ONLINE SUPPLEMENT

Practice composition and sex differences in physician income: observational study

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Figure S1: CONSORT Diagram





| Specialty | Specialty Category |
|-----------------------------------|------------------------|
| Family Medicine | Primary Care |
| Geriatrics | Primary Care |
| Internal Medicine | Primary Care |
| Medicine/Pediatrics | Primary Care |
| Occupational Medicine | Primary Care |
| Other MD/DO | Primary Care |
| Pediatric Emergency Medicine | Primary Care |
| Pediatrics | Primary Care |
| Preventive Medicine | Primary Care |
| Allergy & Immunology | Non-Surgical Specialty |
| Anesthesiology | Non-Surgical Specialty |
| Cardiology | Non-Surgical Specialty |
| Dermatology | Non-Surgical Specialty |
| Emergency Medicine | Non-Surgical Specialty |
| Endocrinology | Non-Surgical Specialty |
| Gastroenterology | Non-Surgical Specialty |
| Hematology | Non-Surgical Specialty |
| Infectious Disease | Non-Surgical Specialty |
| Medical Genetics | Non-Surgical Specialty |
| Nephrology | Non-Surgical Specialty |
| Neurology | Non-Surgical Specialty |
| Nuclear Medicine | Non-Surgical Specialty |
| Oncology | Non-Surgical Specialty |
| Onbthalmology | Non-Surgical Specialty |
| Pathology | Non-Surgical Specialty |
| Padiatric Cardiology | Non-Surgical Specialty |
| Dadiatria Endoarinalagu | Non-Surgical Specialty |
| Padiatria Gastroantaralagy | Non-Surgical Specialty |
| Padiatria Hamatala av & Oncolo av | Non-Surgical Specialty |
| Pediatric Hematology & Oncology | Non-Surgical Specialty |
| Pediatric Nephrology | Non-Surgical Specialty |
| Pediatric Pulmonology | Non-Surgical Specialty |
| Pediatric Kneumatology | Non-Surgical Specialty |
| Physical Medicine/Renab | Non-Surgical Specialty |
| Psychiatry | Non-Surgical Specialty |
| Pulmonology | Non-Surgical Specialty |
| Radiation Oncology | Non-Surgical Specialty |
| Radiology | Non-Surgical Specialty |
| Rheumatology | Non-Surgical Specialty |
| Colon & Rectal Surgery | Surgical Specialty |
| General Surgery | Surgical Specialty |
| Neurosurgery | Surgical Specialty |
| Obstetrics & Gynecology | Surgical Specialty |
| Oral & Maxillofacial Surgery | Surgical Specialty |
| Orthopedic Surgery | Surgical Specialty |
| Otolaryngology (ENT) | Surgical Specialty |
| Plastic Surgery | Surgical Specialty |
| Thoracic Surgery | Surgical Specialty |
| Urology | Surgical Specialty |
| Vascular Surgery | Surgical Specialty |

 Table S1: Listing of physician specialties

Sensitivity Analysis

We performed several sensitivity tests to assess the validity of our results. These results alter analytic assumptions used in our main analyses and use alternative statistical models. The results of the sensitivity analysis were similar to the main results, which are presented in Table S2.

Modeling share of physicians in a practice that are male as a continuous variable

Our main analysis categorized the percentage of male physicians in a practice into four groupings based on the share of male physicians in each group, an analytic choice to allow for a non-linear relationship between the sex difference in physician income and the share of physicians in a practice who were male. We used groupings of less than 50%, 50-75%, 75-90%, and above 90%.

In a sensitivity analysis we estimated a similar regression model that relaxed this assumption and instead interacted the indicator variable for being a female physician with the share of male physicians in each practice (continuous variable). For each physician specialty grouping, Table S3 presents the coefficients from this model. We report both the generalized linear model (GLM) regression coefficients, which are interpreted in logarithmic units, and the more interpretable adjusted income differences, which we calculated by estimating marginal effects.

