

Original Research

Century-Long Trends in the Financing and Ownership of American Health Care

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Policy Points:

- Over the past century, the tax-financed share of health care spending has risen from 9% in 1923 to 69% in 2020; a large part of this tax financing is now the subsidization of private health insurance.
- For-profit ownership of health care facilities has also increased in recent decades and now predominates for many health subsectors. A rising share of physicians are now employees.
- US health care is, increasingly, publicly financed yet investor owned, a
 trend that has been accompanied by rising medical costs and, in recent
 years, stagnating or even worsening population health. A reconsideration of US health care financing and ownership appears warranted.

Context: Who pays for health care—and who owns it—determine what care is delivered, who receives it, and who profits from it. We examined trends in health care ownership and financing over a century.

Methods: We used multiple historical and current data sources (including data from the American Medical Association, the American Hospital Association, government publications and surveys, and analyses of Medicare Provider of Services files) to classify health care provider ownership as: public, private (for-profit), and private (not-for-profit). We used US Census data to classify physicians' employers as public, not-for-profit, or for-profit entities or "self-employed." We combined estimates from the official National Health Expenditures Accounts with other data sources to determine the public vs. private share of health care spending since 1923; we calculated a "comprehensive" public share metric that accounted for public subsidization of private health

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expenditures, mostly via the tax exemption for employer-sponsored insurance plans or government purchase of such plans for public employees.

Findings: For-profit ownership of most health care subsectors has risen in recent decades and now predominates in several (including nursing facilities, ambulatory surgical facilities, dialysis facilities, hospices, and home health agencies). However, most community hospitals remain not-for-profit. Additionally, over the past century, a growing share of physicians identify as employees. Meanwhile, the comprehensive taxpayer-financed share of health care spending has increased dramatically from 9% in 1923 to 69% in 2020, with taxpayer-financed subsidies to private expenditures accounting for much of the recent growth.

Conclusions: American health care is increasingly publicly financed yet investor owned, a trend accompanied by rising costs and, recently, worsening population health. A reassessment of the US mode of health care financing and ownership appears warranted.

Keywords: health care economics and organizations, health care financing, health policy, health care reform.

Background

A century ago, the grandfather of author D.U.H. performed ton-sillectomies on patients' kitchen tables, the useful pharmaceutical armamentarium consisted mostly of aspirin and morphine, and health insurance was a recent German invention not yet imported to the United States. In the interim, "surgicenters" replaced kitchen tables, hospitals have been transformed from mostly small, low-tech infirmaries to exemplars of technology, doctors began deploying a panoply of powerful and effective potions, >90% of Americans have gained health coverage, and health expenditures' share of gross domestic product has grown about sevenfold.

These structural shifts have been accompanied by dramatic changes in who pays for health care and who owns and controls it.

Current patterns of health care financing and ownership reflect historical cross-currents of public policy, corporate power, philanthropy, professional prerogatives, and patients' needs. Private ownership of hospitals, for instance, has long been the norm. Yet public hospitals have always played an important role, starting with the founding of New York's Bellevue Hospital in 1736 and a federal hospital system for sailors under the 1798 Act for the Relief of Sick and Disabled

Seamen, signed into law by John Adams. Today, the federally owned Veterans Affairs (VA) system—the descendant of the National Asylum for Disabled Volunteer Soldiers established under President Lincoln—is the nation's largest health system.

Ownership patterns in the private sector have also shifted. Since the 1980s, investor ownership of many types of health care facilities and physician practices has been rising.¹

On the insurance side, whereas third-party payment was dominated by employer-sponsored insurance (ESI) in the post–World War II period, Medicare's and Medicaid's enactment in the Civil Rights Era, and the Affordable Care Act's (ACA's) 2014 implementation have dramatically expanded public coverage. Meanwhile, the tax exemption for ESI continues to provide hidden taxpayer subsidies to private insurers.

These trends set the context of options for reform. For instance, in projecting government's costs for coverage expansions, the Congressional Budget Office (CBO) assumes that expenditures that are already tax-funded are potentially "usable" by new public insurance programs that absorb existing coverage schemes; for instance, the CBO projects that \$574 billion in savings would accrue to the federal government in 2030 by ending tax subsidies to ESI—savings that could offset the cost of universal publicly financed system.² The question of who owns health care facilities is also salient: ownership influences the cost and quality of care,^{3–6} and working conditions for physicians and other personnel.⁷ More fundamentally, who pays for health care—and who owns it—largely determines what (and where) care is delivered, who can use it, and who profits from its provision.

