EBRI Issue Brief
November 16, 2023 • No. 596

Use of Primary Care Among Workers and Dependents With Employment-Based Health Coverage: A Longitudinal Analysis

By Eden Volkov, Ph.D., and Paul Fronstin, Ph.D., Employee Benefit Research Institute

AT A GLANCE

Through the provision of workplace health benefits, employers not only attract high-quality employees, but also play a role in facilitating primary care use. Coverage of primary care through employment-based health plans helps employees stay healthy and can reduce the risk of serious health problems that can lead to high health care costs and lost productivity. In this *Issue Brief* we discuss efforts by employers to make primary care more accessible and affordable for their employees, such as offering direct primary care plans and work-site clinics, as well as state and federal level policies to increase the primary care work force. Using claims data from 2013–2021, we document how changes in primary care location and provider type have changed over time and coincide with these private- and public-sector policy changes. Finally, we show how the usual source of care has changed over time by age, gender, race, education, and socioeconomic status using data from the 2013–2020 Medical Expenditure Panel Survey (MEPS). We find:

- Among users of primary care, 95–97 percent utilized it in an office setting prior to 2020, but only 86 percent did so from 2020–2021 as employees began using telemedicine (7–8 percent) and urgent care clinics (3–4 percent) with greater frequency due to the COVID-19 pandemic.
- There has been a consistent downward trend in the share of employees whose primary care office visits are at a general/family practice, falling from 42 percent in 2013 to 37 percent in 2021. In addition, primary care office visits at internal medicine providers have fallen from 21 percent in 2013 to 17 percent in 2021. Finally, provision of primary care by a medical doctor has fallen from 9 percent in 2013 to 4 percent in 2021.
- In contrast, primary care provision by nurse practitioners and physician assistants has risen over time. The share of employees whose primary care office visits have been with a physician assistant rose from 2 percent in 2013 to 6 percent in 2021. The corresponding change for nurse practitioners has been from 4 percent in 2013 to 16 percent in 2021.
- The share of workers reporting a usual source of care has fallen from 2013–2020 and has occurred for all workers regardless of gender, race, age, education, or income.
- The decline in primary care office visits at general/family and internal medicine practices demonstrated by claims data is consistent with the decline in general/family and internal medicine practices being the usual source of care reported in the MEPS as are the increases in primary care provision by nurse practitioners and physician.
- Young, lower-income workers with some college, an associate degree, or a bachelor's degree are driving the trends in usual source of care away from general practices. Young workers with high levels of education and income are driving the trends in usual source of care away from internal medicine practices. Middle-aged workers with intermediate and high levels of education and income are driving the trends in usual source of care toward nurse practitioners. Finally, the rise in physician assistants as the usual source of care has been seen across all types of workers to a similar degree.

Eden Volkov produced this research as a Health Research Associate at the Employee Benefit Research Institute (EBRI). Paul Fronstin is Director of Health Benefits Research at EBRI. This *Issue Brief* was written with assistance from the Institute's research and editorial staffs. Any views expressed in this report are those of the author and should not be ascribed to the officers, trustees, or other sponsors of EBRI, Employee Benefit Research Institute-Education and Research Fund (EBRI-ERF), or their staffs. Neither EBRI nor EBRI-ERF lobbies or takes positions on specific policy proposals. EBRI invites comment on this research.

A Thank You to Our Funders: This study was conducted through the EBRI Center for Research on Health Benefits Innovation (EBRI CRHBI), with the funding support of the following organizations: Aon, Blue Cross Blue Shield Association, ICUBA, JP Morgan Chase, Pfizer, and PhRMA.

Table of Contents

Figures

Use of Primary Care Among Workers and Dependents With Employment-Based Health Coverage: A Longitudinal Analysis

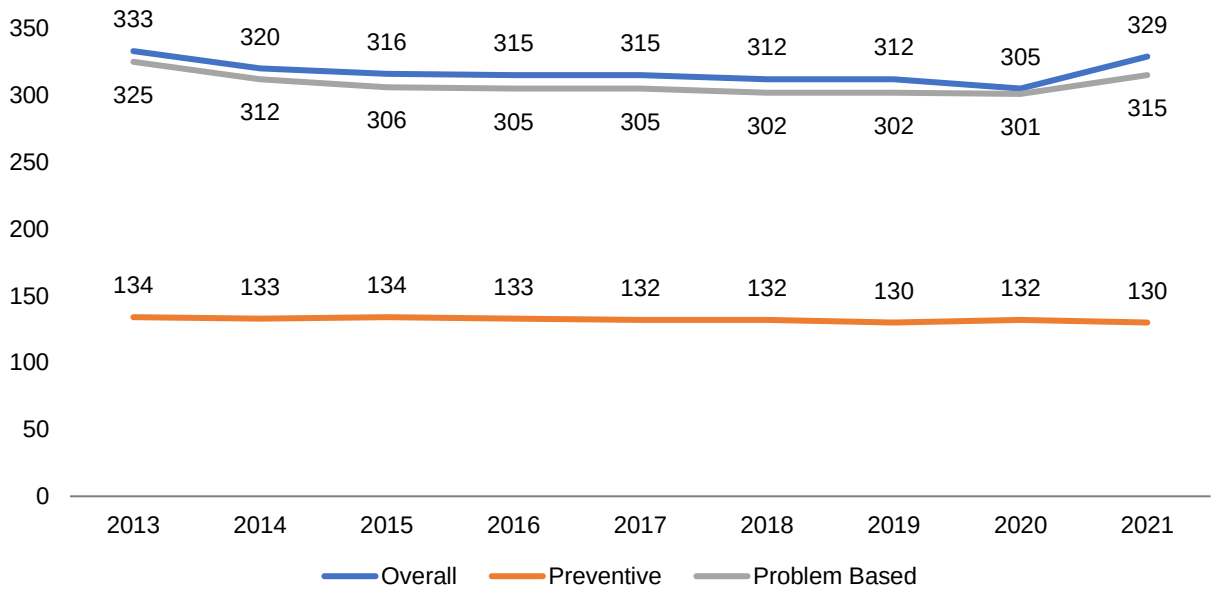
By Eden Volkov, Ph.D., and Paul Fronstin, Ph.D., Employee Benefit Research Institute

Primary Care in the United States: Importance, Challenges, and Opportunities for Access

From 2010–2020 the share of health spending in commercial health plans that was spent on primary care rose from 11.7 percent to 15.1 percent.[1] During that same period, the share of Americans with private health insurance reporting having a usual source of care fell from 83.3 percent to 76.8 percent, implying that the rise in the primary care spending share is driven by higher prices for primary care services and not expanded access to care.[2] Figure 1 also indicates that the number of primary care visits has been trending down from 2013–2020, with a spike in visits in 2021. The overall number of visits per 100 group plan enrollees fell from a high of 333 in 2013 to 301 in 2020, before increasing to 329 in 2021. This may be due to pent-up demand for health services after the 2020 lockdowns due to the COVID-19 pandemic. This downward trend has been driven by a decline in problem-based visits and not preventive visits (Figure 1).

Figure 1

Average Number of Primary Care Visits per 100 Enrollees, 2013–2021



Source: Employee Benefit Research Institute estimates based on administrative enrollment and claims data.

Expanding access to primary care is important because it can help patients identify problems earlier and avoid illness (Liss et al. 2021; Basu et al. 2019). Primary care providers (PCPs) provide preventive care, such as immunizations, screenings, and counseling on lifestyle changes. PCPs also help employees manage chronic conditions, such as diabetes, high blood pressure, and mental health disorders, and can coordinate care with other health care providers. This can help to avoid unnecessary tests and procedures and can lead to lower health care costs overall. Furthermore, having access to a primary care physician improves self-reported physical and mental health, and increases diagnoses of chronic conditions (Chua and Sommers 2014; Wallace and Sommers 2015; Kaufman et al. 2015; Sommers et al. 2016; Han et al. 2016; Wherry and Miller 2016; McMorrow et al. 2017; Cole et al. 2017; Winkelman and Chang, 2018; Cawley, Soni, and Simon 2018; Soni et al. 2018; Graves et al. 2020; Barbaresco, Courtemanche, and Qi 2021). These improvements in physical and mental health can translate to higher employee morale and productivity.

Given the importance of primary care, it is worrying that one-quarter of individuals with private insurance report not having a usual source of care.[3] Cost of care is most frequently reported as the most important barrier to having a usual source of care, making the rising percentage of commercially insured individuals in high-deductible health plans (HDHPs) over time an important factor to evaluate. Reducing the cost of care has been shown to have large benefits for children in commercially insured plans, increasing their use of primary care and decreasing their emergency room visits, all while keeping costs flat (Sepúlveda et al. 2016). Research has shown that the growing size of deductibles in employment-based coverage may discourage primary care utilization beyond mandated preventive screenings with zero cost sharing under the ACA.[4] Encouragingly, in 2019, an IRS policy change was made that will enable HDHPs paired with health savings accounts (HSAs) to cover the provision of chronic care services on a pre-deductible basis, which is already having some positive effects on health care use (Fronstin and Volkov 2023).

In addition to expanding pre-deductible coverage, employers are taking several other steps to encourage primary care use. First, a growing number of employers are offering direct primary care (DPC) arrangements. DPC plans are a type of health care plan that offers members direct access to a PCP for a monthly fee. The DPC model typically has lower out-of-pocket costs than traditional health insurance plans and can provide employees with more time and attention from their PCP, because in DPC staffing models, physicians have 500–1,000 patients, as opposed to the typical patient ratio of 2,000–2,500. DPC typically covers a wide range of primary care services, including annual physical exams, well-child visits, immunizations, sick visits, chronic disease management, and preventive care counseling. DPC can also be a good option for traditional health plan enrollees with high deductibles or out-of-pocket costs. However, because the DPC model typically does not cover specialty care — such as visits to cardiologists, dermatologists, or orthopedists — it is recommended that individuals use DPC to supplement their traditional coverage.