As shown in column 2 of Table S3, which presents adjusted income differences for primary care physicians, each 1-percentage point increase in the share of physicians in a practice who are male was associated with a \$269 decrease in annual income for female physicians in that practice. For surgical specialists, we found a \$2,386 reduction for each 1-percentage point increase in the share of physicians in a practice who were male.

Modeling income with multivariable linear regression

Our main analysis used a non-linear generalized linear model (GLM) regression. In a sensitivity analysis we estimated a multivariable linear regression to assess the impact of model selection on our findings. Table S4 presents the linear regression results, specifically, regression-adjusted male and female physician income and 95% confidence intervals for each physician specialty grouping and male practice share category. We calculated regression-adjusted income using the same set of covariates as controls.

Findings were similar to the GLM analysis. For non-surgical specialists, the adjusted sex difference in income was \$38,483 in the bottom category in terms of male practice share (<50% male) and \$115,680 in the top category (at least 90% male). For surgical specialists, the adjusted sex difference in income was \$49,254 in the bottom category, but increased to \$138,988 in the top category. The choice of statistical model did not account for the income relationships that we observed.

Alternative inclusion criteria for size of physician practice

Our main analysis limited the practices included in the analysis to those that had at least 5 physicians. This restriction reduced the number of included physicians by approximately 50%. We tested the sensitivity of our results to this threshold in two ways. First, we increased the practice size threshold to 10. Second, we removed any restriction and included all physicians,

regardless of practices size, in our sample. For both samples, we used the same GLM model, using the same set of covariates as in the baseline model. We also applied the same male practice thresholds as in the main model. For both male and female physicians, we computed regression-adjusted income for each specialty group and category of male practice share by estimating the marginal effects from the GLM regression.

The results from the sensitivity test that increase the practice size threshold are presented in Table S6 and are similar to our main results. For example, the adjusted sex difference in income for non-surgical specialists was \$33,890 in the bottom category of male practice share and \$99,903 in the top category. For surgical specialists, the adjusted sex difference in income was \$29,458 in the bottom category of male practice share, but increased to \$150,398 in the top category.

The results from the sensitivity test that removed the practice size restriction are presented in Table S5. These results were also similar to the baseline results. For non-surgical specialists, the adjusted sex difference in income was \$40,375 in the bottom category of male practice share and \$101,214 in the top category. For surgical specialists, the adjusted sex difference in income was \$58,182 in the bottom category and \$155,333 in the top category.

Analysis that weights the sample population to be nationally representative

Our study population was drawn from a sample of physicians that responded to the Doximity survey between 2014 and 2018. This surveyed population may not be representative of the entire U.S. physician workforce. We therefore estimated nationally representative figures based on sampling weights that were constructed as follows. Using data on all U.S. physicians assembled by Doximity from the CMS NPI registry and state licensing boards, we constructed sampling weights based on physician gender, specialty, geographic county, and years since medical school graduation. We estimated the same GLM regression as in the main analysis, but applied these sampling weights.

As shown in Table S7, the results from the re-weighted analysis are similar to the baseline results. Among physicians in the top category of male practice share, the difference in adjusted income was smallest for primary care physicians (\$10,833), larger for non-surgical specialists (\$92,528), and largest for surgical specialists (\$153,257). These absolute differences represent relative differences of 3%, 20%, and 28%, respectively. Both the absolute and relative differences in adjusted compensation were similar to our baseline results.

Analysis to assess for the importance of unmeasured confounders

Our sensitivity analysis assessed for the importance of unmeasured confounders by estimating the GLM regression excluding covariates used in the baseline model (e.g., physician age, specialty, practice ownership, hours worked, etc.). We hypothesized that any unmeasured confounders that might explain the male-female income differences observed in the adjusted analysis would likely be correlated with observed characteristics that influence income. Thus, finding similar results between the adjusted and unadjusted model would suggest, though do not prove, that unobserved confounders do not explain the differences in compensation.