Previous analyses of health care financing and ownership have encompassed shorter time periods^{8–10} or specific types of providers¹¹; most neglect the growing taxpayer subsidies to ESI.¹²

We comprehensively assess century-long trends in public vs. private financing and ownership of care.

Study Data and Methods

Data

Health Care Ownership. We used multiple data sources to examine provider ownership in three categories: public, private (for-profit), and private (not-for-profit), using all available years of data (Appendix Note 1 provides details).

In brief, for hospitals (1923-2019), we obtained data on community hospitals from the American Hospital Association's (AHA's) Annual Surveys (1946-2019) and the American Medical Association's (AMA's) annual hospital survey (1923-24; 1934–1945), adjusted for comparability with the AHA data.

For psychiatric hospitals and mental health facilities (1945-2019), we used estimates from the AMA (1945), the AHA (1971-1994), and our own analyses of the National Mental Health Services Survey (N-MHSS) microdata (n = 98,091 facility years for 2010, 2012, 2014–2019). We additionally analyzed nonhospital mental health facilities in the N-MHSS.

For substance abuse treatment facilities (1987-2019), we analyzed microdata from the 1997–2019 National Survey of Substance Abuse Treatment Services (N-SSATS) (n=288,828 facility years) and published figures from the N-SSATS's predecessors, the National Drug and Alcoholism Treatment Unit Survey^{13,14} (1987, 1989–1993) and the Uniform Facility Data Set (1995-1996).¹⁵

For nursing homes (1939-2020), we used published data from a 1939 Census Bureau survey of nursing homes ^{16,17}; 1954, 1956, and 1961 national inventories conducted by the US Public Health Service (USPHS)^{18–20}; the Resident Places surveys I-III (1963, 1964, and 1969) conducted by the National Center for Health Statistics (NCHS)^{21–23}; and NCHS's analyses of the National Master Facility Index (1973, 1976, and 1980). For 1991–2020, we analyzed Medicare Provider of Service (M-POS) files.

For home health agencies (HHAs) (1944-2020), we used published data (1944-1969) from the USPHS (1944-1965) and the Social Security Administration (SSA) (1966-1969)²⁴; a published tabulation of Medicare-certified HHAs (1978-1984) by the Health Care Financing Administration (HCFA)¹; and our own analyses (for 1991–2020) of M-POS microdata (n = 288,631 provider years).

For hospices (1974-2020), we used 1974 reports of the first US hospice; 1979 data from a national survey by the Government Accounting Office²⁵; and our analyses of 1991–2020 M-POS (n = 91,261 provider years).

For Ambulatory Surgical Centers (ASCs) (1970-2020), we used published figures for $1970-89^{26}$ and analyzed M-POS for 1991-2020 (n = 122,418 provider years).

For dialysis facilities (1973-2020), we drew 1973–1988 data from HCFA^{27,28} and analyzed 1991–2020 M-POS (n = 146,151 provider years).

For physician practices, we analyzed microdata from the Current Population Survey (CPS) (1974-2020), which provides detailed data on type of employer (N=122,513 physician months).²⁹ We also analyzed samples from the US Census (1% samples for 1920, 1930, 1940, 1950, 1960, and 1970; 5% samples for 1980, 1990, and 2000), and the 2001–2019 American Community Survey (total n=264,596 physician year level records), which provide only two employment categories: self-employed and employee. We obtained all raw data from Integrated Public Use Microdata Series.^{29,30}

Health Care Financing—by Source. For 1960–2020, we drew on the Centers for Medicare and Medicaid Services' National Health Expenditures Accounts³¹; we defined "private expenditures" as payments made out-of-pocket, by private insurers or by worksite health care, "other private," and workmen's compensation. We defined Medicare, Medicaid, Children's Health Insurance Program, Department of Defense, VA, Indian Health Service, and other government payers as "public" payers. For 1929–1959, we used SSA estimates that categorized spending as public or private.³²

These figures classify several types of taxpayer-subsidized private health insurance expenditures (e.g., subsidized ACA marketplace plans, tax-subsidized ESI, and government-purchased private insurance for government employees) as 100% private, although most economists (and the US Treasury) consider the tax-subsidized portion of such expenditures to be tax-financed. Hence, as summarized below, to estimate a "comprehensive" metric of the public spending share, we recategorized some such expenditures as public (see Appendix Note 2 for details).

