U.S. Health Care from a Global Perspective, 2019: Higher Spending, Worse Outcomes?

Roosa Tikkanen

Research Associate
The Commonwealth Fund

Melinda K. Abrams Senior Vice President The Commonwealth Fund A 2015 Commonwealth Fund brief showed that — before the major provisions of the Affordable Care Act were introduced — the United States had worse outcomes and spent more on health care, largely because of greater use of medical technology and higher prices, compared to other high-income countries.¹ By benchmarking the performance of the U.S. health care system against other countries — and updating with new data as they become available — we can gain important insights into our strengths and weaknesses and help policymakers and delivery system leaders identify areas for improvement.

This analysis is the latest in a series of Commonwealth Fund cross-national comparisons that uses health data from the Organisation for Economic Co-operation and Development (OECD) to assess U.S. health care system spending, outcomes, risk factors and prevention, utilization, and quality, relative to 10 other high-income countries: Australia, Canada, France, Germany, the Netherlands, New Zealand, Norway, Sweden, Switzerland, and the United Kingdom. We also compare U.S. performance to that of the OECD average, comprising 36 high-income member countries.

HIGHLIGHTS

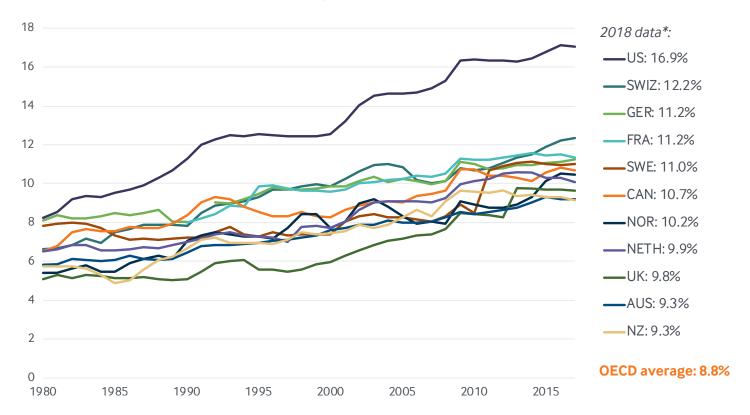
- ▶ The U.S. spends more on health care as a share of the economy nearly twice as much as the average OECD country yet has the lowest life expectancy and highest suicide rates among the 11 nations.
- ▶ The U.S. has the highest chronic disease burden and an obesity rate that is two times higher than the OECD average.
- Americans had fewer physician visits than peers in most countries, which may be related to a low supply of physicians in the U.S.
- Americans use some expensive technologies, such as MRIs, and specialized procedures, such as hip replacements, more often than our peers.
- ▶ The U.S. outperforms its peers in terms of preventive measures it has the one of the highest rates of breast cancer screening among women ages 50 to 69 and the second-highest rate (after the U.K.) of flu vaccinations among people age 65 and older.
- Compared to peer nations, the U.S. has among the highest number of hospitalizations from preventable causes and the highest rate of avoidable deaths.



SPENDING

The U.S. Spends More on Health Care Than Any Other Country





In 2018, the U.S. spent 16.9 percent of gross domestic product (GDP) on health care, nearly twice as much as the average OECD country. The secondhighest ranking country, Switzerland, spent 12.2 percent. At the other end of the spectrum, New Zealand and Australia devote only 9.3 percent, approximately half as much as the U.S. does. The share of the economy spent on health care has been steadily increasing since the 1980s for all countries because health spending growth has outpaced economic growth,² in part because of advances in medical technologies, rising prices in the health sector, and increased demand for services.3

Notes: Current expenditures on health. Based on System of Health Accounts methodology, with some differences between country methodologies. GDP = gross domestic product. OECD average reflects the average of 36 OECD member countries, including ones not shown here. * 2018 data are provisional or estimated.

Data: OECD Health Statistics 2019.

SPENDING

U.S. Public Spending Is Similar to Other Countries; Out-of-Pocket and Private Spending Are Higher Than Most

Dollars (US\$), adjusted for differences in cost of living



Notes: Data reflect current expenditures on health per capita, adjusted using US\$ purchasing power parities (PPPs), for 2018 or the most recent year: 2017 for FRA, SWIZ, UK, US; 2016 for AUS. Data for 2018 reflect estimated or provisional values. Numbers may not sum to total health care spending per capita because of excluding capital formation of health care providers, and some uncategorized health care spending. * For US, spending in the "Compulsory private insurance schemes" (HF122) category has been reclassified into the "Voluntary health insurance schemes" (HF21) category, given that the individual mandate to have health insurance ended in January 2019. OECD average reflects the average of 36 OECD member countries, including ones not shown here.

