

Chapter 10: The Labor Force and Employment in the Health Sector

By:
Christopher Conover

Chapter 10: The Labor Force and Employment in the Health Sector

By:

Christopher Conover

Online:

< <https://hub.mili.csom.umn.edu/content/col10020/1.1/> >

Medical Industry Leadership Institute Open Education Hub

This selection and arrangement of content as a collection is copyrighted by Christopher Conover. It is licensed under the Attribution 3.0 (<http://creativecommons.org/licenses/by/3.0/>).

Collection structure revised: September 27, 2013

PDF generated: November 21, 2013

For copyright and attribution information for the modules contained in this collection, see p. 26.

Table of Contents

1	10.1 Employment Has Increased Faster in Health Services than in the Rest of Economy	1
2	10.2 US Share of Health Sector in Employment Is High among Industrialized Countries	5
3	10.3 The Opportunity Cost of Health Sector Employment in US and Other G7 Countries	9
4	10.4 Share of Female Employees in Health Sector	13
5	10.5 Health Service Employees Work for Less Hours than Employees in General	17
6	10.6 Increased Longevity and Shorter Working Life Have Lengthened the Period of Retirement for Males	21
	Index	25
	Attributions	26

Chapter 1

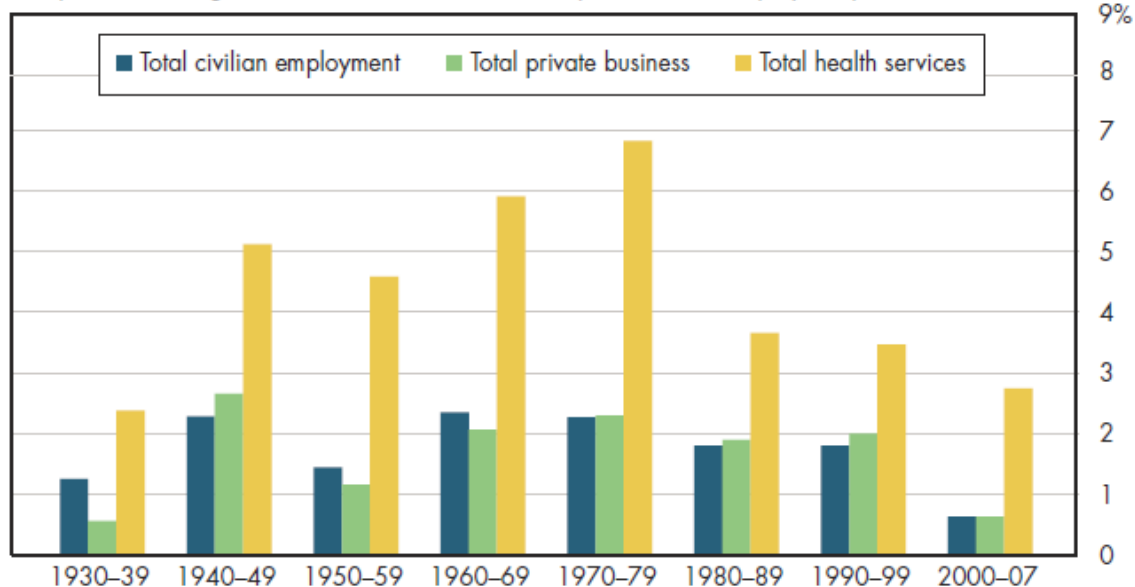
10.1 Employment Has Increased Faster in Health Services than in the Rest of Economy¹

In every decade since the 1930s, total health services employment has increased two to three times as fast as the number of workers in the general economy or private business (figure 10.1a). The numbers exclude workers in the goods-producing part of the health industry, along with employment by health insurers. It is uncertain whether inclusion of such workers would appreciably alter the data. Because the general population grows at approximately 1 percent a year, the numbers in figure 10.1a also illustrate the ratio of health services growth to the overall population. In none of those 80 years has health sector growth been less than two percent a year; in the 1970s, the annual increase reached almost seven percent. These general trends are quite consistent with previous information about growth in health care expenditures relative to the economy (refer to figure 1.5a).

¹This content is available online at <<https://hub.mili.csom.umn.edu/content/m10116/1.2/>>.

10.1a For 80 years, growth in health services employment has greatly exceeded the rate of growth in the number of all employees, as well as for all workers in private business

Compound annual growth rate in number of full-time-equivalent (FTE) employees (percent)



Note: All growth rates calculated through the end of the last year shown in each interval. Health services includes private sector ambulatory health services, hospitals, nursing and residential care facilities. It does not include pharmaceuticals, medical devices, health insurance, or government hospital workers.

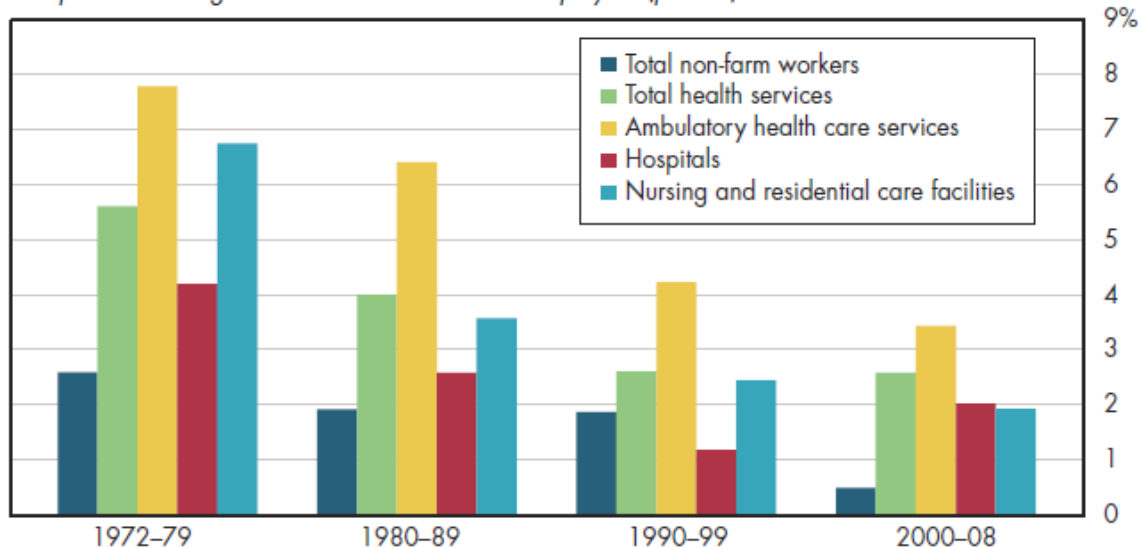
In light of the surge in spending that occurred in the aftermath of the arrival of Medicare and Medicaid in the mid-1960s, the extremely high relative growth in health sector employment might not be surprising. However, even in the 1950s, the health sector work force also grew three times as quickly as employment in private businesses overall. The 1980s were characterized by increasing concerns about rising health expenditures; indeed, this became an important issue in the 1992 election and a failed effort at health reform in 1993-94. Conversely, the late 1990s saw a noticeable slowdown in health spending, yet that increase in health industry employment relative to the rest of the economy during that decade was practically the mirror image of the pattern in the 1980s.