As shown in Table S8, unadjusted results were similar to the results that include the full set of physician and practice-level covariates. For example, similar to the adjusted models, we observed larger se differences in income based on male practice share category for non-surgical and surgical specialists. For non-surgical specialists, the unadjusted sex difference in income in the bottom category of male practice share was \$39,130, but increased to \$137,359 in the top category. For surgical specialists, the respective unadjusted differences were \$34,618 and \$150,532. The similarity between these unadjusted results and the adjusted results suggest that unobserved confounders may not contribute to the variation in sex differences in income that we observed across practices with varying share of physicians that are male.

Similarly, the results in Table S9, which drop just the Medicare billing covariate, are also similar to the main results. The similarity between the results of this test and the main results suggests that there are unlikely unobserved differences in patient insurance status composition that influence our results.

Analysis to assess for differences between academic and non-academic physicians

Physicians employed by an academic institution may have less difference in income between male and female physicians, and there could therefore be less difference based on practice size. Salaries in many academic institutions are set based on salary ranges for each position and length of experience, which may leave less room for differences in income between male and female physicians.

As shown in Table S10, physicians employed by an academic institution report salaries that are approximately 10 to 15 percent lower than non-academic physicians. For surgical specialists in the top category of male practice share, we observed smaller differences in income between male and female physicians for academic physicians (\$36,421) compared to non-academic physicians (\$91,472). However, we observed larger differences for surgical specialists, where we found a \$200,939 difference for academic physicians and a \$146,807 difference for non-academic physicians.

Table S2: Main Results

| Male Practice Share | Adjusted Income: Male | Adjusted Income: Female | Absolute Difference | Relative Difference | Difference-in-Difference | | | | |
|----------------------------------|-----------------------|-------------------------|-------------------------|---------------------|--------------------------|--|--|--|--|
| Panel A: Primary Care Physicians | | | | | | | | | |
| <50% male | \$249,843 | \$220,714 | -\$29,129 | -11.7% | REF | | | | |
| | (242,949 to 256,737) | (215,509 to 225,918) | (-37,435 to -20,825) | | | | | | |
| 50-75% male | \$261,188 | \$228,293 | -\$32,895 | -12.6% | -\$3,765 | | | | |
| | (256,832 to 265,544) | (222,798 to 233,789) | (-40,589 to -25,200) | | (-14,568 to 7,039) | | | | |
| 75-90% male | \$282,948 | \$241,965 | -\$40,983 | -14.5% | -\$11,853 | | | | |
| | (275,033 to 290,862) | (228,260 to 255,670) | (-58,616 to -23,349) | | (-29,488 to 5,782) | | | | |
| >90% male | \$313,194 | \$307,045 | -\$6,149 | -2.0% | \$22,981 | | | | |
| | (297,001 to 329,387) | (215,801 to 398,288) | (-106,032 to 93,734) | | (-69,794 to 115,756) | | | | |
| | | Panel B: Nonsurgica | l Specialist Physicians | | | | | | |
| <50% male | \$312,700 | \$276,096 | -\$36,604 | -11.7% | REF | | | | |
| | (302,161 to 323,239) | (270,396 to 281,795) | (-46,530 to -26,679) | | | | | | |
| 50-75% male | \$351,631 | \$310,978 | -\$40,653 | -11.6% | -\$4,049 | | | | |
| | (346,985 to 356,277) | (304,864 to 317,091) | (-47,970 to -33,337) | | (-17,663 to 9,565) | | | | |
| 75-90% male | \$411,405 | \$381,504 | -\$29,901 | -7.3% | \$6,703 | | | | |
| | (405,985 to 416,825) | (369,554 to 393,454) | (-43,463 to -16,340) | | (-10,735 to 24,142) | | | | |
| >90% male | \$461,559 | \$369,890 | -\$91,669 | -19.9% | -\$55,064 | | | | |
| | (454,302 to 468,815) | (335,457 to 404,323) | (-131,927 to -51,411) | | (-92,288 to -17,841) | | | | |
| | | Panel C: Surgical | Specialist Physicians | | | | | | |
| <50% male | \$456,736 | \$410,233 | -\$46,503 | -10.2% | REF | | | | |
| | (395,147 to 518,325) | (358,461 to 462,004) | (-122,155 to 29,149) | | | | | | |
| 50-75% male | \$479,199 | \$434,533 | -\$44,666 | -9.3% | \$1,838 | | | | |
| | (464,870 to 493,527) | (407,721 to 461,345) | (-75,770 to -13,562) | | (-91,922 to 95,598) | | | | |
| 75-90% male | \$508,720 | \$431,762 | -\$76,958 | -15.1% | -\$30,455 | | | | |
| | (496,963 to 520,477) | (405,302 to 458,221) | (-105,648 to -48,269) | | (-123,358 to 62,448) | | | | |
| >90% male | \$554,694 | \$405,234 | -\$149,460 | -26.9% | -\$102,956 | | | | |
| | (544,427 to 564,960) | (336,083 to 474,385) | (-219,394 to -79,526) | | (-212,607 to 6,694) | | | | |