Data: OECD Health Statistics 2019.

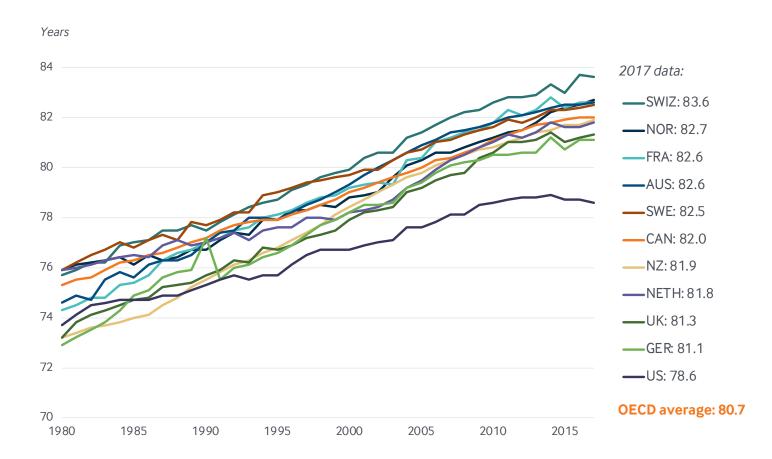
Per capita health spending in the U.S. exceeded \$10,000, more than two times higher than in Australia, France, Canada, New Zealand, and the U.K. Public spending, including governmental spending, social health insurance, and compulsory private insurance, is comparable in the U.S. and many of the other nations and constitutes the largest source of health care spending.

In the U.S., per-capita spending from private sources, for instance, voluntary spending on private health insurance premiums, including employer-sponsored health insurance coverage, is higher than in any of the countries compared here. At \$4,092 per capita, U.S. private spending is more than five times higher than Canada, the second-highest spender. In Sweden and Norway, private spending made up less than \$100 per capita. As a share of total spending, private spending is much larger in the U.S. (40%) than in any other country (0.3%–15%).

The average U.S. resident paid \$1,122 out-of-pocket for health care, which includes expenses like copayments for doctor's visits and prescription drugs or health insurance deductibles. Only the Swiss pay more; residents of France and New Zealand pay less than half of what Americans spend.

HEALTH OUTCOMES

The U.S. Has the Lowest Life Expectancy



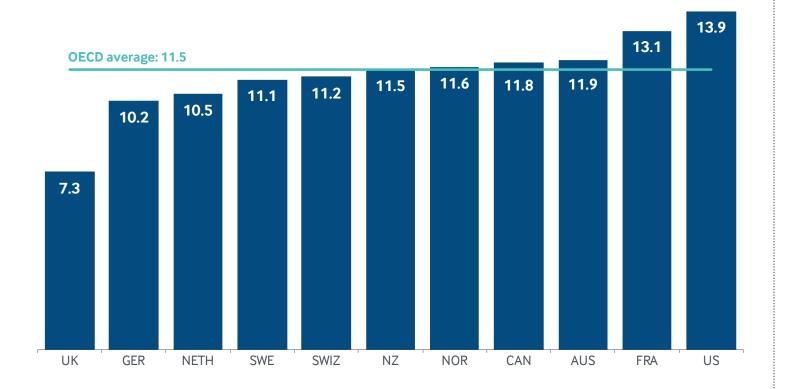
Despite the highest spending, Americans experience worse health outcomes than their international peers. For example, life expectancy at birth in the U.S. was 78.6 years in 2017 — more than two years lower than the OECD average and five years lower than Switzerland, which has the longest lifespan. In the U.S., life expectancy masks racial and ethnic disparities. Average life expectancy among non-Hispanic black Americans (75.3 years) is 3.5 years lower than for non-Hispanic whites (78.8 years).4 Life expectancy for Hispanic Americans (81.8 years) is higher than for whites, and similar to that in Netherlands. New Zealand and Canada.

Note: OECD average reflects the average of 36 OECD member countries, including ones not shown here. Data: OECD Health Statistics 2019.

HEALTH OUTCOMES

Suicide Rates Are the Highest in the U.S.

