association, Association of American Medical Colleges Organization of Student Representatives, Student National Medical Association, Student National Pharmacist Association, American Society of Health System Pharmacists Student Network, and the American Association of Physician Assistants

The student membership of these organizations is large and diverse. Overall, the total number of students contacted via email was 87,599. The total, potential sample was calculated by summing the number of email addresses included on each email listserv. The overall response rate was then calculated by dividing the total number of responses by the total number of potential respondents. Individual profession response rates were calculated by dividing the number of respondents from that profession by the total number of potential respondents of the same profession. For professions with more than one group contacted (eg. Allopathic medicine), the number of email addresses in all listservs were summed together and used as the denominator criteria. It was not possible to capture how many respondents were reached by each individual listserv.

The table below shows the sociodemographic characteristics of the health profession student populations from which our sample was drawn.

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Nursinga | | Allopathic Medicineb | | Osteopathic Medicinec | | Pharmacyd | | Physician Assistante | |
|  | *N* | % | *N* | % | *N* | % | *N* | % | *N* | % |
| **Gender** |  |  |  |  |  |  |  |  |  |  |
| Male | - | - | 46,068 | 50.5% | 16,281 | 53.6% | 25,170 | 37.5% | 1,870 | 23.9% |
| Female | - | - | 45,179 | 49.5% | 14,069 | 46.4% | 41,858 | 62.4% | 5,942 | 76.1% |
| Transgender/Other | - | - | - | - | - | - | 71 | 0.1% | - | - |
| **Sexual Orientation** |  |  |  |  |  |  |  |  |  |  |
| Heterosexual | - | - | 83,582\* | 91.6f | - | - | - | - | 7,401 | 95.5% |
| Gay | - | - | 3,376\* | 3.7f | - | - | - | - | 168 | 2.2% |
| Bisexual | - | - | 4,380\* | 4.8f | - | - | - | - | 120 | 1.5% |
| Other | - | - | - | - | - | - | - | - | 62 | 0.8% |
| **Race** |  |  |  |  |  |  |  |  |  |  |
| African-American (Black) | 20,567 | 9.7 | 6,476 | 7.1% | 991 | 3.3% | 5,719 | 9.2% | 277 | 3.3% |
| Caucasian (White) | 139,946 | 65.8 | 46,626 | 51.1% | 17,489 | 57.6% | 30,494 | 48.8% | 6,605 | 79.3% |
| Hispanic/Latinx | 26,724 | 12.6 | 5,748 | 6.3% | 1,653 | 5.4% | 4,049 | 6.5% | 602 | 7.2% |
| Native American | 988 | 0.5 | 200 | 0.2% | 95 | 0.3% | 228 | 0.4% | 92 | 1.1% |
| Asian | 17,975 | 8.4 | 20,190 | 22.1% | 6,745 | 22.2% | 15,430 | 24.7% | 726 | 8.7% |
| Other | 6,527 | 3.1 | 12,026 | 13.2% | 2,935 | 9.7% | 6,513 | 10.4% | 29 | 0.3% |

\*These numbers are estimated based on calculations of provided percentages and the total number of students as indicated in the national report.

The percentage of female respondents in our sample was greater than the percentage of female students as reported in the national data for Allopathic Medicine (62.4% vs. 49.5%; = 44.4, *P* < .001), Osteopathic Medicine (65.1% vs. 46.4%; = 43.4, *P* < .001), and Pharmacy (80.1% vs. 62.4%; = 38.4, *P* < .001). There was no difference between the percentage of female students in our sample compared to the national demographic data (79.7% vs. 76.1%; = 1.03, *P* = .31).

When comparing the percentage of students identifying as gay, our sample had a higher percentage of allopathic medical students who identified as gay (10.0% vs. 3.7%; = 78.6, *P* < .001) and bisexual (7.5% vs. 4.6%; = 12.4, *P* < .001) compared to the estimated national percentage. A similar trend was identified when comparing the percentage of gay (5.0% vs. 2.1%; = 15.2, *P* = .03) and bisexual (7.3% vs. 1.5%; = 25.6, *P* < .001).

Finally, we compared the percentages of students who identified as each race for all professions. Our sample contained a slightly lower percentage of Asian students compared to the national Allopathic Medicine demographics (14.7% vs. 18.1%; = 5.36, *P* = .02) and a slightly lower percentage of White students (37.2% vs. 33.8%; = 4.77, *P* = .03). Our Allopathic Medical student sample did not differ in terms of the percentage of Black (11.8% vs. 6.6%; = 3.34, *P* = .07), Latinx (4.8% vs. 5.9%; = 1.33, *P* = .25), or Native American (0.5% vs. 0.2%; = 2.20, *P* = .14) students.

Our sample of Osteopathic Medical students contained more Latinx students (4.5% vs. 0.3%; = 160.9, *P* < .001). There were no differences in the percentage of Black (3.4% vs. 3.2%; = 0.03, *P* = .087), White (40.0% vs. 36.9%; = 2.21, *P* = .14), Native American (0.3% vs. 0.3%; = 0.01, *P* = .99) or Asian (15.7% vs. 18.4%; = 1.76, *P* = .18) Osteopathic Medical Students.

This sample contained more Native American Nursing students (1.3% vs. 0.5%; = 12.2, *P* < .001), and a smaller percentage of (5.7% vs. 7.8%; = 4.66, *P* = .03) compared to the national sample. There were no differences in the percentage of Black (6.9% vs. 8.8%; = 3.59, *P* = .06), White (41.1% vs. 39.7%; = 0.98, *P* = .32), or Latinx (10.1% vs. 11.2%; = 0.98, *P* = .32) Nursing students.

The percentage of Pharmacy students in our sample contained a smaller percentage of Asian students (13.1% vs. 19.8%; = 9.67, *P* = .002) compared to the national sample and a higher percentage of White students (40.9% vs. 32.8%; = 14.7, *P* < .001). There was no difference in the percentage of Black (7.3% vs. 8.4%; = 0.51, *P* = .48), Latinx (5.2% vs. 6.1%; = 0.45, *P* = .50), and Native American (0.3% vs. 0.4%; = 0.01, *P* = .95) Pharmacy students.

Finally, there were no differences in the percentages of Black (4.6% vs. 3.2%; = 0.95, *P* = .33), White (42.9% vs. 44.2%; = 0.19, *P* = .67), Latinx (5.3% vs. 6.7%; = 0.52, *P* = .47), Native American (2.0% vs. 1.1%; = 1.19, *P* = .28), or Asian (5.9% vs. 8.0%; = 0.93, *P* = .33) Physician Assistant students when comparing our sample to the national demographics.

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a. American Association of Colleges of Nursing, 2018 survey of student race. Available from: <https://www.aacnnursing.org/News-Information/Research-Data>. No other demographic data publicly available.

b. Association of American Medical Colleges. *2019 FACTS: Enrollment, Graduates, and MD-PhD Data.* Available from: <https://www.aamc.org/data-reports/students-residents/interactive-data/2019-facts-enrollment-graduates-and-md-phd-data>

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d. American Association of Colleges of Pharmacy. *Profile of Pharmacy Students Fall 2018.* Available from: <https://www.aacp.org/research/institutional-research/student-applications-enrollments-and-degrees-conferred>

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f. Association of American Medical Colleges. *Medical School Year Two Questionnaire All School Summary Report*. Available from: <https://www.aamc.org/data-reports/students-residents/report/year-two-questionnaire-y2q>