

## Chapter 1 : United States - OECD Data

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This graph and much more can be found in the Our World In Data-entry on how healthcare is financed. The graph shows the relationship between what a country spends on health per person and life expectancy in that country between and for a number of rich countries. If we look at the time trend for each country we first notice that all countries have followed an upward trajectory – the population lives increasingly longer as health expenditure increased. But again the US stands out as the the country is following a much flatter trajectory; gains in life expectancy from additional health spending in the U. This development led to a large inequality between the US and other rich countries: In the US health spending per capita is often more than three-times higher than in other rich countries, yet the populations of countries with much lower health spending than the US enjoy considerably longer lives. In the most extreme case we see that Americans spend 5-times more than Chileans, but the population of Chile actually lives longer than Americans. The table at the end of this post shows the latest data for all countries so that you can study the data directly. There are several aspects that contribute to the US being such an extreme outlier: Studies find that administrative costs in the health sector are higher in the US than in other countries; The price comparisons between countries rely on adjustment which are not ideally suited for comparisons of health costs and this might make comparisons more difficult. Sometimes it is also pointed out in these comparisons that violence rates in the US are higher than in other rich countries and this is true. But while this could explain the difference in levels, it is not a likely explanation for the difference in trends. Over the period shown in the chart above violence and homicides have fallen in the US more than in other rich countries and this should have led to a narrowing of the difference to other countries and not to the increase that we see. One of the reasons for the underachievement of the US is the large inequality in health spending. The chart above showed that average per capita spending on health is exceptionally high, but the average does not tell you about how much each individual in the US receives. The US healthcare system is characterized by little access to care for some and very high expenditure on health by others. The following graph shows this inequality. The source of the data is the Medical Expenditure Panel Survey – a nationally representative longitudinal survey that collects information on healthcare utilization and expenditure, health insurance, and health status, as well sociodemographic and economic characteristics for civilian non-institutionalized population. This graph should be read similarly to a Lorenz curve: Some concentration in expenditure is certainly to be expected when looking at the distribution across the entire population – because it is in the nature of healthcare that some individuals, particularly those older and with complicated health conditions, will require large expenditure – these figures seem remarkably large and suggest important inequality in access. Indeed, the publisher of the graph notes that a report from the Medicare Payment Assessment Commission shows that personal spending for individuals covered by Medicaid is less concentrated than for the population as a whole. Cumulative distribution of personal healthcare spending in the U.

**Chapter 2 : Project MUSE - Determinants of Life Expectancy in Developing Countries**

*health spending was concentrated within the three highest life expectancy clusters; in other words, health spending was concentrated in the developed world. Health system indicators for workforce, hospital beds, access to medicines and vaccinations.*

Social and health care policies are generally better integrated in the other countries considered here, for example, and access to health care is not as limited by the ability to pay. Health insurance is almost universal in Europe, Canada, Australia, and Japan, whereas Another way in which European health systems may differ from the system in the United States is related to their orientation toward patient services. It is sometimes argued that European health care systems have a stronger focus on primary care as compared with a greater emphasis on specialist care in the United States. Evidence on this matter is mixed. However, the United States scores in the bottom group of OECD countries 6 out of 18 on a scale of the adequacy of primary care Macinko et al. This scale is built from items relating to policy, finance, and personnel. The adequacy of primary care is likely to be related to disease prevention. On several indicators of actual performance in preventive medicine for the older population, the U. The United States ranks ninth among 23 OECD countries in the proportion of the population above age 65 offered an annual influenza vaccination Organisation for Economic Co-operation and Development, , although the proportion actually receiving one is not exceptionally high see Table The proportion of individuals having their blood pressure checked in the past year is higher in the United States than in four other English-speaking countries Schoen et al. In this study, however, U. Eighty percent of Americans have a physician they see regularly, a lower percentage than that in six other OECD countries Schoen et al. This report addresses these behaviors individually, however, and this chapter focuses more narrowly on the health care system—the array of hospitals, physicians, and other health care professionals; the techniques they employ; and the institutions that govern access to and utilization of these resources. The young—both adults and children—are most likely to lack health insurance. Only 10 percent of the uninsured are aged 55 or older; only 2 percent of those 65 and over are uninsured, compared with 13 percent of those 55— Data from the National Health and Nutrition Examination Survey NHANES , , for those aged 55—64 reveal that uninsured and insured adults do not differ significantly in the prevalence of many health conditions and risk factors. The two groups are similar in levels of ever having had cancer uninsured On the other hand, a recent review of the effects of lack of insurance by the Institute of Medicine concludes that uninsured men and women are much less likely to receive clinical preventive services primarily secondary prevention that have the potential to reduce unnecessary morbidity and premature death. Moreover, uninsured chronically ill adults are more likely to delay or forgo visits with physicians and clinically effective therapies, including prescription medications. Uninsured adults are more likely as well to be diagnosed with later-stage cancers that are detectable at earlier stages by screening or by contact with a clinician who can assess worrisome symptoms. Without health insurance, adults also are more likely to die from trauma or other serious acute conditions, such as heart attack or stroke. The Institute of Medicine has estimated that 18, people aged 25—64 die each year because they lack health insurance. This calculation assumes a mortality rate for the uninsured that exceeds that of the insured by 25 percent. A recent update of this analysis found that those without health insurance had 40 percent higher mortality than the insured in the age range 17—64 Wilper et al. An assumption of 40 percent higher mortality would result in 45, excess deaths in this age range attributable to a lack of health insurance. This estimate suggests that only a small number of total deaths over age 50 are likely to result from a lack of insurance: Access to health care in the United States also is affected by the ability to pay for services not covered by insurance. Even those with insurance can find it difficult to pay the high costs of copayments and uncovered drugs. The percentage of adults in the United States who say that they have had an access problem because of costs is far higher than that in other high-income countries see Table In the United States, for example, 42 percent of chronically ill adults indicate that they have forgone

