

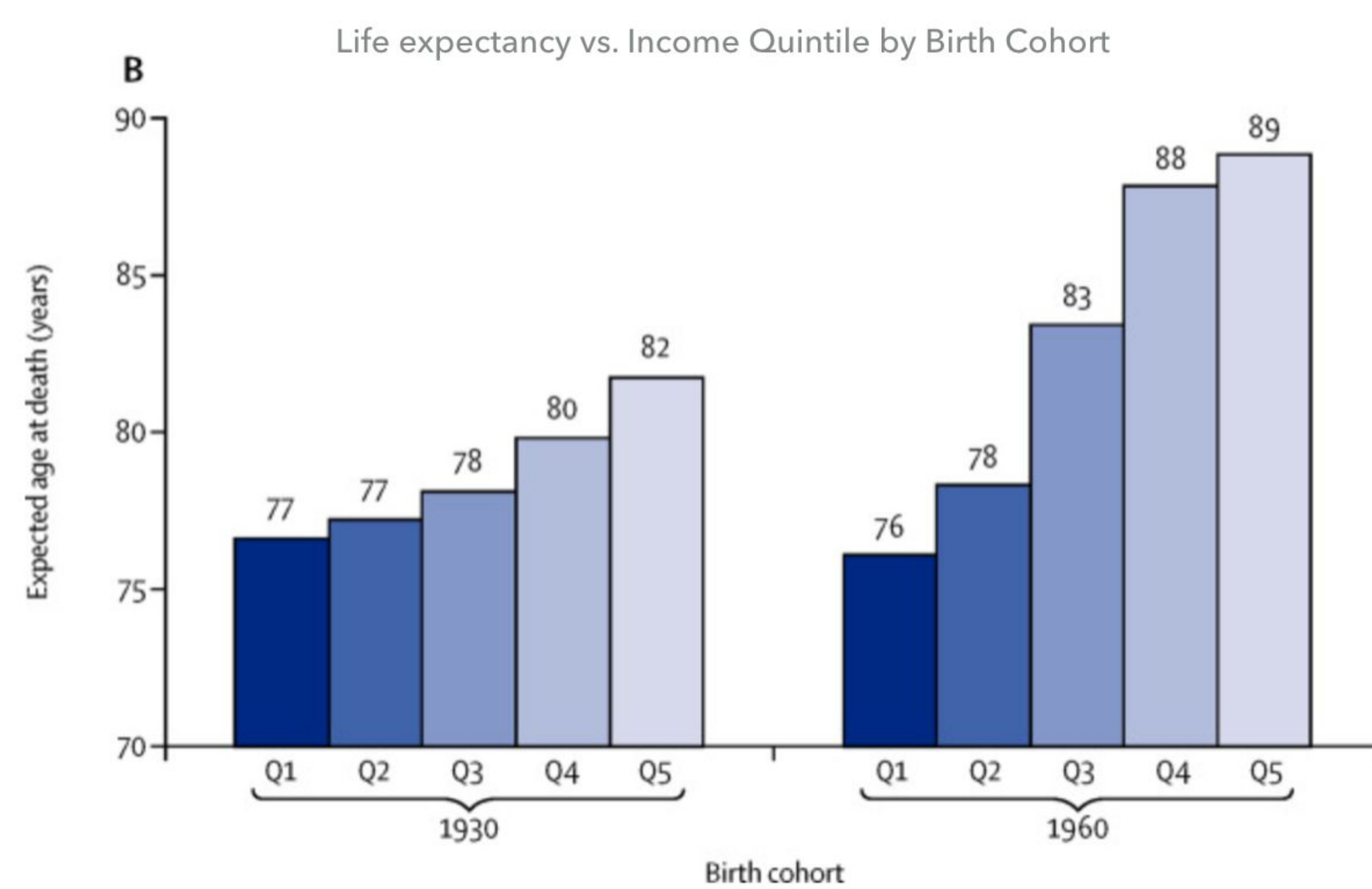


# HEALTHCARE FOR THE FEW: COSTS OF INNOVATION IN THE UNITED STATES HEALTHCARE SYSTEM

Hannah Mitlak | Colloquium on Inequality and Power in the United States

## Introduction

In medical innovation, the United States more than beats out the competition for most medical research publications, most medical device companies, and across 86 different metrics of medical innovation, was found to be at the top of the pack internationally. [1] Curiously, national health is declining – every year since 2017 life expectancy has decreased. [2] At the same time, health disparities are increasing; there was a 10 year life expectancy gap between earners of the top and bottom 5% of income in 2014. [3]



[4]

Why have healthy disparities continued to rise even as medicine becomes more advanced?

