



**FRACKING HEALTH CARE:
HOW TO SAFELY DE-MEDICALIZE
AMERICA AND RECOVER TRAPPED
VALUE FOR ITS PEOPLE**

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INTRODUCTION

Call it the trillions that time forgot. Shining fortresses filled with gold and teeming with human activity dot the American landscape. Within them, much is produced to benefit the nation. Overseers enjoy prestige and prosperity, and minions security and purpose.

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Outside their gates, society's reverence is made tangible by regular custom and lavish tribute.

These fortresses are not feudal castles, grand cathedrals, or even great universities. They are emphatically not churning factories, although they are businesses. They are America's hospitals and clinics – the industrial engines of U.S. health care.¹ And most are both out of time and out of place.

Pushing \$4 trillion annually, and employing millions of people in most communities in every state, health care represents one-sixth of the American economy.² Only the automobile industry in its heyday during the 1950s and 1960s rivaled modern health care's centrality to peacetime domestic production and employment.³

In 2017, large economic sectors tend to share common features.⁴ Ownership is separated from control. Goods and capital move freely. Production is global and automated. Entry barriers have dropped. Products come assembled. Prices are low, as is inflation. Consumers matter. On the downside, domestic employment has slowed, and the

¹ See ROSEMARY STEVENS, *IN SICKNESS AND IN WEALTH: AMERICAN HOSPITALS IN THE TWENTIETH CENTURY* 40–46, 351–52 (1999) (asserting that not-for-profit hospitals have been profit-maximizing enterprises).

² Sean P. Keehan et al., *National Health Expenditure Projections, 2016–25: Price Increases, Aging Push Sector To 20 Percent of Economy*, 36 *HEALTH AFF.* 3553 (2017).

³ Transportation in 1965 and health care in 1995 were similar in several ways: same shares of GDP, shares of employment, degrees of private control, high rates of avoidable death, and cultures of individual responsibility. See JERRY L. MASHAW & DAVID L. HARFST, *THE STRUGGLE FOR AUTO SAFETY* 50 (1990) (describing the cultural and economic power of the auto industry during its heyday).

⁴ For a persuasive description of globalization, see THOMAS L. FRIEDMAN, *THE WORLD IS FLAT: A BRIEF HISTORY OF THE TWENTY-FIRST CENTURY* (2005).

rewards of production accrue mainly to senior executives and wealthy investors.⁵

Health care is different, a throwback.⁶ Ownership is either captive to or fused with control. Capital is hindered both entering and leaving. Entry barriers are substantial, even as consolidation accelerates. Technology seldom increases productivity. Trade is restricted and little production occurs offshore. Products are offered piecemeal at high and rising prices, often paid by intermediaries with faint consumer voice. But job growth is pronounced, and the artisanal and managerial classes prosper. Only higher education seems remotely similar, though (reproductive rights aside) health care has for the most part been spared parallel accusations of secular elitism.

Health care's privileged status imposes an unacceptable social cost. Sheltered by conscious if incremental public policy—including selective subsidies, entry restrictions, tax preferences, and protectionist professional self-governance—an estimated \$1 trillion each year is sacrificed in care that is overpriced, wasteful, useless, or harmful.⁷ At the same time, inattention to poverty, lack of education, and other “social determinants” of health compromises economic productivity and civic engagement, and adds substantially to the nation's medical bill.⁸

⁵ For an analysis of economic inequality and wage stagnation, see THOMAS PIKETTY, *CAPITAL IN THE TWENTY-FIRST CENTURY* (2014).

⁶ Cf. Susan Dentzer, *It's Past Time to Get Serious About Transforming Care*, 32 *HEALTH AFF.* 6, 6 (2013) (“One eternal mystery of US health care is why patients and payers have been loath to demand attributes they take for granted in other sectors of the economy, such as convenience, price transparency, and reasonable costs.”).

⁷ *INST. OF MED., BEST CARE AT LOWER COST: THE PATH TO CONTINUOUSLY LEARNING HEALTH CARE IN AMERICA* 38 (Mark Smith et al. eds., 2013).

⁸ See generally ELIZABETH H. BRADLEY & LAUREN A. TAYLOR, *THE AMERICAN HEALTH CARE PARADOX: WHY SPENDING MORE IS GETTING US LESS* (2015) (discussing US lack of social investment); RICHARD COOPER, *POVERTY AND THE MYTHS OF HEALTH CARE REFORM* (2016) (arguing that poverty, not clinical uncertainty, explains geographic

But there is more to this story than a plea for deregulation and the efficiency gains that would accompany it. The wealth trapped within American health care is simultaneously a tragedy and a miracle. It is a tragedy because stagnating wages, widening disparities in income, ballooning deficits, and stunted investments in education and social services make such medical profligacy shameful. It is a miracle because it still exists, whereas other resources of similar magnitude have already been dissipated without addressing any of the aforementioned failings – indeed, sometimes having contributed to them. It therefore can be released and used.

It is time to “frack” the health care system and innovate the de-medicalization of America. The catchphrase for this effort is assuredly not “Repeal and Replace,” the Republican party’s oversimplified solution to the overblown criticism it continues to level against the Affordable Care Act. A better mantra is “Recover and Repurpose” – releasing the value trapped in our underperforming health care system and directing it toward more individually and socially productive ends. Significantly, this turns out to be a more complex and contextual project than putting one’s faith in freedom and markets, although freedom and markets play a central role.

With careful planning and responsible execution, recovering and repurposing the trillions of dollars being spent on low-value medicine can set an example for policy-makers of an economic transition that offers broad distributive and communal benefits as well as efficiency gains. The current condition of American politics compels such an approach. Cast in its best light, the cleavage revealed by the 2016 election cycle was not between the individual

variations in health care); Raj Chetty et al., *The Association between Income and Life Expectancy in the United States, 2001-2014*, 315 JAMA 1750 (2016).

and the collective, or even between choice and coercion, but between re-invention and restoration. Moreover, the restorative forces made it clear that becoming “great again” meant recapturing many of the qualities that health care aberrantly if expensively has retained: jobs, nativism, regional fairness, paternalism, and trust.

I. TAKING LIBERTIES: THE WELFARE PECULIARITIES OF U.S. HEALTH CARE

Analyzing the social welfare implications of health policy can be a messy endeavor. As Kenneth Arrow observed half a century ago, distributional decisions in health care often are inseparable from efficiency calculations.⁹ Personal liberties intermingle with physical and emotional vulnerabilities.¹⁰ Communal and collective commitments, often over long periods of time, establish the conditions under which individuals face health challenges and respond to them.¹¹ All of these considerations are routinely subject to political forces, which at different times may be ecumenical, ideological, crisis-driven, or narrowly self-interested.¹²

It is often tempting, for example, to equate marketplace conduct with individual freedom in parsing a policy choice.¹³ Markets are composed of voluntary transactions, and clear when buyers

⁹ Kenneth Arrow, *Uncertainty and the Welfare Economics of Medical Care*, 53 AM. ECON. REV. 941, 965 (1963). For a more recent collection of commentaries on Arrow’s analysis, see *UNCERTAIN TIMES: KENNETH ARROW AND THE CHANGING ECONOMICS OF HEALTH CARE* (Peter J. Hammer et al. eds., 2003).

¹⁰ CARL E. SCHNEIDER, *THE PRACTICE OF AUTONOMY: PATIENTS, DOCTORS, AND MEDICAL DECISIONS* (1998) (explaining preferences for medical beneficence).

¹¹ See Rachel Rebouche & Scott Burris, *The Social Determinants of Health*, in *OXFORD HANDBOOK OF U.S. HEALTHCARE LAW 1097* (I. Glenn Cohen et al. eds., 2016).

¹² See generally PAUL STARR, *THE SOCIAL TRANSFORMATION OF AMERICAN MEDICINE* (2d ed. 2017) (exploring the American medical profession’s centuries-long interactions with government).