some care because of costs in the past year, while this is true of only 5 percent of chronically ill people in the Netherlands. Japan and France, two countries with substantially higher life expectancies, spend only 8 percent and 11 percent of their GDP on health care, respectively Organisation for Economic Co-operation and Development, One factor in the higher U. Table shows that administrative costs per capita in the United States are 9 times those in Japan and the United Kingdom and 3. Also contributing to the high costs in the United States is the high prevalence of major illnesses, described in Chapter 2 , and the high proportion of the U. This combination produces a high usage of physician services in the United States. And physicians earn substantially higher salaries in the United States see Table On several other indicators of efficiency that may also be related to survivalâ€”use of information technology, appropriate use of emergency rooms, and appropriate availability of medical recordsâ€”the United States ranks very poorly see Table It is interesting to note, however, that the Netherlands, which ranks as extremely efficient on all of these measures, is one of the other countries that in the past has had relatively poor life expectancy trends. Mortality rates are determined by disease incidence, detection, and treatment. Incidence reflects not just the performance of a health care system but also a variety of other characteristics affecting population health, including behavioral, social, and genetic factors. These characteristics are not unrelated to the health care system but are perhaps less directly a product of that system than disease identification and treatment. This section considers how the U. International Comparisons of Detection and Treatment of Cancer The United States compares well with other countries on both identifying and treating cancer Preston and Ho, First, in international comparisons of the frequency of cancer screening, the United States scores consistently higher than any other country. Howard and colleagues compare U. The frequency of screening was much higher in the United States than in the European composite. In most of the comparisons of screening by age, the United States had a higher frequency than any other country Garcia, ; Howard et al. Preston and Ho show that the international differences in screening frequency for prostate and breast cancer were present in earlier years as well. Given this higher rate of screening, one would expect higher cancer incidence rates in the United States because a greater percentage of those with cancer are actually identified Crimmins et al. Higher levels of screening should also lead to earlier detection and increased survival with treatment. In terms of cancer survival, the United States compares quite well with Europe; however, some or all of this survival advantage may be a reflection of earlier detection. On the other hand, early detection itself offers survival benefits. During the late s, 5-year survival rates in the United States were higher than those in all of the 18 European countries surveyed for each of the major cancers: A more recent study examining survival rates during the period â€” led to a similar conclusion: As can be seen in Table , when all cancers are included, The advantage among men was much larger than the advantage among women mainly because of high U. Recommended levels of screening for breast and prostate cancer are controversial. Most of the controversy relates not to the survival advantages of frequent screening but to the occurrence of false positives and the side effects of biopsy and treatment. Evidence that frequent screening and early detection influence survival from breast and prostate cancer is reviewed by Preston and Ho Most of the evidence indicates that early detection of cancer followed by the typical treatment regimen can alter the clinical course of the disease and produce a survival advantage. One exception is a randomized U. This trial, however, was conducted in a country in which 59 percent of men over age 65 are already receiving an annual PSA test Howard et al. This factor, clearly reflected in the control group and in pretrial conditions, made it more difficult to identify a survival effect. Early detection of cancer would not produce survival advantages unless effective methods of treatment were employed. Treatment appears to be unusually aggressive in the United States once prostate cancer has been detected, although the data are less abundant on treatment than on screening Preston and Ho, Has the combination of extensive screening and aggressive treatment reduced mortality due to prostate cancer in the United States relative to other countries? The United States saw a significantly faster decline in prostate cancer mortality over this period, which included approval of PSA testing by the Food and Drug Administration in see Figure By , the mortality rate for prostate cancer in the United States was One population model suggested that two-thirds of the drop in prostate cancer mortality