## The Cost of Innovation

Economists are in agreement that growth in health expenditure is mainly due to technological advancement. The rate of growth in health care expenditures has grown at a pace double the rate of inflation, meaning that the price of healthcare exceeds the rate of growth of the economy as a whole. [5] This sets medicine apart from other industries, as typically “technological change is identified as the primary driving force behind improved productivity and economic growth,” and is cost-reducing. [6] In 2018, 25% of Americans reported they struggled to afford their health insurance plan, 40% worried about an unexpected medical expense, and 51% put off seeking care due to the expense, 13% of whom got worse as a result. [7]

An important discussion in the skyrocketing costs of American healthcare is the lack of cost containment mechanisms for the medical industry. There are two primary cost containment mechanisms for healthcare:

1. Expenditure caps, like those in Canada and Germany, link fees for service with quantity, essentially setting a yearly expenditure for physicians, and adjusting the fee per service to match.
2. Global budgets set a hospital budget for all services in a year, and thus require negotiation between payers and providers, in addition to a single payer system.

## Incentives to Innovate

- In a fee-for service system, medical practitioners are incentivized to adopt new technology
- Doctors face competition within the medical community, and therefore are incentivized to adopt innovation early and often
- Hospitals compete with each other and for doctors and patients, therefore also needing to stay current with latest medical trends
- Compared to other countries, American patients are more likely to expect medical innovation [8]

## Better for whom?

In 2004, a study on mortality rates of preventable and less preventable disease found that disparities between those of high and low socioeconomic status were much greater for highly preventable diseases, such as CoPD and pneumonia, than harder to prevent diseases, such as prostate and pancreatic cancer. [9] This suggests that the innovation driving up healthcare costs is perhaps not an urgent goal – it is diseases that are more treatable and preventable that are still fatal for those of low socioeconomic status.

A study of once deadly diseases with substantial gains made in prevention or treatment over time similarly found that when advancements were made, disparities emerged. In the 1950s, heart disease was equally common in blacks and whites, and equally fatal. While mortality in both groups has decreased over time, heart disease was fatal for 324 African Americans 100,000 in 2000, but only the cause of death for 253 out of 100,000 whites. Similar findings for socioeconomic status were found for other now treatable diseases like colon cancer and lung cancer. [10] In 1985, some gains had been made, and the infant mortality rate for whites was 8.2 out of 1,000 and 17.1 for blacks. In the following decade, substantial reduction in infant mortality was achieved, and for white infants, mortality fell by 37%, while for blacks it fell by 23%. [11] High cholesterol, which can lead to heart attacks, strokes, and other cardiovascular diseases, was more prevalent in American of higher socioeconomic status, but the trend reversed upon the advent of cholesterol-controlling statins. [12]

## Theoretical Frameworks

1. As economic inequality increases, the health needs of the rich and poor diverge, which in turn lowers social spending on health. [13], [14]
2. Innovation and the adoption of technological improvements reinforce class stratification, leading to the health-poverty trap. [15], [16]
3. The state exercises power over medical innovation firms through subsidies, and thus motivates the rise of medical innovation, and in conjunction with the lobbying of innovation firms, contributes to the rise in healthcare expenditure. [17]

## Findings

1. Healthcare costs are rising while our national health is somewhat deteriorating, innovation is driving those costs, and there are few effective mechanisms in place which contain the high costs of healthcare
2. The innovations we pay so much for do not improve American health in an equitable fashion, and sometimes do not have a positive effect at all
3. As costs rise and health outcomes becomes less equitable, healthcare also becomes increasingly inaccessible.
4. As healthcare becomes less accessible, the medical interests of wealthy and average citizens diverge.
5. At the same time, medical innovation firms have found a way to influence the state and produce even more innovation.

## Conclusion

American medical innovation benefits the few and manages to hurt the many. As innovation drives up costs, healthcare becomes increasingly out of reach. In this way, healthcare has come to produce winners and losers, and increasingly, the healthcare system can be understood to be an instrument of inequality itself – one is encoded with economic inequality that produces health inequality

This two-tiered healthcare system has far reaching implications. As those unable to afford medical care fall into poorer health, they also may miss out on income advancing opportunities, and thus fall victim to the health-poverty trap.

The power of corporate and moneyed interests over politicians and politics for their own economic gain is characteristic of contemporary American politics. But we should not concede that these interests can also determine who can afford care, and effectively, the distribution of quality and longevity of life. The costs of innovation ultimately may not be worth it if they erect barriers so high that most Americans are left with increasingly diminished return from money spent on healthcare.