Employers that have chosen to offer a DPC arrangement have done so as a strategy to address several different health care challenges, like the limited availability of care in a geographic location, a population with a high incidence of chronic conditions, and affordability issues for a low-wage work force. Today, most employers pay the DPC monthly fee for their employees enrolled in a medical plan that is not HSA eligible. In 2020, the IRS proposed regulations that would allow an employer to reimburse an employee's membership fee for a DPC arrangement if the employee has a health reimbursement arrangement (HRA). If enacted, this rule could encourage more workers to take up DPC and thereby increase primary care use.

Another impediment to the wider adoption of the DPC model is that employees with HSAs cannot contribute to an HSA if they are in a DPC arrangement or use the funds in an HSA to pay for DPC. HSA-eligible plans have become an increasingly common type of health plan offered by employers. EBRI research indicates that the share of workers with an HSA-eligible plan has grown from 6 percent in 2013 to 13 percent in 2021.[5] Legislative efforts to expand access to DPC plans among HSA-eligible plan enrollees, like the Primary Care Enhancement Act (S. 2999/H.R. 3708), which would allow the coordination of DPC and high-deductible health plans, is an important step to further employers' efforts to increase primary care use among their employees.

An additional strategy used by many large employers, including Google, Walmart, and Apple, is to provide on-site or near-site health clinics for their employees. This strategy has the potential to increase primary care use and may also contribute to changes in the type of provider an employee sees for primary care services. Mercer's National Survey of Employer-Sponsored Health Plans found that 24 percent of employers with 5,000 or more employees offered a work-site clinic in 2012, nearly a third (31 percent) offered a primary care clinic in 2018, and another 14 percent were considering having one by 2020.[6] On-site and near-site health clinics offer employees convenient access to primary care services without having to leave work. On-site or near-site clinics provide numerous medical and health services for employees, like first aid, primary care, acute and specialty care, occupational health, and more. Health care providers at work-site clinics can give physicals, treat minor injuries, administer wellness exams, provide nutrition counseling, and even manage chronic conditions. Employees can also seek out guidance and treatment for various conditions and receive specialty referrals as needed. Just as with traditional health care plans, employers can choose to cover the costs for participating employees or extend benefits to their spouses and dependents.

One difference between off-site doctors' offices is that on-site and near-site health clinics are more likely to be staffed by nurse practitioners as opposed to physicians, as they can provide primary care that is commensurate to that of a physician and are less costly to employ.[7] According to a 2021 survey report released by the National Association of Worksite Health Centers (NAWHC), 75 percent of workers reported that their on-site clinic was staffed by a nurse practitioner, while 64 percent reported that a physician was on staff. As the number of employers offering work-site clinics grows and these clinics are increasingly staffed by nurse practitioners, we may expect to see a larger share of workers citing nurse practitioners as their primary care physician over time.

A third strategy employers are using to increase access to primary care is offering telemedicine services. EBRI research has shown that telemedicine can be as effective as in-person visits, at least for certain types of care, such as managing diabetes or allergies. In examining patients who had been diagnosed with diabetes, depression, or asthma, the research found that patients who used telemedicine tended to have more of their prescribed drugs on hand (69 percent coverage ratio) compared with patients who did not use telemedicine (61 percent coverage ratio) (Spiegel 2022). Use of telemedicine may continue to rise even after the COVID-19 pandemic, or it may have only acted as a bridge for patients seeking care for their health needs while their doctors' offices were closed. Furthermore, whether employees will continue to use telehealth as a substitute or complement to office-based primary care is an open question.

Finally, state and federal level public policies have expanded access to primary care and impacted the types of providers that act as primary care physicians. According to recent data reported by the Association of American Medical Colleges, a current shortage of physicians in the United States is anticipated to reach between 17,800 and 48,000 in the primary care setting by the year 2034.[8] This projection is representative of physicians practicing in the areas of family medicine, geriatric medicine, and general pediatrics.

One supply-side strategy used by states to address these projected shortfalls has been to grant full practice authority (FPA) to nurse practitioners. According to the American Academy of Nurse Practitioners (AANP), FPA is "the authorization of nurse practitioners to evaluate patients; diagnose, order, and interpret diagnostic tests; and initiate and manage treatments under the exclusive licensure authority of the state board of nursing." States with FPA legislation allow nurse practitioners to operate independently without collaboration from a medical board or supervision from a physician. As of January 2023, 32 states and the District of Columbia have authorized FPA for nurse practitioners. Research shows that the adoption of FPA for nurse practitioners leads to an increased supply of nurse practitioners working in primary care. As an example, within the first five years of adopting FPA, the "the number of Arizona-licensed nurse practitioners in the state increased 52 percent from 2002 to 2007, with the largest percent increase of nurse practitioners occurring in the rural classified counties" (Pohl et al. 2018). Thus, not only is FPA an effective public policy for increasing the primary care work force, but it also has the potential to reduce primary care access disparities in rural communities.

At the federal level, the Affordable Care Act's "Graduate Nurse Education Demonstration" provided federal funding to offset the clinical training costs of advanced practice nurses to increase the supply of nurse practitioners as a way to address the shortfall in primary care physicians. Research shows that the $200 million GNE Demonstration increased the supply of advanced practice nurses, particularly in primary care, by increasing the participation of clinical preceptors, or experienced licensed clinicians acting as teachers and coaches, to supervise nursing students during their clinical rotations in graduate degree programs. In particular, the GNE demonstration resulted in enrollment and graduation rates from a nurse practitioner degree program increasing by 67 percent and 76 percent, respectively (Porat-Dahlerbruch et al. 2022).

In this *Issue Brief,* we use two datasets to evaluate how trends in the place of service and provider type for primary care have evolved from 2013–2021. Using MarketScan claims data from 2013–2021, we show how the place of service and type of provider for primary care appointments have changed for group plan enrollees. We supplement this analysis using data from the 2013–2020 Medical Expenditure Panel Survey (MEPS) and show how usual sources of care have changed over time, segmenting the analysis by age, gender, race, education, and income group to account for the lack of race, education, and income data in the claims data. This is the first work to date showing how the primary care

landscape has changed for group plan enrollees. In addition to showing these trends, we also provide a discussion around how these trends coincide with private- and public-sector policies that have sought to expand access to primary care.

Data, Study Sample, and Methods

We use two data sources for this *Issue Brief*. To analyze trends in primary care use among group plan enrollees, we use the MarketScan® Commercial Claims and Encounters Database (CCAE), focusing on the outpatient claims file. The outcomes we focused on using the claims data were place of service and provider type. For each of the years spanning 2013 through 2021, we included all active employees, their spouses, and their dependents, ages 0–64. The sample is further limited to enrollees who had a primary care claim. In this analysis, primary care claims are defined using provider type codes (STDPROV) and procedure type codes (PROC1). The provider types that we classify as primary care are family practice, pediatrician, nurse practitioner, internal medicine, physician assistant, preventive medicine, medical doctor, and geriatric medicine. In addition to the claim being from any one of these providers, the claim also needs to refer to the following primary care procedure codes:

- Problem-based visit: 99201-99205, 99211-99215.
- Preventive visit: 99381-99387, 99391-99397.
- Telephone/online visit: 99441-99449.

Depending on the year, the resulting analytical sample consists of approximately 9.9 to 17.4 million individuals.

There are some limitations in our analysis. First, our estimates for 2020 and 2021 may not reflect a persistent trend in place of service or type of provider for primary care, as enrollees may have made temporary adjustments due to the lockdowns in response to the COVID-19 epidemic. Second, we cannot observe outcome trends by race, education, or income using the claims data. This is a limitation because it is important to understand whether these trends are systematic or are segmented by enrollee type.

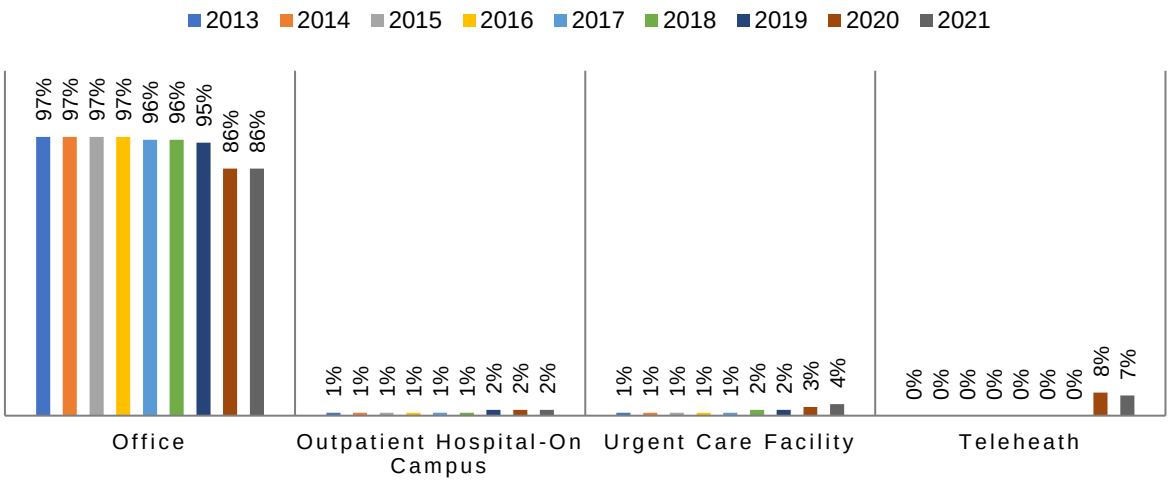
To address this concern, we use data from the 2013–2020 Medical Expenditure Panel Survey (MEPS) to supplement the claims data analysis and show how trends in usual source of care, a proxy for primary care, has changed by age, gender, income, race, and educational attainment among group plan enrollees. This will show whether changes in primary care provision have affected groups equally or differentially. The main outcome we evaluate using the MEPS is provider type for the usual source of care. Our analytical sample is the U.S non-institutionalized population with employment-based health insurance coverage, ages 19–64. Depending on the year, the resulting analytical sample consists of approximately 10,200 to 12,500 individuals.