For the federal income tax subsidies to ESI, we used estimates by the US Treasury Department and the Joint Committee on Taxation (JCT) (1967-1997). For 1948–1966, we applied JCT estimates of the 1967 ratio of subsidy to employer-paid premiums to total employer-paid premiums each year. We used similar methods to calculate federal payroll-tax subsidies. For all years, we estimated state/local tax subsidization of ESI using the ratios of state/local to federal income tax based on Census Bureau and US Treasury data. For tax subsidies for some out-of-pocket medical costs, we used JCT estimates (1967-1997), Office of Management and Budget (OMB) estimates (1998-2019), extrapolation from

a published 1950 estimate,³³ and linear interpolation for 1942–1966. We used 1996–2020 OMB estimates of tax subsidies to Medical/Health Savings Accounts. Figures on direct federal subsidies for nongroup private insurance (including in ACA marketplaces) came from the OMB (2004-2020).

Health Care Financing—by Ownership of Provider. In supplementary analyses, we used 1985–2020 data from the Service Annual Survey (SAS)³⁴ to examine revenue received by hospitals, dialysis facilities, nursing facilities, and HHAs according to ownership (Appendix Note 3).

Analysis Plan

For each available data year, we first calculated the number of total facilities (or beds) per 1 million US residents (using population denominators from the US Census^{35,36}), as well as proportions, by ownership. We then assessed trends in public vs. private financing for each type of provider. Additionally, we examined the public share of overall personal health care expenditures (PHE), which excludes public health, research, and investments in buildings/equipment, both without and with inclusion of tax-subsidized private health expenditures (i.e., the "comprehensive" public share).

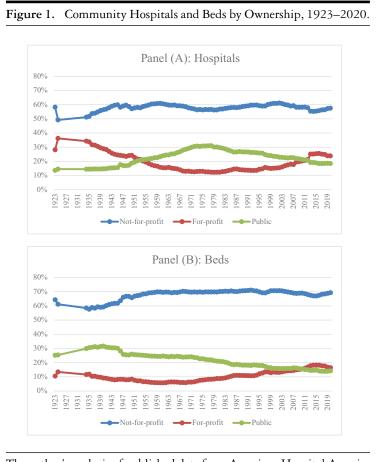
Finally, in supplementary analyses using the SAS data for four provider types, we calculated the portion of revenue flowing to "taxable" (i.e., for-profit) vs. "nontaxable" (i.e., not-for-profit and government) providers.

We performed analyses of M-POS, CPS, US Census Samples, American Community Survey, N-MHSS, and N-SSATS microdata using STATA/SE 17 (StataCorp). For population surveys, we used weights appropriate for nationally representative estimation.

The authors' institutions do not consider analyses of deidentified public-use data to constitute human subject research.

Results

We first describe trends in ownership share, public vs. private financing, and for-profit revenue share by provider type.



The author's analysis of published data from American Hospital Association's Annual Survey of Hospitals (1946-2020) as well as American Medical Association annual hospital survey (1923-1924 and 1934–1945), adjusted for comparability. The Methods section and Appendix Exhibit 1 provide details on methods.

Community Hospitals

Figure 1 displays 1923–2020 trends in hospitals and beds by ownership. In 1923, 58% of community hospitals were nonprofit, 28%

for-profit, and 14% public (authors' calculation using American Medical Association's annual hospital survey data³⁷; Appendix Note 1). However, for-profits constituted a much smaller share (11%) of total beds, reflecting the small size of the typically physician-owned proprietary hospitals of the day.

In the decades after the 1946 passage of the Hill-Burton Act, which subsidized nonprofit and public hospital construction, such hospitals increased in number, whereas for-profit facilities declined. In 1980, the proportion of for-profit hospitals hit a low of 12%; the public share peaked at nearly 30%, and the remainder (56%) were nonprofit (authors' calculation using American Hospital Association Annual Survey data³⁸; Appendix Note 1).