Since 2000, growth in health sector employment reached its lowest level since the 1930s in absolute terms. Yet this growth rate nevertheless was triple the rate of increase in both overall civilian employment and private business employment during that period.

Employment consistently has grown faster in ambulatory health services than in health facilities (figure 10.1b). The annual rates of increase for all services except hospitals has declined for each of the snapshots shown in the figure. However, the rate of increase became larger for hospitals, but the absolute rate of increase for hospitals is lower than for ambulatory health services for all years, even 2000-2008. The introduction of Medicaid fueled a nursing home boom that lasted more than a decade.

10.1b Employment growth has steadily become smaller since 1972, except in hospitals, where the employee growth rate increased starting in 2000

Compound annual growth rate in number of total employees (percent)



Note: All growth rates calculated through the end of the last year shown in each interval. Health services includes private sector ambulatory health services, hospitals, nursing and residential care facilities. It does not include pharmaceuticals, medical devices, health insurance, or government hospital workers.

1.1 Downloads

Download PowerPoint versions of both figures.

- Figure 10.1a Image Slide (as it appears above)²
- Figure 10.1a Editable Slide (can be formatted as desired)³
- Figure 10.1b Image Slide (as it appears above)⁴
- Figure 10.1b Editable Slide (can be formatted as desired)⁵

Download Excel workbooks used to create Figure 10.1a Table⁶ and Figure 10.1b Table⁷. [Note that you'd have separate links for each set of tables] Figures 10.1a and 10.1b were created from the following tables (the workbook includes all supporting tables used to create these tables):

- Fig. 10.1a: Table 10.1.1. Average Annual Growth in Employment for Detailed Components of Health Sector and Total U.S. Employment, by Decade, 1929-2011
- Fig. 10.1b: Table 10.1.2. Average Annual Growth in Employment for Detailed Components of Health Sector and Total U.S. Employment, by Decade, 1970-2008

1.2 References

A. Author's calculations.

²<https://hub.mili.csom.umn.edu/content/m10116/latest/10.1aIMG.ppt>

³<https://hub.mili.csom.umn.edu/content/m10116/latest/10.1aDATA.ppt>

⁴<https://hub.mili.csom.umn.edu/content/m10116/latest/10.1bIMG.ppt>

⁵<https://hub.mili.csom.umn.edu/content/m10116/latest/10.1bDATA.ppt>

⁶<https://hub.mili.csom.umn.edu/content/m10116/latest/10.1aTAB.xls>

⁷<https://hub.mili.csom.umn.edu/content/m10116/latest/10.1bTAB.xls>

CHAPTER 1. 10.1 EMPLOYMENT HAS INCREASED FASTER IN HEALTH SERVICES THAN IN THE REST OF ECONOMY

- B. Department of Commerce. Bureau of Economic Analysis.
- C. Department of Labor. Bureau of Labor Statistics.

Chapter 2

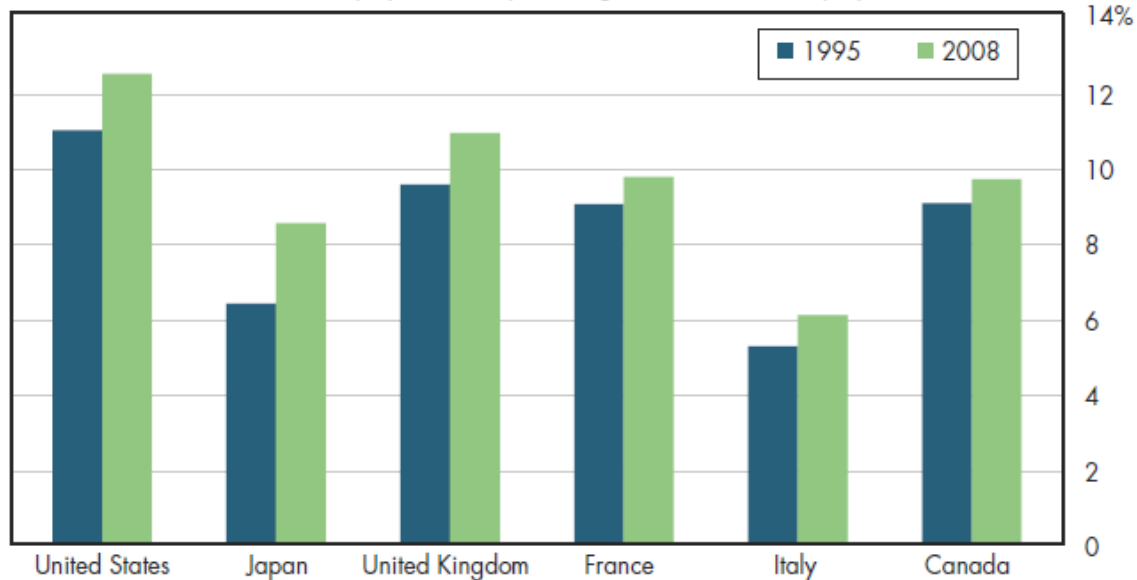
10.2 US Share of Health Sector in Employment Is High among Industrialized Countries¹

The share of civilian employment in the health and social work sector is higher in the United States than in other nations in the G7 (figure 10.2a). Nevertheless, compared with 1995, all these major competitors experienced, along with the United States, an increase in health sector employment relative to all civilian workers. It is worth noting that in the three OECD countries most comparable to the United States in terms of standardized per capita health expenditures (Norway, Switzerland, and the Netherlands), health employment exceeds 11.5 percent of total employment; in Norway it equals 20 percent. The U.S. level is assuredly not the highest in the world.

¹This content is available online at <<https://hub.mili.csom.umn.edu/content/m10117/1.1/>>.

