Avalere Health™

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FQHC 340B contract pharmacies: Assessment of growth and access implications for Medicare beneficiaries with HIV

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Executive summary

The 340B Drug Pricing Program is a federal program that was established in 1992 to allow eligible healthcare organizations (i.e., covered entities) to purchase prescription drugs at discounted prices. In 1996, the Health Resources and Services Administration (HRSA) issued guidance allowing covered entities that do not have an in-house pharmacy to establish a relationship with one contract pharmacy (i.e., an off-site pharmacy that agrees to dispense medications acquired at the 340B discounted price on the covered entity's behalf). In 2010, HRSA released updated guidance that permitted all covered entities (i.e., not just those without an in-house pharmacy) to establish an unlimited number of arrangements with contract pharmacies, the long-term impacts of which have contributed to a substantial increase in contract pharmacy relationships. [1]

Among all federal grantee participants in the 340B program, Federally Qualified Health Centers (FQHCs) represent both the largest share of participants and are responsible for the greatest share of drug purchases among grantees. The majority of FQHC drug spending under the 340B program is on anti-infective medications, such as drugs used to treat human immunodeficiency virus (HIV)/ acquired immunodeficiency syndrome (AIDS).[2]

To assess how an increase in the number of FQHC contract pharmacy relationships impact utilization of HIV drugs, Avalere Health analyzed Medicare beneficiaries with HIV who received care at FQHCs, focusing on their HIV prescription drug fills at in-house pharmacies, 340B contract pharmacies, and non-contract community pharmacies between 2018 and 2022. The analysis examined the proportion of patients with at least one HIV prescription drug fill and the average annual number of HIV prescription drug fills. Despite the growth in the average number of contract pharmacy relationships among FQHCs, Avalere Health found that the proportion of these FQHCs' Medicare beneficiaries with at least one HIV prescription drug fill did not increase. Similarly, beneficiaries who received care at FQHCs with and without contract pharmacy relationships had similar HIV prescription drug fill rates. Additionally, there were no substantial differences in the average number of HIV prescription drug fills between beneficiaries who filled their prescriptions at contract pharmacies, non-contract community pharmacies, and in-house pharmacies.

These findings indicate that while contract pharmacy arrangements contribute to overall 340B program growth, they do not appear to materially increase utilization of HIV prescription drugs for Medicare beneficiaries with HIV receiving care at FQHCs. In other words, 340B agreements between FQHCs and contract pharmacies do not increase access to HIV medications, as measured by HIV prescription drug fills, for Medicare beneficiaries with HIV.

[1] HRSA. "Notice Regarding 340B Drug Pricing Program-Contract Pharmacy Services." (accessed December 16, 2025).
[2] Congressional Budget Office. "Growth of the 340B Drug Pricing Program." (accessed December 16, 2025).

Background on the 340B program and contract pharmacy growth

The 340B Drug Pricing Program is a federal program that requires drug manufacturers to sell prescription drugs at discounted prices to certain healthcare facilities. Eligible healthcare facilities, otherwise known as covered entities, include hospitals and federal grantees such as FQHCs, Ryan White HIV/AIDS Program grantees, and specialized clinics.[3] The goal of the program is to enable safety net providers to purchase drugs at lower costs to support broader access to medicines for uninsured, underinsured, and low-income patients.[4,5]

340B covered entities can dispense prescription drugs purchased through the 340B program at their facility's in-house pharmacy or through a contract pharmacy. However, patients of 340B covered entities can also fill their prescriptions at community pharmacies that are not 340B contract pharmacies. A contract pharmacy is an off-site pharmacy that agrees to dispense 340B drugs on behalf of a covered entity to eligible patients. While contract pharmacies are not mentioned in the 340B statute, HRSA released guidance in 2010 which states that 340B covered entities can have an unlimited number of arrangements with contract pharmacies; these pharmacies are intended to facilitate 340B program participation for covered entities to "increase patient access to 340B drugs."[6] The guidance has, in part, led to increased prevalence of these arrangements in the 340B program. The number of 340B contract pharmacy arrangements across all covered entity types, including hospitals and grantees, increased from approximately 2,000 in 2010 to over 230,000 by January 2026.[7,8] Recent research shows that less than one percent of contract pharmacies were "closed" contract pharmacies that only served 340B patients and filled prescriptions with only 340B drugs.[9] Thus, nearly all contract pharmacies dispense 340B discounted and non-340B drugs.