This table presents the regression-adjusted income for male (column 1) and female physicians (column 2), for primary care physicians (Panel A), non-surgical specialists (Panel B), and surgical specialists (Panel C), and by the share of male physicians within each practice. Regression models were estimated using a generalized linear model (GLM) regression with a log-link and gamma-distributed error term with a dependent variable of self-reported annual income and physician- and practice-level covariates described in the Methods section. Columns 3 and 4 present absolute and relative differences between male and female physicians. Column 5 presents difference-in-differences estimates that show the difference in the male-female physician wage difference between each category of male practice share, relative to practices that are <50% male.

| - | | - | | | | |
|--|----------------------------|----------------------------|--------------------------|----------------------------|----------------------------|----------------------------|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| | Primary Car | e Physicians | Non-Surgical Specialists | | Surgical Specialists | |
| | Log-change income | Adjusted income | Log-change income | Adjusted income | Log-change income | Adjusted income |
| | (95% CI) | difference, \$ (95% CI) | (95% CI) | difference, \$ (95% CI) | (95% CI) | difference, \$ (95% CI) |
| Sex difference in income associated with 1 percentage point increase | -0.00106* | -269.0* | -0.000496 | -186.0 | -0.00462*** | -2,386*** |
| in share of physicians in a practice that are male | (-0.00218 to 5.14e- 05) | (-551.0 to 12.99) | (-0.00130 to 0.000309) | (-487.8 to 115.7) | (-0.00764 to - 0.00159) | (-3,952 to -820.3) |

Table S3: Modeling share of physicians in a practice that are male as a continuous variable

This table presents the regression-adjusted association between income and male practice share for male and female physicians by specialty category. The regression was estimated using a generalized linear model (GLM) regression with a log-link and gamma-distributed error term with a dependent variable of self-reported annual income and physician- and practice-level covariates described in the Methods section. The odd-numbered columns report the regression coefficients, which are in log-compensation units. The even-numbered columns report the adjusted dollar differences, estimated using a standard marginalization approach. The 95% confidence intervals are in parentheses. *** reflect estimates that are significant at p < 0.01.