10.2a Employment in the health and social work sector has a higher share of total civilian employment in the United States than in other G7 nations

Health and social work sector employment as a percentage of total civilian employment



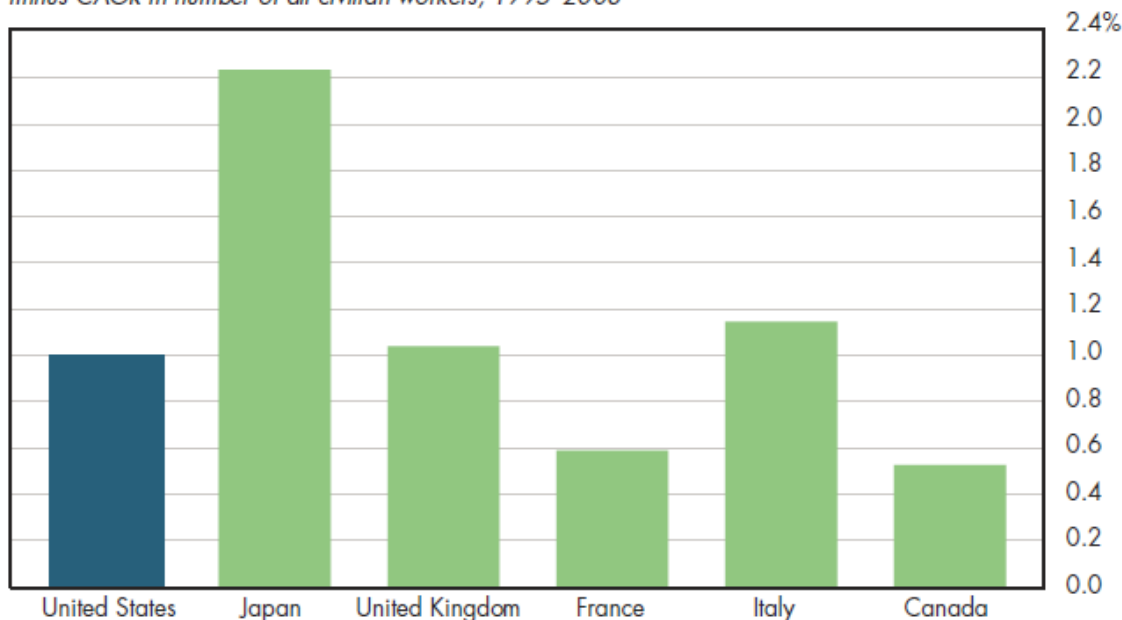
Note: Health and social work includes human health activities, veterinary activities, and social work activities. For the United States and Japan, the 1995 figure is imputed from 2003, which is the earliest year with data reported for this measure. In France, data refer to employees only (excluding the self-employed). This underestimates by about 10 percent the total number of people employed in health and social services.

These data have three limitations. First, they combine health sector workers with veterinary workers and those doing other types of social work services. In the United States, "social assistance" makes up approximately 15 percent of the total for health services and social assistance. This is a catch-all category for various services: emergency and other relief, vocational rehabilitation, child day care, and other individual or family services. Unfortunately, data do not show whether this 15 percent share is similar in other G7 countries (a higher share would make the differences between the United States and other nations even more than shown). Second, reporting gaps for the United States, Japan, and France preclude an exact comparison of numbers, especially for 1995 (figure 10.2a note). Finally, the data shown are self-reported estimates from population surveys. In the United States, such self-reporting for health care is one-seventh higher than are more precise counts obtained through detailed employer surveys.

These limitations inhibit our ability to get precise cross-sectional comparisons between the United States and other nations. Nevertheless, it is possible to compare how employment in this health sector and social work aggregate grew relative to civilian employment overall in each country. In the United States, health sector and social work employment grew 1 percent a year faster than did civilian employment (figure 10.2b). This was much slower than in Japan and the same as the experience in the UK and Italy, but the U.S. increase was approximately double the added growth rate in health workers in France and Canada, relative to the whole work force.

10.2b U.S. growth in health sector employment relative to total employment has been approximately the same as in the other G7 countries

Compound annual growth rate (CAGR) in number of health/social work employees minus CAGR in number of all civilian workers, 1995–2008



2.1 Downloads

Download PowerPoint versions of both figures.

- Figure 10.2a Image Slide (as it appears above)²
- Figure 10.2a Editable Slide (can be formatted as desired)³
- Figure 10.2b Image Slide (as it appears above)⁴
- Figure 10.2b Editable Slide (can be formatted as desired)⁵

2.2 References

- Author's calculations.
- Organisation for Economic Co-operation and Development.

²<https://hub.mili.csom.umn.edu/content/m10117/latest/10.2aIMG.ppt>

³<https://hub.mili.csom.umn.edu/content/m10117/latest/10.2aDATA.ppt>

⁴<https://hub.mili.csom.umn.edu/content/m10117/latest/10.2bIMG.ppt>

⁵<https://hub.mili.csom.umn.edu/content/m10117/latest/10.2bDATA.ppt>

Chapter 3

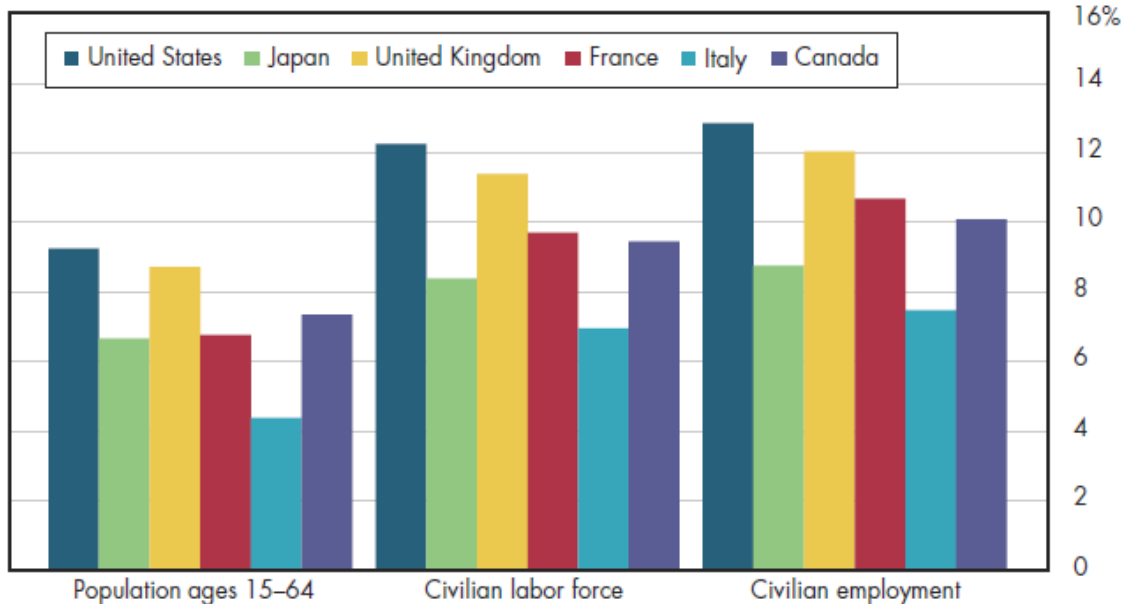
10.3 The Opportunity Cost of Health Sector Employment in US and Other G7 Countries¹

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.