Deaths per 100,000 population (standardized rates)



Reflecting shorter life expectancy, the U.S. has the highest suicide rate of these countries, with France a close second. Meanwhile, the U.K. has the lowest rate — half that of the U.S. Elevated suicide rates may indicate a high burden of mental illness: socioeconomic variables are also a factor.⁵ The U.S. has seen an uptick in "deaths of despair" in recent years, which include suicides and deaths related to substance use, including overdoses.6

Notes: Rates reflect age- and sex-standardized rates for 2016 or latest available year: 2015 for CAN, FRA; 2014 for NZ. OECD average reflects the average of 36 OECD member countries, including ones not shown here.

Data: OECD Health Statistics 2019.

POPULATION HEALTH

U.S. Adults Have the Highest Chronic Disease Burden





Worse health outcomes and shorter life expectancy appear related to risk factors and disease burden. More than one-quarter of U.S. adults report they have ever been diagnosed with two or more chronic conditions such as asthma. diabetes, heart disease, or hypertension during their lifetime compared to 22 percent or less in all other countries. This rate is twice as high as in the Netherlands and the U.K.

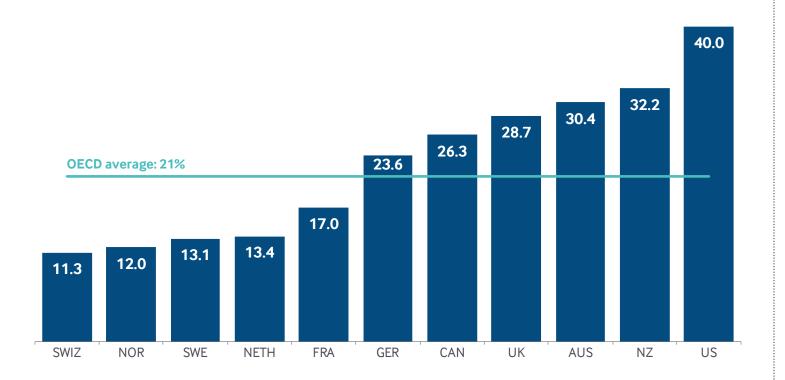
Notes: Chronic disease burden defined as adults age 18 years or older who have ever been told by a doctor that they have two or more of the following chronic conditions; joint pain or arthritis; asthma or chronic lung disease; diabetes; heart disease, including heart attack; or hypertension/high blood pressure. Average reflects 11 countries shown in the exhibit that take part in the Commonwealth Fund's International Health Policy Survey.

Data: 2016 Commonwealth Fund International Health Policy Survey.

POPULATION HEALTH

The U.S. Has the Highest Rate of Obesity

Percent (%)



Obesity is a key risk factor for chronic conditions such as diabetes, hypertension and other cardiovascular diseases, and cancer. The U.S. has the highest obesity rate among the countries studied — two times higher than the OECD average and approximately four times higher than in Switzerland and Norway. Overall, obesity rates were highest in English-speaking countries, all with rates of one-quarter or more of the total population. Issues that contribute to obesity include unhealthy living environments, less-regulated food and agriculture industries, and socioeconomic and behavioral factors.⁷

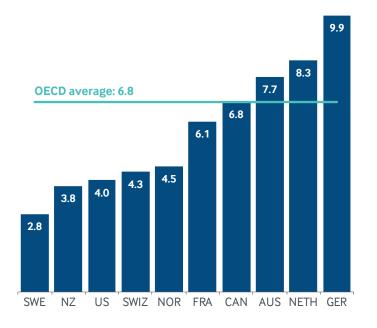
Notes: Obese defined as body-mass index of 30 kg/m^2 or more. Data reflect rates based on measurements of height and weight, except NETH, NOR, SWE, SWIZ, for which data are self-reported. (Self-reported rates tend to be lower than measured rates.) 2017 data for all countries except 2016 for US; 2015 for FRA, NOR; 2012 for GER. OECD average reflects the average of 36 OECD member countries, including ones not shown here.

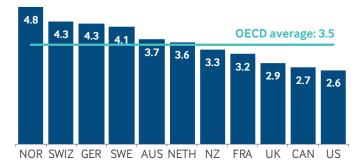
Data: OECD Health Statistics 2019.

Americans Visit the Doctor Less Frequently and Have Fewer Physicians

Average physician visits per capita, 2017

Practicing physicians per 1,000 population, 2018





Despite having the highest level of health care spending, Americans had fewer physician visits than their peers in most countries. At four visits per capita per year, Americans visit the doctor at half the rate as do Germans and the Dutch. The U.S. rate was comparable to that in New Zealand, Switzerland, and Norway, but higher than in Sweden.