Table S4: Results from multivariable linear regression

| | (1) | (2) | (3) | (4) | (5) | (6) | |
|------------------|----------------------|----------------------|----------------------|------------------------------|----------------------|------------------------------|--|
| | Primary Car | e Physicians | Non-Surgica | al Specialists | Surgical S | Specialists | |
| | Adjusted incom | me, \$ (95% CI) | Adjusted incom | Adjusted income, \$ (95% CI) | | Adjusted income, \$ (95% CI) | |
| | Male | Female | Male | Female | Male | Female | |
| Category of male | practice share | | | | | | |
| <50% male | 253,739 | 220,453 | 319,707 | 281,269 | 459,637 | 410,383 | |
| | (251,981 to 255,498) | (218,877 to 222,028) | (314,010 to 325,404) | (276,733 to 285,805) | (428,344 to 490,929) | (382,526 to 438,241) | |
| 50-75% male | 263,109 | 225,249 | 359,566 | 304,470 | 489,431 | 402,726 | |
| | (261,860 to 264,359) | (223,445 to 227,054) | (356,833 to 362,298) | (299,986 to 308,955) | (480,742 to 498,121) | (389,755 to 415,697) | |
| 75-90% male | 280,958 | 232,217 | 411,652 | 354,666 | 514,898 | 410,415 | |
| | (279,006 to 282,909) | (227,379 to 237,056) | (409,040 to 414,264) | (346,721 to 362,611) | (508,903 to 520,892) | (393,987 to 426,842) | |
| >90% male | 311,787 | 292,917 | 454,188 | 338,508 | 551,415 | 412,427 | |
| | (308,869 to 314,705) | (272,748 to 313,086) | (451,100 to 457,277) | (309,980 to 367,036) | (546,552 to 556,279) | (367,518 to 457,336) | |

This table presents regression-adjusted income for male and female physicians by specialty category and category of male practice share. The regression was estimated using a linear regression with a dependent variable of self-reported annual income and physician- and practice-level covariates described in the Methods section. 95% confidence intervals are in parentheses.

| Table S5: Sensitivi | ty analysis restricted | to physicians who | practiced in a group with | h 10 or more physicians |
|---------------------|------------------------|-------------------|---------------------------|-------------------------|
|---------------------|------------------------|-------------------|---------------------------|-------------------------|

| | (1) | (2) | (3) | (4) | (5) | (6) |
|--------------------|----------------------|----------------------|----------------------|------------------------------|----------------------|----------------------|
| | Primary Car | re Physicians | Non-Surgica | al Specialists | Surgical S | Specialists |
| | Adjusted incom | me, \$ (95% CI) | Adjusted incor | Adjusted income, \$ (95% CI) | | me, \$ (95% CI) |
| | Male | Female | Male | Female | Male | Female |
| Category of male p | practice share | | | | | |
| <50% male | 247,402 | 223,382 | 296,087 | 262,197 | 464,582 | 435,124 |
| | (237,299 to 257,505) | (215,988 to 230,776) | (284,600 to 307,574) | (254,967 to 269,426) | (374,211 to 554,953) | (324,492 to 545,757) |
| 50-75% male | 262,414 | 232,938 | 348,770 | 311,712 | 490,213 | 452,842 |
| | (257,181 to 267,646) | (225,115 to 240,760) | (343,176 to 354,364) | (304,449 to 318,975) | (472,654 to 507,772) | (414,241 to 491,442) |
| 75-90% male | 295,448 | 261,910 | 414,113 | 395,350 | 513,532 | 499,149 |
| | (283,830 to 307,065) | (243,302 to 280,518) | (407,566 to 420,661) | (379,713 to 410,988) | (498,081 to 528,983) | (455,765 to 542,532) |
| >90% male | 312,409 | 268,931 | 473,538 | 373,635 | 551,663 | 401,265 |
| | (283,990 to 340,829) | (217.392 to 320.470) | (461,339 to 485,736) | (330,754 to 416,517) | (533,052 to 570,274) | (330,910 to 471,620) |

This table presents regression-adjusted income for male and female physicians by specialty category and the category of male practice share. The regression was estimated using a generalized linear model (GLM) regression with a log-link and gamma-distributed error term with a dependent variable of self-reported annual income and physician- and practice-level covariates described in the Methods section. The model was estimated in a sample restricted to physicians with 10 or more physicians in the practice.