¹³ See, e.g., RICHARD A. EPSTEIN, *MORTAL PERIL: OUR INALIENABLE RIGHT TO HEALTH CARE* (1997) (arguing both liberty and efficiency).

subjectively value potential purchases at higher amounts than the prices sellers charge for them. Voluntary exchange often implies allocative efficiency, but not always. Notably, “free markets” in American medicine have been anything but, driving a wedge between commercial activity and personal autonomy in far more than just the exceptional situations of commoditized personhood that tend to concern bioethicists and prompt legal restrictions on contracting and alienation.¹⁴

The public finds itself defending and conflating two flawed versions of health care liberty. In one, the autonomy of the individual is represented by the ability to choose a physician (the specific designation of a member of the licensed medical profession being deliberate) and the decisional freedom of that physician once selected.¹⁵ Collective policy decisions that alter conditions for physicians, even indirectly, are therefore perceived as threats to individuals, notwithstanding a multi-generational critique of medical bias and paternalism. As a result, public policy that modifies health care financing or delivery, even at an aggregate level, becomes vulnerable to an “identified life” objection because the public imagines it constraining a physician caring for a parent, spouse, or

¹⁴ See William M. Sage, *Assembled Products: The Key to More Effective Competition and Antitrust Oversight in Health Care*, 101 CORNELL L. REV. 609 (2016) (explaining the constitutive role of regulation in health care delivery). See also ROBERT I. FIELD, *MOTHER OF INVENTION: HOW THE GOVERNMENT CREATED FREEMARKET HEALTH CARE* 24 (2014) (discussing the crucial role of public initiatives in private health care); CLARK C. HAVIGHURST, *HEALTH CARE CHOICES: PRIVATE CONTRACTS AS INSTRUMENTS OF HEALTH CARE* (1995); EPSTEIN, *supra* note 13.

¹⁵ Charles D. Weller, *Free Choice as a Restraint of Trade in American Health Care Delivery and Insurance*, 69 IOWA L. REV. 1351, 1392 (1984) (noting the potential for market power from unconstrained choice of physician).

child.¹⁶ In the health reform debate of the 1990s, for example, preserving the public's ability to choose a health insurer – which, at the time, were mainly financing entities – became a rallying cry for opponents of the Clinton proposal because it served as a political proxy for measures that might eventually limit choice of physician.¹⁷ Similarly, the expansion of private managed care raised concerns over its potential to compromise or negate physician independence, a strand of resistance that persists in the continuing emotional exchanges over the ACA's alleged but apocryphal “death panels.”¹⁸

In the second version of health care liberty, false cognates to market competition and informed consumerism reinforce the majority's preference for decentralized medical policymaking. As health care spending has risen dramatically over the last several decades, the circularity in public debate that fact provokes is understandable. Should we treat health care as a market because it is so expensive, or is it so expensive because we treat it as a market?¹⁹ U.S. health care mimics the commercial economy in its transactional

¹⁶ Although the distinction is not without its critics, regulatory decisions that alter conditions so as to increase the probability of physical harm in a population (“statistical lives”) are subjected to a different cost-benefit calculus than decisions whose victims are known (“identified lives”). See, e.g., Lisa Heinzerling, *The Rights of Statistical People*, 24 HARV. ENVTL. L. REV. 189–207 (2000).

¹⁷ E.g., Elizabeth McCaughey, *No Exit*, NEW REPUBLIC (Feb. 7, 1994), <https://newrepublic.com/article/69935/no-exit> (equating rationing under the Clinton reform with private managed care).

¹⁸ See Peter Ubel, *Why It Is So Difficult to Kill the Death Panel Myth*, FORBES (Jan. 9, 2013, 12:00 PM), <http://www.forbes.com/sites/peterubel/2013/01/09/why-it-is-so-difficult-to-kill-the-deathpanel-myth/>. The supposed “death panel” rule was merely a provision permitting Medicare to pay for conversations between patients and their physicians about end-of-life care.

¹⁹ For similar complaints about the current health care system but different perspectives on the role of market competition, compare REGINA HERZLINGER, *WHO KILLED HEALTH CARE? AMERICA'S \$2 TRILLION MEDICAL PROBLEM—AND THE CONSUMER-DRIVEN CURE* (2007) (embracing market-driven consumer choice), with JEROME P. KASSIRER, *ON THE TAKE: HOW MEDICINE'S COMPLICITY WITH BIG BUSINESS CAN ENDANGER YOUR HEALTH* (2004) (criticizing the profit incentives in health care).

basis—with billions of “claims” paid annually by self-insured employers, health insurers, and individuals—as well as its reliance on branded private organizations, its proliferation of new technologies, and its assertions of unrivaled quality to justify its very high prices.²⁰ The workforce specialization that accompanies a claims-oriented conception of medical progress has also altered the character of therapeutic relationships between expert physicians and their patients, bonds that traditionally placed medicine in a private, familial space.²¹ For most Americans facing illness, a physician has become less a trusted friend than a personal shopper prescribing, referring, admitting, and ordering goods and services supplied and often provided by others.²²

As discussed below, however, these purchases in many instances reflect simulated market competition, not the real thing. Freedom to engage in distorted transactions is not efficient, nor does it further non-commercial autonomy (medical or otherwise). For example, neglecting the social determinants of health, sacrificing educational

²⁰ In 2015, U.S. health plans processed 5.4 billion transactions. 2016 CAQH INDEX, A REPORT OF HEALTHCARE INDUSTRY ADOPTION OF ELECTRONIC BUSINESS TRANSACTIONS AND COST SAVINGS (2016), <https://www.caqh.org/sites/default/files/explorations/index/report/2016-caqh-index-report.pdf>

²¹ Many commentators have attributed high health care costs in part to excessive physician specialization. See, e.g., David C. Goodman & Elliott S. Fisher, *Physician Workforce Crisis? Wrong Diagnosis, Wrong Prescription*, 358 NEW ENGL. J. MED. 1658 (2008). Managed care “gatekeeping” requirements were intended to discourage specialist consultation and the expensive services that were then ordered.

²² Health policy experts generally agree that the “physician’s pen” is the most expensive medical technology in the world. Cf. Louis Goodman & Timothy Norbeck, *Who’s to Blame for Our Rising Healthcare Costs?*, FORBES (Apr. 3, 2013, 9:31 AM), <http://www.forbes.com/sites/realspin/2013/04/03/whos-to-blame-for-our-rising-healthcare-costs/> [<https://perma.cc/5Q9T-E45K>] (citing 80% as a “frequently used number” for the percentage of health care costs that is directed by physicians).

spending in favor of overpriced medical care, and forsaking cash wages in order to fund overpriced, often ineffective health insurance benefits hardly seem conducive to the exercise of individual liberty.

Parallel tensions and ambiguities affect redistribution. America's redistributive commitments with respect to health care are substantial, but are mediated by its bloated health care industry.²³ As in-kind support for essential needs or circumstances beyond the recipient's control, health care fits well with taxpayers' overall paternalism regarding redistribution. Nonetheless, political preferences reinforced by fiscal accounting practices limit public generosity with respect to explicit taxation and entitlement spending, which are reserved for favored constituencies such as the elderly (Medicare), children (SCHIP), and categories of "deserving poor" (pre-expansion Medicaid).²⁴ Additional redistribution in the health care system takes place privately and implicitly within hospitals and medical practices²⁵ – which resist cost pressures partly on this basis – and through the mixed risk pools prevalent in employment-based health coverage.²⁶

²³ COOPER, *supra* note 8; Laurence R. Jacobs, *Politics of America's Supply State: Health Reform and Technology*, 14 HEALTH AFF. 143 (1995) (describing the primacy of generating supply over ensuring access in US health policy).

²⁴ See Amy L. Wax, *Rethinking Welfare Rights: Reciprocity Norms, Reactive Attitudes, and the Political Economy of Welfare Reform*, 63 L. & CONTEMP. PROBS. 257 (Winter/Spring 2000); Theodore R. Marmor & Jerry L. Mashaw, *Understanding Social Insurance: Fairness, Affordability, and the 'Modernization' of Social Security and Medicare*, 25 HEALTH AFF. 114, 117 (2006).

²⁵ The amount of "cost-shifting" to uncompensated care is contestable. See Teresa A. Coughlin et al., *Uncompensated Care for the Uninsured in 2013: A Detailed Examination* (May 30, 2014), <http://kff.org/report-section/uncompensated-care-for-the-uninsured-in-2013-a-detailed-examination-cost-shifting-and-remaining-uncompensated-care-costs-8596/> (estimating cost-shifting at 4.6% of private health insurance premiums).

²⁶ David A. Hyman & Mark Hall, *Two Cheers for Employment-Based Health Insurance*, 2 YALE J. HEALTH POL'Y L. & ETHICS 23 (2001).

The lobbying muscle of provider and supplier constituencies boosts these charitable impulses, and channels them into payments for goods and services. Medicare and Medicaid eligibility and benefit standards, and those programs' anti-discrimination rules, exert major redistributive force.²⁷ As a result, U.S. hospital expenditures on the poor surpassed spending on the non-poor around 1980, as the spending effects of ill health arising from poverty and increasingly expensive medical services delivered in commercial settings overcame the financial constraints usually placed on welfare benefit programs.²⁸

Filtering so much social policy through publicly subsidized medical commerce is doubly inflationary because the "medical-industrial complex" is not counterbalanced by a national politics of health that asserts a need for collective restraint and pushes back against special interests claiming more than their fair share of resources.²⁹ As Jacobs observed in the 1990s, social solidarity in European countries has made universal access to health care an expression of patriotism, necessitating limits on supply to assure sustainability.³⁰ The United States, by contrast, prioritizes the development of new medical products and services, with only a

²⁷ Bruce C. Vladeck, *The Political Economy of Medicare*, HEALTH AFF., Jan./Feb. 1999, at 22, 23–24; LAURA KATZ OLSON, *THE POLITICS OF MEDICAID* (2014).