Analysis approach

Outside of hospital-based facilities, FQHCs are the largest covered entity group participating in the 340B program, making up over 20% of facilities participating in the program in 2021.[10] FQHCs are

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[3] HRSA. "340B Eligibility." (accessed December, 16, 2025).
[4] Congressional Research Service. Rogers, Hannah-Alise. "Courts Evaluate the Role of Contract Pharmacies in the 340B Drug Discount Program." (accessed December 16, 2025).
[5] HRSA. "340B Drug Pricing Program." (accessed December 16, 2025).
[6] HRSA. "Notice Regarding 340B Drug Pricing Program-Contract Pharmacy Services." (accessed December 16, 2025).
[7] Congressional Budget Office. "Growth of the 340B Drug Pricing Program." (accessed December 16, 2025).
[8] Office of Pharmacy Affairs Information System (OPAIS). (accessed January 12, 2026)
[9] IQVIA. "Do 340B Contract Pharmacies Really 'Increase Access' for 340B Patients?" (accessed January 12, 2026).
[10] Congressional Budget Office. "Growth of the 340B Drug Pricing Program." (accessed December 16, 2025).

required to provide services in an outpatient clinic setting to individuals in underserved areas regardless of their ability to pay.[11] They often act as a safety net provider in areas serving uninsured, underinsured, and low-income individuals. Among federal grantees, FQHCs spent the most on drug purchases through the 340B program. Across all covered entities, anti-infective drugs make up one of the largest shares of facility spending on drugs purchased through the 340B program.[12] Notably, 85% of all spending on anti-infective drugs is on drugs used to treat HIV/AIDS.

Given that HIV drugs represent a substantial share of 340B program drug spending and that the use of contract pharmacies is intended to increase patient access to 340B drugs, Avalere Health sought to understand if the availability and growth of contract pharmacies has led to increased utilization of HIV drugs for Medicare beneficiaries treated at FQHCs.[13] Avalere Health conducted an analysis examining Medicare beneficiaries with HIV who received treatment at FQHCs, focusing on their HIV prescription drug fills at in-house pharmacies, 340B contract pharmacies, and non-contract community pharmacies between 2018 and 2022.

Avalere Health's analysis narrows on two measures of access for Medicare beneficiaries who are receiving care at FQHCs: (1) the proportion of these beneficiaries with at least one HIV drug fill in a year and (2) among those beneficiaries, the average number of HIV drug fills in a year. To assess whether the presence of FQHC contract pharmacy relationships differentially increase utilization of HIV drugs, Avalere Health evaluated utilization across pharmacy type and presence of a contract pharmacy relationship.

Key findings

Trends in contract pharmacy growth among FQHCs

Avalere Health analyzed data from the Office of Pharmacy Affairs Information System (OPAIS) and found that between 2018 and 2022, the number of FQHCs increased by 24%, from almost 10,000 to over 12,000. During that same period, the proportion of FQHCs with a contract pharmacy relationship remained steady at approximately 30% (Figure 1). However, the average number of contract pharmacies per FQHC more than doubled between 2018 and 2022, increasing from 8 to 18. Upon further examination, Avalere Health found that much of this growth in the number of contract pharmacies is associated with contract pharmacies that are located more than 50 miles from the FQHC. From 2018 to 2022, the percent of contract pharmacies located more than 50 miles from the associated FQHC increased from 19% to 27%. One-third of the growth in FQHC contract pharmacy relationships between 2018 and 2022 involved pharmacies that were more than 50 miles away from the FQHC.