From the 1980s onward, the for-profit share of facilities (many of them chain-owned) and beds rose, whereas the public share declined, with for-profits surpassing public hospitals in 2012. In 2020, non-profits still owned most (57%) hospitals, as they had throughout the 20th century, whereas for-profits owned 24%, and public owned 18% (authors' calculation using American Hospital Association Annual Survey data³⁸; Appendix Note 1).

From 1990 to 2020, for-profits' share of hospital revenues rose from 10.2% to 11.3% (authors' calculation using Service Annual Survey data³⁹; Appendix Figure 1).

Appendix Figure 2 displays the share of US hospital spending derived from public sources 1929–2020 (excluding tax-subsidized private expenditures), which rose from 31.1% in 1929 to 52.0% in 1952 (authors' calculations using the *Compendium of National Health Expenditures Data*³²). It declined over the next 15 years—during ESI's rapid expansion—but spiked after the implementation of Medicare/Medicaid in mid-1966, from 35.4% to 54.7% in just two years (authors' calculations using the National Health Expenditure Data³¹). The public share then remained mostly stable and was at 57.5% in 2020 (authors' calculations using the National Health Expenditure Data³¹).

Mental Health Facilities

In 1945, most psychiatric hospitals were public (63.6%), with forprofits and nonprofits accounting for 27.9% and 8.5%, respectively (authors' calculation; Appendix Figure 3A).⁴⁰ Public facilities' share

plunged after 1970 and stabilized from the early 1990s onward (30.2% in 2019) (authors' calculation).³⁷ The for-profit share rose sharply in the 1970s-1990s, reaching 49.3% in 1992; a subsequent break in data sources obscures trends from 1993–2009. Thereafter, a consistent data source for 2010–2019 shows for-profits' share rising to 45.9% (authors' analysis of N-MHSS microdata). Finally, nonprofits' share also rose before falling in the last decade to 23.9% in 2019.

From 2010–2019, the not-for-profit share of other mental health facilities fell from 71.8% to 63.4%, whereas the for-profit share rose from 8.4% to 18.6%; the public share fell slightly (authors' analysis of N-MHSS microdata; Appendix Figure 3B).

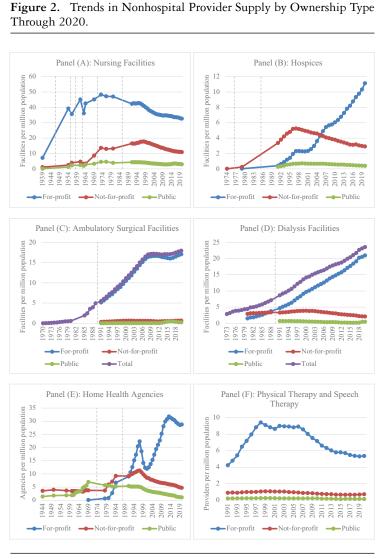
Substance Use Facilities

From 1987 to 2019, public facilities' share of all substance use facilities fell from 19.9% to 10.0%, for-profits' share grew from 14.4% to 39.7%, and not-for-profits' share fell from 65.7% to 50.4% (authors' analysis of N-SSATS microdata and calculations using references; Appendix Figure 4). 13–15

Nursing Homes

Figure 2A displays the number of nursing facilities by ownership category per million US population (authors' analysis of M-POS microdata and calculations using references as described in Appendix Note 1; ownership share and bed data appear in Appendix Figures 5 and 6). ^{16,18,19,20}p^{14,21–23,41,42} In 1939, of the 8.3 nursing homes (and 173 beds) per million US residents, 85.7% were for-profit. The number of facilities per capita increased almost sixfold over the next three decades, driven mostly by growth in for-profit facilities, peaking at 48.3 facilities per million in 1973 before gradually declining to 32.7 facilities per million in 2020. Since 1997, the not-for-profit share has dipped from 28% to 23%, whereas the for-profit share rose from 66% to 70% (authors' analysis of M-POS microdata).

Measured in revenues, for-profits' share has been rising since 1985, standing at 82% in 2020 (authors' calculation using Service Annual Survey data³⁹; Appendix Figure 1).