¹This content is available online at <<https://hub.mili.csom.umn.edu/content/m10118/1.2/>>.

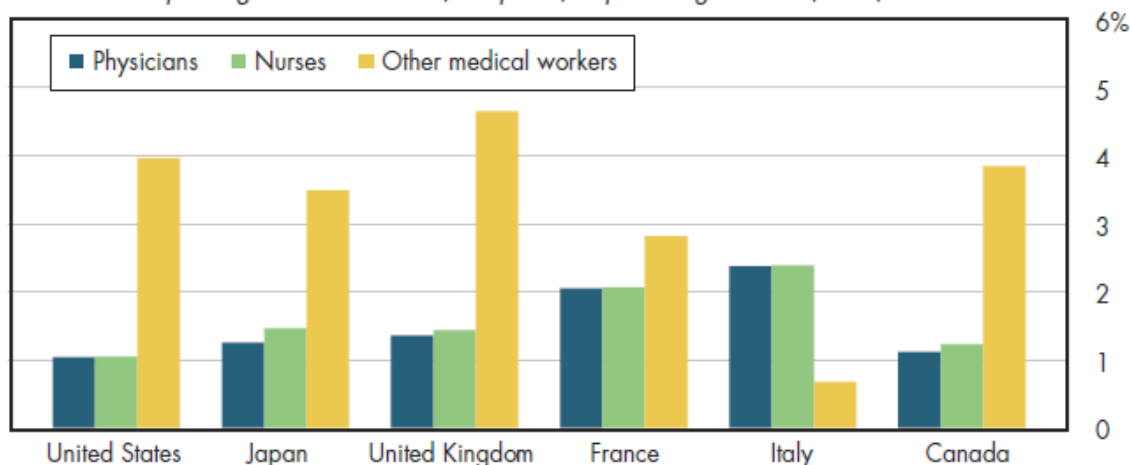
10.3a The opportunity cost for health employees is only slightly more in the United States than in the rest of the G7*Weighted health employment as percentage of total (2006)*

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.

3.1 Downloads

Download PowerPoint versions of both figures.

- Figure 10.3a Image Slide (as it appears above)²
- Figure 10.3a Editable Slide (can be formatted as desired)³
- Figure 10.3b Image Slide (as it appears above)⁴
- Figure 10.3b Editable Slide (can be formatted as desired)⁵

Download Excel tables used to create Figures 10.3a/10.3b Tables⁶. 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.

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

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

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

⁵<https://hub.mili.csom.umn.edu/content/m10118/latest/10.3bDATA.ppt>

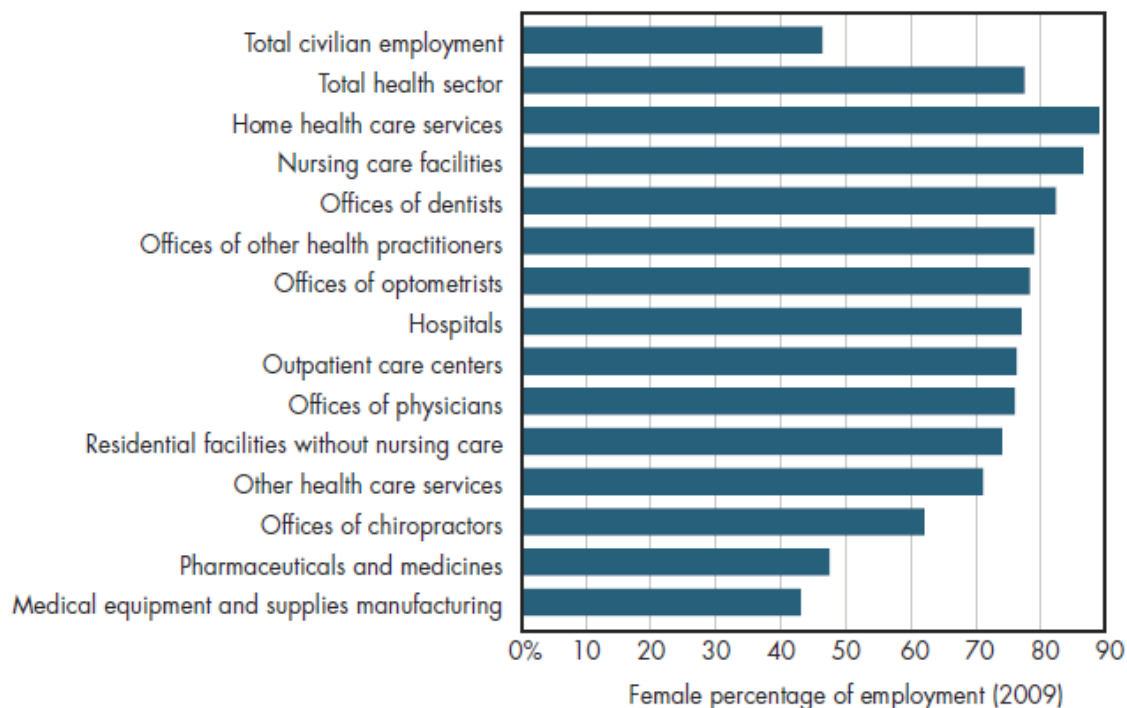
⁶<https://hub.mili.csom.umn.edu/content/m10118/latest/10.3TAB.xls>

Chapter 4

10.4 Share of Female Employees in Health Sector¹

Although females make up fewer than half of all civilian workers, they comprise more than 75 percent of workers in the health sector (figure 10.4a). This share varies dramatically across different components of the health industry. In the goods-producing part of the industry—manufacturing of pharmaceuticals, medical equipment, and supplies (which together make up only 6.5 percent of health sector employment)—the female share is slightly less than among all civilian workers.

