# International Comparison of Physician Incomes

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Physicians are some of the highest-skilled and highest-earning professionals in advanced economies. Their incomes affect the allocation of top talent in the economy and are often cited as contributing to high and rising healthcare costs, especially in the United States. Since the public sector is deeply involved in healthcare, regulatory choices guide the valuation of much of the output in this market, and thus physicians' incomes (Gottlieb et al., 2025). At the same time, market forces also shape the earnings distribution and constrain policy options (Gottlieb et al., forthcoming; Dodini et al., 2025).

We use administrative data to investigate doctors' income distributions in four developed countries, focusing on physicians' incomes relative to each country's income distribution. Physicians are highly concentrated in the top decile of each country's income distribution. In the U.S., over 84% of physicians are in the top decile, with 26% in the top percentile alone. In the other three countries, roughly 60% of physicians are in the top decile. Sweden differs in having a lower share in the top percentile: only 5% of Swedish doctors, compared with around 20% in Canada and the Netherlands.

## I. Data

We use administrative 2017 tax data from the United States, Sweden, and the Netherlands, and 2015 tax data from Canada. We identify physicians by linking individual tax records to occupational codes or healthcare provider registries. We observe the universe or near-universe of physicians in each country. We harmonize the definition of income across the four countries to the extent possible, adjust values for inflation, and convert to 2025 USD at purchasing power parity. We compute income level and positions in the national income distribution for each physician. The position in the income distribution is measured using household level income (Adjusted Gross Income) in the U.S. and at the individual level in the other countries, reflecting the respective tax systems.

Table 1 summarizes data sources and income definitions for each country, and reports sample sizes and mean incomes. The Online Appendix provides details on measurement and healthcare institutions in each country. Average individual physician incomes in the U.S. are more than twice those in the other countries. Canada and the Netherlands offer similar average incomes, with average Swedish physician incomes 40% lower.

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TABLE 1—SUMMARY STATISTICS

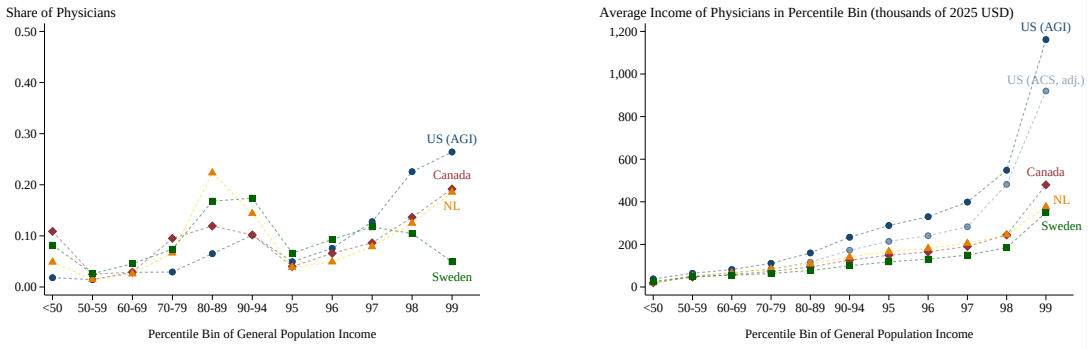
| | United States | | Canada | Netherlands | Sweden |
|---|---|---|---|---|---|
| Income level | Household | Individual | | Individual | |
| Mean income (2025 USD) | $562,100 | $458,100 | $194,700 | $185,700 | $115,200 |
| Number of physicians | 819,500 | | 100,660 | 70,295 | 55,097 |
| Data year | 2017 | | 2015 | 2017 | 2017 |
| Data source | IRS tax data Form 1040 | | Canadian Census with linked tax records | Personal Records Database (BRP) with linked tax records | LISA Database with linked tax records |
| Income measure | adjusted gross income (AGI) | individual total income | wage and salary, self-employment, and capital gains | wage and salary, and self-employment | wage and salary, self-employment, and capital gains |
| Physician definition | National Provider Identifier (NPI) Registry (2018) | | National Occupation Classification (2016) | BIG (Professions in Individual Healthcare) online register | Swedish Standard Classification of Occupations (SSYK) |

*Note:* This table summarizes the data on physician incomes in the United States, Canada, the Netherlands, and Sweden. Data sources and income definitions are specified in the table for each country. Samples are restricted to individuals age 20 to 70. Individual total income for the U.S. is defined as in Gottlieb et al. (2025). Income is reported in 2025 USD and adjusted for purchasing power parity.
*Source:* Disclosure Review Board Approval CBDRB-FY23-0319 .