Table S6: Sensitivity analysis including all group practice sizes

| | (1) | (2) | (3) | (4) | (5) | (6) | |
|------------------|----------------------|----------------------|----------------------|------------------------------|----------------------|------------------------------|--|
| | Primary Car | re Physicians | Non-Surgica | al Specialists | Surgical Specialists | | |
| | Adjusted inco | me, \$ (95% CI) | Adjusted inco | Adjusted income, \$ (95% CI) | | Adjusted income, \$ (95% CI) | |
| | Male | Female | Male | Female | Male | Female | |
| Category of male | practice share | | | | | | |
| <50% male | 249,342 | 216,879 | 325,621 | 285,246 | 441,359 | 383,177 | |
| | (243,195 to 255,488) | (213,279 to 220,478) | (316,138 to 335,105) | (280,756 to 289,735) | (393,069 to 489,649) | (358,149 to 408,205) | |
| 50-75% male | 257,162 | 224,879 | 354,948 | 312,962 | 477,304 | 412,513 | |
| | (253,571 to 260,754) | (220,617 to 229,140) | (350,686 to 359,210) | (307,882 to 318,042) | (465,467 to 489,141) | (395,032 to 429,995) | |
| 75-90% male | 274,322 | 236,483 | 406,782 | 372,939 | 505,285 | 420,248 | |
| | (267,879 to 280,764) | (226,138 to 246,827) | (401,825 to 411,738) | (362,387 to 383,490) | (494,692 to 515,879) | (398,181 to 442,314) | |
| >90% male | 286,706 | 315,529 | 449,552 | 348,338 | 544,018 | 388,685 | |
| | (267,409 to 306,002) | (225,403 to 405,654) | (440,793 to 458,311) | (311,396 to 385,281) | (529,769 to 558,267) | (324,575 to 452,795) | |

This table presents regression-adjusted income for male and female physicians by specialty category and the category of male practice share. The regression was estimated using a generalized linear model (GLM) regression with a log-link and gamma-distributed error term with a dependent variable of self-reported annual income and physician- and practice-level covariates described in the Methods section. This model drops the group practice size inclusion restriction and includes all physicians in the data.

| | (1) | (2) | (3) | (4) | (5) | (6) |
|------------------|----------------------|-------------------------|----------------------|------------------------------|----------------------|----------------------|
| | Primary Car | e Physicians | Non-Surgic | al Specialists | Surgical S | Specialists |
| | Adjusted incom | me, \$ (95% CI) | Adjusted inco | Adjusted income, \$ (95% CI) | | me, \$ (95% CI) |
| | Male | Female | Male | Female | Male | Female |
| Category of male | e practice share | | | | | |
| <50% male | 248,822 | 221,311 | 305,185 | 270,125 | 469,114 | 420,679 |
| | (241,778 to 255,867) | (214,196 to 228,426) | (293,896 to 316,474) | (264,256 to 275,994) | (398,974 to 539,253) | (358,475 to 482,883) |
| 50to75% male | 261,366 | 228,791 | 345,747 | 306,566 | 484,635 | 431,610 |
| | (256,107 to 266,626) | (222,109 to 235,473) | (340,713 to 350,782) | (300,326 to 312,806) | (468,924 to 500,345) | (404,612 to 458,607) |
| 75to90% male | 283,625 | 246,899 | 407,042 | 377,933 | 514,138 | 430,955 |
| | (274,170 to 293,079) | (231,299 to 262,498) | (401,350 to 412,735) | (365,061 to 390,805) | (502,041 to 526,235) | (405,143 to 456,768) |
| >90% male | 317,282 | 306,449 | 459,260 | 366,732 | 553,368 | 400,111 |
| | (200 238 to 335 326) | (202,730 to $(110,169)$ | (151 266 to 167 251) | (327 763 to 405 700) | (542 807 to 563 929) | (332 380 to 167 833) |

Table S7: Sensitivity analysis that applies sampling weights to be representative of U.S. physician population

(299,238 to 335,326) (202,730 to 410,169) (451,266 to 467,254) (327,763 to 405,700) (542,807 to 563,929) (332,389 to 467,833) This table presents regression-adjusted income for male and female physicians by specialty category and the category of male practice share. The regression was estimated using a generalized linear model (GLM) regression with a log-link and gamma-distributed error term with a dependent variable of self-reported annual income and physician- and practice-level covariates described in the Methods section. This model weights the sample population to be representative of the U.S. physician population.