10.4a Females account for more than 75 percent of health sector employees compared with fewer than half of civilian employment overall



In the services part of health care, the share of female workers is dramatically higher. In home health care, nine of 10 workers are women. In nursing-care facilities, seven of eight workers are female (although in

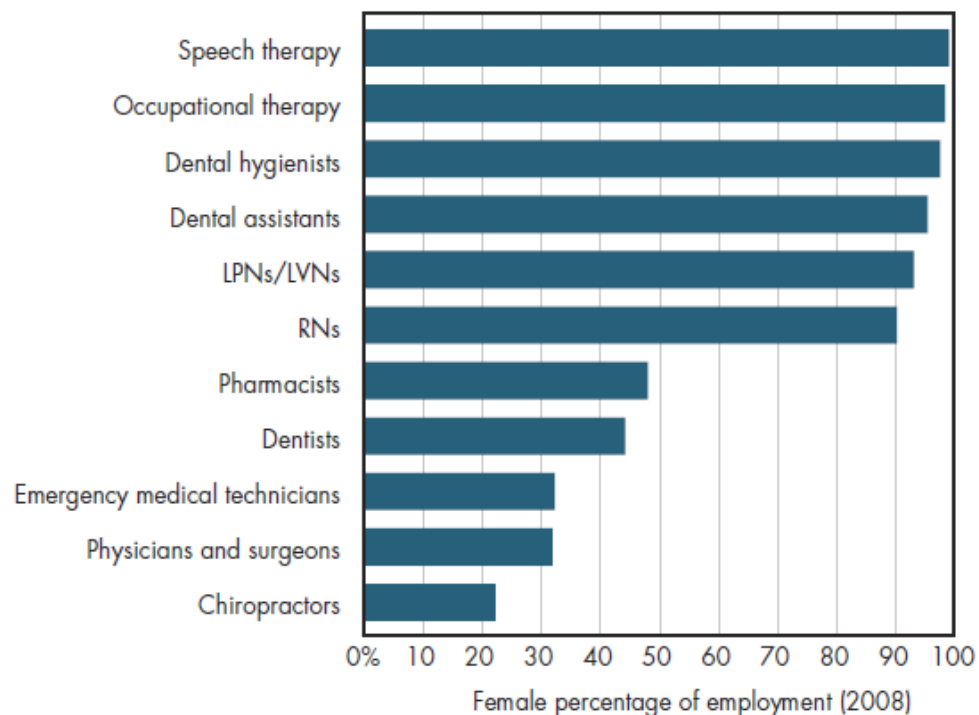
¹This content is available online at <<https://hub.mili.csom.umn.edu/content/m10119/1.3/>>.

Available for free at Medical Industry Leadership Institute Open Education Hub
<<https://hub.mili.csom.umn.edu/content/col10020/1.1>>

residential facilities that do not provide skilled nursing care, the female share is less than 75 percent). Most ambulatory health services have a workforce in which women make up 75 percent of employees. Hospital workers have approximately the same share of female workers.

The differences in share of females are even wider at the individual occupational level. Women make up 88 percent of health care support occupations such as nursing and home health aides, compared with fewer than 75 percent of workers in health care practitioner and technical occupations. In the five health-related occupations that have the highest share of females, women make up more than 90 percent of employees (figure 10.4b). Also shown are registered nurses (RNs), who make up the single largest occupation in health care, almost 90 percent of whom are female.

10.4b Females tend to be concentrated more in health care support occupations than in health care practitioner or technical occupations



Note: LPN = licensed practical nurse; LVN = licensed vocational nurse; RN = registered nurse.

The five occupations in which women are least represented include four that require doctoral training; these include chiropractors (22 percent), physicians and surgeons (32 percent), dentists (44 percent), and pharmacists (48 percent). Although some pharmacists have only bachelor's degrees, all newly minted pharmacists now must have a doctorate. However, these numbers are gradually changing. Currently, females comprise half of all medical students; chiropractics is also seeing an increase in the female share of graduates.

4.1 Downloads

Download PowerPoint versions of both figures.

- Figure 10.4a Image Slide (as it appears above)²
- Figure 10.4a Editable Slide (can be formatted as desired)³

²<https://hub.mili.csom.umn.edu/content/m10119/latest/10.4aIMG.ppt>

³<https://hub.mili.csom.umn.edu/content/m10119/latest/10.4aDATA.ppt>

- Figure 10.4b Image Slide (as it appears above)⁴
- Figure 10.4b Editable Slide (can be formatted as desired)⁵

Download Excel workbooks used to create Figure 10.4a Table⁶ and Figure 10.4b Table⁷ . [Note that you'd have separate links for each set of tables] Figures 10.4a and 10.4b were created from the following tables (the workbook includes all supporting tables used to create these tables):

- Fig. 10.4a: Table 10.4.1 Female Percentage of All Employees by Health Sub-Sector and Total Civilian Employment, 2007, 2009 and 2010
- Fig. 10.4b: Table 10.4.2. Female Percentage of All Employees by Health Sub-Sector and Total Civilian Employment, 2008

4.2 References

- A. Author's calculations.
- B. Department of Labor. Bureau of Labor Statistics.