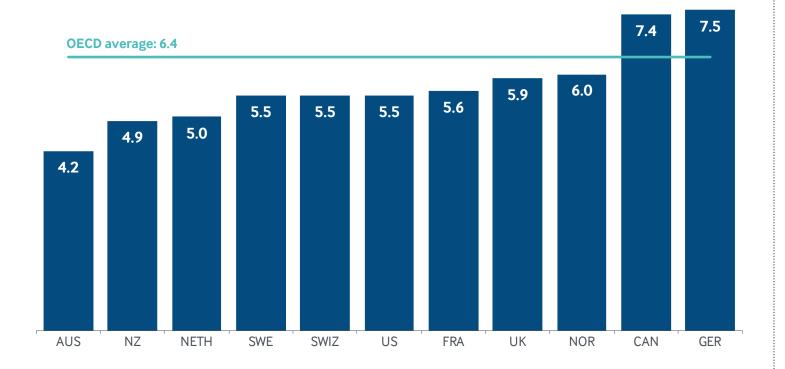
Less-frequent physician visits may be related to the low supply of physicians in the U.S. compared with the other countries. The U.S. has slightly more than half as many physicians as Norway, which has the highest supply.

Notes: Physician visit data reflect 2017 or nearest year: 2016 for FRA, 2011 for US. No recent data for UK (since 2009). Physician supply data for 2018 or nearest year: 2017 for AUS, GER, NETH, SWIZ, US; 2016 for SWE. OECD average reflects the average of 36 OECD member countries, including ones not shown here.

Data: OECD Health Statistics 2019.

U.S. Average Hospital Stay Is Similar to That in Sweden, Switzerland, and France

Average length of stay for acute care (days)



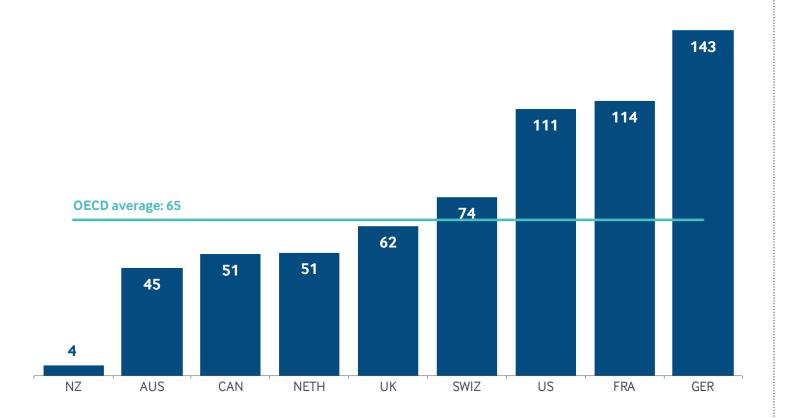
The average length of a hospital stay in the U.S. in 2017 was 5.5 days, far lower than the OECD average and comparable to that in Sweden, Switzerland, and France. Canadians and Germans had the longest lengths of stay, while Australians had the shortest.

Notes: Data reflect average length of stay for curative (acute) care for physical and mental/psychiatric illnesses, or treatment of injury; diagnostic, therapeutic, and surgical procedures; and obstetric services. Excludes rehabilitative care, long-term care, and palliative care. Data for 2017 or nearest year: 2016 for AUS, FRA, NZ, US. OECD average reflects the average of 36 OECD member countries, including ones not shown here.

Data: OECD Health Statistics 2019.

The U.S. Has a High Rate of MRI Scans

Magnetic resonance imaging (MRI) scans per 1,000 population



U.S. utilization for specialized scans is higher than in most countries, nearly twice as high as the OECD average but comparable to France. Germany had an even higher magnetic resonance imaging (MRI) rate, while New Zealand's was low. Previous analyses suggest that countries with a high supply of MRI scanners also tend to have higher rates of scan utilization.8

Notes: Data shown for 2017 or nearest year: 2016 for GER; 2013 for NZ. No data for NOR, SWE. OECD average reflects the average of 36 OECD member countries, including ones not shown here.

Data: OECD Health Statistics 2019.

The U.S. Performs More Hip Replacements Among Older Adults

Inpatient hip replacement procedures per 1,000 population age 65 and older



The U.S. performs some elective surgeries at a higher rate than other countries. The U.S. rate of hip replacements per 1,000 persons age 65 and older was higher than the OECD average but similar to the rate in Norway and Switzerland. Canada, the U.K., and New Zealand had the lowest rates, with rates close to the OECD average.