from to in the United States was attributable to increased PSA testing and one-third to improved treatment (Etzioni et al., Preston and Ho, Figure 1). Breast cancer appears to present a similar picture (Preston and Ho, Figure 2). In contrast with prostate cancer, however, its incidence is affected by a number of risk factors, such as childlessness, delayed childbearing, obesity, and hormone replacement therapy. This means mortality trends cannot be interpreted unambiguously for this form of cancer in terms of health care practices. As noted above, the United States uses mammograms to screen for breast cancer more frequently than do European countries. Probably as a result, breast cancer is caught, on average, at an earlier stage in the United States than in Europe (Sant et al.). Once detection occurs, there appear to be no large differences in treatment regimens between Europe and the United States, although treatment has tended to be somewhat more aggressive in the United States, and U.S. studies of women diagnosed with breast cancer between and after 1980 (Sant et al.). The researchers who made these comparisons concluded that the U.S. As Figure 3 shows, the United States has also seen a more rapid and statistically significant drop in breast cancer mortality since 1980 relative to other OECD countries, although breast cancer mortality has been declining in all high-income countries. This decline is not likely to be due to improvements in risk factors as the risk factors for breast cancer have, if anything, worsened; obesity has risen, and women have been bearing children increasingly later in life. The one exception is the decrease in the use of hormone therapy after 1980 (see Chapter 8). Thus it appears likely that the decreases in breast cancer deaths are attributable to improved screening and treatment. Berry and colleagues conducted a careful simulation of the decline in breast cancer mortality in the United States and concluded that about two-thirds of the decline from 1980 to 2000 was attributable to increased use of adjuvant therapy and one-third to screening. Das and colleagues supported this conclusion with a study showing that those states with higher levels of screening had lower levels of cancer mortality when other factors were taken into account. As with prostate cancer, the U.S. This successful performance may be one reason why Gleis and colleagues find that cancer apart from lung cancer has had less of an effect on life expectancy trends in the United States than in most other countries.

**International Comparisons of Detection and Treatment of Cardiovascular Disease** It is more difficult to compare the effectiveness of health care systems in dealing with cardiovascular disease than to do so for cancer because there are no national registries for heart disease and stroke as there are for cancer. Still, data are available on both treatment and survival rates that allow some country-to-country comparisons. Two major risk factors for cardiovascular disease are high serum cholesterol and high blood pressure. A relatively large percentage of people in the United States have been diagnosed with both conditions (see Chapter 2). The table shows that among those diagnosed with high cholesterol, a higher proportion of both males and females in the United States are treated for the condition than is the case in any of the other 11 countries listed, with the exception of older French women. Use of medication among those diagnosed with high blood pressure is less variable across countries. Table 3 shows that, for men reporting having been diagnosed with high blood pressure, the United States is in the middle of the group of 13 countries listed in terms of frequency of receiving medication; for women, the United States ranks third. The combination among Americans of high prevalence of hypertension and relatively high drug use among those diagnosed means that they are the most likely to be using antihypertensives. It is likely that other countries have only recently begun to treat hypertension as aggressively as the United States. Wolf-Maier and colleagues used data from the 1980s to compare frequency of treatment for hypertension in the United States, Canada, and five European countries (Germany, Spain, England, Sweden, and Italy). Of those aged 35–64 who had measured high blood pressure or were receiving medication for the condition,

### Chapter 3 : The link between health spending and life expectancy: The US is an outlier

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