Results

Trends in Primary Care Place of Service and Provider Type From 2013–2021

Figure 2 shows the trends in place of service for a primary care visit from 2013–2021 among group plan enrollees. The share of enrollees receiving primary care in an office setting was relatively flat from 2013–2019, with 97 percent receiving care in an office in 2013 and 95 percent doing so in 2019. The share of enrollees obtaining primary care in an office fell to 86 percent in 2020 and 2021, likely due to the lockdowns during the COVID-19 pandemic. Figure 2 further shows that, during the pandemic, enrollees shifted their primary care use from office settings to telehealth appointments and urgent care facilities. Telehealth appointments for primary care rose from 0 percent of all primary care appointments prior to 2020 to 8 percent in 2020 and 7 percent in 2021. In addition, the share of all primary care appointments at urgent care clinics rose from 1–2 percent pre-2020 to 3-4 percent in 2020 and 2021. Future analyses using postpandemic data are needed to ascertain whether these trends in primary care setting will persist or revert to their pre-2020 levels.

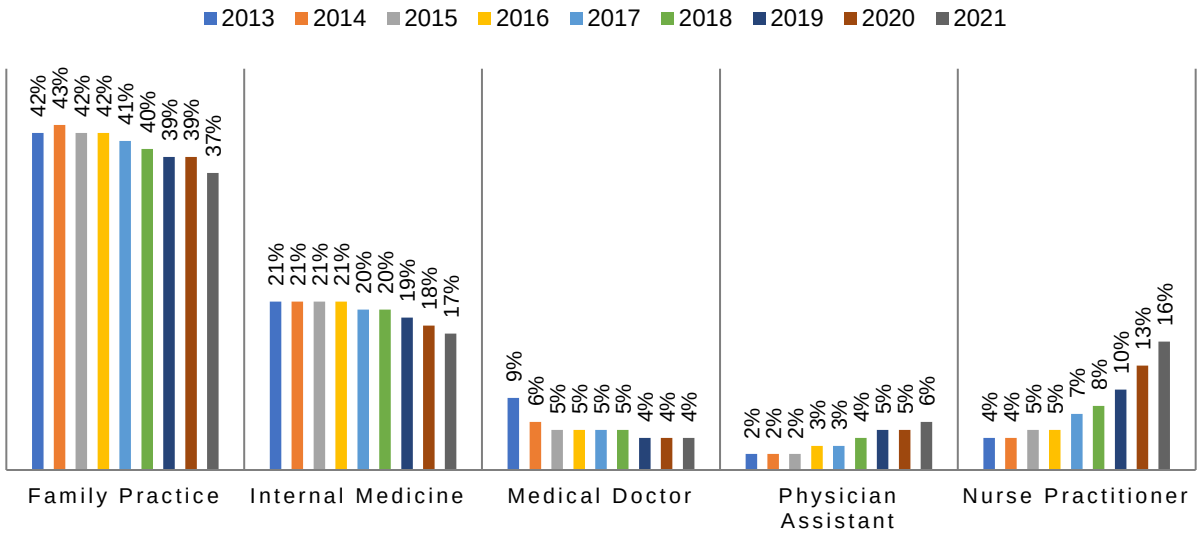
Figure 2
Most Common Place of Service for a Primary Care Visit, 2013–2021



Source: Employee Benefit Research Institute estimates based on administrative enrollment and claims data.

Figure 3 shows trends in primary care provider types among those who have primary care visits in an office setting. The most notable change is the decline in primary care office visits occurring at a family/general practice, internal medicine practice, and with a medical doctor. While 42 percent of all office-based primary care visits were at a family/general practice in 2013, by 2021, this share had fallen to 37 percent. For internal medicine practice, the share fell from 21 percent to 17 percent from 2013–2021. Finally, medical doctors were the providers for 9 percent of all primary care office visits in 2013, but this was the case for only 4 percent in 2021. Figure 3 further shows that the declines in primary care visits at a family/general practice, at an internal medicine practice, and with a medical doctor coincide with increases in primary care being provided by nurse practitioners and physician assistants. From 2013–2021, the share of all primary care office visits where the provider was a nurse practitioner rose from 4 percent to 16 percent. During this same period, the share of all primary care office visits where the provider was a physician assistant rose from 2 percent to 6 percent.

Figure 3
Provider Types for a Primary Care Office Visit, 2013–2021



Source: Employee Benefit Research Institute estimates based on administrative enrollment and claims data.

Increases in demand for health care services, fueled by increases in health insurance coverage through the Affordable Care Act (ACA) and the aging population, which has outpaced the supply of physicians, can explain the shifts in provider types. In particular, the growth in the primary care workforce has been fueled by nurse practitioners.[9] This growing reliance on nurse practitioners in the primary care work force can be explained by several supply and demand factors. On the supply side, the training pipeline for nurse practitioners is shorter and less costly relative to physicians. Also, several provisions of the ACA included grants for nurse-managed clinics and financial support for nurse practitioner training. On the demand side, the ACA included grants encouraging team-based models of care that incorporate nurse practitioners. In addition, major corporations are relying on nurse practitioners to staff their retail health clinics. Finally, on the demand side, a growing number of states have passed laws granting FPA. Research has shown that states that passed these laws saw the largest increases in the nurse practitioner work force (Pohl et al. 2018).

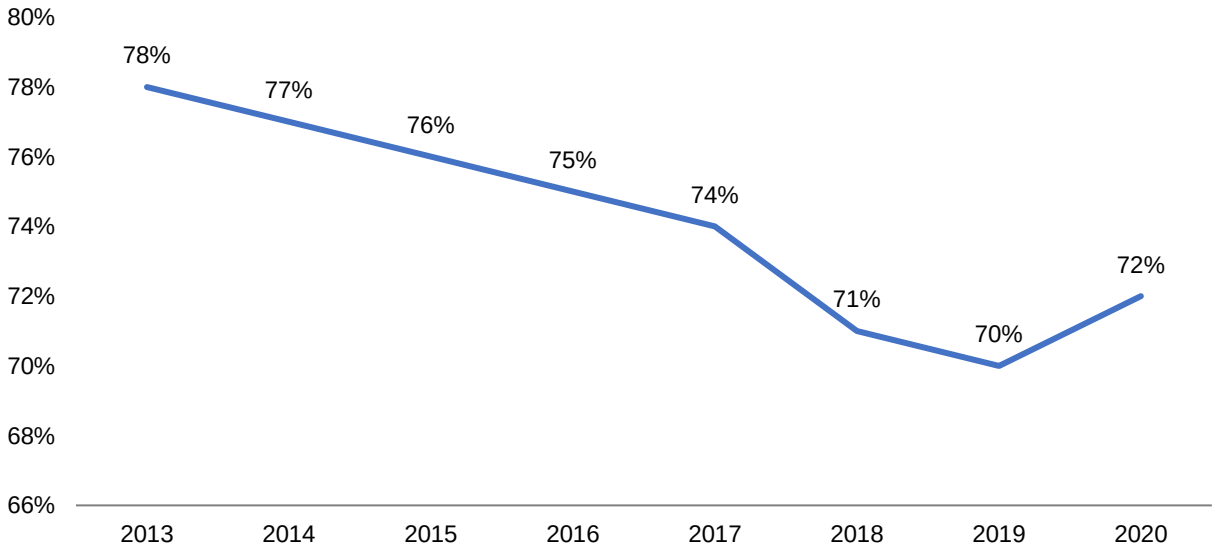
Our results in Figures 2 and 3 indicate that these changes in the primary care work force have impacted group plan enrollees. In the next set of findings, we explore whether the trends observed in Figure 2 are representative of all group plan enrollees or if they depend on individuals' demographic or socioeconomic characteristics.

Trends in Usual Source of Care by Individual Characteristics, 2013–2020

Before turning to trends in the provider type for the usual source of care, in Figures 4–9, we examine how the share of the population with a usual source of care has trended over time and how the share of group plan enrollees with a usual source varies by gender, race, age, education, and income.

Figure 4 shows that the share of group plan enrollees has fallen from 78 percent in 2013 to 72 percent in 2020.

