

# Who Values Human Capitalists' Human Capital? The Earnings and Labor Supply of U.S. Physicians

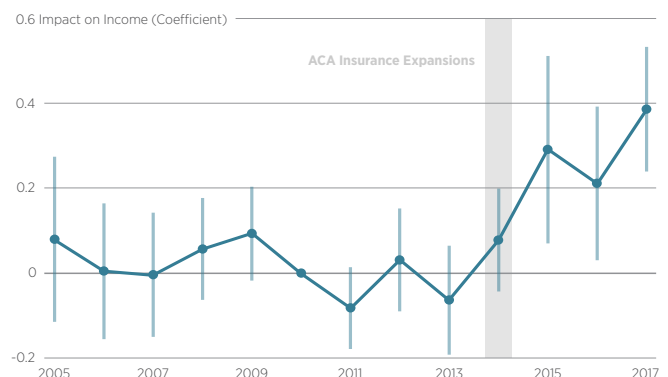
Based on BFI Working Paper No. 2023-95, "[Who Values Human Capitalists' Human Capital? The Earnings and Labor Supply of U.S. Physicians](#)," by Joshua D. Gottlieb, Chicago Harris; Maria Polyakova, Stanford University; Hugh Shiple, University of New Brunswick; Kevin Rinz, U.S. Census Bureau; and Victoria Udalova, U.S. Census Bureau

*Physicians' annual earnings average \$350,000 and comprise 8.6% of national healthcare spending. Government policy has a major impact on earnings: 25% of incremental Medicare spending on physician care goes to physicians personally, and physicians earn 6% of public money spent on insurance expansions.*

To practice medicine, physicians train for many years. But once this training is complete, they enter a market with supply limited by this training length, and demand supported by the government through public health insurance subsidies. Physicians are the most common occupation among the top one percent of income earners and, despite the government's larger role in the market, we do not have a good understanding of how much physicians earn or how government payments shape their labor market choices. This paper addresses these questions. The authors ask whether these high earnings are purely rents, or change important economic decisions, such as which specialty a physician chooses.

The authors create a new dataset by linking administrative information on physicians to tax records. They measure physicians' earnings and estimate the influence of healthcare policies on physicians' incomes, labor supply, and allocation of talent. In the first part of their paper, they document a set of descriptive facts about physician earnings:

**Figure 1 • Effect of Insurance Expansion on Physicians' Income**



Note: This figure shows event study estimates of the effects of ACA insurance expansions on insurance rates individual total income of physicians aged 40-55. The sample includes counties in states that had ACA expansions in 2014 and 2015, and error bars represent 95% confidence intervals.

- The average physician earns \$243,400 in wages and \$350,000 in total individual income. This measure is right-skewed; the median physician earns \$265,000 per year, more than 25% of physicians in 2017 earn above \$425,000, and the top 1% earn more than \$1.7 million.

- Age accounts for 14% of the variation in physician earnings. Physicians earn around \$60,000 on average in their late twenties while they are still in training. This escalates rapidly to an average of more than \$185,000 in their early thirties, and peaks at around \$425,000 at age 50. Women earn 30% less than men.
- Business income is crucial for the top earners; 80% of physicians in the top 1% report business income of at least \$25,000. Overall, business income comprises 25% of physician earnings and is systematically underreported in survey data.
- Earnings vary substantially across specialties. Primary care physicians (PCPs), who make up the most common specialty, are also the lowest earning, with an average income of \$201,200. The highest earners are procedural specialists and surgeons, whose average earnings are 2.3 times those of PCPs.
- Physician earnings vary strikingly across areas. Unlike for the broader economy, physicians' incomes are highest in parts of the Great Plains, rather than on the coasts. The authors also show that smaller markets tend to attract lower-earning physicians but also boost their earnings substantially. Seventy percent of the difference in physicians' income across areas is attributable to the impacts of the local market, rather than to characteristics of the doctors who work there. This pattern suggests that government subsidies, which permeate the market for physicians, may play a substantial role in setting wages.
- In response to short-term reimbursement changes, 25% of marginal Medicare reimbursement dollars flow into physician earnings. For the permanent change in demand induced by the public insurance expansions under the Affordable Care Act, the authors document a 6% pass-through of public spending to physician incomes.
- Earnings affect physicians' short-run supply of medical care, as they adjust the treatments they offer. Additionally, in the medium-run, doctors who are past their lifetime earnings peak tend to delay retirement in response to positive earnings shocks.
- Increased earnings attract physicians with higher test scores to a specialty while displacing those with lower test scores and less choice. Increasing primary care earnings by 5%, while holding constant the number of available slots and earnings of other specialties increases the probability that graduates from top-five medical schools enter primary care by 4.8%.

The authors next assess the impacts of government policies on physicians' earnings. Using income tax, Medicare billing, and specialty choice data, they consider two types of insurance policy changes: changes in coverage and changes in payment rates. They find the following:

The upshot is that government payment rules play a key role in valuing and allocating one of society's most expensive assets: physicians' human capital. Taken together, the results here suggest that policies subsidizing surgery will increase surgeons' incomes and allocate more top talent to surgical specialties, improving surgery for a generation. Subsidizing primary care will instead increase these physicians' incomes and allocate top talent to primary care, improving primary care for a generation. To conduct sensible policy evaluation in this environment, further work should quantify the health impacts of ability in different specialties and determine the overall welfare impact of talent allocation.

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## ABOUT OUR SCHOLAR



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