Table S8: Analysis to assess for the importance of unmeasured confounders

| | (1) | $\langle 2 \rangle$ | (2) | (4) | (5) | |
|------------------|----------------------|----------------------|----------------------|----------------------|------------------------------|----------------------|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| | Primary Car | e Physicians | Non-Surgica | al Specialists | Surgical S | Specialists |
| | Adjusted incom | me, \$ (95% CI) | Adjusted incor | me, \$ (95% CI) | Adjusted income, \$ (95% CI) | |
| | Male | Female | Male | Female | Male | Female |
| Category of male | practice share | | | | | |
| <50% male | 253,627 | 218,130 | 253,627 | 218,130 | 452,167 | 417,549 |
| | (245,282 to 261,972) | (212,565 to 223,695) | (245,282 to 261,972) | (212,565 to 223,695) | (371,535 to 532,800) | (354,712 to 480,385) |
| 50-75% male | 262,959 | 222,911 | 262,959 | 222,911 | 488,280 | 401,143 |
| | (257,978 to 267,939) | (217,563 to 228,260) | (257,978 to 267,939) | (217,563 to 228,260) | (469,459 to 507,102) | (373,627 to 428,659) |
| 75-90% male | 284,558 | 237,051 | 284,558 | 237,051 | 513,117 | 401,367 |
| | (274,611 to 294,504) | (221,174 to 252,928) | (274,611 to 294,504) | (221,174 to 252,928) | (498,771 to 527,462) | (372,731 to 430,003) |
| >90% male | 316,592 | 308,190 | 316,592 | 308,190 | 554,180 | 403,648 |
| | (295,805 to 337,379) | (171,668 to 444,712) | (295,805 to 337,379) | (171,668 to 444,712) | (541,569 to 566,792) | (316,092 to 491,205) |

This table presents income for male and female physicians by specialty category and category of male practice share, adjusted only for calendar year indicators and excluding physician- and practice-level covariates used in the baseline model (a generalized linear model (GLM) regression with a log-link and gamma-distributed error term with a dependent variable of self-reported annual income and year indicators only was estimated).

| | (1) | (2) | (3) | (4) | (5) | (6) | |
|--------------------|---------------------|---------------------|---------------------|------------------------------|---------------------|------------------------------|--|
| | Primary Car | e Physicians | Non-Surgica | al Specialists | Surgical S | Specialists | |
| | Adjusted incom | me, \$ (95% CI) | Adjusted incom | Adjusted income, \$ (95% CI) | | Adjusted income, \$ (95% CI) | |
| | Male | Female | Male | Female | Male | Female | |
| Category of male p | practice share | | | | | | |
| <50% male | 249,854 | 220,535 | 312,309 | 275,468 | 456,523 | 407,992 | |
| | (243,579 - 256,129) | (215,244 - 225,827) | (304,242 - 320,375) | (269,580 - 281,357) | (404,079 - 508,966) | (356,399 - 459,585) | |
| 50-75% male | 261,296 | 227,973 | 351,711 | 310,542 | 478,994 | 434,701 | |
| | (256,863 - 265,730) | (221,820 - 234,126) | (347,547 - 355,874) | (304,466 - 316,618) | (464,221 - 493,768) | (407,418 - 461,984) | |
| 75-90% male | 283,444 | 241,310 | 411,645 | 381,356 | 509,102 | 429,657 | |
| | (275,564 - 291,325) | (225,760 - 256,859) | (406,702 - 416,588) | (368,597 - 394,116) | (498,170 - 520,033) | (403,283 - 456,031) | |
| >90% male | 313,463 | 312,963 | 462,331 | 364,589 | 554,916 | 398,264 | |
| | (299,305 - 327,622) | (212,295 - 413,631) | (455,406 - 469,255) | (325,128 - 404,050) | (544,892 - 564,940) | (330,141 - 466,387) | |