⁴<https://hub.mili.csom.umn.edu/content/m10119/latest/10.4bIMG.ppt>

⁵<https://hub.mili.csom.umn.edu/content/m10119/latest/10.4bDATA.ppt>

⁶<https://hub.mili.csom.umn.edu/content/m10119/latest/10.4aTAB.xls>

⁷<https://hub.mili.csom.umn.edu/content/m10119/latest/10.4bTAB.xls>

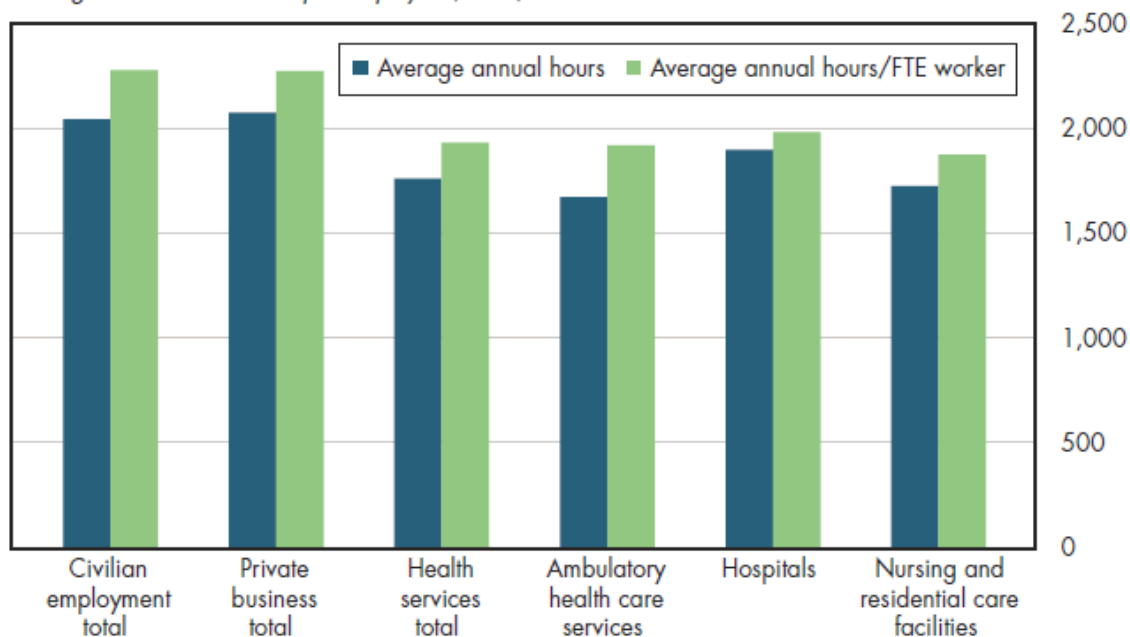
Chapter 5

10.5 Health Service Employees Work for Less Hours than Employees in General¹

The average health care worker spends fewer hours a year working than do employees in private business or all civilian workers (the latter includes government employees). This statement is valid regardless of whether hours per worker or average annual hours per full-time equivalent (FTE) worker are counted (figure 10.5a). Within the health services industry, hospital workers have the longest work-years, followed by ambulatory health care services employees and those in nursing and residential care facilities. These respective differences are less than the difference in hours worked in health care compared with the total economy.

10.5a Across the health services industry, annual hours per employee are shorter than in private business or the general economy

Average annual work hours per employee (2009)



Annual hours worked in the goods-producing part of the health sector, including manufacture of pharmaceuticals and medical equipment, are much more than in the general economy. In pharmaceuticals, the

¹This content is available online at <<https://hub.mili.csom.umn.edu/content/m10120/1.3/>>.

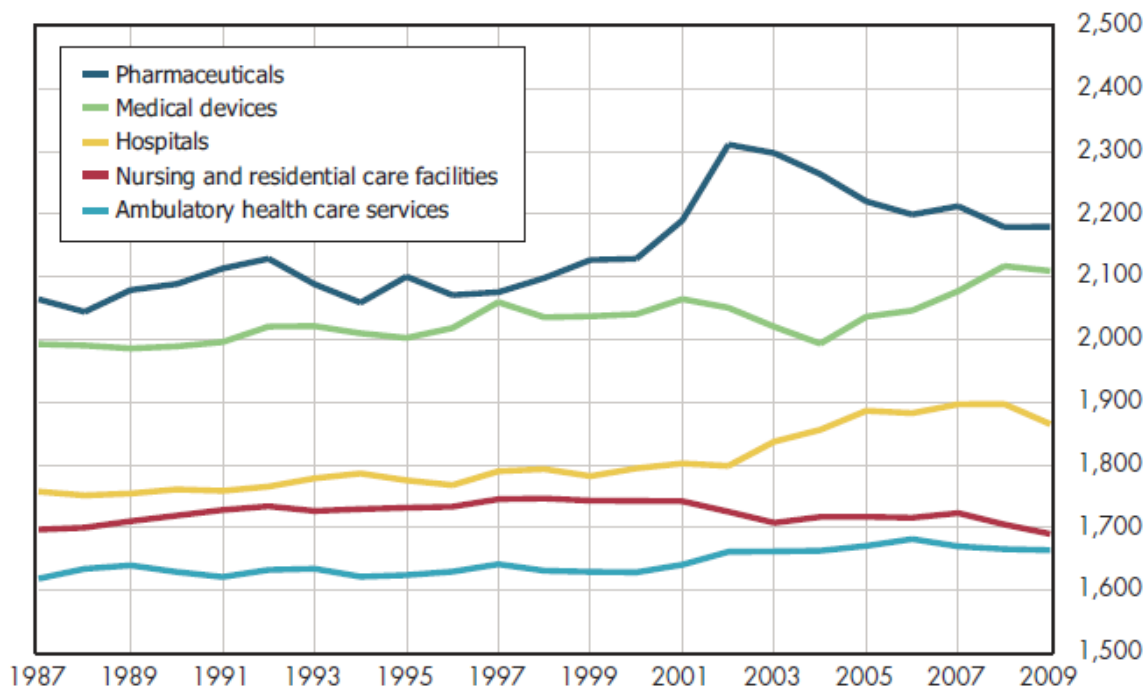
Available for free at Medical Industry Leadership Institute Open Education Hub
<<https://hub.mili.csom.umn.edu/content/col10020/1.1>>

length of the work-year peaked in 2002 but has declined subsequently, even though the total number of employees in the industry continues to grow (except for the years 2008 and 2009, which reflects the economic slow-down).

In the hospital industry, the work-year has generally increased since 1987, but hospital employees also saw a sharp increase in their annual hours starting in 2002 (figure 10.5b). This increase likewise occurred despite rising numbers of hospital employees. Changes in the length of the work-year have been more modest in ambulatory health care services, and nursing and residential care facilities. Since the start of the 21st century, there has been a general, modest decline in the length of the work-year among employees of nursing homes. In contrast, the length of the work-year generally has risen in the ambulatory care sector for approximately 20 years.

10.5b Annual hours per employee have declined in long-term care facilities during the past decade but have generally risen in hospitals

Average annual work hours per employee



5.1 Downloads

Download PowerPoint versions of both figures.