²⁸ COOPER, *supra* note 8, at 9.

²⁹ William M. Sage, *Minding Ps and Qs: The Political and Policy Questions Framing Health Care Spending*, 44 J. L. MED. & ETHICS 559, 559–60 (2016) (substituting "health care" for "military" in Eisenhower's address). See also BARBARA EHRENREICH, *THE AMERICAN HEALTH EMPIRE: POWER, PROFITS, AND POLITICS* (1970) (warning of the "medical-industrial complex"); President Dwight D. Eisenhower, Farewell Address to the Nation (Jan. 17, 1961), https://www.eisenhower.archives.gov/All_About_Ike/Speeches/Farewell_Address.pdf.

³⁰ Jacobs, *supra* note 23, at 145.

secondary commitment to financing access to that supply for the underserved.³¹

There is no health policy nationalism here.³² Even under the ACA, the closest that the U.S. seems to get to a citizen-focused health policy is a consumerist one.³³ President Obama's remarks after the most recent Supreme Court decision upholding his own program are telling: "There's no card that says "Obamacare" when you enroll. But that's by design, for this has never been a government takeover of health care, despite cries to the contrary. This reform remains what it's always been: a set of fairer rules and tougher protections that have made health care in America more affordable, more attainable, and more about you – the consumer, the American people."³⁴

In sum, access to the health care "system" (a word we use unabashedly even in the United States) is not granted as an attribute of citizenship or residence, nor is it funded collectively through general tax revenues. But neither does it remotely resemble an unfettered market, and policymakers deceive themselves and the public when they defend it on that basis. Both emotionally and financially, our very costly yet non-universal health care system

³¹ *Id.*

³² William M. Sage, *Solidarity*, in *CONNECTING AMERICAN VALUES WITH AMERICAN HEALTH CARE REFORM* 10–22 (Thomas H. Murray and Mary Crowley, eds. 2009).

³³ See William M. Sage, *Relational Duties, Regulatory Duties, and the Widening Gap Between Individual Health Law and Collective Health Policy*, 96 *GEO. L.J.* 497 (2008) (making the case for a more collective, population-oriented approach to health system governance); William M. Sage, *Why the Affordable Care Act Needs a Better Name: "Americare"*, 29 *HEALTH AFF.* 1496 (2010) (criticizing the ACA failure to build a shared identity around health and health care).

³⁴ President Barack Obama, Remarks in the Rose Garden of the White House on the Supreme Court's Decision in *King v. Burwell* (June 25, 2015), <https://www.usnews.com/news/articles/2015/06/25/president-barack-obamas-full-statement-on-supreme-court-affordable-care-act-ruling>

crowds out other individual and shared commitments.³⁵ As a result, rather than being addressed more cheaply and effectively by other means, many social problems in the U.S. are “medicalized” because doing so confers a priority claim on national resources.³⁶ The U.S. health care system may not resemble Western Europe’s compulsory insurance or the UK’s National Health Service (NHS), but it is our own version of socialized medicine nonetheless—for which we individually and collectively pay a steep price.

II. HOLDING BACK THE TIDE: SOURCES OF HEALTH CARE INERTIA

Writing in the late 1990s about his hometown of Pittsburgh, former Medicare administrator Bruce Vladeck recalled a recent visit during which it struck him that the great steel mills and factories of his youth had been replaced in the local economy by giant hospitals. But his self-described epiphany went further: “It’s not just health care that is now the largest industry in Pittsburgh. The largest industry in Pittsburgh is Medicare.”³⁷ This shift in U.S. economic production has not slowed: a 2017 New York Times article on the nation’s political divisions quoted a Trump supporter on the disappearance of

³⁵ For an authoritative analysis of the relationship between spending on medical care and spending on social services, see ELIZABETH H. BRADLEY & LAUREN A. TAYLOR, *THE AMERICAN HEALTH CARE PARADOX: WHY SPENDING MORE IS GETTING US LESS* (2015). For the potential crowd-out effect on private wages, see David I. Auerbach & Arthur L. Kellermann, *A Decade of Health Care Cost Growth Has Wiped Out Real Income Gains for an Average US Family*, 30 *HEALTH AFF.* 1630, 1631 (2011).

³⁶ See, e.g., THOMAS SZASZ, *THE MANUFACTURE OF MADNESS* (1970); Ivan Illich, *The Medicalization of Life*, 1(2) *J. MED. ETHICS* 73 (1975); PETER CONRAD, *THE MEDICALIZATION OF SOCIETY: ON THE TRANSFORMATION OF HUMAN CONDITIONS INTO MEDICAL DISORDERS* (2007).

³⁷ See Vladeck, *supra* note 27, at 23.

traditional jobs in her Massachusetts community. The new industry, she complained, “is medical, medical, medical.”³⁸

Yet an astonishing amount of health care spending is plausibly unnecessary. An Institute of Medicine (IOM) report issued in 2012, *Best Care at Lower Cost*, attributed over \$750 billion each year to waste.³⁹ Of this amount, an estimated \$210 billion reflects unnecessary services, including overuse not justified by scientific evidence, discretionary use beyond established benchmarks, and unnecessary choice of higher-cost services. The IOM report identified another \$130 billion in inefficiently delivered services, including medical errors, preventable complications, fragmented care, unnecessary use of higher-cost providers, and operational inefficiency at care delivery sites. Excess administrative costs accounted for \$190 billion, missed prevention opportunities for \$55 billion, and fraud for \$75 billion. The report’s final category, with \$105 billion in annual waste, was “Prices That Are Too High.” Annual waste today very likely exceeds \$1 trillion.

The undeserved prosperity of U.S. health care has not escaped notice, particularly among economists and policymakers new to the sector who have not yet become inured to unending medical inflation. When Peter Orszag served as President Obama’s director of the Office of Management and Budget after leading the Congressional Budget Office, his excitement at the prospect of health care reform was palpable.⁴⁰ Orszag understood the long-term fiscal drag from unnecessary health care spending, its distortionary effects on the economy, and its likely role in reducing overall economic

³⁸ Sabrina Tavernise, *One Country Two Tribes*, N.Y. TIMES (Jan. 28, 2017), https://www.nytimes.com/2017/01/28/opinion/one-country-two-tribes.html?_r=0.

³⁹ INST. FOR MED., *BEST CARE AT LOWER COST: THE PATH TO CONTINUOUSLY LEARNING HEALTH CARE IN AMERICA* 102 (Mark Smith et al. eds., 2012).

⁴⁰ Peter Orszag, *Healthcare is America’s Real Problem*, FIN. TIMES (Jan. 22, 2013), <https://www.ft.com/content/3023caa2-63e3-11e2-84d8-00144feab49a>.

growth. Nowhere else, he speculated, could policy change potentially generate national savings of more than a full percentage point of GDP.⁴¹

The industrial profile of U.S. health care helps explain its uniqueness in an increasingly automated, global, and unforgiving economy. Begin with employment. According to the Bureau of Labor Statistics (BLS), health care and social assistance grew from comprising 10.2% of U.S. employment in 2006 to 12.2% in 2016, with the highest job growth rate of any industry sector.⁴² BLS now lists in its data approximately 90 health care-related occupations.⁴³ More Americans work in health care than in retail trade, and health care employment is approaching that of professional and business services, which have a substantially lower job growth rate; and state and local government, which is not adding jobs at all.⁴⁴

Health care output is growing rapidly as well, although (as discussed above) the clinical value of health care goods and services is often questionable. Six of the top seven industrial sectors with the highest projected employment growth from 2016–2026 are within “health and social services.”⁴⁵ In rank order, these included home health care services, individual and family services, outpatient care

⁴¹ Peter Orszag, Director, Cong. Budget Off., Growth in Health Care Costs, Statement before the Committee on the Budget, US Senate (Jan. 31, 2008), <http://www.cbo.gov/ftpdocs/89xx/doc8948/01-31-HealthTestimony.pdf>.

⁴² See *Employment by Major Industry Sector*, BUREAU OF LAB. STAT., https://www.bls.gov/emp/ep_table_201.htm (last updated Oct. 24, 2017).

⁴³ See *Industry-Occupation Matrix Data, by Occupation*, BUREAU OF LAB. STAT., https://www.bls.gov/emp/ep_table_108.htm (last updated Oct. 24, 2017).

⁴⁴ BUREAU OF LAB. STAT., *supra* note 42.