Notes: Data reflect inpatient cases only (day cases not included) for 2017 or nearest year: 2016 for NZ; 2014 for NETH; 2010 for US. No recent data for AUS. OECD average reflects the average of 36 OECD member countries, including ones not shown here.

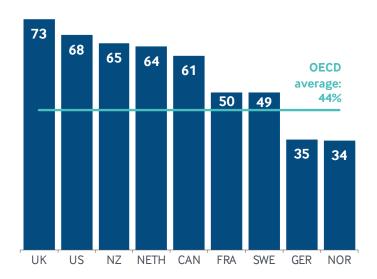
Data: OECD Health Statistics 2019.

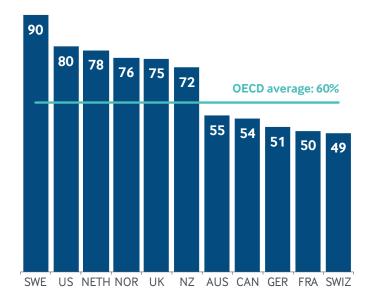
QUALITY AND CARE OUTCOMES

The U.S. Excels in Prevention Measures, Including Flu Vaccinations and Breast Cancer Screenings

Percent of adults age 65 and older immunized (%)

Percent of females ages 50–69 screened (%)





The U.S. outperforms peer nations in terms of preventive measures. In the U.S., more than two-thirds of adults 65 and older had a flu vaccine in 2016, considerably more than in the average OECD country. Only the U.K. had a higher rate than the U.S. At the lower end of the spectrum, one-third of older adults in Germany and Norway received the vaccine.

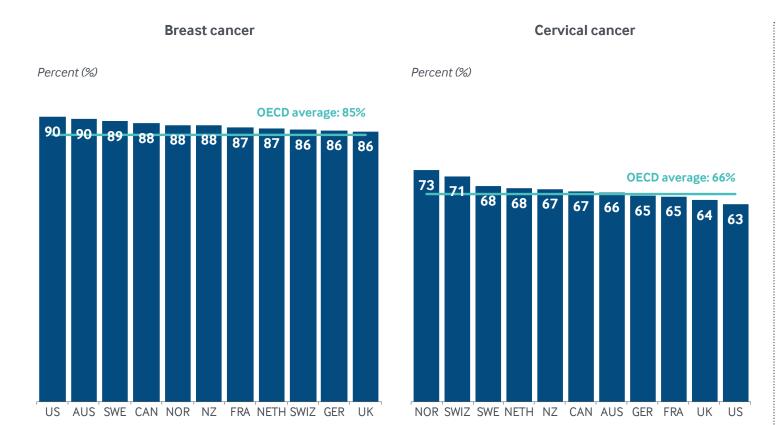
The U.S. also had one of the highest rates of women ages 50 to 69 being screened for breast cancer. The U.S. rate is considerably higher than the OECD average. In contrast, in Switzerland, France, and Germany, only half of women this age had been screened.

Notes: Flu immunization data reflect 2017 or nearest year: 2016 for US. No recent data available for AUS, SWIZ (since 2009/2010). Breast cancer screening data reflect 2018 or nearest year: 2017 for FRA, NOR; 2016 for AUS, GER; 2015 for CAN, NETH, US; 2014 for SWE. Programmatic data for all countries except survey data for SWE, SWIZ, US. OECD average reflects the average of 36 OECD member countries, including ones not shown here.

Data: OECD Health Statistics 2019.

QUALITY AND CARE OUTCOMES

The U.S. Has the Highest Average Five-Year Survival Rate for Breast Cancer, but the Lowest for Cervical Cancer



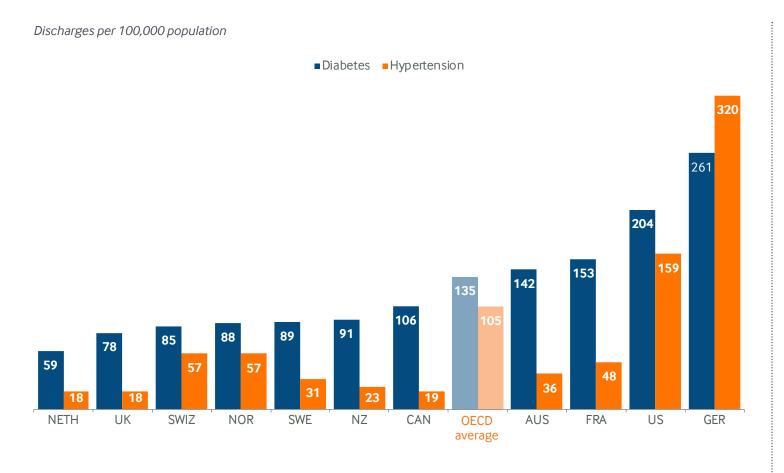
The five-year survival rate for breast cancer is the highest in the U.S. among the 11 countries — it is more than 5 percentage points higher than the OECD average. Breast cancer survival rates in all 11 countries compared here are higher than the OECD average. This is not true for other types of cancer. For example, five-year survival for cervical cancer among U.S. women is lower than in the 10 other countries and below the OECD average.