## II. Results

### A. *All Physicians*

Figure 1 presents the main results. Panel A plots the distribution of physicians by position in the national income distribution in each country. For example, the rightmost navy dot in Panel A means that 26 percent of U.S. physicians have incomes at or above the 99th percentile of the U.S. income distribution. Percentiles below the 95th percentile of the national income distribution are aggregated for visual clarity as specified on the horizontal axis. Panel B shows the corresponding levels of physician incomes within each bin. For the U.S., Panel B reports both household level AGI and individual level income based on the American Community Survey (ACS) and adjusted for income under-reporting following Gottlieb et al. (2025); the Online Appendix provides details.




Panel A: Position in the National Income Distribution Panel B: Income Levels

FIGURE 1. PHYSICIAN INCOMES RELATIVE TO THE NATIONAL INCOME DISTRIBUTIONS

*Note:* Panel A plots the share of physicians in each country with incomes in different percentile bins of the national income distribution; Panel B plots average income levels within each bin. Percentiles of the national income distribution below the 95th percentile on the horizontal axis are aggregated into bins for visual clarity. Percentiles are defined using the floor, so that, *e.g.*, "99" means top 1% of earners. Table 1 provides the definition of the samples and income measures. we report two income measures for the U.S.: one using data from IRS Form 1040 for Adjusted Gross Income (AGI series) and the other based on IPUMS estimates from 2015–2019 for individual total income (ACS series) adjusted for under-reporting following Gottlieb et al. (2025)
*Source:* Administrative tax-linked registers as specified in Table 1. Disclosure Review Board Approval CBDRB-FY21-009, CBDRB-FY2021-CES010-015, CBDRB-FY2021-CES010-01 CBDRB-FY23-0319 .

The graphs show a few clear patterns. First, across all four countries, physicians are a common high-income occupation. Few physicians are below the top two deciles of earners nationally. Second, the U.S. has particularly high mass in the top two percentiles. Physicians in Canada and the Netherlands are somewhat less concentrated in the top percentiles; their distributions show more mass from percentiles 70 to 95. Approximately 19% of Canadian and Dutch physicians are in the top percentile, with the majority in the top decile. In these countries, a meaningful share of physicians is located further down the income distribution than in the U.S. The Swedish distribution appears different from the other three countries, as only about 5% of Swedish physicians are in the top percentile of the Swedish income distribution. More Swedish physicians fall in the 80th–94th percentiles than in the other countries.[1]

The U.S. difference is most pronounced when we consider physicians' average income level rather than their relative position in the income distribution. Panel B reports these average incomes for physicians.[2] U.S. physicians in the top percentile earn nearly $1.2 million at the household level and $1 million at the individual level, compared with $500,000 in Canada and under $400,000 in Sweden and the Netherlands. Physicians in the 98th percentile earn over $500,000 in the U.S. and around $200,000 in all three other countries. U.S. physicians are concentrated at percentile 95 and above, where incomes exceed $280,000. In contrast, physicians in other countries are concentrated in percentiles 80–94 and earn around $100,000.

How much of the difference between the mean individual incomes in Table 1 reflects differences in physicians' relative locations in each country's income distribution, as opposed to differences in the incomes at each level? To answer this, in Table 2 we take the average individual physician income by percentile bin in one country, and re-weight them based on the share of physicians in each bin from a second country. When that second country is the United States, this exercise explains at most 22% of the difference in mean incomes between each other country and the U.S. So U.S. physicians' higher incomes largely reflects differences in incomes at a particular point in the income distribution, rather than U.S. physicians being more prevalent in the top percentiles.

TABLE 2—DECOMPOSITION OF INCOME DIFFERENCES: SHARE EXPLAINED BY LEVELS VS. RELATIVE POSITIONS

| | | Country 2 | | | |
|---|---|---|---|---|---|
| | | US | Canada | Sweden | NL |
| Country 1: | | | | | |
| US | % of (Country 2 - US) inc. gap explained: | | 43% | 66% | 43% |
| Canada | % of (Country 2 - Canada) inc. gap explained: | 21% | | 63% | 0% |
| Sweden | % of (Country 2 - Sweden) inc. gap explained: | 22% | 44% | | 49% |
| NL | % of (Country 2 - NL) inc. gap explained: | 14% | -33% | 49% | |

*Note:* This table shows the percentage of the difference in mean earnings between two countries that is explained by the relative positions of physicians in their respective national income distributions. The numerator of the percentage is counterfactual country 1 mean income (re-weighted using shares in country 2) minus observed country 1 mean income. The denominator is observed country 2 mean income minus observed country 1 mean income. NL denotes the Netherlands.
*Source:* Administrative tax-linked registers as specified in Table 1. Disclosure Review Board Approval CBDRB-FY23-0319 CBDRB-FY21-009, CBDRB-FY2021-CES010-015, CBDRB-FY2021-CES010-01 .

