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From the Desk of Robert F. Graboyes

February 28, 2018

Chairman Lamar Alexander
United States Senate
455 Dirksen Office Building
Washington, DC 20510

Chairman Alexander,

It is a pleasure to respond to your call for ideas on rising healthcare costs. Twenty-first-century technologies offer an unprecedented opportunity to provide better health for more people at lower cost, year after year. The federal government has important roles to play in this quest, including giving states and entrepreneurs incentives to experiment and discover new ways of providing care.

This letter addresses three questions:

1. *Is America's healthcare system broken?* High costs and less-than-ideal health imply challenges, not a broken system.
2. *Why do Americans spend so much?* America's high healthcare costs stem not so much from the healthcare system itself, but rather from macroeconomic fundamentals—high income, high wealth, and low saving rates.
3. *What are America's biggest opportunities?* Lower costs and better care depend largely on changes in the delivery system, which depend heavily on state laws and regulations. The most promising avenues involve shifting to less expensive modes of care: nonphysician providers, intelligent machines, and patient self-care in place of expensive physician labor; fewer brick-and-mortar facilities; remote providers for greater scale economies.

The federal government can play a crucial role in encouraging states and entrepreneurs to develop more efficient modes of care. There are two parts to this story:

- Stop applying nonsolutions to nonproblems: American healthcare is imperfect, not broken. Gloomy assumptions lead to a panicky search beyond America's borders for easy solutions. America can learn from other countries, but it is not and cannot be Canada or Switzerland.
- Start giving states and entrepreneurs incentives to allow delivery system innovation: States have considerable power to encourage innovation. Promising opportunities include (1) telemedicine, (2) expanded use of nonphysician providers, (3) greater hospital competition, (4) novel organizational structures for primary care, (5) increasing use of artificial-intelligence-based diagnostics and monitoring, and (6) use of unmanned aerial systems to deliver drugs, blood products, and other medical goods.

Consider this real-life parable: In India, Narayana Health System's 20 hospitals provide cardiac bypass operations for just over $1,000, versus $100,000 in the United States. Their success rates and quality of care equal or surpass almost any hospitals in the world. Narayana has opened a hospital in the Cayman Islands in partnership with America's Ascension system. Narayana's CEO, Dr. Devi Shetty, has said, "The best location to build a hospital on the planet today is a ship that is parked in the US waters just outside its territory. . . . The site at the Cayman Islands is the closest approximation that fits the bill." America should study how this visionary innovator achieves such economies and ask why he and his American partners feel compelled to serve American patients from beyond the reach of American law and regulation.[1]

Is America's Healthcare System Broken?

The raw facts are endlessly repeated: America spends more than any other country on healthcare in the aggregate, per person, and as a percentage of gross domestic product (GDP). In 2017, national health expenditures were $3.5 trillion—$10,739 per person, or 17.9 percent of GDP.[2] Statistics indicate that America falls short of many other developed nations in certain health metrics. For example, official statistics say that 5.9 American infants per 1,000 die in their first year, versus, say, 3.6 per 1,000 in Switzerland.[3] The Organisation for Economic Co-operation and Development (OECD) shows average life expectancy in America to be 78.6 years, versus Switzerland's 83.7 years.[4]

Many people use these raw numbers to paint a dire picture that America's healthcare system is in crisis; that its high levels of spending result from shortcomings of its healthcare sector and are unsustainable; that American care is unusually rife with waste, fraud, and abuse; that Americans receive inferior care; and that America should restructure its system to resemble those of Europe or Canada.

The Institute of Medicine (IoM) estimated in 2012 that American healthcare wastes $750 billion per year—30 percent of total healthcare spending.[5] Many readers took IoM's estimate (and other similar claims) to mean that huge savings are readily available with no loss of quality of care, if only America manages things just right. Unfortunately, these breathtakingly large estimates are more mirage than reality. As health policy experts Sherry Glied and Adam Sacarny write,

> The potential for waste in the health care system is indisputable, and it makes sense to be ever vigilant in addressing it. But it is all too easy to over-state the potential savings from eliminating waste. While situations where things could work better—often labeled as waste—are omnipresent in the health care system, the steps needed to eliminate these instances of waste are often challenging, and in many cases, the cost of the cure is likely to be greater than the cost of the disease. The health care sector does not seem to be worse at eliminating waste than are other sectors, where many of the factors ostensibly generating excess health care waste are not in play. Supposedly pain-free treatments to raise the productivity of the health care sector are few and far between. The most

[1] Soma Das, "Devi Shetty Opens Low-Cost Healthcare Venture in Cayman Islands outside US Regulatory Reach," *Economic Times*, February 24, 2014; Robert F. Graboyes, "High Quality and Low Price Converge at Narayana and Health City Cayman Islands," *Inside Sources*, September 13, 2017.

[2] Centers for Medicare & Medicaid Services, "NHE Fact Sheet," December 6, 2018, https://www.cms.gov/research-statistics-data-and-systems/statistics-trends-and-reports/nationalhealthexpenddata/nhe-fact-sheet.html.