Vertical dashed lines represent discontinuities in data source. The authors' analysis of published data from multiple sources (detailed below and in Appendix Note 1) as well as Medicare Provider of Service (M-POS) microdata, 1991–2020. (A) 1939 facilities are nursing, convalescent, and rest homes; for-profit is proprietary facilities; public is government facilities; not-for-profit is nonprofit

Appendix Figure 2 displays payment sources to nursing homes. In the 1940s, private sources accounted for virtually all nursing home spending (authors' calculations using the *Compendium of National Health Expenditures Data*³²), although residents' Social Security income reportedly paid

facilities (sourced from National Office of Vital Statistics's Table 616). 1954 facilities are skilled nursing homes; for-profit is proprietary facilities; not-for-profit is church-related and nonprofit associations (sourced from Solon and Baney's Table 3¹⁸). 1956 facilities are skilled nursing homes; for-profit is proprietary facilities; not-for-profit is nonprofit facilities. N = 726 facilities (14% total) and n= 14,491 beds (9% total) had "unknown" ownership status this year and are not presented here (sourced from Brown's Table 119). 1961 facilities are skilled nursing homes; for-profit is proprietary facilities; not-for-profit is church-related and other voluntary nonprofit. 20p14 1963, 1964, and 1969 data are from Resident Places surveys; facilities are nursing and personal care homes providing nursing care as the type of services; for-profit is proprietary facilities; not-for-profit is nonprofit facilities; and public is government facilities. 1963 beds were calculated by multiplying average bed size by number of facilities; beds by ownership not available for 1969 (1963 sourced from National Center for Health Statistics, Wunderlich's Tables 1 and A²¹; 1964 from National Center for Health Statistics, Taube's Table 8²²; 1969 from National Center for Health Statistics, Mathis's Table F²³ and Gagnon's Table C⁴¹). 1973, 1976, and 1980 data are from the National Master Facility File. Facilities are nursing and related care homes (sourced from National Center for Health Statistics, Strahan's Tables B and E⁴²). The data exclude facilities with <25 beds; see Appendix for details. 1991-2020 data: authors' analysis of M-POS. Facilities included those active in Medicare classified as skilled nursing facility (SNF), a SNF/nursing facility (NF) (dually certified), SNF (distinct part), or NF. (B) 1974 data are the founding of the Connecticut Hospice. 1979 data come from survey of the General Accounting Office. 25p11 1991-2020 data are from the authors' analysis of the M-POS files. The data exclude "other" hospices (≤11% for all years). (C) 1973–1989 figures as compiled by Durant and Battaglia.²⁶ This source does not provide figures by ownership status in public/for-profit/not-for-profit; we present totals for comparison with later years. 1991–2020 data are from the authors' analysis of the M-POS files. (D) 1973-1979 (sourced from US Department of Health and Human Services' Table 1^{28}) and 1980–1988 (sourced from the Institute of Medicine's Table 6– 4^{27}) figures on dialysis facilities are from the Health Care Financing Administration; we lack data on ownership for 1973-1979 but present totals for comparison across periods. 1991-2020 data are from the authors' analysis of the M-POS files. (E) 1944-1969 figures are Public Health Service or Social Security Administration data compiled by Ryder and colleagues (sourced from Ryder, Stitt, and Elkin's Tables 1 and 2²⁴). 1978, 1980, 1982, and 1984 data are Health Care Financing Administration data compiled by the Institute of Medicine (sourced from the Institute of Medicine's Table 2.81). See the Appendix for details on how ownership was aligned across survey years. 1991-2020 data are from the authors' analysis of the M-POS files. (F) From the authors' analysis of the 1991-2020 M-POS files.

for about half by 1961.²⁰ The proportion financed directly from public sources rose sharply in the 1960s after Medicare/Medicaid's implementation; from the 1970's onward, most (e.g., 62.4% in 2020) have been publicly funded years (authors' calculations using the National Health Expenditure Data³¹).

Hospice

The Hospice of New Haven, established as a nonprofit in 1974, is generally considered the first modern American hospice.⁴³ Five years later, 59 hospices operated nationwide, the vast majority (93%) being nonprofits (authors' calculation; Figure 2B; Appendix Figure 5B).^{25p11}

During the 1980s (when Medicare and commercial insurers added hospice benefits) the number of hospices rose sharply, to 1,040 or 4.1 per million population (1991), driven by not-for-profit growth (only 10% were for-profit in 1991; authors' analysis of M-POS files). Over the next three decades, however, for-profit hospices proliferated and by 2020, constituted 70% of the total (authors' analysis of M-POS files).