Notes: Rates reflect age-standardized survival rates for females age 15 years and older. OECD average reflects the average of 36 OECD member countries, including ones not shown here.

Data: OECD Health Statistics 2019.

OUALITY AND CARE OUTCOMES

The U.S. Has Among the Highest Rates of Hospitalizations from Preventable Causes Like Diabetes and Hypertension



Hospitalizations for diabetes and hypertension which are considered ambulatory care-sensitive conditions, meaning they are considered preventable with access to better primary care⁹ — were approximately 50 percent higher in the U.S. than the OECD average. Only Germany had higher rates for both conditions. The U.S. rate of hypertensionrelated hospitalizations was more than eightfold higher than the bestperforming countries, the Netherlands, the U.K.. and Canada. For diabetes hospitalizations, the U.S. rate (204/100,000) was more than threefold higher than the Netherlands, the bestperforming country.

Notes: Data reflect 2017 or nearest year: 2016 for AUS, NZ; 2010 for US. OECD average reflects the average of 36 OECD member countries, including ones not shown here.

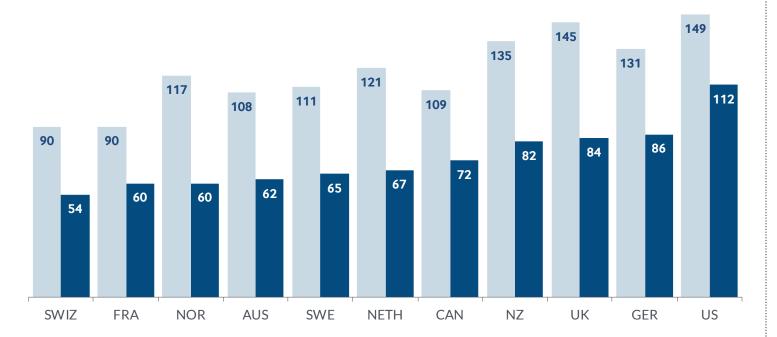
Data: OECD Health Statistics 2019.

QUALITY AND CARE OUTCOMES

The U.S. Has the Highest Rate of Avoidable Deaths

Deaths per 100,000 population

■2000 ■2016



Notes: Data for 2000 (except UK, 2001) and latest available (2016 for NETH, NOR, SWE, US; 2015 for AUS, CAN, FRA, GER, SWIZ, UK; 2014 for NZ). Mortality data from World Health Organization (WHO) detailed mortality files (released Dec. 2018). Population data from WHO detailed mortality files, except CAN (UN population database) and US (Human Mortality Database). Amenable causes as per list by Nolte and McKee (2004). Calculations by the European Observatory on Health Systems and Policies (2019). Age-specific rates standardized to European Standard Population, 2013.

Data: Marina Karanikolos, European Observatory on Health Systems and Policies (2019).

Premature deaths from conditions that are considered preventable with timely access to effective and quality health care, 10 including diabetes, hypertensive diseases, and certain cancers, are termed "mortality amenable to health care." This indicator is used by several countries to measure health system performance.¹¹ The U.S. has the highest rates of amenable mortality among the 11 countries with 112 deaths for every 100,000. It is notable that the amenable mortality rate has dropped considerably since 2000 for every country in our analysis, though less proportionately in the U.S. The U.S. rate was two times higher than in Switzerland, France, Norway, and Australia. This poor performance suggests the U.S. has worse access to primary care, prevention, and chronic disease management compared to peer nations.

CONCLUSIONS AND POLICY IMPLICATIONS

While the United States spends more on health care than any other country, we are not achieving comparable performance. We have poor health outcomes, including low life expectancy and high suicide rates, compared to our peer nations. A relatively higher chronic disease burden and incidence of obesity contribute to the problem, but the U.S. health care system is also not doing its part. Our analysis shows that the U.S. has the highest rates of avoidable mortality because of people not receiving timely, high-quality care. The findings from this analysis point to key policy implications, as well as opportunities to learn from other countries.