- Figure 10.5a Image Slide (as it appears above)²
- Figure 10.5a Editable Slide (can be formatted as desired)³
- Figure 10.5b Image Slide (as it appears above)⁴
- Figure 10.5b Editable Slide (can be formatted as desired)⁵

²<https://hub.mili.csom.umn.edu/content/m10120/latest/10.5aIMG.ppt>

³<https://hub.mili.csom.umn.edu/content/m10120/latest/10.5aDATA.ppt>

⁴<https://hub.mili.csom.umn.edu/content/m10120/latest/10.5bIMG.ppt>

⁵<https://hub.mili.csom.umn.edu/content/m10120/latest/10.5bDATA.ppt>

Download Excel tables used to create Figures 10.5a/10.5b Tables⁶ . Figures 10.5a and 10.5b were created from the following tables (the workbook includes all supporting tables used to create this table):

- Fig. 10.5a: Table 10.5.1. Average Annual Work Hours for Selected Components of the Health Sector, 2009
- Fig. 10.5b: Table 10.5.2. Annual Hours per Employee, by Industry, 1987–2009

5.2 References

- A. Author's calculations.
- B. Department of Labor. Bureau of Labor Statistics.

⁶<https://hub.mili.csom.umn.edu/content/m10120/latest/10.5TAB.xls>

*CHAPTER 5. 10.5 HEALTH SERVICE EMPLOYEES WORK FOR LESS
HOURS THAN EMPLOYEES IN GENERAL*

Chapter 6

10.6 Increased Longevity and Shorter Working Life Have Lengthened the Period of Retirement for Males¹

Since 1900, male life expectancy at age 20 has risen by 14 years, yet working-life expectancy currently is lower than it was when Theodore Roosevelt first was elected president. Working-life expectancy for men generally declined slowly but steadily starting in 1950, although it has increased slightly since 1990.

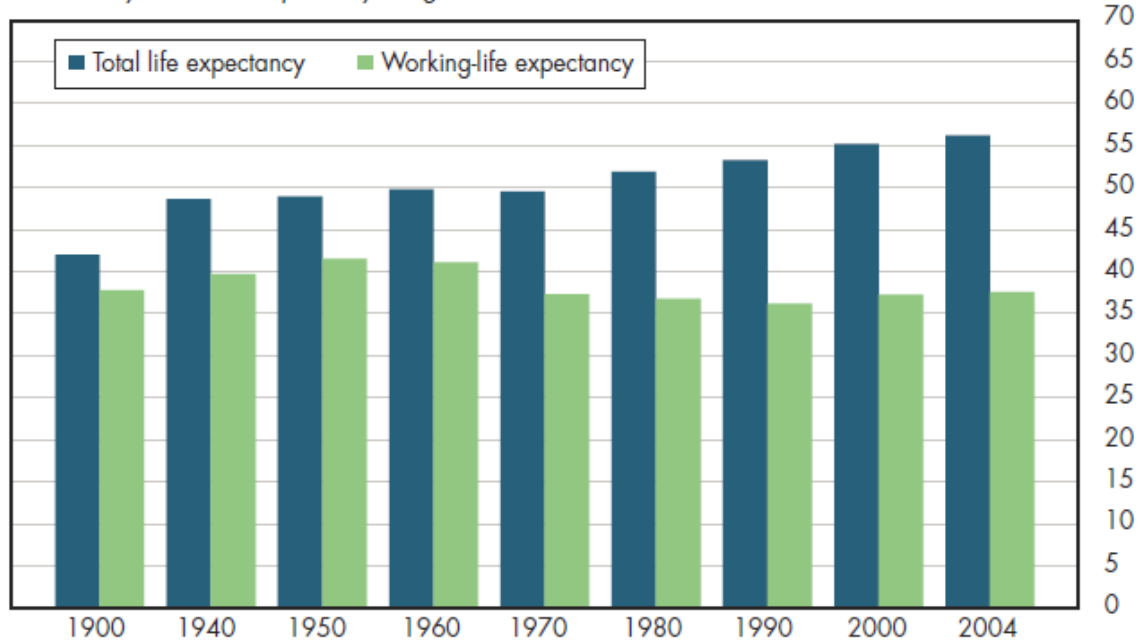
A baby born in 1900 had a life expectancy of only 47 years. A baby born in 2007 has a life expectancy of 77.9 years. The health sector cannot take credit for this entire 30-year increase in life expectancy. Public health measures such as improved sanitation and clean drinking water surely played a role. For the same reason, everyone believes that the rapid growth in the health care sector in the United States contributed to these remarkable gains in years of life.

At the start of the last century, a man age 20 could expect to live an additional 42 years, during which he could expect to work 38 years (figure 10.6a). The period of retirement was thus short. By 2004, life expectancy for a typical 20-year-old man had climbed to 56 years, yet his expected working-life expectancy still was 38 years! With a longer life expectancy and no change in working-life expectancy, the expected duration of retirement rose to 18 years, a considerable increase over four years a century earlier. Another way to look at this is to consider that in 1900, a man surviving to age 20 could expect to work 90 percent of his remaining life; by 2004, that share was less than 65 percent.

¹This content is available online at <<https://hub.mili.csom.umn.edu/content/m10121/1.2/>>.

10.6a The health sector helped contribute to increasing male life expectancy over the past century, yet working-life expectancy declined

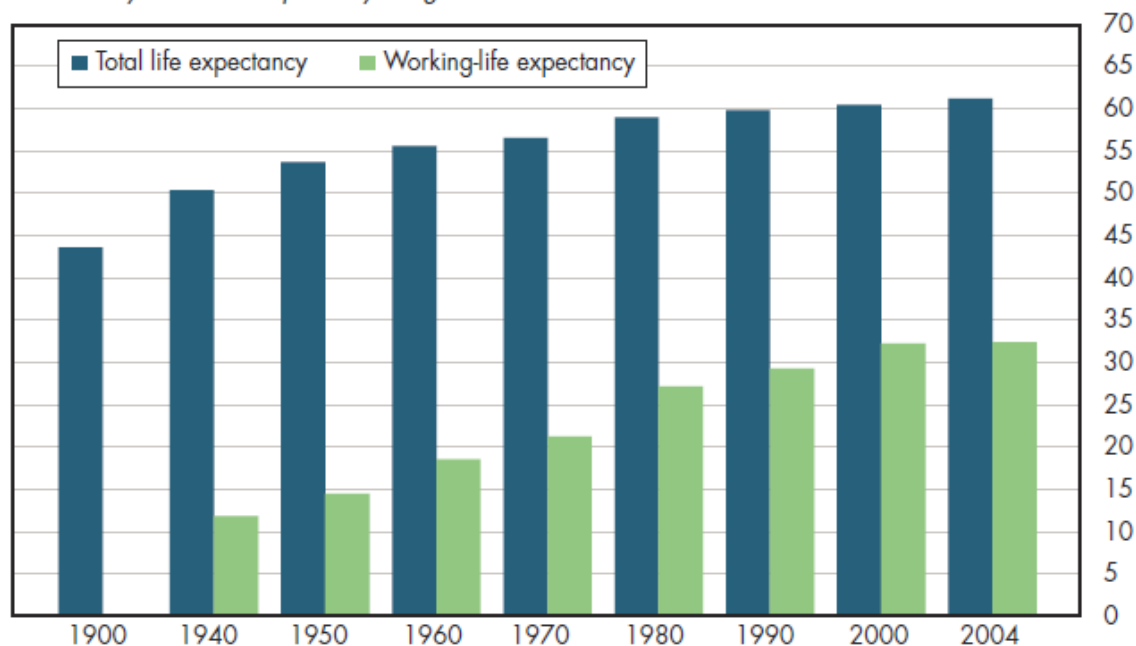
Additional years of life expectancy at age 20