ASCs

The first free-standing ASC, SurgiCenter, was established in Phoenix, Arizona, in 1970.²⁶ The number of ASCs grew steadily: by 2020, 18 centers/million operated nationwide (Figure 2C; authors' analysis of M-POS files). The vast majority (≥93%) of these facilities were forprofit throughout the 1991–2020 period (Appendix Figure 5C; authors' analysis of M-POS files).

Dialysis Facilities

In 1980, 4.4 per million dialysis facilities operated nationwide, most (65.9%) of them not-for-profit (Figure 2D and Appendix Figure 5D).²⁷ The next four decades saw an increase in the number of for-profit facilities; by 2020, 89.1% were for-profit, 9.0% were not-for-profit, and 2.0% were government (authors' analysis of M-POS files).

Between 1990 and 2020, the share of total revenue received by forprofit facilities rose from 82.6% to 93.4% (authors' calculation using Service Annual Survey data³⁹; Appendix Figure 1).

HHAs

In 1944, 3.6 per million not-for-profit and 1.4 per million public HHAs were in operation (authors' calculation; Figure 2 and Appendix Figure 5E).²⁴ The number of public agencies rose during the 1960s; no for-profit agencies were reported until 1969, when they constituted 1% of the 2,184 agencies in operation (authors' calculation).²⁴

Medicare lifted its prohibition against participation by for-profit HHAs in 1980, and the for-profit share rose to 38% by 1991 (authors' analysis of M-POS files). The early 1990s saw a sharp rise in the number of HHAs, followed by a sharp decline (as previously described⁴⁴) following the 1997 Balanced Budget Act, which transitioned from cost-based to prospective HHA payment. Over the next two decades, the number of not-for-profit agencies continued to fall, whereas the number of for-profit agencies nearly tripled, accounting for 83% of the 11,386 active agencies (and 77.6% of revenues [Appendix Figure 1]) by 2020 (authors' analysis of M-POS files).

In the early 1960s, only 16%-19% of HHA funding came from public sources (authors' calculation using the National Health Expenditure Data³¹; Appendix Figure 2). The proportion rose sharply after the passage of Medicare/Medicaid. By 1970, nearly half of HHA funding came from public sources, remaining stable until about 2000 before rising (peaking at 83% in 2010) in the wake of the Supreme Court's 1999 Olmstead decision and a 2000 change in Medicare payment policy (authors' calculation using the National Health Expenditure Data³¹).

Outpatient Physical/Speech Therapy

The number of not-for-profit and government outpatient physical or speech therapy providers remained stable from 1991–2020 (Figure 2), although the number of for-profit providers rose sharply from 1991 to 1999 and fell after 2006 (authors' analysis of M-POS files). In 2020, 86% were for-profit, 12% were not-for-profit, and 2% were public (Appendix Figure 1).

Pharmaceutical Companies

We assumed virtually all pharmaceutical companies were owned by forprofit companies throughout the study period and that for-profits received all revenues. In 1929, only 0.3% of pharmaceutical expenditures had a public source, a figure that remained low until the 1960s, when it began rising (Appendix Figure 1B); it was 22.6% in 2002 (just before the passage of Medicare Part D), then turned sharply upward, reaching 45.3% in 2020 (authors' calculation). 31,32

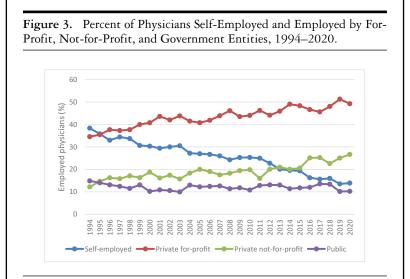
Physician Employment by Practice Ownership

In 1920, 85.7% of physicians reported being self-employed, with only 14.3% defined as employees (Appendix Figure 7); these proportions reversed by 2019, when only 18.5% reported self-employment (authors' analysis of 1% US Census samples for 1920, 1930, 1940, 1950, 1960, and 1970; 5% US Census samples for 1980, 1990, and 2000; and the 2001–2019 American Community Survey). Our CPS analyses show a similar drop in self-employment from 38.4% in 1991 to 13.9% in 2020 with all other physicians reporting employment by public, not-for-profit, or for-profit entities (Figure 3).