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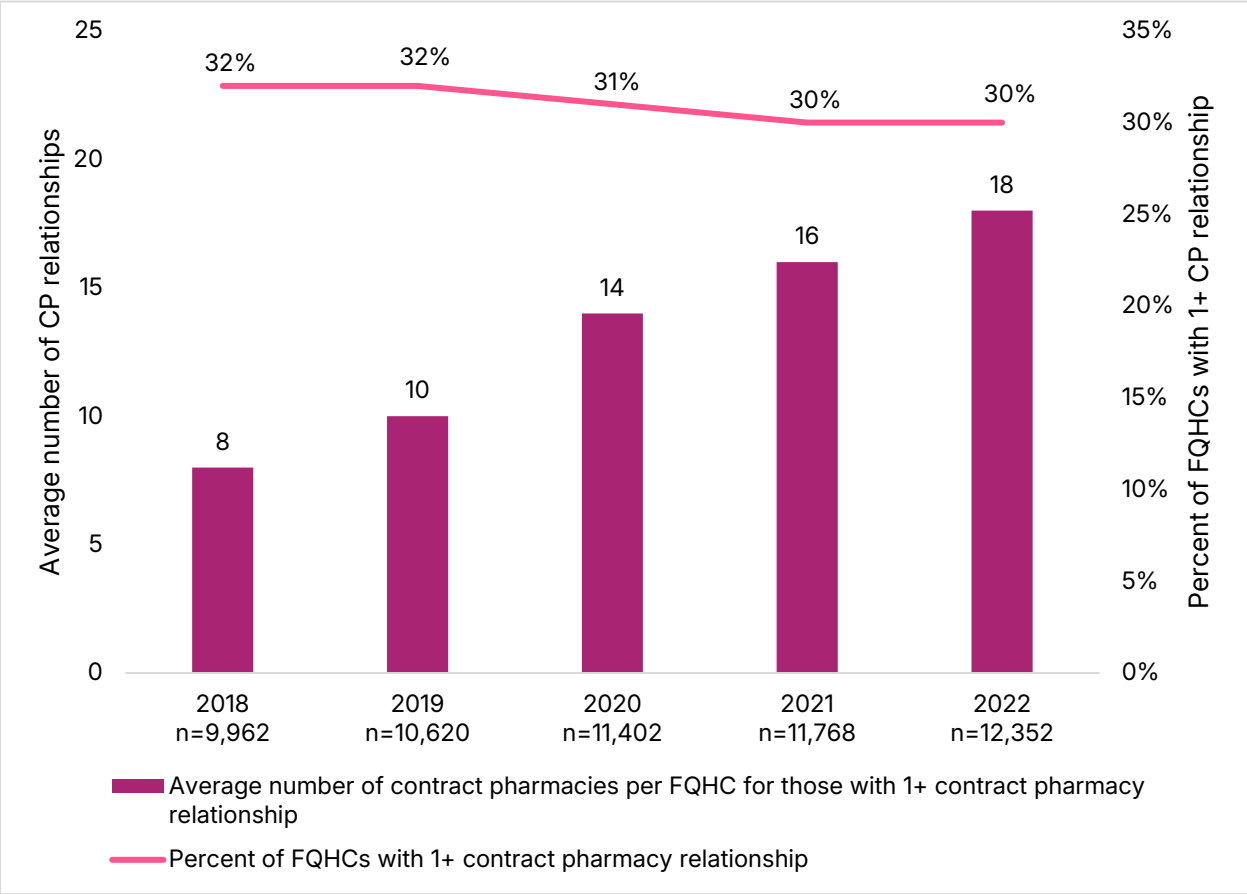
[11] 42 U.S.C. § 254b – Health centers
[12] Spending is reflective of drugs purchased through the Prime Vendor Program. Approximately 90% of healthcare facilities that participate in the 340B program also participate in the Prime Vendor Program.
[13] HRSA. "2024 340B Covered Entity Purchases." (accessed December 16, 2025).