[3] Organisation for Economic Co-operation and Development, "Infant Mortality Rates," accessed February 9, 2019, https://data.oecd.org/healthstat/infant-mortality-rates.htm.

[4] Organisation for Economic Co-operation and Development, "Life Expectancy at Birth," accessed February 9, 2019, https://data.oecd.org/healthstat/life-expectancy-at-birth.htm.

[5] Institute of Medicine, *Best Care at Lower Cost: The Path to Continuously Learning Health Care in America* (Washington, DC: National Academies Press, September 6, 2012).

commonly touted examples, like electronic medical records and care coordination, remain backed by scant evidence.[6]

While American healthcare has plenty of problems, all these suppositions can be refuted or moderated by careful examination of data. The problems America has are not so much those of waste, fraud, abuse, profligacy, inefficiency, or incompetence. Rather, they are remediable problems of missed opportunities.

Why Do Americans Spend So Much?

Americans' high level of spending results not so much from factors specific to the healthcare sector, but rather from the fact that Americans have high incomes, high accumulated wealth, and low rates of saving. As a percentage of household consumption (as opposed to GDP), American healthcare spending is relatively in line with that of other countries.[7] Reforming American healthcare will not alter these macroeconomic fundamentals.

Canada's Fraser Institute noted that 2013 per capita healthcare expenditures were $9,086 in the United States and $4,569 in Canada (17 percent of GDP in America versus 11 percent in Canada).[8] But the Fraser Institute's point was that these numbers do *not* constitute a crisis for America. America's 2013 per capita GDP was $53,135; Canada's was $42,701. In income terms, Canadians are 20 percent poorer than Americans. The average American who spends $9,086 on healthcare still has $44,049 left over for food, shelter, clothing, roads, military, entertainment, etc. The Canadian spending $4,569 on healthcare only has $38,132 remaining for other items. If Canada is not in crisis with $38,132 per person after healthcare, then it is strange to argue that Americans, with $44,049 after healthcare, are in crisis. Simply put, Americans spend a lot on health not because their healthcare providers are greedy or inefficient, but rather because Americans are blessed by unparalleled wealth.[9]

America's health status shortcomings are also largely explained by factors outside of healthcare. By one typical estimate, 11 percent of health variation is explained by medical care.[10] By that same estimate, 36 percent of that variation is owing to individual behavior (drug use, motor vehicle behavior, etc.). Twenty-four percent results from social circumstances (incarceration, religious involvement, family status, etc.). Twenty-two percent comes from genetics and biology (heredity, nutrition, etc.). Seven percent is explained by environmental factors (pollution, allergens, etc.). One 2006 study suggested that if one filters out instantaneous deaths by homicide, suicide, or accidents—events largely unrelated to healthcare—America would have the longest lifespan of any OECD country.[11] America's infant mortality rate is higher than some other countries' rates, in part, because it fully airs its statistical dirty laundry, whereas other countries underreport infant deaths by falsely categorizing many as stillbirths.[12]

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[6] Sherry A. Glied and Adam Sacarny, "Is the US Health Care System Wasteful and Inefficient? A Review of the Evidence," *Journal of Health Politics, Policy and Law* 43, no. 5 (2018): 739–65.

[7] Peter Laakmann, "The Price is Right," *National Review*, October 16, 2017; plaakmann, "Unique Features of the US Health Care System Are Unlikely To Be a Major Cause of High US Health Spending (Abbreviated Version)," *Empirical Scrutiny*, September 26, 2017. These are must-reads for this unconventional view of spending.

[8] John R. Graham, "The Reality of U.S. and Canadian Health-Care Spending," *Fraser Forum*, March 31, 2016.

[9] A detailed and impressive statistical exploration of this argument is found here: "Disposable Income Also Explains US Health Expenditures Quite Well," *Random Critical Analysis*, April 13, 2017.

[10] Edwin Choi and Juhan Sonin, "Determinants of Health," *GoInvo*, November 15, 2018.

[11] Robert L. Ohsfeldt and John E. Schneider, *The Business of Health: The Role of Competition, Markets, and Regulations* (Washington DC: AEI Press, 2006). This estimate is methodologically controversial but at least suggests that a significant portion of America's longevity deficit may result from violent deaths, over which the healthcare system has little influence.

[12] Nicholas Eberstadt, *The Tyranny of Numbers: Mismeasurement and Misrule* (Washington DC: AEI Press, 1995). Eberstadt notes that the sizable difference between Swiss and American infant mortality rates could be almost entirely explained by Swiss underreporting of infant deaths.

