

# 10.3 THE OPPORTUNITY COST OF HEALTH SECTOR EMPLOYMENT IN US AND OTHER G7 COUNTRIES\*

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## Abstract

Whether the opportunity cost of health sector employment in the United states is more or less than in the rest of the G7 depends on how it is measured.

Health expenditures are not a good measure of whether the burden of medical care is more or less in the United States, compared with its major competitors. If markets are less competitive in health care due to regulation or other forces, this will result in higher prices. Thus, for each unit of resources used (for example, an hour of labor), spending might be more in medical care than if the identical resource were used elsewhere in the economy. Briefly, spending might be much more than costs.

However, because higher prices result in income to someone (for example, doctors, drug company shareholders), decreasing the medical prices might change the distribution income in the economy. Nevertheless, it will not make Americans better off in the aggregate (every dollar of income "won" by buyers would be matched by a corresponding loss by the sellers of medical services).

Two methods provide an approximate measure of the opportunity cost of health services labor across countries. One approach calculates the percentage of the population employed in health care. This method assumes that the cost to any economy of diverting a worker into the health care sector is approximated by GDP per worker in that economy. However, this would be a poor approximation for doctors, whose value to the economy presumably would be much higher than average GDP per employee even if they were employed elsewhere. Taking this into account — by weighting employment by the average ratio of doctor compensation to nurse compensation in the countries shown in figure 10.3a — the U.S. share of employment is higher than in its competitors, but not by much.

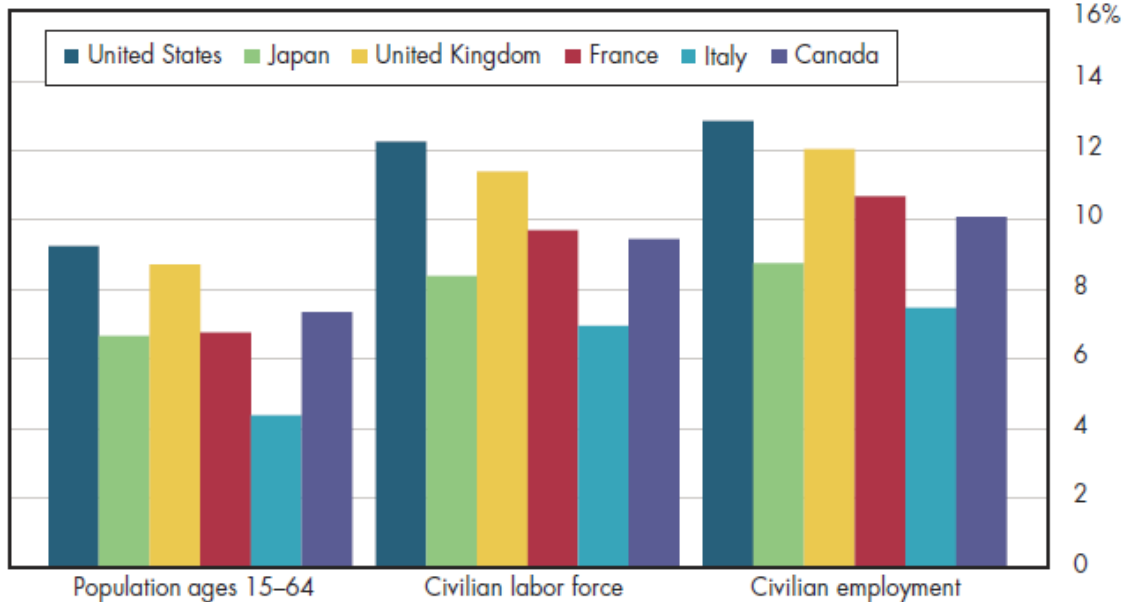
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### 10.3a The opportunity cost for health employees is only slightly more in the United States than in the rest of the G7