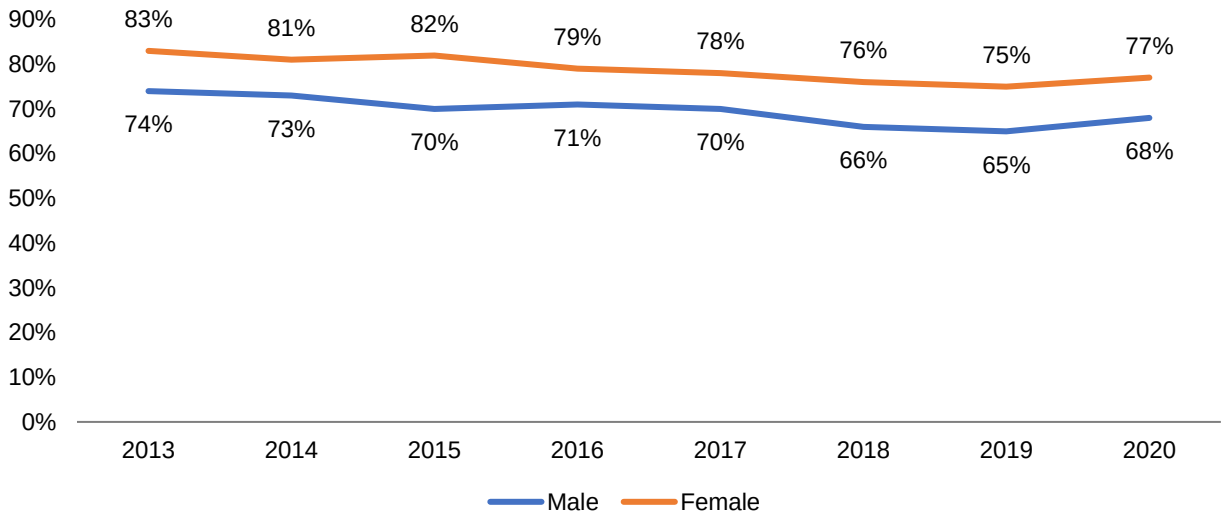
Figure 4
Has a Usual Source of Care, Overall, 2013–2010



Source: 2013–2020 Medical Expenditure Panel Survey (MEPS), ages 19–64.

Figure 5 shows that women are more likely to report having a usual source of care as compared with men. For both men and women, the share reporting a usual source of care fell over time. In 2013, 83 percent of women had a usual source of care, while 74 percent of men did. By 2020, only 77 percent of women had a usual source of care, while 68 percent of men did.

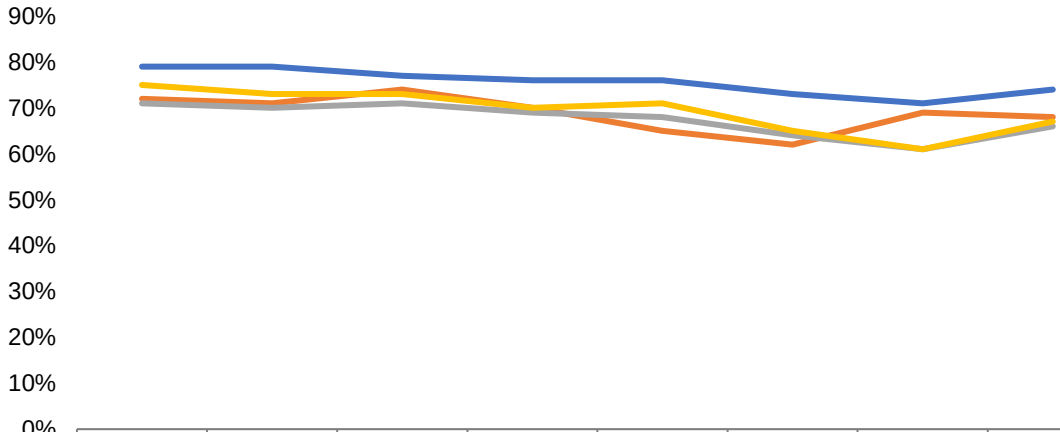
Figure 5
Has a Usual Source of Care, by Gender, 2013–2020



Source: 2013–2020 Medical Expenditure Panel Survey (MEPS), ages 19–64.

Figure 6 shows that White Americans are most likely to have a usual source of care. Across all racial groups, the share reporting a usual source of care fell over time. In 2013, 79 percent of White Americans had a usual source of care, 72 percent of Asian Americans had a usual source of care, 71 percent of Hispanic Americans had a usual source of care, and 75 percent of Black Americans had a usual source of care. By 2020, only 74 percent of White Americans had a usual source of care, 68 percent of Asian Americans had a usual source of care, 66 percent of Hispanic Americans had a usual source of care, and 67 percent of Black Americans had a usual source of care.

Figure 6
Has a Usual Source of Care, by Race, 2013–2020

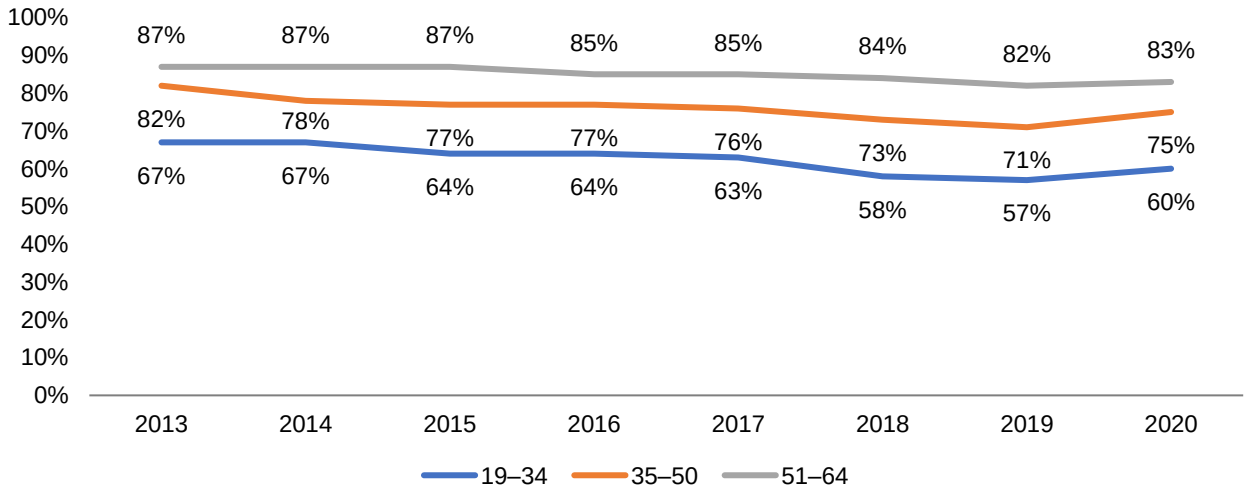


	2013	2014	2015	2016	2017	2018	2019	2020
White	79%	79%	77%	76%	76%	73%	71%	74%
Asian	72%	71%	74%	70%	65%	62%	69%	68%
Hispanic	71%	70%	71%	69%	68%	64%	61%	66%
Black	75%	73%	73%	70%	71%	65%	61%	67%

Source: 2013–2020 Medical Expenditure Panel Survey (MEPS), ages 19–64.

Figure 7 shows that older workers (ages 51–64) are most likely to have a usual source of care. In fact, the oldest workers (51–64) are 20–23 percentage points more likely to have a usual source of care relative to the youngest workers (19–34). Across all age groups, the share reporting a usual source of care fell over time. In 2013, 87 percent of workers ages 51–64 had a usual source of care, 82 percent of workers ages 35–50 had a usual source of care, and 67 percent of workers ages 19–34 had a usual source of care. By 2020, 83 percent of workers ages 51–64 had a usual source of care, 75 percent of workers ages 35–50 had a usual source of care, and 60 percent of workers ages 19–34 had a usual source of care. These trends show that the workers with the lowest share reporting having a usual source of care saw the largest decline over time as well.

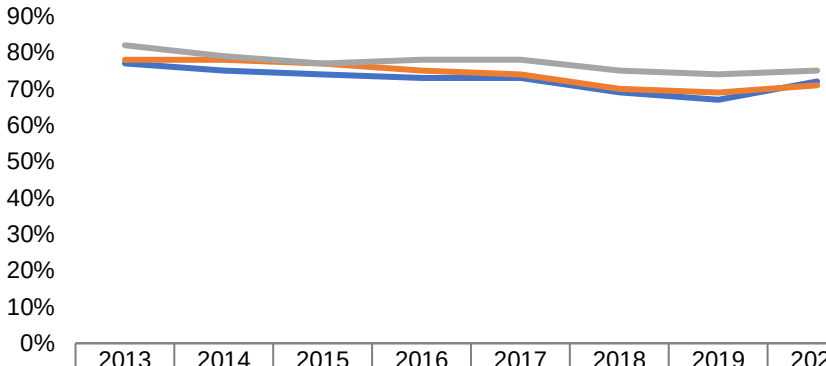
Figure 7
Has a Usual Source of Care, by Age, 2013–2020



Source: 2013–2020 Medical Expenditure Panel Survey (MEPS), ages 19–64.

Figure 8 shows that workers with more education are more likely to have a usual source of care. Still, across all education groups, the share saying that they had a usual source of care fell over time. In 2013, 82 percent of workers with a master's degree, a professional degree, or a Ph.D. had a usual source of care; 78 percent of workers with an associate degree, some college, or a bachelor's degree had a usual source of care; and 77 percent of workers with a high school degree or less had a usual source of care. By 2020, only 75 percent of workers with a master's degree, a professional degree, or a Ph.D. had a usual source of care; 71 percent of workers with an associate degree, some college, or a bachelor's degree had a usual source of care; and 72 percent of workers with a high school degree or less had a usual source of care.