If America seeks to adopt other countries' healthcare systems like off-the-rack suits, then Americans are bound to be disappointed. Yes, Canadians spend less on care than Americans do, but mostly for reasons that are not replicable in the United States. Consider an analogy: In 2018, a Big Mac hamburger cost $5.51 on average in the United States and $5.07 in Canada.[13] That 8.7 percent difference does not represent inefficiency or profligacy or failure in the United States. It simply represents different market conditions. Adopting a "Canadian-style hamburger system" in America will not bring those prices any closer together. One factor that makes Canadian healthcare less expensive than America's is the fact that Americans pay doctors more than Canadians do. In 2008, primary care physicians (family doctors, internists, obstetrician/gynecologists, and so forth) earned 50 percent more on average in America than in Canada—$186,582 versus $125,000.[14] (The differences were even larger in some specialties.) One possible reason Canadian doctors accept $125,000 per year is that alternative opportunities for highly intelligent, deeply motivated individuals may be more limited in Canada than in America. Offer physicians $125,000 in the United States, and would-be medical students will choose careers in law, finance, or information technology instead.

What Are America's Biggest Opportunities?

The more one dives into the numbers, the more obvious it is that the sky is not falling on American healthcare. But America could still do far, far better than it does at present. A traditional assault on waste, fraud, and abuse will almost certainly leave Americans disappointed. Though all three problems exist in American healthcare, their severity and solvability are likely exaggerated in the minds of many medical professionals and laypeople. Unless America allows markets to find new and innovative ways of delivering care, the cost of reducing waste, fraud, and abuse will almost certainly eat away a large percentage of whatever savings America realizes through those efforts.

The real opportunities lie in changing the recipes by which the country delivers care. Americans' enemy is not so much waste, fraud, and abuse as it is stagnation—miring American healthcare in the technologies of yesterday. One way to get more bang for the buck is to substitute less expensive modes of care for more expensive ones:

1. A telemedicine visit by a patient may be less expensive for both doctor and patient than an in-office visit, and the ability to contact a doctor from one's own residence in the dead of night can lead to the early detection of serious problems. Yet some states throw up barriers against the adoption of telemedicine.[15]
2. In some states, relatively low-cost nurse practitioners, pharmacists, and others perform tasks that, in other states, require high-cost physician labor.[16]
3. In some states, certificate-of-need laws prevent new and innovative hospitals and other providers from competing with older, less efficient institutions or expanding coverage to underserved areas.[17]

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[13] Statista.com, "Big Mac Index - Global Prices for a Big Mac in July 2018, by Country (in U.S. Dollars)," accessed February 9, 2019, https://www.statista.com/statistics/274326/big-mac-index-global-prices-for-a-big-mac/.

[14] Miriam J. Laugesen and Sherry A. Glied, "Higher Fees Paid to US Physicians Drive Higher Spending for Physician Services Compared to Other Countries," *Health Affairs* 30, no. 9 (2011): 1647–56.

[15] Robert F. Graboyes, "Telemedicine as Lifesaver — Ian Tong and Doctor on Demand," *Inside Sources*, October 15, 2016; Robert F. Graboyes, "Telepsychiatry — Serving the Underserved," *Inside Sources*, October 9, 2018.

[16] Edward J. Timmons, "Healthcare License Turf Wars: The Effects of Expanded Nurse Practitioner and Physician Assistant Scope of Practice on Medicaid Patient Access" (Mercatus Working Paper, Mercatus Center at George Mason University, Arlington, VA, 2016).

[17] Thomas Stratmann et al., "Certificate-of-Need Laws: How CON Laws Affect Spending, Access, and Quality across the States," Mercatus Center at George Mason University, August 29, 2017.

4. Direct primary care and other novel organizational structures can reduce costs and provide better care in some settings, yet some states erect roadblocks deterring the development of these novel delivery mechanisms.[18]
5. Artificial intelligence offers new and promising ways of diagnosing illness and monitoring patients, but America's healthcare system has been slow to make full use of these opportunities.[19]
6. In Rwanda, Tanzania, and Vanuatu, unmanned aerial systems are transporting blood products, drugs, and other medical goods at low cost—an especially important innovation in vast rural areas. The United States has barely begun to make use of this technology.[20]

Many of these opportunities depend on state laws and regulations. Federal laws and regulations also have the capacity to expand or contract the states' leeway in these and other areas. One of the truly encouraging aspects of these ideas is that they can appeal to legislators on both sides of the aisle. America has seen surprising and heartwarming displays of bipartisanship on these issues in a number of states. That by itself is a rare gift in this era.

We at the Mercatus Center are pleased to offer research and encouragement in the six aforementioned areas. We wish you, your committee, and Congress much luck in your search for solutions.

Respectfully,

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[18] Robert F. Graboyes, "Direct Primary Care — Rushika Fernandopulle and Iora," *Inside Sources*, November 30, 2016.
[19] Robert F. Graboyes, "Patient as Diagnostician — David Albert and AliveCor," *Inside Sources*, September 28, 2016; Robert F. Graboyes, "The Invention of the Chicken and Innovation in Healthcare," *Inside Sources*, February 22, 2017.
[20] Robert F. Graboyes and Darcy Nikol Bryan, "Drones Delivering Medical Supplies and More Can Help Save American Lives," *StatNews*, January 18, 2019.