[1] Previous research (*e.g.*, Karimi, Lucke and Palme, 2024) has shown that realized capital gains constitute an important component of income at the top of the Swedish income distribution. Excluding capital gain income from the income measure, we find that 13% of Swedish physicians are located in the 99th percentile of the income distribution.

[2] By construction the average incomes of physicians in each bin are similar to the overall population's average income within each bin. This is less true for the top percentile, since top incomes are unbounded.

### B. *Specialty Differences*

Figure 2 reports the distribution of physicians' location in the income distribution disaggregated by specialties. Panel A shows primary care physicians (PCPs) and Panel B shows all specialists. Panel C focuses on obstetricians/gynecologists and Panel D on surgeons, specialties that we can separately observe in the U.S. and the Netherlands.

Across all countries, the distribution for primary care physicians is shifted to the left. Panels B—D show that physicians' concentration at the top of the income distribution is more pronounced for specialists than for physicians overall. For primary care physicians, in contrast, there is more mass in percentiles 60–94. In the U.S., 42% of specialists are in the top percentile of the national income distribution. Combined with the 98th percentile, over half of American specialists are in the top 2%. Canadian and Dutch specialists are also prominent at the top, with over one-quarter of Canadian specialists and over one-fifth of Dutch specialists in the top percentile. While specialization does predict higher income for Swedish physicians, the absolute concentration at the top remains below the other countries, with only 7% of specialists being in the top percentile.[3]

Table 3 summarizes these results. Outside of Sweden, PCPs have a similar top-decile share as physicians overall, but lower top-percentile shares. Surgeons are notably more prevalent in the top percentile in both the U.S. and the Netherlands, and in the U.S. show a stark concentration in the top percentile relative to obstetricians/gynecologists.

TABLE 3—SHARE OF PHYSICIANS IN TOP INCOME PERCENTILES

| | All Physicians | | Primary Care | | Specialists | |
|---|---|---|---|---|---|---|
| Country | Top Decile | Top 1% | Top Decile | Top 1% | Top Decile | Top 1% |
| US | 84% | 26% | 83% | 14% | 90% | 42% |
| Canada | 62% | 19% | 57% | 13% | 69% | 27% |
| Netherlands | 62% | 19% | 65% | 16% | 58% | 21% |
| Sweden | 60% | 5% | 24% | 1% | 87% | 7% |

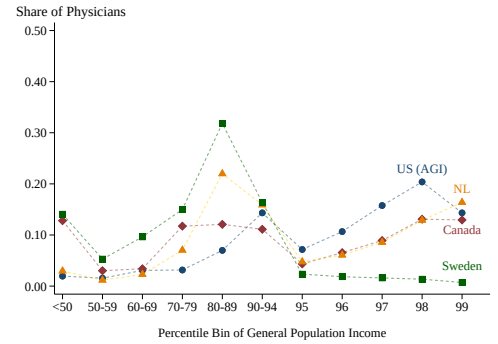
*Note:* The table reports the share of physicians in each country with incomes in the top decile and in the top percentile of the national income distribution, overall and by specialty. Percentiles are defined using the floor, so that, *e.g.*, top decile means physicians earning at or above the 90th percentile of their country's national income distribution. Table 1 provides the definition of income measures and physicians.
*Source:* Administrative tax-linked registers as specified in Table 1.. Disclosure Review Board Approval CBDRB-FY21-009, CBDRB-FY2021-CES010-015, CBDRB-FY2021-CES010-01 , CBDRB-FY2020-CES005-035 .

## III. Interpretation and Implications

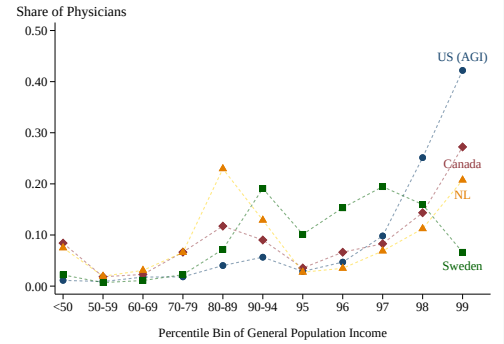
This paper documents the distribution of physician incomes across four high-income countries using tax data. We find that physicians are consistently near the top of the national income distributions in the U.S., Canada, and the Netherlands, with the majority in the top decile and substantial representation in the top percentile. Specialists are particularly concentrated in the top percentiles.