⁴⁵ See *Industries with the Fastest Growing and Most Rapidly Declining Wage and Salary Employment*, BUREAU OF LAB. STAT., https://www.bls.gov/emp/ep_table_203.htm (last updated Oct. 24, 2017).

centers, offices of other health practitioners, medical and diagnostic laboratories, and other ambulatory health care services. Offices of physicians and offices of dentists are listed among the top twenty sectors.⁴⁶

On the other hand, productivity gains in the health care industry have been unimpressive. Health care output increases almost exactly in proportion to employment.⁴⁷ In U.S. manufacturing, by contrast, output expanded by an average compound rate of 0.3% per year from 2006–2016 even as employment dropped by 1.4% per year.⁴⁸ Productivity increases are also substantially greater in many other technology-driven service sectors than in health care.⁴⁹ Lack of automation in health care delivery likely is a partial explanation for its lackluster performance.

High wages are also a challenge to labor productivity in health care, except for minimally trained staff such as nursing aides and personal attendants, but high wages are obviously beneficial to health care workers themselves. So are generous benefits. Of the more than three million temporary and contract employees who work in the U.S., only 9% work in health care—compared to 37% working in industrial settings and 28% in office-based clerical and administrative positions.⁵⁰

⁴⁶ *Id.*

⁴⁷ See *Employment and Output by Industry*, BUREAU OF LAB. STAT., https://www.bls.gov/emp/ep_table_207.htm (last modified Oct. 24, 2017).

⁴⁸ *Id.*

⁴⁹ See Lucy Eldridge & Jennifer Price, *Measuring Quarterly Labor Productivity by Sector*, MONTHLY LAB. REV. (June 27, 2016), <https://www.bls.gov/opub/mlr/2016/article/measuring-quarterly-labor-productivity-by-industry.htm> [<https://doi.org/10.21916/mlr.2016.28>].

⁵⁰ See *Staffing Industry Statistics*, AM. STAFFING ASS'N, https://americanstaffing.net/staffing-research-data/fact-sheets-analysis-staffing-industry-trends/staffing-industry-statistics/#tab:tbs_nav_item_0 (last visited Dec. 2, 2017).

The physician professional class—nearly all of whom are front-line personnel rather than senior executives—is particularly well-paid. Median incomes exceed \$400,000 for orthopedic surgeons and cardiologists; \$300,000 for general surgeons, dermatologists, and anesthesiologists; and \$200,000 for pediatricians and family physicians.⁵¹ Surprisingly, physicians in rural states such as North Dakota tend to make the most.⁵² With about 700,000 physicians in active practice nationally, their earnings comprise a substantial portion of overall U.S. labor costs.⁵³ In the aggregate based on 2008 data, physicians account for more salary dollars than any BLS classification except “managers,” “chief executives” (including small business owners), and registered nurses, all of whom work in significantly larger numbers than do physicians.⁵⁴

Corporate structure in health care is also antiquated. In form if not economic substance, many of the largest health care businesses operate as non-profits. Most hospitals, even those in national chains with hundreds of facilities, are chartered under state non-profit law and are considered tax-exempt by the Internal Revenue Service.⁵⁵ Public investment in these organizations is limited to debt purchases and charitable contributions. Physicians still typically own their

⁵¹ See *Medscape Physician Compensation Report 2017*, MEDSCAPE (Apr. 5, 2017), <http://www.medscape.com/slideshow/compensation-2017-overview-6008547>.

⁵² *Id.*

⁵³ See Dean Baker, *The Problem of Doctors' Salaries*, POLITICO (Oct. 25, 2017), <https://www.politico.com/agenda/story/2017/10/25/doctors-salaries-pay-disparities-000557>.

⁵⁴ See Jennifer Cheeseman Day & Jeffrey Rosenthal, *Detailed Occupations and Median Earnings: 2008* (U.S. Census Bureau, Working Paper, 2008), <https://www.census.gov/content/dam/Census/library/working-papers/2008/demo/acs08-detailedoccupations.pdf>.

⁵⁵ See Jill Horwitz, *Nonprofit Healthcare Organizations and the Law*, in OXFORD HANDBOOK OF U.S. HEALTHCARE LAW 535 (I. Glenn Cohen et al. eds., 2016).

medical practices or are employed by other physicians, although in recent years significant numbers have become hospital employees.⁵⁶ In addition, publicly traded entities or, more often, private equity firms have begun to purchase and exploit ambulatory care facilities and physician practice infrastructure.⁵⁷

How did health care avoid the fate of other industries that have increased productivity, automated, shifted production offshore, undergone cycles of corporate restructuring, or come to rely on temporary or low-wage workers? The observation that health care is a service rather than manufacturing industry is true, but lacks much explanatory power.⁵⁸ The argument that most health care remains local is based largely on circular reasoning; health care's intimacy does not predict its cost, and its informational deficits and incentive problems, while substantial, need not persist indefinitely.

Surprisingly, this question is typically overlooked amid the ongoing enthusiasm for "delivery system redesign" and "value-based care." In general, when an industry has declared a trajectory of change and has reached consensus on the methods to be employed, improvement should be steady if not always rapid. This

⁵⁶ See Robert Kocher & Nikhil R. Sahni, *Hospitals' Race to Employ Physicians – The Logic Behind a Money-Losing Proposition*, 364 NEW ENG. J. MED. 1790 (2011).

⁵⁷ The role of private investment in health care is not well known. See Clay Bischoff et al., *The Next Act in Healthcare Private Equity*, MCKINSEY & CO. (Dec. 2016), <http://www.mckinsey.com/industries/private-equity-and-principal-investors/our-insights/the-next-act-in-healthcare-private-equity>.

⁵⁸ Productivity in service industries may be more difficult to improve than in manufacturing. WILLIAM J. BAUMOL & WILLIAM G. BOWEN, *PERFORMING ARTS: THE ECONOMIC DILEMMA* 164 (1966) (observing, among other things, that one cannot easily reduce the labor force in a string quartet). The relevance of service industry productivity to health care spending has been widely noted. See, e.g., George Will, *'Baumol's Disease' Explains Flagging Productivity*, NAT. REV. (May 17, 2017), <http://www.nationalreview.com/article/447720/baumols-disease-productivity-entitlements-problem-workforce-ages>.

happened in health care over a decade ago, but progress has been glacial.

The principal explanation for why we are not “there yet” in the pursuit of health care value lies in the dense thicket of accumulated regulation, subsidy, and—above all—professional privilege that constitutes the deep legal architecture of the health care system.⁵⁹ Political capture plays an important role in this story, particularly regarding the substantial revenue streams that flow from public coffers or enjoy the forbearance of tax collectors.⁶⁰ Beneath these layers of self-interest and opportunism, however, is a medical archetype that the U.S. embraced long ago and still aggressively defends: a reliance on individual and collective professional judgment that often pushes physicians’ expertise and ethics beyond their breaking points and channels our accidental health care system into the profligacy we now must confront and reverse.⁶¹

Although centralized authority might have brought us to a similar situation, American federalism has been a substantial enabler of the “professional paradigm.”⁶² The federal government has served largely as a funder: of insurance coverage through Medicare and

⁵⁹ See generally William M. Sage, *Relating Health Law to Health Policy: A Frictional Account*, in OXFORD HANDBOOK OF U.S. HEALTHCARE LAW 3–28 (I. Glenn Cohen et al. eds., 2016). The medical profession often feigns ignorance of its legal privilege. See, e.g., William M. Sage, *Over Under or Through: Physicians, Law, and Health Care Reform*, 53 ST. LOUIS UNIV. L.J. 1033, 1033–34 (2009) (“For a physician to want regulation out of medical licensing is as absurd as the oft-quoted saw about a senior citizen telling his congressman to ‘keep the government out of my Medicare.’”) (noting the irony of a leading physician claiming that government regulation has no place in medicine).

⁶⁰ See, e.g., Vladeck, *supra* note 27, at 26.

⁶¹ Rand E. Rosenblatt, *The Four Ages of Health Law*, 14 HEALTH MATRIX 155 (2004) (describing the professional paradigm).

⁶² See Abigail R. Moncrieff & Joseph Lawless, *Health Care Federalism*, in OXFORD HANDBOOK OF U.S. HEALTHCARE LAW 93 (I. Glenn Cohen et al. eds., 2016).