Figure 8
Has a Usual Source of Care, by Education, 2013–2020

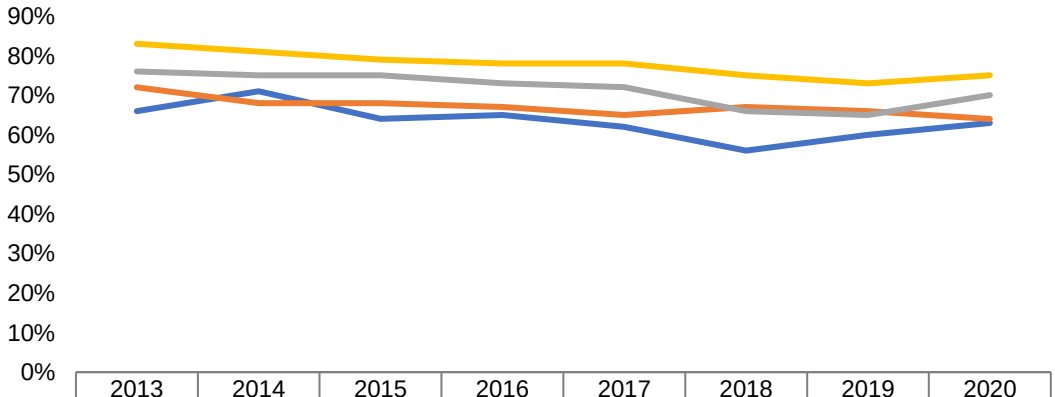


	2013	2014	2015	2016	2017	2018	2019	2020
High School or Less	77%	75%	74%	73%	73%	69%	67%	72%
Associate Degree, Some College, Bachelor's Degree	78%	78%	77%	75%	74%	70%	69%	71%
Master's Degree, Professional Degree, Ph.D.	82%	79%	77%	78%	78%	75%	74%	75%

Source: 2013–2020 Medical Expenditure Panel Survey (MEPS), ages 19–64.

Figure 9 shows that higher-income workers are more likely to have a usual source of care. Across all income groups, the share saying that they had a usual source of care fell over time. In 2013, 83 percent of high-income workers had a usual source of care, 76 percent of middle-income workers had a usual source of care, 72 percent of low-income workers had a usual source of care, and 66 percent of poor/near-poor workers had a usual source of care. By 2020, only 75 percent of high-income workers had a usual source of care, 70 percent of middle-income workers had a usual source of care, 64 percent of low-income workers had a usual source of care, and 63 percent of poor/near-poor workers had a usual source of care.

Figure 9
Has a Usual Source of Care, by Income Group, 2013–2020



	2013	2014	2015	2016	2017	2018	2019	2020
Poor/Near Poor	66%	71%	64%	65%	62%	56%	60%	63%
Low	72%	68%	68%	67%	65%	67%	66%	64%
Middle	76%	75%	75%	73%	72%	66%	65%	70%
High	83%	81%	79%	78%	78%	75%	73%	75%

Source: 2013–2020 Medical Expenditure Panel Survey (MEPS), ages 19–64.

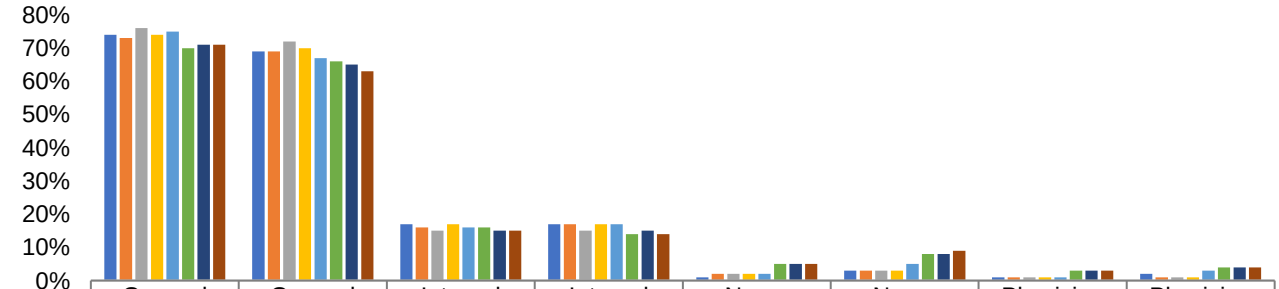
The cumulative trends in Figures 4–9 indicate that the share of workers with a usual source of care fell from 2013 to 2020, and this is independent of gender, age, race, education, or income. We next turn to examining how provider type has changed over time among workers with a usual source of care.

Trends in Usual Source of Care Provider Type by Individual Characteristics, 2013–2020

The results in Figures 10–14 indicate that the trends in primary care provider type observed in the claims data are generally identical to the trends in the reported provider type for the usual source of care in the MEPS. This indicates that all individuals with group health are generally experiencing similar changes in their primary care providers over time. Figures 10–14 also show that these trends are relatively constant across age, gender, race, income, and educational status, with effects being larger for some groups. These results are discussed in more detail below.

First, Figure 10 shows that both men and women were less likely to cite a general practice as their usual source of care from 2013–2020. The declines were largest for women. In 2020, 63 percent of women said a general practice was their usual source of care, while in 2013 the share was 71 percent. Seventy-four percent of men cited a general practice as their usual source of care in 2013, and 71 percent did so in 2020. Both men women were also less likely to say that an internal medicine practice was their usual source of care over time. Again, declines were largest for women. Seventeen percent of women cited an internal medicine practice as their usual source of care in 2013, while only 14 percent did so in 2020. By comparison, 17 percent of men also cited an internal medicine practice as their usual source of care in 2013, but 15 percent did so in 2020. While the share of men and women citing general and internal medicine practices as their usual source of care fell, the share saying nurse practitioners and physician assistants were the providers of their usual source of care rose from 2013–2020. In all years, women were more likely to say that a nurse practitioner or a physician assistant was their usual source of care. From 2013–2020, the share of women having a nurse practitioner as their usual source of care tripled from 3 percent to 9 percent. From 2013–2020, the share of men having a nurse practitioner as their usual source of care increased fivefold from 1 percent to 5 percent. Finally, the share of women having a physician assistant as their usual source of care doubled from 2 percent to 4 percent, and the share of men having a physician assistant as their usual source of care tripled from 1 percent to 3 percent from 2013–2020.

Figure 10
Provider Type of Usual Source of Care, by Gender, 2013–2020



	General Practice (Male)	General Practice (Female)	Internal Medicine (Male)	Internal Medicine (Female)	Nurse Practioner (Male)	Nurse Practioner (Female)	Physician Assistant (Male)	Physician Assistant (Female)
2013	74%	69%	17%	17%	1%	3%	1%	2%
2014	73%	69%	16%	17%	2%	3%	1%	1%
2015	76%	72%	15%	15%	2%	3%	1%	1%
2016	74%	70%	17%	17%	2%	3%	1%	1%
2017	75%	67%	16%	17%	2%	5%	1%	3%
2018	70%	66%	16%	14%	5%	8%	3%	4%
2019	71%	65%	15%	15%	5%	8%	3%	4%
2020	71%	63%	15%	14%	5%	9%	3%	4%

Source: 2013–2020 Medical Expenditure Panel Survey (MEPS), ages 19–64.

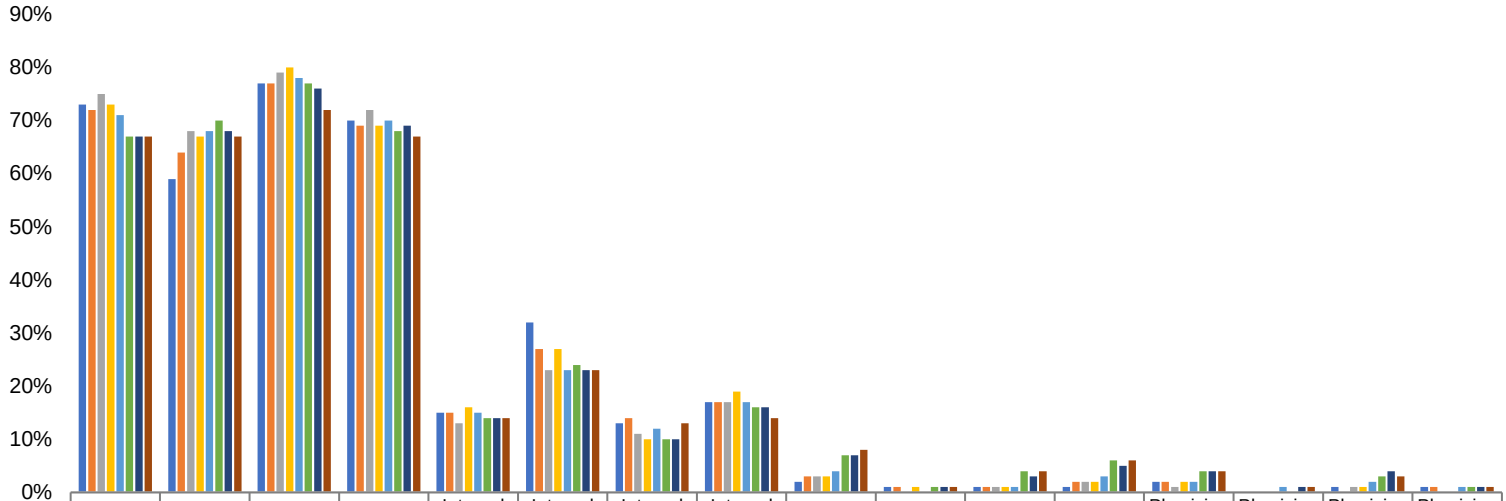
Figure 11 shows that there are differences in the provider type of the usual source of care across racial groups, but the overall trends are similar. Citing a general practice as the usual source of care is most common among Hispanic Americans, while citing an internal medicine practice as the usual source of care is most common among Asian Americans. White Americans are more likely than other groups to report a nurse practitioner or a physician assistant as their usual source of care. All racial groups except for Asian Americans experienced a decline in the share citing a general practice as their usual source of care from 2013–2020. In contrast, Asian Americans were more likely to say that a general practice was their usual source of care over time. Fifty-nine percent of Asian Americans cited a general practice as their usual source of care in 2013, while 67 percent did so in 2020. The decline in general practice as the usual source of care was largest for White Americans and smallest for African Americans. Seventy-three percent of White Americans said that a family practice was their usual source of care in 2013, while only 67 percent said this in 2020. Seventy-seven percent of Hispanic Americans said that a family practice was their usual source of care in 2013, while only 72 percent said so in 2020. And 70 percent of African Americans said that a family practice was their usual source of care in 2013, while only 67 percent cited a family practice as the usual source of care in 2020.