Figure 1: Average number of contract pharmacy relationships and percent of FQHCs with at least one contract pharmacy relationship, 2018-2022



Source: Avalere Health analysis of HRSA OPAIS contract pharmacy data, accessed June 2025.

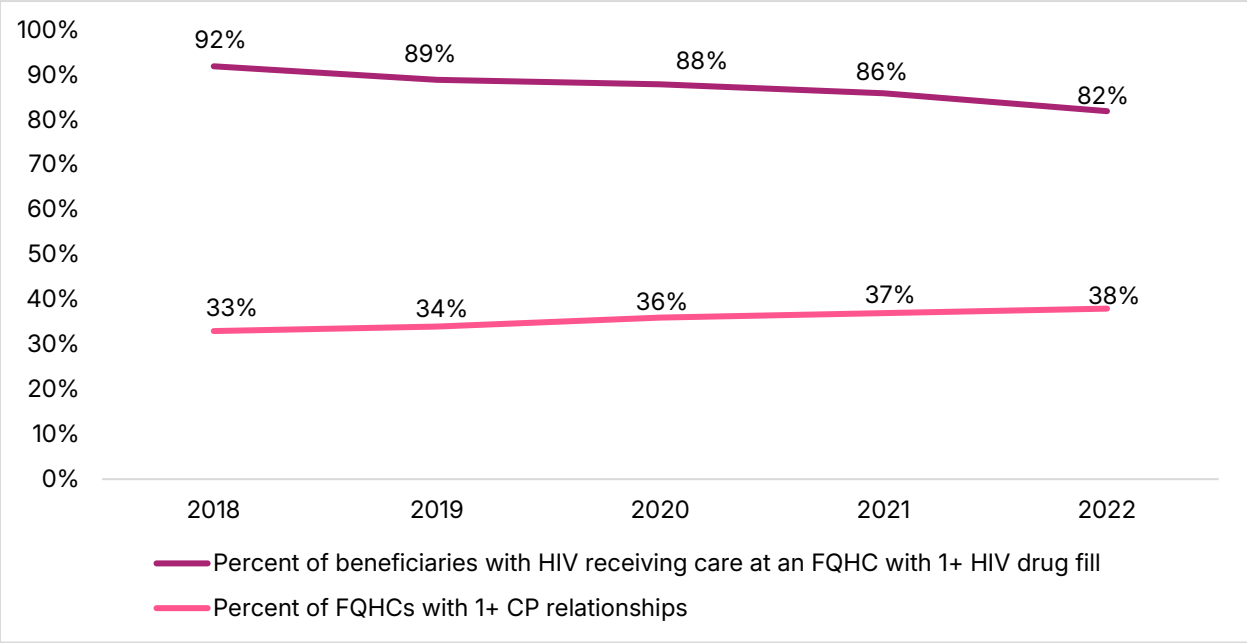
Patterns of HIV prescription drug fills among Medicare beneficiaries with HIV receiving care at FQHCs

Avalere Health also assessed HIV prescription drug utilization among Medicare beneficiaries with HIV that received care from FQHCs using Medicare fee-for-service (FFS) claims, Medicare Advantage Encounter data, and Part D drug event data. Among Medicare beneficiaries with HIV that received treatment at an FQHC, 57% received treatment at an FQHC with at least one contract pharmacy relationship in 2022, an increase from 44% in 2018. Furthermore, Avalere Health found that FQHCs with contract pharmacy relationships treated 58% of beneficiaries who received care at FQHCs and had at least one HIV prescription drug fill in 2022, an increase from 44% in 2018.