Appendix Figure 2C provides data on the unadjusted public share of health spending for physicians. In 1929, 4.5% of physician-services funding came from public sources, a proportion that jumped after the passage of Medicare/Medicaid and then gradually declined, reaching 46.8% in 2020 (authors' calculation). The public share was generally lower for dental and other professional services.

Insurance Overhead

Appendix Figure 1D provides the unadjusted public share of spending on "overhead," which includes costs of government health program administration (e.g., Medicare/Medicaid) and the overhead costs of private health insurers (including publicly funded, privately managed programs like Medicare Advantage and Medicaid Managed Care; authors' calculation). The unadjusted public share of total overhead was 1.8% in 1929; it spiked during World War II before again climbing in the 1960s. It subsequently stabilized at 20%-30% for some two decades before again climbing after 2000, reaching 48.1% in 2020 (authors' calculation). 31,32

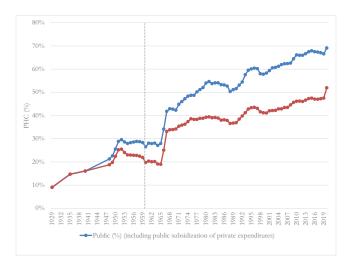


The authors' analysis of Current Population Survey Basic Monthly survey (1994-2020), averaged over each calendar year. See the Methods section and Appendix Note 1 for details.

Overall Trends in Health Care Financing by Public Sources

The public share of overall PHE (both with and without accounting for subsidies to private insurance and expenditures) is presented in Figure 4 (authors' analysis of 1960–2020 National Health Expenditures Accounts³¹ and 1929–1959 Social Security Administration health spending estimates³² with adjustments as described in Appendix Note 2). The public share, including and excluding public subsidization of private expenditures, rose from 9% in 1929 to more than a quarter in 1952. Subsequently, the two metrics of the public spending share progressively diverged. Without inclusion of public subsidies for private expenditures, the public share fell steadily during the 1950s, a period of rapid private insurance expansion, to 19% in 1965. However, the comprehensive public share (which classifies tax subsidies for ESI as public spending) appears stable during this decade. Both metrics of the public spending share rose sharply after the 1966 implementation of

Figure 4. Public Share of Personal Health Care Expenditures With and Without Inclusion of Public Subsidization of Private Health Expenditures, 1929–2020.



Vertical dashed lines represent discontinuities in data sources. The authors' analysis of the Centers for Medicare and Medicaid Services' 1960–2020 National Health Expenditures Accounts³¹ and 1929–1959 Social Security Administration health spending estimates,³² with numerous adjustments as described in the Methods section and Appendix Note 2. PHC, personal health care.

Medicare/Medicaid and more gradually from 1967 to 2020 (with some fluctuations); however, the comprehensive public share generally rose faster. The COVID-19 pandemic produced a further sharp uptick in both. In 2020, the public share of PHE without inclusion of taxpayer subsidization of private expenditures was 52%, whereas the comprehensive public share was 69% (authors' analysis of 1960–2020 National Health Expenditures Accounts³¹ with adjustments as described in Appendix Note 2).

From 1923 to 2020, the proportion of total public PHE accounted for by public subsidies of private expenditures (mostly private health insurance expenditures) rose from 0% to 25% (authors' analysis of 1960–

2020 National Health Expenditures Accounts³¹ and 1929–1959 Social Security Administration health spending estimates³² with adjustments as described in Appendix Note 2).

Discussion

Over the past century, three overarching trends are evident in the financing and ownership of US health care. First, the tax-financed share of health care spending has soared from 9% in 1923 to 69% in 2020. Taxpayer subsidies for private insurance accounted for a growing proportion of these public expenditures, rising from 0% in the 1920s to nearly a third in recent years (authors' analysis of 1960–2020 National Health Expenditures Accounts³¹ and 1929–1959 Social Security Administration health spending estimates³² with adjustments as described in Appendix Note 2). Second, for-profit ownership of health care facilities has increased, with a concomitant decline in public ownership. At present, investor ownership predominates for many types of providers, although a notable exception is community hospitals, which remain mostly not-for-profit. Finally, a decreasing share of physicians are self-employed, and more are employees, although the proportion reporting public employment has fallen.