Medicaid; of biomedical research, through NIH; of physician training through Medicare; and of employer-based health coverage and tax-exempt hospitals, through tax preferences. Federal health politics is correspondingly dominated by spending, with the focused interests seeking a particular payment typically proving more powerful than the diffuse interests opposing it. Substantive regulation is often appended to these revenue streams, but dominates in only a few areas (e.g., FDA) and, in many instances, places health professionals in powerful gatekeeping roles (e.g., the RUC that advises on Medicare payments to physicians).⁶³

By contrast, states have been the principal regulators of health care delivery. States license professionals and facilities, regulate prescriptive authority, and define physician-hospital relations.⁶⁴ Many of these responsibilities have been delegated to the medical profession with little state supervision, while even direct regulation tends to be highly deferential to professional traditions and associated political organizing.⁶⁵ Until recently, states also possessed near-exclusive oversight of health insurance benefits, underwriting

⁶³ For an overview of current FDA regulation, see Lewis A. Grossman, *Drugs, Biologics, and Devices: FDA Regulation, Intellectual Property, and Medical Products in the US Healthcare System*, in OXFORD HANDBOOK OF U.S. HEALTHCARE LAW 637 (I. Glenn Cohen et al. eds., 2016). For an explanation of organized medicine's role in setting Medicare Part B payments, see Miriam J. Laugesen et al., *In Setting Doctors' Medicare Fees, CMS Almost Always Accepts the Relative Value Update Panel's Advice on Work Values*, 31 HEALTH AFF. 965, 968-70 (2012). The RUC is composed of 31 physician members approved by the AMA, with 21 nominated by major national medical specialty societies. AM. MED. ASS'N, *The RVS Update Committee* (2014), <http://www.ama-assn.org/ama/pub/physicianresources/solutions-managing-your-practice/coding-billing-insurance/medicare/the-resource-based-relative-value-scale/the-rvs-update-committee.page> [<http://perma.cc/FN3D-LAUC>] (overview of RUC composition).

⁶⁴ See John D. Blum et al., *The Hospital-Physician Relationship*, in OXFORD HANDBOOK OF U.S. HEALTHCARE LAW 512 (I. Glenn Cohen et al. eds., 2016).

⁶⁵ *Id.*

practices, and pricing.⁶⁶ Moreover, state courts define most patient rights and resolve most disputes over the quality of patient care—a fragmented process that seldom attracts public attention and leaves the vast majority of substandard care unexamined.⁶⁷

This fusion of professional protectionism and public subsidy presumes that beneficent therapeutic relationships between individual physicians and patients can be extrapolated to the population level. No doubt this expectation was well-motivated and had the virtue of incrementalism, but its cumulative effect on fragmentation and waste over the course of several generations has been profound.⁶⁸ Reliance on the physician-patient dyad has also been expedient as a political strategy for larger reforms such as

⁶⁶ Substantive federal regulation of health insurance has been incremental and incomplete: The Consolidated Omnibus Budget Reconciliation Act of 1985 (COBRA, establishing limited rights upon termination of employment), the Health Insurance Portability and Accountability Act of 1996 (HIPAA, mainly regulating the small-group insurance market), and the ACA. See Timothy Stoltzfus Jost, *Access to Health Insurance and Health Benefits*, in OXFORD HANDBOOK OF U.S. HEALTHCARE LAW 147 (I. Glenn Cohen et al. eds., 2016).

⁶⁷ See Barry R. Furrow, *Medical Malpractice Liability: Of Modest Expansions and Tightening Standards*, in OXFORD HANDBOOK OF U.S. HEALTHCARE LAW 421 (I. Glenn Cohen et al. eds., 2016); A. Russell Localio et al., *Relation Between Malpractice Claims and Adverse Events Due to Negligence: Results of the Harvard Medical Practice Study III*, 325 NEW ENG. J. MED. 245, 248 (1991) (estimating that less than 2% of adverse events due to negligence result in malpractice claims.); William M. Sage et al., *Use of Non-Disclosure Agreements in Medical Malpractice Settlements by a Large Academic Health System*, 175 JAMA INTERNAL MED. 1130 (2015) (documenting the high frequency of non-disclosure agreements in malpractice tort settlements).

⁶⁸ See Einer Elhauge, *Why We Should Care about Health Care Fragmentation and How to Fix It*, in THE FRAGMENTATION OF U.S. HEALTH CARE: CAUSES AND SOLUTIONS (E. Elhauge ed., 2010): 1–20. For an overview of associated legal issues, see William M. Sage & Robert F. Leibenluft, *Overcoming Barriers to Collaboration and Alignment: Legal and Regulatory Issues*, in PHYSICIAN-HOSPITAL INTEGRATION 110–40 (Francis J. Crosson & Laura Tollen eds., 2010)).

Medicare, neutralizing potentially powerful grass-roots opposition from the medical profession and its allies President Lyndon Johnson's memorable declaration when told the (as it turned, grossly understated) \$500-million-over-ten-years price tag of accepting the AMA's final package of demands in exchange for withdrawing opposition to Medicare – "Is that all? Do it. Move that damn bill out now, before we lose it!" – should be engraved on each nail it placed in the coffin of national fiscal responsibility.⁶⁹

Barriers to new competition were erected under the assumption that physician control is desirable, but routinely tempt favored stakeholders to engage in rent-seeking through both private activity and politics. Privately, large insurers and prominent hospitals have a mutual interest in preserving their positions that chills innovation and may even subvert hard bargaining over cost or quality.⁷⁰ Politically, stakeholders of various types hide behind the health care system's foundational architecture of professional privilege while exerting influence at all levels of government, from the pharmaceutical and insurance industries' lobbying muscle with Congress to the local influence of hospitals that are dominant employers in many communities. Moreover, industry groups often enjoy support from demand-side constituencies with strong interests in maintaining collective subsidies, including not only America's

⁶⁹ JOSEPH A. CALIFANO, *AMERICA'S HEALTH CARE REVOLUTION: WHO LIVES, WHO DIES, WHO PAYS?* 52(1986); see also William M. Sage, *Fraud and Abuse Law*, 281 JAMA 1179 (1999).

⁷⁰ See Scott Allen & Marcella Bombardieri, *A Handshake that Made Healthcare History*, BOS. GLOBE (Dec. 28, 2008), <https://www.bostonglobe.com/specials/2008/12/28/handshake-that-made-healthcare-history/QiWbywqb8olJsA3IZ11o1H/story.html> (describing the decision by Blue Cross Blue Shield of Massachusetts to pay very high prices to Partners Healthcare). See generally William M. Sage, *Assembled Products: The Key to More Effective Competition and Antitrust Oversight in Health Care*, 101 CORNELL L. REV. 609 (2016).

rising population of seniors but also smaller groups concerned primarily with a particular medical condition or set of services.

In this manner, accreted health law has conferred a significant degree of immunity on health care from competitive and corporate pressures that have transformed other industries:

(1) Professional licensing laws truncate the conventional relationship between price and quality, prohibiting the sale of less expensive non-physician medical services while simultaneously curtailing commercial accountability for price and quality in connection with market transactions in favor of threshold barriers to entry and a veneer of professional self-policing.⁷¹

(2) Ready access to admitting and procedural privileges at community hospitals, along with independent billing for other on-demand resources, enables physicians to specialize and prosper with minimal capital investment in their own practices.

(3) The Joint Commission and other self-regulatory bodies on which government depends to survey and certify health

⁷¹ Cf. MILTON FRIEDMAN, *CAPITALISM AND FREEDOM* 149-59 (1962) ("I am . . . persuaded that [restrictive] licensure has reduced both the quantity and quality of medical practice; . . . that it has forced the public to pay more for less satisfactory medical service, and that it has retarded technological development both in medicine itself and in the organization of medical practice."). This is no longer a fringe view. See OFFICE OF ECON. POLICY ET AL., DEP'T OF THE TREASURY, *OCCUPATIONAL LICENSING: A FRAMEWORK FOR POLICYMAKERS* 13-14 (July 2015), https://obamawhitehouse.archives.gov/sites/default/files/docs/licensing_report_final_nonembargo.pdf (Obama administration report documenting inefficiency and unfairness associated with occupational licensing); Aaron Edlin & Rebecca Haw, *Cartels by Another Name: Should Licensed Occupations Face Antitrust Scrutiny?*, 162 U. PA. L. REV. 1093 (2014).

facilities often set standards that minimally scrutinize physician behavior.⁷²

(4) Physicians' legal prerogative to authorize third parties to bill patients' health insurance in connection with prescriptions, orders for services, and referrals inherent in the "practice of medicine" inflates and distorts prices for care inputs and attenuates incentives to deliver care efficiently.