When examining the FQHCs used by Medicare beneficiaries in its sample, Avalere Health found that the proportion of these FQHCs with at least one contract pharmacy relationship increased slightly during the evaluation period (33% in 2018 to 38% in 2022). Although the proportion of FQHCs with

contract pharmacy relationships increased, the proportion of this sample of Medicare beneficiaries with HIV receiving at least one HIV drug fill decreased over the evaluation period. For Medicare beneficiaries with HIV that received care at an FQHC (both with and without contract pharmacy relationships), the share with at least one HIV drug fill decreased from 92% in 2018 to 82% in 2022 (Figure 2).

Figure 2: Proportion of Medicare beneficiaries with HIV receiving care at an FQHC* with 1+ HIV drug fill and proportion of FQHCs with 1+ contract pharmacy relationships, 2018-2022



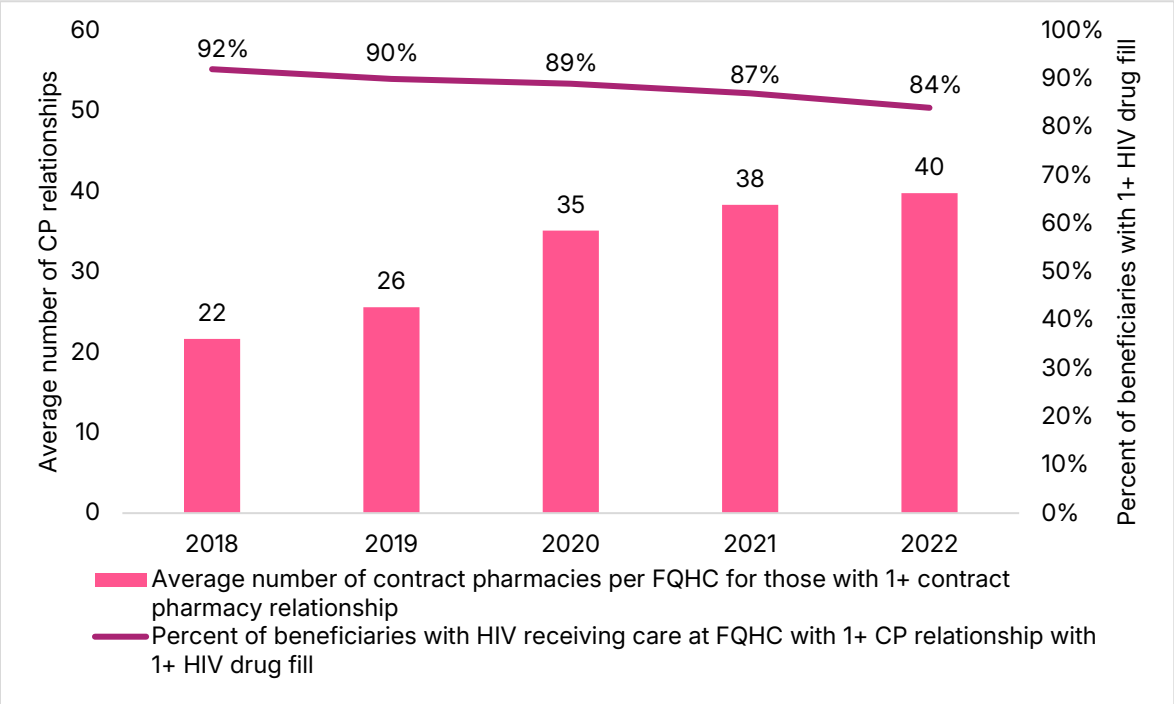
Source: Avalere Health analysis of Medicare FFS claims, Medicare Advantage Encounter data, and Part D drug event data, 2018 – 2022. See methodology section for FQHC and beneficiary count.

Note: These data points differ from those in Figure 1 because Avalere Health's analysis is based on a subset of FQHCs as defined by the criteria of the study sample.