Women have a different course. Female life expectancy has risen even more than for men over the same period—from 44 to 61 years for a woman age 20 (figure 10.6b). Working-life numbers for women also rose more rapidly, as women’s participation in the labor force has increased. In 1940, the average woman at age 20 could expect to be actively working in paid employment for only 12 years—less than 25 percent of her remaining years of life. This was 28 years fewer than the comparable number for men. By 2004, this male-female difference had decreased to only five years.

10.6b Increased life expectancy for females generally has been accompanied by rising working-life expectancy

Additional years of life expectancy at age 20



Note: Working-life expectancy not available for females in 1900.

Despite these changes, men today have 11 more working years than women do. Women spend far more time in paid employment than a century ago, but such work accounts for only approximately half of their adult lives.

6.1 Downloads

Download PowerPoint versions of both figures.

- Figure 10.6a Image Slide (as it appears above)²
- Figure 10.6a Editable Slide (can be formatted as desired)³
- Figure 10.6b Image Slide (as it appears above)⁴
- Figure 10.6b Editable Slide (can be formatted as desired)⁵

Download Excel tables used to create Figures 10.6a/10.6b Tables⁶. Figures 10.6a and 10.6b were created from the following tables (the workbook includes all supporting tables used to create this table):

- Fig. 10.6a: Table 9.6.1. Table 10.6. Life and Working-Life Expectancies for Males and Females At Age 20, 1900-2009
- Fig. 10.6b: Table 9.6.2. Table 10.6. Life and Working-Life Expectancies for Males and Females At Age 20, 1900-2009

²<https://hub.mili.csom.umn.edu/content/m10121/latest/10.6aIMG.ppt>

³<https://hub.mili.csom.umn.edu/content/m10121/latest/10.6aDATA.ppt>

⁴<https://hub.mili.csom.umn.edu/content/m10121/latest/10.6bIMG.ppt>

⁵<https://hub.mili.csom.umn.edu/content/m10121/latest/10.6bDATA.ppt>

⁶<https://hub.mili.csom.umn.edu/content/m10121/latest/10.6TAB.xls>

6.2 References

- A. Chiecka J, T Donley and J Goldman. Work Life Estimates at Millennium's End: Changes over the Last Eighteen Years. Illinois Labor Market Review 2000; 6(2). <http://lmi.ides.state.il.us/lmr/worklife.htm> (accessed June 30, 2010).
- B. Department of Health and Human Services. Centers for Disease Control and Prevention.
- C. Department of Labor. Bureau of Labor Statistics.
- D. Krueger KV, GR Skoog and JE Ciecka. Worklife in a Markov Model with Full-time and Part-time Activity. Journal of Forensic Economics 2006; 19(1):61-82. http://legaleconometrics.com/P19_JFE8.pdf (accessed June 30, 2010).
- E. Smith SJ. New Worklife Estimates Reflect Changing Profile of Labor Force. Monthly Labor Review March 1982:15-20. http://www.bls.gov/opub/mlr/1982/03/art2_full.pdf (accessed June 30, 2010).

Index of Keywords and Terms

Keywords are listed by the section with that keyword (page numbers are in parentheses). Keywords do not necessarily appear in the text of the page. They are merely associated with that section. *Ex.* apples, § 1.1 (1) **Terms** are referenced by the page they appear on. *Ex.* apples, 1

H health spending, § 1(1), § 2(5), § 3(9), § 4(13), § 5(17), § 6(21)

Attributions

Collection: *Chapter 10: The Labor Force and Employment in the Health Sector*

Edited by: Christopher Conover

URL: <https://hub.mili.csom.umn.edu/content/col10020/1.1/>

License: <http://creativecommons.org/licenses/by/3.0/>

Module: "10.1 Employment Has Increased Faster in Health Services than in the Rest of Economy"

By: Christopher Conover

URL: <https://hub.mili.csom.umn.edu/content/m10116/1.2/>

Pages: 1-4

Copyright: Christopher Conover

License: <http://creativecommons.org/licenses/by/3.0/>

Module: "10.2 US Share of Health Sector in Employment Is High among Industrialized Countries"

By: Christopher Conover

URL: <https://hub.mili.csom.umn.edu/content/m10117/1.1/>

Pages: 5-7

Copyright: Christopher Conover

License: <http://creativecommons.org/licenses/by/3.0/>

Module: "10.3 The Opportunity Cost of Health Sector Employment in US and Other G7 Counties"

By: Christopher Conover

URL: <https://hub.mili.csom.umn.edu/content/m10118/1.2/>

Pages: 9-11

Copyright: Christopher Conover

License: <http://creativecommons.org/licenses/by/3.0/>

Module: "10.4 Share of Female Employees in Health Sector"

By: Christopher Conover

URL: <https://hub.mili.csom.umn.edu/content/m10119/1.3/>

Pages: 13-15

Copyright: Christopher Conover

License: <http://creativecommons.org/licenses/by/3.0/>

Module: "10.5 Health Service Employees Work for Less Hours than Employees in General"

By: Christopher Conover

URL: <https://hub.mili.csom.umn.edu/content/m10120/1.3/>

Pages: 17-19

Copyright: Christopher Conover

License: <http://creativecommons.org/licenses/by/3.0/>

Module: "10.6 Increased Longevity and Shorter Working Life Have Lengthened the Period of Retirement for Males"

By: Christopher Conover

URL: <https://hub.mili.csom.umn.edu/content/m10121/1.2/>

Pages: 21-24

Copyright: Christopher Conover

License: <http://creativecommons.org/licenses/by/3.0/>

About Medical Industry Leadership Institute Open Education Hub

Rhaptos is a web-based collaborative publishing system for educational material.