*Weighted health employment as percentage of total (2006)*

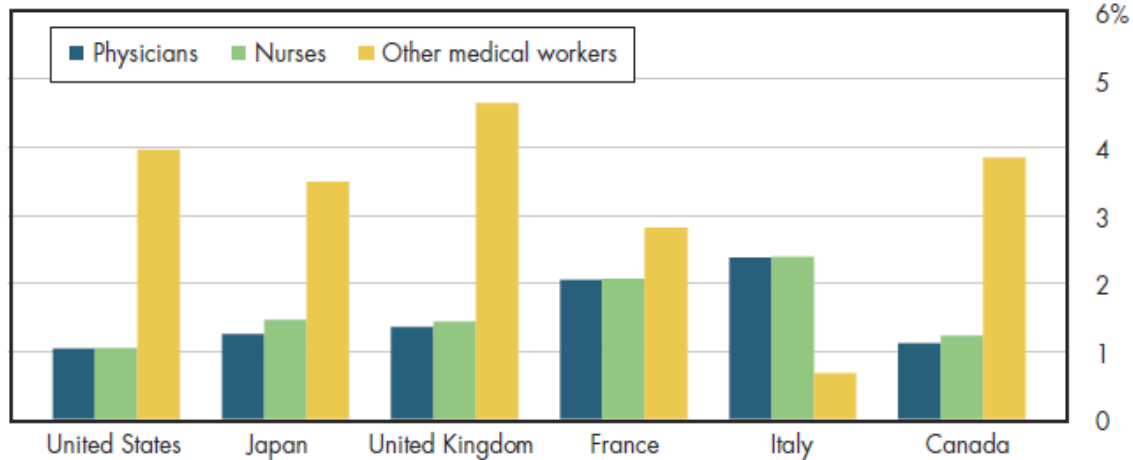


Note: Weighted figures are calculated by multiplying the number of general practitioners, specialists, and all other doctors times their respective salary ratios (see below) and adding this to the total number of non-physician health sector employees. The salary ratios were calculated as the average ratio of compensation for doctors relative to nurses for nine countries (six shown plus the three more with the highest level of health spending per capita: The Netherlands, Norway, and Switzerland). The ratios were: 1.8 for GPs, 2.8 for specialists, and 3.0 for all other MDs.

Another approach assumes that the opportunity cost of health workers is the same elsewhere as in the United States. When applying U.S. prices to the number of physicians, nurses, and other workers, the opportunity cost of medical labor is lower in the United States than in any of its major competitors (figure 10.3b). That is, after accounting for the higher prices paid for medical labor in the United States, the level of potential output these nations give up to produce health care is greater than in the United States.

### 10.3b When U.S. prices are applied to health sector employment, the United States has a lower relative share of GDP spent for doctors and nurses

Standardized spending on medical labor (U.S. prices) as percentage of GDP (2006)



Note: Standardized spending is calculated using U.S. levels of compensation for general practitioners, MD specialists, and nurses (both standardized spending and GDP measured in 2006 U.S. dollars, purchasing power parity).

Neither of these exactly measures U.S. comparative performance. However, the truth is likely to fall somewhere in between these estimates.

## 1 Downloads

Download PowerPoint versions of both figures.

- Figure 10.3a Image Slide (as it appears above)<sup>1</sup>
- Figure 10.3a Editable Slide (can be formatted as desired)<sup>2</sup>
- Figure 10.3b Image Slide (as it appears above)<sup>3</sup>
- Figure 10.3b Editable Slide (can be formatted as desired)<sup>4</sup>

Download Excel tables used to create Figures 10.3a/10.3b Tables<sup>5</sup>. Figures 10.3a and 10.3b were created from the following tables (the workbook includes all supporting tables used to create this table):

- Fig. 10.3a: Table 10.3.1. Total Weighted Health Employment as a Percentage of Population in Selected Industrialized Countries, 2006
- Fig. 10.3b: Table 10.3.2. Standardized Expenditures on Medical Care Labor, as a Percentage of GDP in Selected Industrialized Countries, 2006

## References

- Author's calculations.
- Organisation for Economic Co-operation and Development.
- Pauly MV. U.S. Health Care Costs: The Untold True Story. *Health Affairs* 1993;12(3):152-59.

<sup>1</sup><https://hub.mili.csom.umn.edu/content/m10118/latest/10.3aIMG.ppt>

<sup>2</sup><https://hub.mili.csom.umn.edu/content/m10118/latest/10.3aDATA.ppt>

<sup>3</sup><https://hub.mili.csom.umn.edu/content/m10118/latest/10.3bIMG.ppt>

<sup>4</sup><https://hub.mili.csom.umn.edu/content/m10118/latest/10.3bDATA.ppt>

<sup>5</sup><https://hub.mili.csom.umn.edu/content/m10118/latest/10.3TAB.xls>