Perhaps the most fundamental finding is that the overall income distribution within each country is so closely related to physician incomes. U.S. physicians earn substantially more than their counterparts in Canada, the Netherlands, and Sweden, but much of this difference can (statistically) be attributed to higher incomes at given percentiles of the overall U.S. income distribution. The U.S. income distribution is more dispersed than that in these other countries and, in particular, features higher incomes at the top. This fact, rather than differences in physicians' relative locations in the income distribution, statistically explains the bulk of the U.S. physician earnings premium. Economically, this could arise from physicians' labor market alternatives and from high-income consumers' willingness to pay for health (Murphy and Topel, 2006; Gottlieb et al., forthcoming).

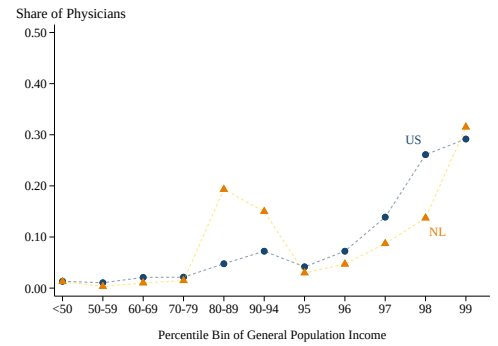
[3]Excluding capital gains from the income measure would yield 20% of Swedish specialists in the 99th percentile (see footnote 1).



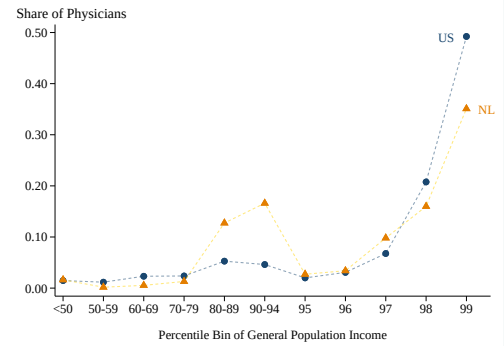

Panel A: Primary Care




Panel B: Specialists




Panel C: Obstetrics and Gynecology




Panel D: Surgery

FIGURE 2. DISTRIBUTION OF PHYSICIAN INCOMES BY SPECIALTY AND COUNTRY

*Note:* The panels in this figure replicate Figure II.A for a selection of specialty groupings. Each panel shows the share of physicians in a given specialty (as specified in panel titles) whose income falls within a given income percentile bin of the national distribution. Percentiles are defined using the floor (*e.g.*, "99" means the top 1% of incomes). In Panel A, primary care doctors in Sweden are defined as physicians who have not yet obtained specialist certification.
*Source:* Administrative tax-linked registers as specified in Table 1. Disclosure Review Board Approval CBDRB-FY21-009, CBDRB-FY2021-CES010-015, CBDRB-FY2021-CES010-01 , CBDRB-FY2020-CES005-035 .

While the income distributions and common economic fundamentals are key factors, institutional differences across countries also likely influence the patterns we document. U.S. physicians' greater representation in the very top income percentiles may reflect greater business opportunities in the American healthcare system. In contrast, Swedish physicians' lower presence near the very top of the income distribution likely reflects the predominance of salaried, public-sector healthcare employment, and perhaps the use of this dominant employer's monopsony power to reduce physician incomes.

These observations highlight an important caveat for any efforts to reduce U.S. healthcare spending by lowering physician pay. If average individual physician incomes in the U.S. fell to the Swedish level, healthcare spending would fall by 6%, corresponding to $291 billion or 1.0% of GDP (from 17.6% of GDP to 16.6% of GDP). In other words, this change would have a modest effect on U.S. healthcare spending, but would represent a $342,800, or 75%, reduction in average U.S. physician incomes, which would likely have a substantial impact on workers' choices of whether to become physicians. Nicholson (2002), Gottlieb et al. (2025), Dodini et al. (2025), and Alexander and Schnell (2026) show that physicians' talent allocation and labor supply respond to potential earnings, so a 75% fall in incomes could reshape these choices.

If U.S. physician incomes instead shifted to match Swedish doctors' *relative* income distribution, the change would be smaller. This would imply a $230,400, or 50%, reduction in average U.S. physician incomes, inducing a somewhat smaller impact on labor supply. This would generate a correspondingly smaller reduction in savings: healthcare spending would fall by 3.8%, corresponding to $195 billion, or 0.7% of GDP.[4]

The relative differences across specialties are largely consistent across countries. This suggests that similar economic fundamentals, regulations or political forces are at play. Economic fundamentals include different skill requirements or compensating differentials for job amenities (Gottlieb et al., 2025). Regulatory differences could include entry barriers and administrative price setting. Although the broad patterns are similar, specialists commanding the very top incomes is more pronounced in the U.S., suggesting that business opportunities or the higher return to skill may interact with specialty fundamentals to create particularly good earning opportunities.

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[4]The Online Appendix explains this calculation and reports analogous comparisons using Canada and the Netherlands instead of Sweden.