(5) In several states, including California and Texas, prohibitions on the corporate practice of medicine constrain the corporate forms of health care businesses and may restrict access to capital in both the professional and facility subsectors.⁷³

(6) "Fraud and abuse" concerns over potential corruption of professional judgment in connection with Medicare and Medicaid contracting practices misalign incentives and perpetuate the fragmentation of care delivery.⁷⁴

⁷² See *Medical Staff (CAMH/Hospitals)*, THE JOINT COMM'N (Mar. 10, 2011), http://www.jointcommission.org/mobile/standards_information/jcfaqdetails.aspx?StandardsFAQId=435&StandardsFAQChapterId=74 [<http://perma.cc/9DAB-LFZQ>]; *Benefits of Joint Commission Accreditation*, THE JOINT COMM'N (Aug. 28, 2015), http://www.jointcommission.org/benefits_of_joint_commission_accreditation/ [https://web.archive.org/web/20150906064510/http://www.jointcommission.org/benefits_of_joint_commission_accreditation/]. See generally James S. Roberts et al., *A History of the Joint Commission on Accreditation of Hospitals*, 258 JAMA 936 (1987).

⁷³ See, e.g., CAL. BUS. & PROF. CODE §§ 2400, 2052 (West 2012) (regulations providing that corporations cannot have professional licenses and requiring physicians to have a license in order to practice medicine); TEX. OCC. CODE ANN. §§ 155.001, 155.003, 157.001, 164.052, 165.156 (West 2012) (regulations on physician licensing and corporation's ability to hire physicians).

⁷⁴ See generally Joan K. Krause, *Integration, Fragmentation, and Human Nature: The Role of the Fraud and Abuse Laws in a Changing Healthcare System*, in OXFORD HANDBOOK OF U.S. HEALTHCARE LAW, at 852 (I. Glenn Cohen et al. eds., 2016). For earlier critiques of the antifraud regime's conflicting demands on health care delivery, see James F. Blumstein, *The Fraud and Abuse Statute in an Evolving Health Care Marketplace: Life in the*

(7) Consumer protection in health care does less to prevent and redress fraud than to maintain dependence on physicians and discourage informed self-help, which elsewhere in American commerce is considered the preferred path to both autonomy and efficiency.

The incoherence of health care products and services compared to other commercial contexts – and the fact that such incoherence has all but gone unnoticed – shows how pervasive law-driven market distortions have become. In advanced industries serving consumers, products are almost universally delivered fully assembled, generally with a warranty for performance as expected. By contrast, the health care system trades in physician-led process steps that can be assigned a billing code and “reimbursed,” along with isolated inputs to professional processes. Health insurance “benefit packages” are loose assemblages of these process steps and inputs, grouped in ways that obscure the purposes that might be served by offering them in combination and disclaiming any responsibility for combining them effectively.

Products or services assembled to meet consumers’ intuitive needs are rare, and warranty-style accountability for failing consumer expectations is rarer still.⁷⁵ Even Medicare’s new “bundled payment” initiatives tend to proxy assembly rather than actually demanding it – kind of like paying for all the things that experts say

Health Care Speakeasy, 22 AM. J.L. & MED. 205 (1996); David A. Hyman, *Health Care Fraud and Abuse: Market Change, Social Norms, and the Trust “Reposed in the Workmen,”* 30 J. LEGAL STUD. 531 (2001).

⁷⁵ For a detailed discussion of the effects of regulation on the health care “product,” see Sage, *supra* note 69; William M. Sage, *Getting the Product Right: How Competition Policy Can Improve Health Care Markets*. 33 HEALTH AFF. 1076 (2014).

should go into making a television set but not simply buying a television set.⁷⁶

Most perniciously, accreted regulation and professional self-regulation have distorted innovation itself, which is the engine of change over the longer term. Although process innovation has finally begun in earnest, the last several decades of medical innovation have mainly involved reimbursable technologies that fit existing, flawed methods of production and therefore that have tended to increase costs without dramatically improving health outcomes.⁷⁷ As Lewis Thomas noted long ago, “definitive technologies” that prevent or cheaply cure disease are few and far between.⁷⁸ Moreover, medical innovations have almost always been conceptualized as extensions of the physician’s economically capacious if now merely metaphorical “black bag” – reinforcing professional intermediation in the receipt of health care rather than freeing the public from it. A new technology not attached to a physician (or to a technician for whom a physician or health facility catering to physicians can bill) will likely go unused in the current regulatory and payment environment.

Basic science investment by government remains strong, but the “translational science” that has come into vogue to compete with it for funding tends to center on care delivery in academic health

⁷⁶ See Susan Delbanco, *The Payment Reform Landscape: Bundled Payment*, HEALTH AFF. BLOG, (July 2, 2014), <http://healthaffairs.org/blog/2014/07/02/the-payment-reform-landscape-bundled-payment>; Robert E. Mechanic, *Mandatory Medicare Bundled Payment – Is It Ready for Prime Time?*, 373 NEW ENGL. J. MED. 1291 (2015).

⁷⁷ James C. Robinson, *Biomedical Innovation in the Era of Health Care Spending Constraints*, 34 HEALTH AFF. 203 (2015) (arguing that the era of “cost-unconscious” innovation is finally over). See also Clayton M. Christensen, *Disruptive Innovation* (2015), <http://www.claytonchristensen.com/key-concepts/> (describing a process by which a product or service takes root initially at the bottom of a market and then moves up market displacing established competitors).

⁷⁸ LEWIS THOMAS, *THE LIVES OF A CELL: NOTES OF A BIOLOGY WATCHER*, 5–42 (1978).

centers, which are hardly exemplars of efficiency or accountability. “Precision medicine” may eventually link molecular characteristics to personalized treatment protocols, but in the short term seems more likely to bolster regressive arguments for costly, customized production models.⁷⁹ Even health information technology (HIT) has struggled, despite generous federal support to promote supply (the Bush approach) and incentivize demand (the Obama approach).⁸⁰ Real advances in HIT have been stymied by traditions of collecting health care information primarily to get paid and not to improve production processes; a paucity of users (other than large hospitals) who are willing to expend their own capital on HIT; and an aging generation of physician and hospital leaders who—like the matriarchs of Midwest farm families who wanted a “horseless carriage” rather than an automobile—understand HIT more as paperless medical records than as an integrated production management system.

III. FRACKING HEALTH CARE: THE QUEST TO FIND AND RELEASE TRAPPED VALUE

Barely more than ten years ago, it was deemed impossible that the U.S. could achieve energy independence. A technology—horizontal hydraulic fracturing, or “fracking”—was capable of harvesting vast but previously inaccessible shale gas deposits that are located in many parts of the country, but the economic and

⁷⁹ Francis S. Collins & Harold Varmus, *A New Initiative on Precision Medicine*, 372 *NEW ENG. J. MED.* 793 (2015).

⁸⁰ See generally *INST. OF MED., HEALTH IT AND PATIENT SAFETY: BUILDING SAFER SYSTEMS FOR BETTER CARE* 19 (2012).

political conditions were not conducive to disseminating it.⁸¹ Once these conditions changed, the trapped value could be, and was, rapidly released. The benefits of fracking are undeniable, although they are offset by potential dangers both short-term (groundwater contamination, local seismic activity) and long (disincentives to develop cleaner, renewable energy sources).⁸²

The most important question with respect to the value trapped in U.S. health care is not whether it should be released, but how. Applying a fracking analogy to the health care system focuses attention on the key issues. What are the key technologies and skills? What political and economic conditions will result in their deployment? To whom will the benefits accrue? And what might possibly go wrong?

A promising sign is that health care opinion-makers now understand the vastness of their medicalized reserves, and have made a consensus commitment to recovering the value trapped within them. Over the past two decades, the policy understanding of high health system expenditure has shifted from an assumption of necessity to a recognition of waste. In his 1994 book, *Medicine's Dilemmas: Infinite Needs Versus Finite Resources*, William Kissick asserted that "no society in the world has ever been – or will ever be – able to afford providing all the health services its population is capable of utilizing."⁸³ Accordingly, he conceived of health policy as an "iron triangle" delimiting the trade-offs that would become necessary – through explicit government rationing of access and/or quality – if the nation wished to cap health care spending. Kissick's

⁸¹ See generally RUSSELL GOLD, *THE BOOM: HOW FRACKING IGNITED THE AMERICAN ENERGY REVOLUTION AND CHANGED THE WORLD* (2014) (offering a scientific and economic history of hydraulic shale fracturing through the personal stories of those involved).

⁸² See, e.g., Sari Kovats et al., *The Health Implications of Fracking*, 383 LANCET 757 (2014) (explaining the limited evidence base for assessing fracking-related health risks).

⁸³ WILLIAM KISSICK, *MEDICINE'S DILEMMAS: INFINITE NEEDS VERSUS FINITE RESOURCES* 48 (1994).

book was written during the legislative debate over the Clinton administration's health reform plan, the first attempt in more than a generation to universalize health insurance coverage. Following 25 years of persistent increases in health care costs, it was also the first to consider the effects of expanded coverage both on medical expenditures and – through higher taxation and government crowd-out of private activity – on overall economic growth.