Asian Americans had the largest decline in the share reporting an internal medicine practice as their usual source of care from 2013–2020. This share fell from 32 percent in 2013 to 23 percent in 2020. The share of African Americans saying that an internal medicine practice was their usual source of care fell from 17 percent in 2013 to 14 percent in 2020. In contrast, the shares of White Americans and Hispanic Americans sighting an internal medicine practice as the usual source of care from 2013–2020 did not change. Fifteen percent of white Americans reported an internal medicine practice as their usual source of care in 2013 and 2020, while 13 percent of Hispanic Americans reported an internal medicine practice as their usual source of care in both years.

African Americans had the largest increase in the share of those reporting a nurse practitioner as their usual source of care from 2013–2020. While only 1 percent of African Americans cited a nurse practitioner as their usual source of care in 2013, 6 percent did so in 2020. White and Hispanic Americans were also more likely to say that a nurse practitioner was their usual source of care over time. Two percent of White Americans cited a nurse practitioner as their usual source of care in 2013, while 8 percent did so in 2020. One percent of Hispanic Americans said a nurse practitioner was their usual source of care in 2013, and 4 percent did so in 2020. Finally, the share of Asian Americans citing nurse practitioners as their usual source of care has been constant at 1 percent over time.

All racial groups except for African Americans were more likely to cite a physician assistant as their usual source of care from 2013–2020. The share of White Americans having a physician assistant as their usual source of care doubled from 2 percent to 4 percent, the share of Asian Americans having a physician assistant as their usual source of care increased from 0 percent to 1 percent, and this share increased threefold from 1 percent to 3 percent among Hispanic Americans. By comparison, the share of African Americans citing a physician assistant as their usual source of care has been constant at 1 percent.

Figure 11
Provider Type of Usual Source of Care, by Race and Ethnicity, 2013–2020



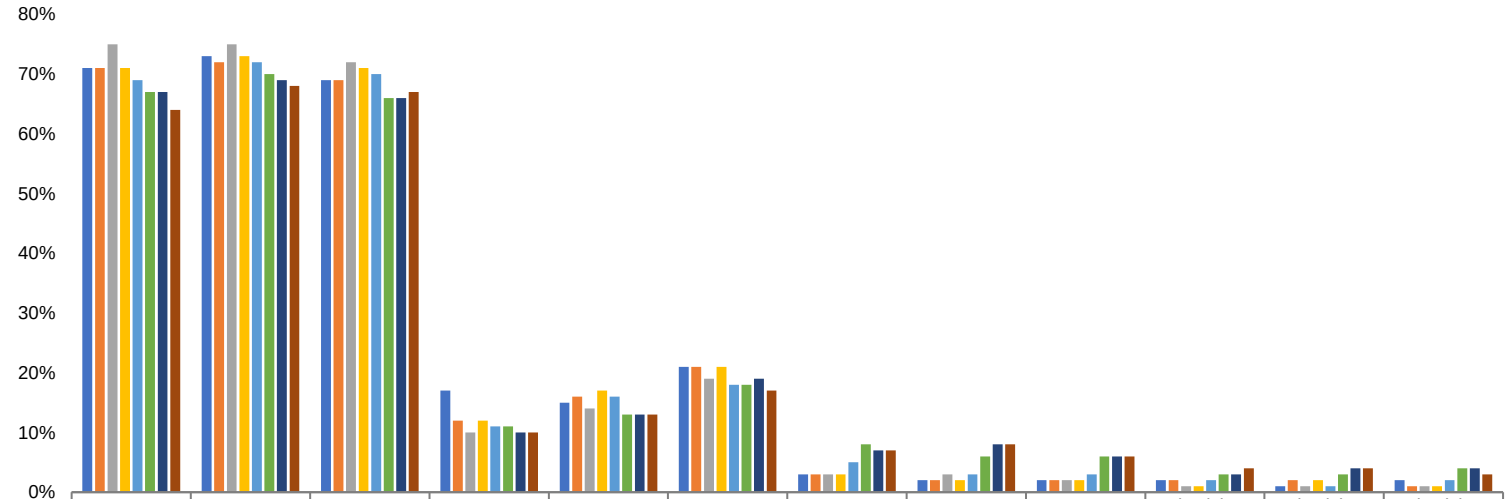
	GP (White)	GP (Asian)	GP (Hispanic)	GP (Black)	Internal Med (White)	Internal Med (Asian)	Internal Med (Hispanic)	Internal Med (Black)	NP (White)	NP (Asian)	NP (Hispanic)	NP (Black)	Physician Assistant (White)	Physician Assistant (Asian)	Physician Assistant (Hispanic)	Physician Assistant (Black)
2013	73%	59%	77%	70%	15%	32%	13%	17%	2%	1%	1%	1%	2%	0%	1%	1%
2014	72%	64%	77%	69%	15%	27%	14%	17%	3%	1%	1%	2%	2%	0%	0%	1%
2015	75%	68%	79%	72%	13%	23%	11%	17%	3%	0%	1%	2%	1%	0%	1%	0%
2016	73%	67%	80%	69%	16%	27%	10%	19%	3%	1%	1%	2%	2%	0%	1%	0%
2017	71%	68%	78%	70%	15%	23%	12%	17%	4%	0%	1%	3%	2%	1%	2%	1%
2018	67%	70%	77%	68%	14%	24%	10%	16%	7%	1%	4%	6%	4%	0%	3%	1%
2019	67%	68%	76%	69%	14%	23%	10%	16%	7%	1%	3%	5%	4%	1%	4%	1%
2020	67%	67%	72%	67%	14%	23%	13%	14%	8%	1%	4%	6%	4%	1%	3%	1%

*GP=general practice, NP=nurse practitioner.
Source: 2013–2020 Medical Expenditure Panel Survey (MEPS), ages 19–64.

Figure 12 shows that the general trends in usual sources of care away from general practices and internal medicine practices are driven by younger workers. This may reflect recent changes in the provision of primary care, like employer-provided on-site clinics. The share of workers ages 19–34 citing a general practice as their usual source of care fell from 71 percent to 64 percent from 2013–2020, while the share saying an internal medicine practice was their usual source of care fell from 17 percent to 10 percent. Older workers also experienced similar trends in their reported usual source of care, but the changes were not as stark; the share of workers ages 35–50 citing a general practice as their usual source of care fell from 73 percent in 2013 to 68 percent in 2020, while for workers ages 51–64, the corresponding decline was 69 percent to 67 percent. The share of workers ages 35–50 citing an internal medicine practice as their usual source of care fell from 15 percent to 13 percent from 2013 to 2020, and the corresponding decline for those ages 51–64 was 21 percent to 17 percent.

All age groups had large increases in the share of those using nurse practitioners and physician assistants as their usual source of care. The share of workers ages 19–34 citing nurse practitioners rose from 3 percent in 2013 to 7 percent in 2020, and the share citing physician assistants rose from 2 percent to 4 percent. The share of workers ages 35–50 citing nurse practitioners rose from 2 percent in 2013 to 8 percent in 2020, and the share citing physician assistants rose from 1 percent to 4 percent. Finally, the share of workers ages 51–64 reporting a nurse practitioner was their usual source of care rose from 2 percent to 6 percent, and the share citing a physician assistant rose from 2 percent to 3 percent from 2013–2020.

Figure 12
Provider Type of Usual Source of Care, by Age, 2013–2020



	GP (19–34)	GP (35–50)	GP (51–64)	Internal Med (19–34)	Internal Med (35–50)	Internal Med (51–64)	NP (19–34)	NP (35–50)	NP (51–64)	Physician Assistant (19–34)	Physician Assistant (35–50)	Physician Assistant (51–64)
2013	71%	73%	69%	17%	15%	21%	3%	2%	2%	2%	1%	2%
2014	71%	72%	69%	12%	16%	21%	3%	2%	2%	2%	2%	1%
2015	75%	75%	72%	10%	14%	19%	3%	3%	2%	1%	1%	1%
2016	71%	73%	71%	12%	17%	21%	3%	2%	2%	1%	2%	1%
2017	69%	72%	70%	11%	16%	18%	5%	3%	3%	2%	1%	2%
2018	67%	70%	66%	11%	13%	18%	8%	6%	6%	3%	3%	4%
2019	67%	69%	66%	10%	13%	19%	7%	8%	6%	3%	4%	4%
2020	64%	68%	67%	10%	13%	17%	7%	8%	6%	4%	4%	3%