This table presents regression-adjusted income for male and female physicians by specialty category and the category of male practice share. The regression was estimated using a generalized linear model (GLM) regression with a log-link and gamma-distributed error term with a dependent variable of self-reported annual income and physician- and practice-level covariates described in the Methods section. This model excludes adjustment for physician-specific Medicare clinical workload.

| | (1) | (2) | (3) | (4) | (5) | (6) |
|-----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| | Primary Car | re Physicians | Non-Surgica | ll Specialists | Surgical Specialists | |
| Category of male | Adjusted incom | me, \$ (95% CI) | Adjusted incom | ne, \$ (95% CI) | Adjusted incom | me, \$ (95% CI) |
| practice share | Male | Female | Male | Female | Male | Female |
| Panel A: Academic phy | sicians | | | | | |
| <50% male | 226,884 | 192,247 | 264,941 | 244,877 | 451,144 | 360,834 |
| | (214,443 to 239,324) | (182,733 to 201,761) | (249,561 to 280,322) | (238,362 to 251,391) | (356,062 to 546,225) | (214,766 to 506,902) |
| 50-75% male | 232,362 | 199,985 | 300,206 | 268,176 | 457,120 | 451,441 |
| | (223,620 to 241,104) | (187,552 to 212,419) | (293,491 to 306,920) | (261,168 to 275,183) | (430,753 to 483,486) | (362,006 to 540,875) |
| 75-90% male | 221,940 | 239,578 | 329,662 | 271,986 | 495,741 | 413,055 |
| | (208,349 to 235,532) | (203,561 to 275,595) | (319,496 to 339,829) | (250,184 to 293,789) | (474,143 to 517,339) | (370,211 to 455,900) |
| >90% male | 247,291 | NA | 328,520 | 292,099 | 529,779 | 328,840 |
| | (236,585 to 257,997) | | (306,728 to 350,312) | (255,109 to 329,089) | (508,054 to 551,505) | (105,815 to 551,864) |
| Panel B: Non-academic | e physicians | | | | | |
| <50% male | 253,849 | 224,418 | 329,086 | 286,269 | 460,123 | 417,193 |
| | (246,388 to 261,311) | (218,785 to 230,052) | (316,541 to 341,631) | (279,436 to 293,102) | (383,767 to 536,479) | (351,110 to 483,275) |
| 50-75% male | 264,193 | 231,795 | 366,493 | 323,658 | 482,793 | 436,300 |
| | (259,527 to 268,860) | (225,948 to 237,641) | (361,297 to 371,689) | (316,283 to 331,033) | (466,422 to 499,164) | (409,569 to 463,031) |
| 75-90% male | 287,146 | 243,904 | 422,398 | 397,430 | 511,672 | 440,449 |
| | (279,002 to 295,289) | (229,819 to 257,989) | (416,728 to 428,067) | (384,581 to 410,278) | (498,716 to 524,628) | (410,141 to 470,757) |
| >90% male | 317,698 | 309,286 | 467,518 | 376,046 | 558,674 | 411,867 |
| | (301,386 to 334,011) | (213,894 to 404,678) | (460,269 to 474,767) | (339,482 to 412,611) | (547,632 to 569,715) | (350,071 to 473,663) |

Table S10: Analysis to assess difference between academic and non-academic physicians

This table presents regression-adjusted income for male and female physicians by specialty category and the category of male practice share. The regression was estimated using a generalized linear model (GLM) regression with a log-link and gamma-distributed error term with a dependent variable of self-reported annual income and physician- and practice-level covariates described in the Methods section. This model was separately estimated among physicians employed by an academic institution (Panel A) and non-academic physicians (Panel B).