**Both with and without contract pharmacy relationships*

Focusing on FQHCs with at least one contract pharmacy relationship, and HIV prescription drug fills for Medicare beneficiaries receiving care at these FQHCs, Avalere Health found similar patterns to FQHCs overall. The average number of contract pharmacies for these FQHCs increased from 22 in 2018 to 40 in 2022. Furthermore, Avalere Health found that the share of these FQHCs' beneficiaries receiving at least one HIV drug fill decreased from approximately 92% to 84% over that same period. The share of beneficiaries receiving at least one HIV drug fill declined, despite the average number of contract pharmacies per FQHC nearly doubling from 2018 to 2022 among FQHCs with at least one contract pharmacy relationship (Figure 3). This suggests that, for FQHCs with contract pharmacy relationships, increasing the number of contract pharmacy relationships does not improve access for beneficiaries who are receiving care and filling prescriptions at these FQHCs.

Figure 3: Average number of contract pharmacies for FQHCs with 1+ contract pharmacy relationships and proportion of Medicare beneficiaries with HIV receiving care at an FQHC with contract pharmacy relationships with 1+ HIV drug fill

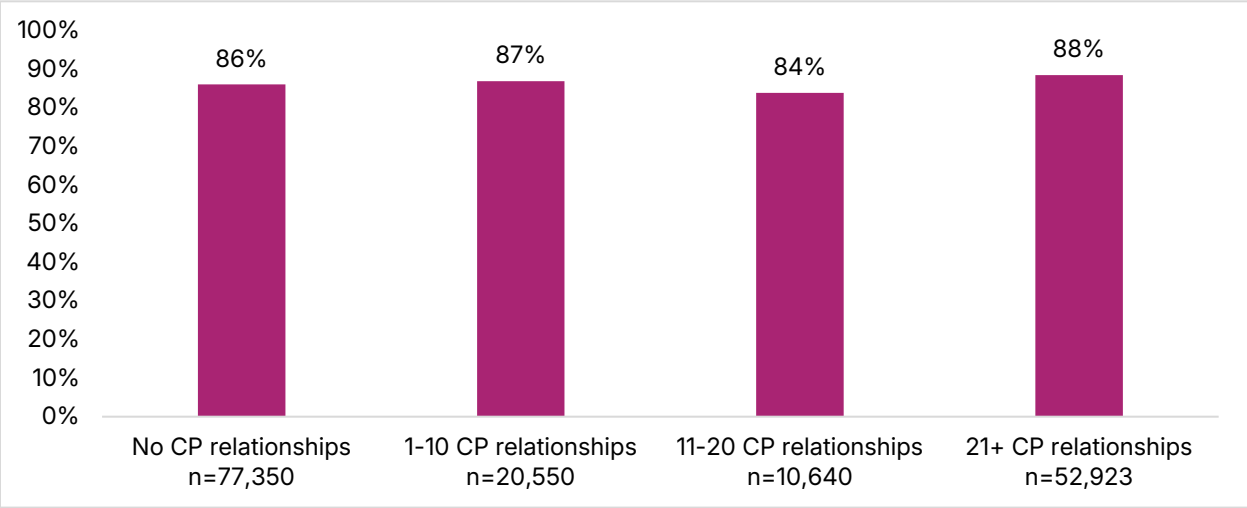


Source: Avalere Health analysis of Medicare FFS claims, Medicare Advantage Encounter data, and Part D drug event data, 2018-2022.

Note: These data points differ from those in Figure 1 because Avalere Health's analysis is based on a subset of FQHCs as defined by the criteria of the study sample. In Avalere Health's study sample, there were 778, 1,012, 1,194, 1,271, and 1,442 FQHCs with at least one contract pharmacy relationship in 2018, 2019, 2020, 2021, and 2022, respectively.

Avalere Health also evaluated whether the number of contract pharmacy relationships an FQHC has affected access to HIV drugs. Avalere Health found that having a greater number of contract pharmacy relationships does not materially increase the percentage of beneficiaries with at least one HIV drug fill (Figure 4). On average, between 2018 and 2022, the proportion of beneficiaries with at least one HIV drug fill was 86% at FQHCs with no contract pharmacy relationships; this is comparable to FQHCs with 1–10 relationships (87%), 11–20 relationships (84%), and 21+ relationships (88%).