Taken together, these findings indicate that US health care has become an increasingly publicly financed yet investor-owned enterprise.

In 1981, amidst growing concern over health care's commercialization, the Institute of Medicine (now the National Academy of Medicine) convened a workshop on "Trends in For-Profit Health Care" that produced an influential study examining early trends and potential harms of rising for-profit ownership. Subsequently, a welter of studies have characterized growth in for-profit health care ownership for specific provider types or time periods. ^{11,45}

Uniquely, our study delineates trends over a century across all major types of providers. Although the effects of for-profit ownership on access to or quality of care is beyond the scope of our analysis, other research suggests that these trends may have adverse clinical impacts, particularly for specific provider sectors.^{3,5} Hence, the ascending for-profit ownership of health care facilities may have concerning implications for care quality.

We found that the public share of health care spending rose over the past century, consistent with earlier analyses. $^{8-10,46}$ However, we assessed

a far broader time period and included virtually all categories of "tax expenditures." The financing trends we observed belie the widespread assumption that taxes fund only a minority of US health expenditures. The current high levels of public funding—much of it in the form of tax subsidies for private coverage—suggest that substantial public funds could be freed up for a universal coverage expansion that would replace existing coverage schemes, limiting the budgetary cost of such reform.

Our finding of a shift in physicians' employment status, with a transition from self-employment to employee, likely stems from several factors, such as the ongoing vertical integration of physician practices with hospitals and insurance firms, with large corporations (including private equity firms) directly employing a growing share of physicians. Similar trends, albeit over shorter time periods, have been observed in AMA surveys. 47 However, our Census data-based analysis finds much higher rates of physicians who classify themselves as employees—including at for-profit firms—than the AMA analyses. The difference may reflect, in part, physicians' perceptions of their work setting rather than their actual legal status. For instance, some physicians working in large physician-owned practices may self-identify as employees rather than self-employed, even if they have some practice ownership share. However, the trend from physicians-as-owners to physicians-as-employees is clear. This could have complex implications for work satisfaction, quality, and the cost of care. 48 For instance, integration may present opportunities for improved coordination of care across specialties; on the other hand, consolidation can drive up payment rates from private insurers⁴⁹ and might worsen clinician burnout.⁵⁰ The context in which integration takes place, including how care is financed and organized, is no doubt critical.

Our study is subject to some additional limitations. Although we made adjustments to produce consistent time series, the changing nature of health care, data sources, and collection methodologies reduces the comparability of data over time, requiring cautious interpretation of small changes. However, data inconsistencies are unlikely to account for the broad trends we observed. The meaning of our categories of provider ownership, moreover, have changed over time. An early 20th-century "for-profit" hospital was often a small physician-owned facility, whereas, today, such an institution is likely to belong to a large publicly traded corporate hospital chain. Similarly, "public" facilities may range from fully government-owned and operated institutions (e.g., military or

Veterans Health Administration hospitals) to municipal institutions with some degree of nonprofit governance. Finally, we do not attempt to address the full implications of ownership or financing for the quality, fairness, or costs of care.

Conclusion

The American health care system is increasingly investor owned yet publicly financed. These two developments are linked: public (and publicly subsidized) health care financing helped stimulate the emergence of powerful health care enterprises that displaced heavy industry at the commanding heights of the US economy in the postwar decades. The trend toward private gain financed by public expenditures is not unique to health care delivery. Over the past 40 years, public subsidies have been key to the rise, expansion, and profitability of the telecommunications, defense, banking, and real-estate sectors; Silicon Valley; and the pharmaceutical industry. At the same time, public subsidies are often invisible to American taxpayers, including in health care, where, as we observed, a rising portion of public dollars flow through private insurers. Such growth of what has been called the "submerged state," well described in other contexts, ⁵² may obscure the publicly funded basis of both social benefits and private profits.

The historical trends we observed have not been accompanied by salubrious results: medical costs continue to soar while administrative inefficiency worsens, ⁵³ even as Americans' health stagnates—or deteriorates. A reassessment of the logic of American health care financing and ownership appears warranted.

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Supplementary Material

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