## References

1. “Medical Technology Innovation Scorecard: The Race for Global Leadership.” PricewaterhouseCoopers LLP. Accessed May 4, 2020. <https://www.pwc.com/en/pharmaceuticals/assets/innovation-scorecard.pdf>
2. Carroll, Linda. “U.S. Life Expectancy Declining Due to More Deaths in Middle Age.” Reuters. Thomson Reuters, November 26, 2019. <https://www.reuters.com/article/us-health-life-expectancy/us-life-expectancy-declining-due-to-more-deaths-in-middle-age-idUSKBN1Y02C7>
3. “Inequality and Health.” Inequality.org. Institute for Policy Studies. Accessed May 4, 2020. <https://inequality.org/facts/inequality-and-health/#us-inequality-health>
4. Bor, Jacob, et al. “Population Health in an Era of Rising Income Inequality: USA, 1980-2015.” *The Lancet*, vol. 389, no. 10077, 2017, pp. 1475-1490.
5. Newhouse, Joseph P. “An Iconoclastic View of Health Cost Containment.” *Health Affairs* 12, no. suppl 1 (1993): 152-71. [https://doi.org/10.1377/hlthaff.12.suppl\\_1.152](https://doi.org/10.1377/hlthaff.12.suppl_1.152)
6. Gelijns, Annette, and Nathan Rosenberg. “The Dynamics of Technological Change in Medicine.” *Health Affairs* 13, no. 3 (1994): 28-46. <https://doi.org/10.1377/hlthaff.13.3.28>
7. Kirzinger, Ashley, Cailey Muhana, Bryan Wu, and Mollyann Brodie. “Data Note: Americans’ Challenges with Health Care Costs - Findings.” The Henry J. Kaiser Family Foundation, February 6, 2020. <https://www.kff.org/report-section/data-note-americans-challenges-with-health-care-costs-findings/>
8. Bodenheimer, Thomas. “High and Rising Health Care Costs. Part 2: Technologic Innovation.” *Annals of Internal Medicine*. American College of Physicians, June 7, 2005. <https://annals.org/aim/article-abstract/718434/high-rising-health-care-costs-part-2-technologic-innovation>
9. Phelan, Jo C, Bruce G Link, Ana Diez-Roux, Ichiro Kawachi, and Bruce Levin. “Fundamental Causes’ of Social Inequalities in Mortality: A Test of the Theory.” *Journal of Health and Social Behavior* 45, no. 3 (2004): 265-85. [www.ijournals.org/stable/3653845](http://www.ijournals.org/stable/3653845)
10. Phelan, Jo C, and Bruce G Link. “Controlling Disease and Creating Disparities: A Fundamental Cause Perspective.” *The Journals of Gerontology: Series B* 60, no. Special Issue 2 (October 1, 2005). [https://doi.org/10.1093/geronb/60.special\\_issue\\_2.s27](https://doi.org/10.1093/geronb/60.special_issue_2.s27)
11. Cutler, David M., Ellen Meerna, and Seth Richards-Shubik. “Induced Innovation and Social Inequality: Evidence from Infant Medical Care.” *Journal of Human Resources* 47, no. 2 (2012): 456-92. <https://doi.org/10.1353/jhr.2012.0014>
12. Chang, Virginia W., and Diane S. Lauderdale. “Fundamental Cause Theory, Technological Innovation, and Health Disparities: The Case of Cholesterol in the Era of Statins.” *Journal of Health and Social Behavior* 50, no. 3 (2009): 245-60. <https://doi.org/10.1177/0021465009000301>
13. Kaplan, George A, Elise R Pamuk, John W Lynch, Richard D Cohen, and Jennifer L Balfour. “Inequality in Income and Mortality in the United States: Analysis of Mortality and Potential Pathways.” *BMJ* 312, no. 7037 (April 20, 1996): 999-1003. <https://doi.org/10.1136/bmj.312.7037.999>
14. Kawachi, Ichiro, and Bruce P Kennedy. “Income Inequality and Health: Pathways and Mechanisms.” *Health Services Research* 34 (April 1999): 215-27.
15. Bourdieu, Pierre. *Pierre Bourdieu: Key Concepts*. Edited by Michael James Grenfell. London: Taylor and Francis, 2014.
16. Lopez-Casasnovas, Guillem, Berta Rivera, Luis Currais, and Xavier Sala-i-Martin. “On the Health-Poverty Trap.” In *Health and Economic Growth: Findings and Policy Implications*. Cambridge, MA: MIT Press, 2007
17. Campbell, Andrea Louise. *How Policies Make Citizens: Senior Political Activism and the American Welfare State*. Princeton: Princeton University Press, 2011.