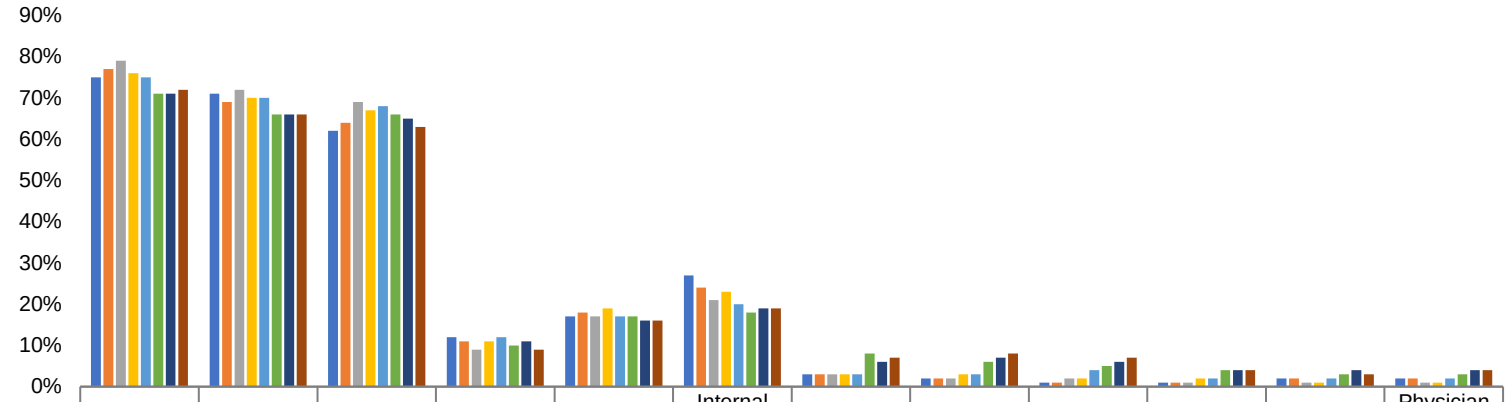
*GP=general practice, NP=nurse practitioner.
Source: 2013–2020 Medical Expenditure Panel Survey (MEPS), ages 19–64.

Figure 13 shows that there are differences in the provider type of the usual source of care by educational attainment, but the general trends are similar across education groups. Workers with a high school degree or less are most likely to have a general practice be their usual source of care. The share citing an internal medicine practice as the usual source of care increases with educational attainment. Historically, workers with a high school degree or less were more likely than workers with more education to cite a nurse practitioner as the usual source of care, but there has been convergence across education groups over time. Finally, workers with more education were once more likely to report a physician assistant as their usual source of care, but there has been convergence over time in this area as well.

The decline in the share of workers reporting a general practice as their usual source of care is driven by workers with a high school degree or less, while the decline in the share of workers reporting an internal medicine practice as the usual source of care is driven by workers with a master's degree, a professional degree, or a Ph.D. The share of workers with a high school degree or less citing a general practice as their usual source of care fell from 75 percent in 2013 to 72 percent in 2020. The corresponding decline for workers with some college, an associate degree, or a bachelor's degree was 71 percent to 66 percent. For workers with a master's degree, professional degree, or a Ph.D., the share was relatively flat over time, rising from 62 percent to 63 percent from 2013–2020. The share of workers with a high school degree or less that reported an internal medicine practice was their usual source of care fell from 12 percent to 9 percent from 2013–2020. This share was relatively flat and only fell from 17 percent to 16 percent among workers with some college, an associate degree, or a bachelor's degree. The corresponding decline was largest for workers with a master's degree, a professional degree, or a Ph.D., falling from 27 percent in 2013 to 19 percent in 2020.

Workers with a master's degree, professional degree, or a Ph.D. are driving the increased share of workers reporting a nurse practitioner as their usual source of care, while workers with a high school degree or less are driving the increases in the share of workers reporting physician assistants as their usual source of care. While only 3 percent of workers with a high school degree or less cited a nurse practitioner as their usual source of care in 2013 seven percent did so in 2020. This share quadrupled from 2 percent to 8 percent among workers with some college, an associate degree, or a bachelor's degree. The corresponding rise was the largest among those with a master's degree, a professional degree, or a Ph.D., rising from 1 percent to 7 percent from 2013–2020. Workers with a high school degree or less experienced the largest increase in the share reporting a physician assistant as their usual source of care, rising from 1 percent in 2013 to 4 percent in 2020. The corresponding rise for those with some college, an associate degree, or a bachelor's degree was 2 percent to 3 percent, and for those with a master's degree, a professional degree, or a Ph.D., the share rose from 2 percent to 4 percent.

Figure 13
Provider Type of Usual Source of Care, by Educational Attainment, 2013–2020



	GP (high school or less)	GP (some coll., associate, bachelor's)	GP (master's, prof. degree, Ph.D.)	Internal Med (high school or less)	Internal Med (some coll., associate, bachelor's)	Internal Med (master's, prof. degree, Ph.D.)	NP (high school or less)	NP (some coll., associate, bachelor's)	NP (master's, prof. degree, Ph.D.)	Physician Assistant (high school or less)	Physician Assistant (some coll., associate, bachelor's)	Physician Assistant (master's, prof. degree, Ph.D.)
2013	75%	71%	62%	12%	17%	27%	3%	2%	1%	1%	2%	2%
2014	77%	69%	64%	11%	18%	24%	3%	2%	1%	1%	2%	2%
2015	79%	72%	69%	9%	17%	21%	3%	2%	2%	1%	1%	1%
2016	76%	70%	67%	11%	19%	23%	3%	3%	2%	2%	1%	1%
2017	75%	70%	68%	12%	17%	20%	3%	3%	4%	2%	2%	2%
2018	71%	66%	66%	10%	17%	18%	8%	6%	5%	4%	3%	3%
2019	71%	66%	65%	11%	16%	19%	6%	7%	6%	4%	4%	4%
2020	72%	66%	63%	9%	16%	19%	7%	8%	7%	4%	3%	4%

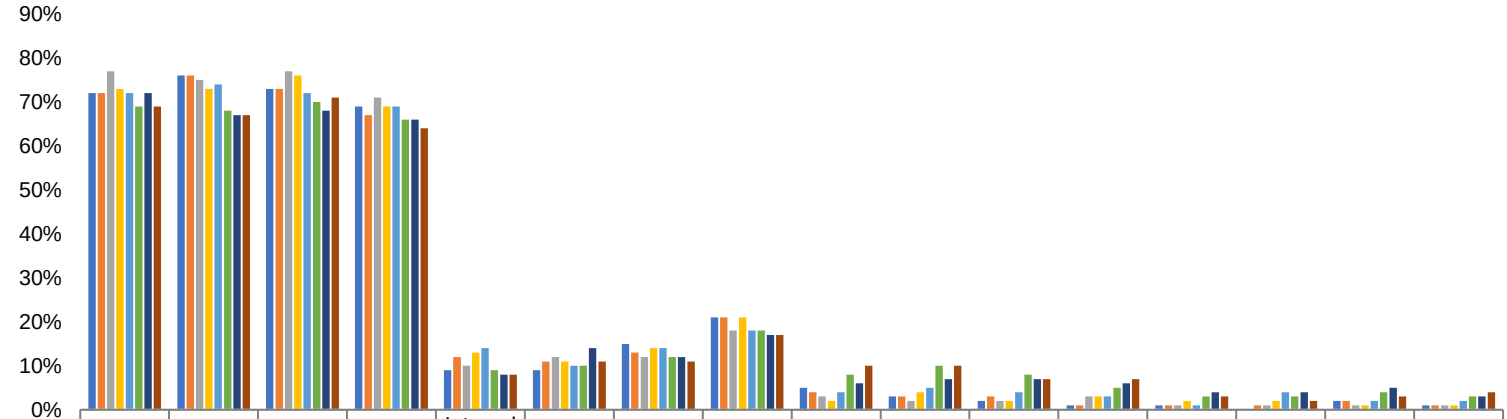
*GP=general practice, NP=nurse practitioner.
Source: 2013–2020 Medical Expenditure Panel Survey (MEPS), ages 19–64.

Finally, Figure 14 indicates that the general trends in provider type of the usual source of care differ somewhat by income group. First, while all income groups had a decline in the share reporting a general practice as their usual source of care, only low-, middle-, and high-income workers experienced this declining share over time. In contrast, the share of poor/near-poor workers reporting a general practice as their usual source of care was constant at 72 percent from 2013–2019, and 2020 was the only year this share declined (to 69 percent), likely due to the COVID-19 pandemic. Seventy-six percent of low-income workers cited a general practice as their usual source of care in 2013, while only 67 percent did so in 2020. This share declined from 73 percent to 71 percent among middle-income workers, and it declined from 69 percent to 64 percent among high-income workers.

Furthermore, not all income groups had a declining share reporting an internal medicine practice as their usual source of care. The share was relatively flat for poor/near-poor workers, only falling slightly from 9 percent to 8 percent from

2013–2020. The share actually rose for low-income workers, from 9 percent in 2013 to 11 percent in 2020. Middle- and high-income workers drove the decline in the share of workers citing an internal medicine practice as their usual source of care. The share of middle-income workers saying an internal medicine practice was their usual source of care fell from 15 percent to 11 percent from 2013–2020, and the corresponding decline for high-income workers was 21 percent to 17 percent. Workers across all income groups had higher shares reporting nurse practitioners and physician assistants as the usual source of care, with the increases being driven by high-income workers. The share of poor/near-poor workers citing a nurse practitioner as their usual source of care doubled from 5 percent to 10 percent from 2013–2020. This share rose from 3 percent to 10 percent among low-income workers, from 2 percent to 7 percent among middle-income workers, and from 1 percent to 7 percent among high-income workers. The share of poor/near-poor workers citing physician assistants as their usual source of care rose from 1 percent to 3 percent from 2013–2020. While no low-income workers cited physician assistants as their usual source of care in 2013, 2 percent did so in 2020. The share of middle-income workers citing physician assistants as the usual source of care rose from 2 percent to 3 percent, and the corresponding increase among high-income workers was 1 percent to 4 percent.