Kissick's policy frame placed existing health care expenditures on a Pareto frontier, making "guns or butter" tradeoffs necessary. But what if health care was just massively inefficient? By the time the Obama administration's health reform plan took shape a generation later, extensive evidence challenged not only the high cost of conventional health care but also its quality and safety, as well as raising dire warnings about the long-term economic implications of rapid increases in chronic disease and the inevitable aging of the U.S. population.⁸⁴ Kissick's iron triangle therefore gave way to another triad, the "Triple Aim," which was the brainchild of Harvard pediatrician Donald Berwick and his colleagues at the Institute for Healthcare Improvement.⁸⁵ The "Triple Aim" consists of (1) improving the patient experience of care (including quality and satisfaction), (2) improving the health of populations, and (3) reducing the per capita cost of health care.⁸⁶ In a striking contrast to

⁸⁴ See, e.g., Steven H. Woolf & Laudan Y. Aron, *The US Health Disadvantage Relative to Other High-Income Countries*, 309 JAMA 771, 772 (2013) (comparing Americans' health to that of other countries of similar economic status).

⁸⁵ *IHI Triple Aim Initiative*, INST. FOR HEALTHCARE IMPROVEMENT (2015), <http://www.ihl.org/Engage/Initiatives/TripleAim/pages/default.aspx> (last visited Sept. 8, 2016).

⁸⁶ *Id.*

Kissick's tragic choices, Berwick implies that all three parts of the Triple Aim can be achieved simultaneously.

The Triple Aim was the outgrowth of decades of research documenting costly variability in clinical medicine with overinvestment in specialized services and corresponding neglect of primary care and prevention.⁸⁷ The Triple Aim altered health policy thinking in two critical respects. First, it took the existing health care system off the Pareto frontier, making the crux of policy debate productive efficiency rather than rationing.⁸⁸ The concept of "value-based health care," which hardly registered as a health policy objective in the 1990s, is now universally praised if not always wholeheartedly pursued.⁸⁹ Second, and relatedly, it emphasized incremental improvement on a decentralized basis, the urgency

⁸⁷ Substantial, unexpected geographic variations in medical treatment were not associated with either greater health care needs or superior clinical outcomes. *Understanding of the Efficiency and Effectiveness of the Health Care System*, DARTMOUTH ATLAS HEALTH CARE (2015), <http://www.dartmouthatlas.org> (last visited Apr. 17, 2017).

⁸⁸ A compelling example pitting preventive services for populations against rescue treatment for individuals resulted in transplant pioneer Thomas Starzl's move from Colorado to Pennsylvania. Richard D. Lamm, *Doctors Have Patients, Governors Have Citizens*, 19 HEALTH AFF. 173 (2000). Similarly, the controversy over Oregon's Medicaid "rationing" plan in the early 1990s obscured the fact that its cost-benefit calculations were based on existing production and pricing models. See Jonathan Oberlander et al., *Rationing Medical Care: Rhetoric and Reality in the Oregon Health Plan*, 164 CANADIAN MED. ASS'N J. 1583 (2001).

⁸⁹ When a young management consultant and I proposed "health care value" as the platform for a major gubernatorial candidate in 1994, the reaction was bemused puzzlement. This has changed. According to experts in health care management: "There is no longer any doubt about how to increase the value of care." Michael E. Porter & Thomas H. Lee, *The Strategy That Will Fix Health Care*, HARV. BUS. REV. (Oct. 2013), <https://hbr.org/2013/10/the-strategy-that-will-fix-health-care>. The standard toolkit for pursuing value includes measuring costs and outcomes, expecting payment only for successful care, building "integrated practice units," and embracing health information technology. See generally MICHAEL E. PORTER & ELIZABETH O. TEISBERG, *REDEFINING HEALTH CARE: CREATING VALUE-BASED COMPETITION ON RESULTS* (2006).

having receded to achieve a definitive political settlement balancing access, cost, and quality.

Where the Triple Aim may fall short is in its expectation that population health can be substantially improved within a medical framework.⁹⁰ Its explicit integration of individual and population health goals was a reminder that rendering cost-be-damned care to patients with generous insurance can represent an abdication of medical ethics rather than a fulfillment of it.⁹¹ At the same time, however, research continues to reveal that fundamental drivers of ill health and premature death—poverty, inequality, racism, etc.—are more amenable to non-medical social interventions, and that developed nations whose health care spending is dwarfed by that in the United States invest instead in such services.⁹²

Accepting this re-conceptualization, and propelled by the urgency that accompanies stagnant wages, lack of broad-based

⁹⁰ Many new forms of health care organization contemplate population engagement, with varying degrees of commitment to social services. See, e.g., Steven M. Shortell & Lawrence P. Casalino, *Health Care Reform Requires Accountable Care Systems*, 300 JAMA 95 (2008) (explaining the ACO model); H. S. Luft, *Becoming Accountable – Opportunities and Obstacles for ACOs*, 363 NEW ENG. J. MED 1389 (2010) (same); JEREMY CANTOR ET AL., COMMUNITY-CENTERED HEALTH HOMES: BRIDGING THE GAP BETWEEN HEALTH SERVICES AND COMMUNITY PREVENTION, https://www.preventioninstitute.org/sites/default/files/publications/HE_Cmty-centered%20health%20homes_032311.pdf; Marsha Regenstein et al., *The State of the Medical-Legal Partnership Field* (2017), <http://medical-legalpartnership.org/wp-content/uploads/2017/07/2016-MLP-Survey-Report.pdf>.

⁹¹ Cf. Tom Lehrer, “Wernher von Braun” (“‘Once the rockets are up, who cares where they come down? That’s not my department,’ says Wernher von Braun”).

⁹² See BRADLEY & TAYLOR, *supra* note 8. International comparisons of health care system performance generally place the United States at or near the bottom. See ERIC C. SCHNEIDER ET AL., MIRROR, MIRROR 2017: INTERNATIONAL COMPARISON REFLECTS FLAWS AND OPPORTUNITIES FOR BETTER U.S. HEALTH CARE (Commonwealth Fund 2017), http://www.commonwealthfund.org/~media/files/publications/fund-report/2017/jul/schneider_mirror_mirror_2017.pdf.

economic opportunity, and stunted social investments, how should the U.S. frack its health care system? Among the key objectives:

- Eliminating middlemen who profit from “reimbursable claims”
- Disintermediating physicians from many treatment processes
- Enabling tech-savvy self-help
- Making insurance subsidies transparent
- Depopulating and reconstituting hospitals
- Re-collectivizing health in patient groups and local communities

A detailed proposal is beyond the scope of this essay, but one can identify the core elements and offer basic goals. Because health care governance has played such a large role in trapping value, redirecting governance is an essential aspect of recovering it. Facilitated by re-regulation, a second aspect is restructuring the health care industry, both in terms of financing (insurance) and care delivery. A third aspect is the workforce, which is currently top-heavy in specialization and expense, yet remote from the people to be served and the needs to be met. Fourth is the nature of industry output, which still favors physician habits and preferences over demonstrable value to patients. Finally, repurposing trapped value once recaptured requires a plan for investing the proceeds that have been realized.

Because the challenge is to undo an accretion of law that influences so many parts of the health care system, resetting regulation to release value must be an evolutionary and adaptive process rather than a revolutionary one. Part of the task is conditioning change by adjusting expectations and incentives. Another part, as with responsible fracking, is ensuring transparency and accountability with respect to both finances and outcomes. In general terms, initial steps would involve reducing collective professional control over industry structure and performance,

thereby unmasking large subsidies for the current health care sector in order either to reduce them outright or, where health-oriented redistribution remains justifiable, to draw public attention to the need for cost control.

Barriers to competitive entry and practice innovation that are erected by professionally dominated entities and organizations should be exposed, scrutinized, and in most instances dismantled. The Supreme Court's 2015 decision in *North Carolina State Bd. of Dental Examiners v. F.T.C.*,⁹³ subjecting unsupervised state licensing boards to federal antitrust law, provides one opening to begin this interrogation.⁹⁴ Licensing restrictions, like state legal requirements and Joint Commission standards for hospital-physician relations, primarily influence competitive opportunities by constraining care processes and imposing operational costs. Legal constraints that go more to corporate structure, such as corporate practice of medicine prohibitions, should also be revisited – as should those that impede the free entry and exit of investment capital, such as certificate-of-need laws for capital expansion that some states still enforce as well as various legal obstacles to closing facilities (while maintaining access to services in other ways).

Tax preferences for employer-sponsored health insurance, criticized by health policy experts across the political spectrum but still prized by workers who are unaware of how they crowd out wages and increase waste, should finally be curtailed.⁹⁵ By contrast,

⁹³ 135 S. Ct. 1101 (2015).