First, greater attention should be placed on reducing health care costs. The U.S. could look to approaches taken by other industrialized nations to contain costs, 12 including budgeting practices and using value-based pricing of new medical technologies. Approaches that aim to lower health care prices are likely to have the greatest impact, since previous research has indicated that higher prices are the primary reason why the U.S. spends more on health care than any other country. 15

Second, our findings call for addressing risk factors for, and better management of, chronic conditions. We can start by strengthening access to care and primary care systems. Our findings show that the U.S. has a relatively lower rate of physician visits compared to other nations. This is surprising given U.S. adults' seemingly greater health needs. We do know from previous Commonwealth Fund

surveys that adults in the U.S. experience greater affordability barriers to accessing physician visits, tests, and treatments. ¹⁴ Increasing access to affordable health care and strengthening primary care systems are two of the most important challenges for the U.S. health care system. ¹⁵

Third, the U.S. should promote incentives to use effective care and disincentives to discourage less-effective care. For example, a recent analysis estimated that as much as one-quarter of total health care spending in the U.S. — between \$760 billion and \$935 billion annually — is wasteful.16 Overtreatment or low-value care — medications. tests, treatments, and procedures that provide no or minimal benefit or potential harm — accounts for approximately one-tenth of this spending. The U.S. can learn from other countries; for example, our comparably high use of MRI scans and surgeries for hip replacement suggests we should assess when these interventions bring the greatest value. The global Choosing Wisely campaign promotes conversations around evidence-based care between physicians and their patients to help evaluate which tests and treatments are truly necessary and free from harm.17

In sum, the U.S. health care system is the most expensive in the world, but Americans continue to live relatively unhealthier and shorter lives than peers in other high-income countries. Efforts to rein in costs, improve affordability and access to needed care, coupled with greater efforts to address risk factors, are required to alleviate the problem.

HOW WE CONDUCTED THIS STUDY

This analysis used data from the 2019 release of health statistics compiled by the Organisation for Economic Cooperation and Development (OECD), which tracks and reports on a wide range of health system measures across 36 high-income countries. Data were extracted between July and August 2019. While data collected by the OECD reflect the gold standard in international comparisons, one limitation is that data may mask differences in how countries collect their health data. Full details on how indicators were defined. as well as country-level differences in definitions, are available from the OECD.¹⁸ The 10 comparator countries included in this comparison represent those that take part in the Commonwealth Fund's annual International Health Policy Survey: Australia, Canada, France, Germany, the Netherlands. New Zealand. Norway, Sweden, Switzerland, and the United Kingdom.¹⁹

NOTES

- 1. David Squires and Chloe Anderson, *U.S. Health Care from a Global Perspective: Spending, Use of Services, Prices, and Health in 13 Countries* (Commonwealth Fund, Oct. 2015).
- 2. Luca Lorenzoni et al., *Health Spending Projections to 2030: New Results Based on a Revised OECD Methodology*, OECD Health Working Papers, no. 110 (Organisation for Economic Co-operation and Development, May 2019).
- 3. David Morgan, "How Much Is Too Much? Value for Money in Health Spending," in *Value for Money in Health Spending* (Organisation for Economic Co-operation and Development, Oct. 2010), 21–42.
- 4. Elizabeth Arias and Jiaquan Xu, "United States Life Tables, 2017," *National Vital Statistics Reports* 68, no. 7 (June 24, 2019): 1–66.
- 5. Ruth S. Shim and Michael T. Compton, "Addressing the Social Determinants of Mental Health: If Not Now, When? If Not Us, Who?," *Psychiatric Services* 69, no. 8 (Aug. 2018): 844–46.
- 6. Susan L. Hayes, David C. Radley, and Douglas McCarthy, "States of Despair: A Closer Look at Rising State Death Rates from Drugs, Alcohol, and Suicide," *To the Point* (blog), Commonwealth Fund, Aug. 9, 2018.
- 7. Organisation for Economic Co-operation and Development, *Obesity Update* 2017 (OECD Health, May 2017).
- 8. Irene Papanicolas, Liana R. Woskie, and Ashish K. Jha, "Health Care Spending in the United States and Other High-Income Countries," *JAMA* 319, no. 10 (Mar. 13, 2018): 1024–39.
- 9. Sarah Purdy et al., Ambulatory Care–Sensitive Conditions: Terminology and Disease Coding Need to Be More Specific to Aid Policy Makers and Clinicians," *Public Health* 123, no. 2 (Feb. 2009): 169–73.
- 10. Juan G. Gay et al., Mortality Amenable to Health Care in 31 OECD Countries: Estimates and Methodological Issues, OECD Health Working Papers, no. 55 (Organisation for Economic Co-operation and Development, Jan. 2011).