Figure 14
Provider Type of Usual Source of Care, by Income Group, 2013–2020



	GP (poor/ near poor)	GP (low)	GP (middle)	GP (high)	Internal Med (poor/ near poor)	Internal Med (low)	Internal Med (middle)	Internal Med (high)	NP (poor/ near poor)	NP (low)	NP (middle)	NP (high)	PA (poor/ near poor)	PA (low)	PA (middle)	PA (high)
2013	72%	76%	73%	69%	9%	9%	15%	21%	5%	3%	2%	1%	1%	0%	2%	1%
2014	72%	76%	73%	67%	12%	11%	13%	21%	4%	3%	3%	1%	1%	1%	2%	1%
2015	77%	75%	77%	71%	10%	12%	12%	18%	3%	2%	2%	3%	1%	1%	1%	1%
2016	73%	73%	76%	69%	13%	11%	14%	21%	2%	4%	2%	3%	2%	2%	1%	1%
2017	72%	74%	72%	69%	14%	10%	14%	18%	4%	5%	4%	3%	1%	4%	2%	2%
2018	69%	68%	70%	66%	9%	10%	12%	18%	8%	10%	8%	5%	3%	3%	4%	3%
2019	72%	67%	68%	66%	8%	14%	12%	17%	6%	7%	7%	6%	4%	4%	5%	3%
2020	69%	67%	71%	64%	8%	11%	11%	17%	10%	10%	7%	7%	3%	2%	3%	4%

*GP=general practice, NP=nurse practitioner, PA=physician assistant.
Source: 2013–2020 Medical Expenditure Panel Survey (MEPS), ages 19–64.

The cumulative findings shown in Figures 9–13 indicate that young, lower-income workers with some college, an associate degree, or a bachelor's degree are driving the trends in usual source of care away from general practices. Young workers with high levels of education and income are driving the trends in usual source of care away from internal medicine practices. Middle-aged workers with intermediate and high levels of education and income are driving the trends in usual source of care toward nurse practitioners. Finally, the rise in physician assistants as the usual source of care has been seen across all types of workers to a similar degree.

Conclusion

The trends in place of service and usual source of primary care reported in this *Issue Brief* are consistent with ACA and state-level policies facilitating the growth in the nurse practitioner primary care work force, as well as the continued proliferation of work-site clinics among large employers. To meet the increasing demand for primary care as the U.S. population ages, but also due to large insurance expansions after the implementation of the 2010 ACA, the increased supply of nurse practitioners is helping address the primary care work force shortage. This increased supply of nurse practitioners is reflected in the growing share of employees who cite a nurse practitioner as their primary care physician and their usual source of care. At the same time, the share of employees visiting general/family and internal medicine practices for their primary care needs has fallen. The shift away from seeking primary care at a general practice has been most pronounced among young, lower-income workers with some college, an associate degree, or a bachelor's degree. Young workers with high levels of education and income are driving the trends in usual source of care away from internal medicine practices. While all employees are more likely to be seeing a nurse practitioner for their primary care visits, middle-aged workers with intermediate and high levels of education and income are driving these trends.

These trends began years before the 2020 pandemic and will likely continue as additional states grant FPA to nurse practitioners and as more large employers invest in work-site clinics. An open question is how the changing primary care work force will impact primary care costs and use of health care services. Exisiting evidence indicates that the growing nurse practionitoner prescence has the potential to lower costs and increase acccess to care. However, what we have seen so far has been the opposite. From 2010–2020, the share of health spending in commercial health plans that was put toward primary care rose 30 percent, but the share of Americans with private health insurance reporting having a usual source of care fell 8 percent. Understanding why the shift toward nurse practitioners hasn't resulted in lower costs or improved access to care is an important puzzle for public policy to address given the importance of primary care for employers and employees.

References

Barbaresco, Silvia, Charles J. Courtemanche, and Yanling Qi. "Impacts of the Affordable Care Act dependent coverage provision on health-related outcomes of young adults." *Journal of health economics* 40 (2015): 54-68.

Basu, Sanjay, et al. "Association of primary care physician supply with population mortality in the United States, 2005-2015." *JAMA internal medicine* 179.4 (2019): 506-514.

Cawley, John, Aparna Soni, and Kosali Simon. "Third year of survey data shows continuing benefits of Medicaid expansions for low-income childless adults in the US." *Journal of general internal medicine* 33 (2018): 1495-1497.

Cole, Megan B., et al. "At federally funded health centers, Medicaid expansion was associated with improved quality of care." *Health Affairs* 36.1 (2017): 40-48.

Chua, Kao-Ping, and Benjamin D. Sommers. "Changes in health and medical spending among young adults under health reform." *Jama* 311.23 (2014): 2437-2439.

Fronstin, Paul, and Eden Volkov, "The Impact of Expanding Pre-Deductible Coverage in HSA-Eligible Health Plans on Use of Health Care Services," *EBRI Issue Brief*, no. 588 (Employee Benefit Research Institute, August 17, 2023)

Graves, John A., et al. "Medicaid Expansion Slowed Rates Of Health Decline For Low-Income Adults In Southern States: An analysis of the impact of Medicaid expansion on the self-reported health of low-income older nonelderly adults living in the South." *Health Affairs* 39.1 (2020): 67-76.

Han, Xuesong, et al. "The Affordable Care Act and cancer stage at diagnosis among young adults." *JNCI: Journal of the National Cancer Institute* 108.9 (2016): djw058.

Kaufman, Harvey W., et al. "Surge in newly identified diabetes among Medicaid patients in 2014 within Medicaid expansion states under the Affordable Care Act." *Diabetes care* 38.5 (2015): 833-837.

Liss, David T., et al. "General health checks in adult primary care: a review." *Jama* 325.22 (2021): 2294-2306.

McMorrow, Stacey, et al. "Medicaid expansion increased coverage, improved affordability, and reduced psychological distress for low-income parents." *Health Affairs* 36.5 (2017): 808-818.

Pohl, Joanne M., et al. "Primary care workforce data and the need for nurse practitioner full practice authority." *Health Affairs Forefront* (2018).

Porat-Dahlerbruch J, Aiken LH, Todd B, Cunningham R, Brom H, Peele ME, McHugh MD. Policy Evaluation Of The Affordable Care Act Graduate Nurse Education Demonstration. Health Aff (Millwood). 2022 Jan;41(1):86-95. doi: 10.1377/hlthaff.2021.01328. PMID: 34982635; PMCID: PMC9022679.

Sepúlveda, Martín-J., et al. "Elimination of the out-of-pocket charge for children's primary care visits: An application of value-based insurance design." *The Journal of Pediatrics* 175 (2016): 195-200.

Sommers, Benjamin D., et al. "Changes in utilization and health among low-income adults after Medicaid expansion or expanded private insurance." *JAMA internal medicine* 176.10 (2016): 1501-1509.

Soni, Aparna, et al. "Effect of Medicaid expansions of 2014 on overall and early-stage cancer diagnoses." *American journal of public health* 108.2 (2018): 216-218.

Spiegel, Jake, "The Webcam Will See You Now: A Review of Telemedicine During the COVID-19 Era," *EBRI Issue Brief*, no. 528 (Employee Benefit Research Institute, April 1, 2021).

Wallace, Jacob, and Benjamin D. Sommers. "Effect of dependent coverage expansion of the Affordable Care Act on health and access to care for young adults." *JAMA pediatrics* 169.5 (2015): 495-497.

Winkelman, Tyler NA, and Virginia W. Chang. "Medicaid expansion, mental health, and access to care among childless adults with and without chronic conditions." *Journal of general internal medicine* 33 (2018): 376-383.

Wherry, Laura R., and Sarah Miller. "Early coverage, access, utilization, and health effects associated with the Affordable Care Act Medicaid expansions: a quasi-experimental study." *Annals of internal medicine* 164.12 (2016): 795-803.

Endnotes

[1] See https://www.graham-center.org/content/dam/rgc/documents/publications-reports/reports/milbank-baseline-scorecard-appendix-b.pdf.

[2] See https://thepcc.org/sites/default/files/resources/pcc-evidence-report-2022_1.pdf.

[3] See https://thepcc.org/sites/default/files/resources/pcc-evidence-report-2022_1.pdf.

[4] See Peterson-Kaiser Family Foundation Health System Tracker. Accessed November 14, 2023. https://www.healthsystemtracker.org/brief/tracking-the-rise-in-premium-contributions-and-cost-sharing-for-families-with-large-employer-coverage/.

[5] See "Trends in Cost Sharing for Medical Services, 2013–2020," *EBRI Chartbook* (Employee Benefit Research Institute, January 2023). https://www.ebri.org/publications/research-publications/issue-briefs/content/trends-in-cost-sharing-for-medical-services-2013-2020

[6] See https://www.mercer.com/en-us/insights/us-health-news/direct-primary-care-as-a-strategy-to-manage-cost/.

[7] See https://ota.fas.org/reports/8615.pdf.

[8] See https://www.aamc.org/media/54681/download.

[9] See https://www.healthaffairs.org/content/forefront/primary-care-workforce-data-and-need-nurse-practitioner-full-practice-authority.

EBRI Issue Brief is registered in the U.S. Patent and Trademark Office. ISSN: 0887–137X/90 0887–137X/90 $ .50+.50