⁹⁴ William M. Sage & David A. Hyman, *Antitrust as Disruptive Innovation in Health Care: Can Limiting State Action Immunity Help Save a Trillion Dollars?*, 48 LOY. U. CHI. L.J. 724 (2017).

⁹⁵ Although the politics are daunting, health economists of all political bents tend to agree on both the inefficiency and unfairness of not taxing employer-provided health

national fiscal commitments designated for specific purposes should be clearly explained and wisely spent. For example, the Trump administration seeks to repeal an estimated \$346 billion over ten years that the ACA collects in taxes from high earners to help offset tax subsidies that enable low earners to purchase health insurance – a substantial amount that, for misguided political reasons, has never been publicized to its beneficiaries while those forced to pay it fail to abstract from that responsibility any incentive to demand more efficient health care delivery.⁹⁶

In terms of industrial structure, many of the inefficiencies in health care derive from a few basic patterns that require disruption through legal change and parallel industrial innovation. One example is the American hospital. Although acute care hospitalization has shifted from a residential and recuperative experience to a time-limited and intensive one, hospital care still consists largely of people in beds (“in-patients”) being assessed for needs and delivered goods or services on an itemized basis.⁹⁷ Because of this ad hoc, “blank-check” approach (at least to insured patients), many hospitals remain bloated enterprises compared with other industrial sites. Another example is how people with health care needs collect information, products and services piecemeal in a series of B2C (business to consumer) transactions, with each step

coverage. See, e.g., Joseph Antos, *End the Exclusion for Employer-Provided Health Care*, N.Y. TIMES (Dec. 6, 2016), <https://www.nytimes.com/roomfordebate/2015/04/14/the-worst-tax-breaks/end-the-exemption-for-employer-provided-health-care>.

⁹⁶ See Tony Nitti, *In Amended Health Care Bill, GOP Doubles Down on Tax Breaks for the Rich, Reduced Medicaid Funding*, FORBES (Mar. 22, 2017), <https://www.forbes.com/sites/anthonymitti/2017/03/22/in-amended-health-care-bill-gop-doubles-down-on-tax-breaks-for-the-rich-reduced-medicaid-funding/#6b7d6a6c6b7d>.

⁹⁷ See Erin C. Fuse Brown, *Irrational Hospital Pricing*, 14 HOUS. J. HEALTH L. & POL'Y 11 (2014); Steven Brill, *Bitter Pill: How Outrageous Pricing and Egregious Profits Are Destroying Our Healthcare*, TIME, Mar. 4, 2013, at 24–26.

beset by administrative frictions, delays, and uncertainties.⁹⁸ Access points for this care almost always include or are endorsed by physicians, but coordination is uncommon.⁹⁹ In particular, little happens in the background as B2B (business to business) transactions, with customization receding in favor of economies of scale, batch processing, and established commercial relationships.¹⁰⁰

Meaningful improvement would refine the health system's output in at least three respects. First, reversing a century or more of elaborate design to discourage self-help, people would be able to recognize and address the majority of their own health care needs. Second, most complex medical services would be offered fully assembled for a clear price known in advance. Third, accountability would be oriented more closely to the quality and safety of the specific services received, including warranties, and less to the general reputations of physicians or facilities.

The workforce issues in fracking health care are both fascinating and daunting, in that health care employment must shift to a different model to be simultaneously effective, affordable, and sustainable. As discussed above, health care is one of the few domestic industries with continuing employment growth, many high-wage jobs with generous benefits, and many workplaces. But health care is so productively and allocatively inefficient that many of these jobs are plausibly unnecessary.¹⁰¹ Successfully converting

⁹⁸ See PORTER & TEISBERG, *supra* note 89, at 4.

⁹⁹ *Id.*

¹⁰⁰ See REGINA HERZLINGER, MARKET-DRIVEN HEALTH CARE: WHO WINS, WHO LOSES IN THE TRANSFORMATION OF AMERICA'S LARGEST SERVICE INDUSTRY 158 (1997) (coining and explaining the phrase "focused factory").

¹⁰¹ Katherine Baicker & Amitabh Chandra, *The Health Care Jobs Fallacy*, 366 NEW ENG. J. MED. 2433, 2433 (2012) ("It is tempting to think that rising health care employment is a boon, but if the same outcomes can be achieved with lower employment and fewer

the employment base of health care to a sounder footing could offer valuable lessons for American society more generally as automation accelerates, off-shore production grows, and significant numbers of people find themselves not only deprived of large paychecks with benefits, but also in need of fulfilling work to occupy their time and assist their communities.¹⁰²

An unexpected aspect of labor transformation in health care is that lower-income jobs may be less rather than more vulnerable. A more efficient health care system will still need technicians to maintain and operate advanced medical technology that is applied directly to patients in dedicated clinical settings. Some of these individuals will be craftspeople, while others will adhere strictly to protocols. The health care system also will need human representatives spread widely through communities to engage people in promoting and regaining health where they live, work, learn, and play. And it will need carers—compassion, connection, and love being qualities that remain impossible to automate or outsource *en masse*.¹⁰³ With sufficient investment in education and development, the employment base in health care will still be substantial.

Which jobs are the most vulnerable? Surprisingly, it may be those of physicians, making it essential to retool medical education so as to emphasize careers in management and innovation and policy in

resources, that leaves extra money to devote to other important public and private priorities such as education, infrastructure, food, shelter, and retirement savings.”).

¹⁰² See, e.g., Arthur Garson et al., *A New Corps of Trained Grand-Aides Has the Potential to Extend Reach of Primary Care Workforce and Save Money*, 31 HEALTH AFF. 1016 (2012).

¹⁰³ Many commentators, including leaders in the technical measurement of health care quality, have come to emphasize caring relationships as the most enduring quality of human employment. See, e.g., Donald M. Berwick, *Era 3 for Medicine and Health Care*, 315 JAMA 1329 (2016); Fitzhugh Mullan, *A Founder of Quality Assessment Encounters a Troubled System Firsthand*, 29 HEALTH AFF. 137, 141 (2000) (according to quality pioneer Avedis Donabedian, “The secret of quality is love.”).

addition to direct service to patients.¹⁰⁴ Technology today is increasingly able to recognize patterns, access voluminous facts, and generate recommendations for action.¹⁰⁵ Much as highly paid lawyers have been supplanted in many practice settings by less expensive legal services personnel using information and communication resources, physicians may find themselves replaced by clinical staff who are less extensively qualified but more numerous and manageable. If physicians' self-protective licensing barriers fall, substantial numbers of these replacements will be other professionals, such as advanced practice nurses, pharmacists, and clinical social workers. An even larger cadre, however, will likely consist of "trained observers" who use decision support technologies, with expert back-up if needed, to assist individuals in caring for themselves.

Finally, the financial proceeds of successful industry restructuring should be diffused widely rather than appropriated by a privileged few. The most powerful effects would be to boost general wages by reducing the cost to private employers of compensating workers through health benefits, and to free up public resources currently invested in health for other uses. But a substantial amount of targeted public investment is also necessary, specifically

¹⁰⁴ Scholars have begun to speculate on the job-killing potential of new health technologies. See, e.g., Fazal Khan, *The 'Uberization' of Healthcare: The Forthcoming Legal Storm over Mobile Health Technology's Impact on the Medical Profession*, 26 HEALTH MATRIX 123 (2016).

¹⁰⁵ As the word suggests, "disrupting" health care will not be a smooth process. But it is under way for both profit and social contribution. For example, the Peterson Center on Healthcare is "a non-profit organization dedicated to making higher quality, more affordable healthcare a reality for all Americans [that] is working to transform U.S. healthcare into a high-performance system by finding innovative solutions that improve quality and lower costs, and accelerating their adoption on a national scale." *About the Peterson Center on Healthcare*, PETERSON CTR. ON HEALTHCARE, <https://petersonhealthcare.org/about-us> (last visited Nov. 8, 2017).

in education and social services that can ameliorate adverse social determinants of health more successfully than can be done by the health care system.

CONCLUSION

As this essay has explained, the United States is over-medicalized. President Eisenhower warned in 1961 that a military-industrial complex presented social, political, and economic risks of perpetual militarization; our medical-industrial complex has actually brought to fruition an analogous situation of perpetual medicalization. We must therefore turn our innovative energies, and our public policies, in a different direction.

At the same time, the essay has depicted U.S. health care as an industry that has failed to modernize, despite its reputation for advanced science and technological prowess. Whether health care is perceived primarily as a professional domain, a social right, an intimate personal need, or a flawed market, it also seems to be the last sector of post-war America whose economic transformation is now long overdue. Our challenge in recovering the massive resources currently trapped in the health care system is to avoid worsening economic inequality or social alienation. Instead, we must develop and execute a plan for recovering value and repurposing resources that enhances human capital and helps rebuild communities and American society as a whole.