- 11. Eurostat, "Amenable and Preventable Deaths Statistics," European Commission, last updated June 8, 2017.
- 12. Organisation for Economic Co-operation and Development, *Fiscal Sustainability of Health Systems: Bridging Health and Finance Perspectives* (OECD Health, Sept. 2015).
- 13. Gerard F. Anderson, Peter Hussey, and Varduhi Petrosyan, "It's Still the Prices, Stupid: Why the U.S. Spends So Much on Health Care, and a Tribute to Uwe Reinhardt," *Health Affairs* 39, no. 1 (Jan. 2019): 87–95.
- 14. Robin Osborn et al., "In New Survey of Eleven Countries, U.S. Adults Still Struggle with Access to and Affordability of Health Care," *Health Affairs* 35, no. 12 (Dec. 2016): 2327–36.
- 15. Eric C. Schneider and David Squires, "From Last to First Could the U.S. Health Care System Become the Best in the World?," *New England Journal of Medicine* 377, no. 10 (Sept. 7, 2017): 901–3; and Eric C. Schneider et al., *Mirror, Mirror* 2017: *International Comparison Reflects Flaws and Opportunities for Better U.S. Health Care* (Commonwealth Fund, July 2017).
- 16. William H. Shrank, Teresa L. Rogstad, and Natasha Parekh, "Waste in the U.S. Health Care System: Estimated Costs and Potential for Savings," *JAMA* 322, no. 15 (Oct. 7, 2019): 1501–9.
- 17. "Choosing Wisely: Promoting Conversations Between Patients and Clinicians," ABIM Foundation, n.d.
- 18. Organisation for Economic Co-operation and Development, *OECD Health Statistics 2019: Definitions, Sources, and Methods* (OECD Health, 2019).
- 19. Michelle M. Doty et al., "Primary Care Physicians' Role in Coordinating Medical and Health-Related Social Needs in Eleven Countries," *Health Affairs* 39, no. 1 (Jan. 2020): 115–23; and Osborn et al., "New Survey of 11 Countries," 2016.

ABOUT THE AUTHORS

Roosa Tikkanen, M.P.H., M.Res., is a research associate in the Commonwealth Fund's International Health Policy and Practice Innovations program, where she tracks health care policy developments in industrialized countries; provides research support to and coauthors the Fund's annual international health policy surveys; provides support for the international issue briefs and an annual OECD data update; coedits and coordinates the *International Health News Brief*; and prepares presentations for the vice president. Before joining the Fund, she was a policy analyst at the Center for Health Law and Economics at Commonwealth Medicine based at UMass Medical School in Boston.

Ms. Tikkanen holds a B.Sc. in neuroscience and an M.Res. in integrative biology from the University of Manchester in England, and an M.P.H. from the Harvard T.H. Chan School of Public Health.

Melinda K. Abrams, M.S., senior vice president, oversees the Commonwealth Fund's Delivery System Reform and International Health Policy and Practice Innovations programs. Since coming to the Fund in 1997, Ms. Abrams has worked on the Fund's Task Force on Academic Health Centers, the Child Development and Preventive Care program, and most recently, she led the Patient-Centered Primary Care Program. Ms. Abrams has served on many national committees and boards for private organizations and federal agencies, and is a peer-reviewer for several journals. Ms. Abrams holds a B.A. in history from Cornell University and an M.S. in health policy and management from the Harvard T.H. Chan School of Public Health.

ACKNOWLEDGMENTS

The authors wish to thank Corinne Lewis and Jesse Baumgartner for their careful data check. Authors also wish to thank Robin Osborn for her help in conceptualizing the analysis.

Editorial support was provided by Deborah Lorber.

For more information about this brief, please contact:

Roosa Tikkanen Research Associate International Health Policy and Practice Innovations The Commonwealth Fund rt@cmwf.org



Affordable, quality health care. For everyone.

About the Commonwealth Fund

The mission of the Commonwealth Fund is to promote a high-performing health care system that achieves better access, improved quality, and greater efficiency, particularly for society's most vulnerable, including low-income people, the uninsured, and people of color. Support for this research was provided by the Commonwealth Fund. The views presented here are those of the authors and not necessarily those of the Commonwealth Fund or its directors, officers, or staff.