Figure 4: Proportion of Medicare beneficiaries with 1+ HIV drug fill receiving care at FQHCs by number of contract pharmacy relationships, 2018–2022

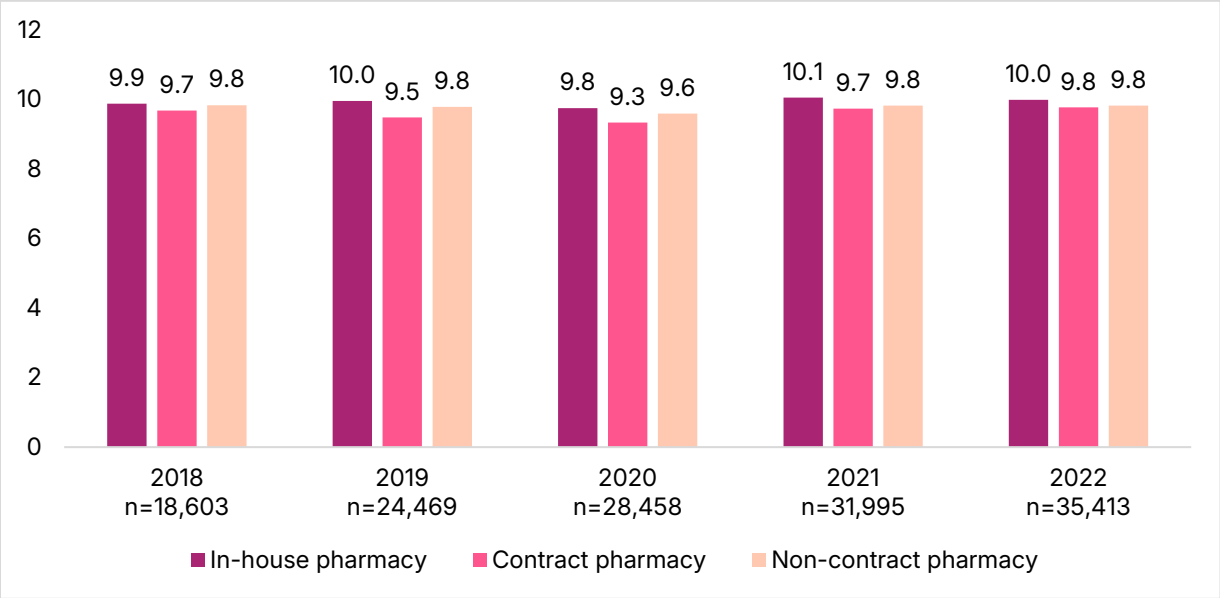


Source: Avalere Health analysis of Medicare FFS claims, Medicare Advantage Encounter data, and Part D drug event data, 2018-2022.

Note: Avalere Health defined the number of contract pharmacy relationships per FQHC based on what is reported in OPAIS. However, as outlined in the methodology section, not all contract pharmacy relationships were matched to each FQHC in the claims analysis.

To further explore the impact of contract pharmacy relationships on patient utilization of HIV drugs, Avalere Health compared the average number of HIV prescription drug fills at FQHCs with and without contract pharmacy relationships across pharmacy types. Between 2018 and 2022, Avalere Health found that the average annual number of HIV prescription drug fills for Medicare beneficiaries with at least one fill was similar across different pharmacy types, after controlling for Medicare benefit type (i.e., whether the beneficiary has Medicare FFS or Medicare Advantage), low-income subsidy status, and fill size (i.e., 30-day or 90-day fill) (Figure 5). This suggests that using a contract pharmacy rather than an in-house or non-contract community pharmacy to fill HIV drug prescriptions does not appear to increase utilization of HIV medications, as measured by the average annual number of HIV prescription drug fills among Medicare beneficiaries with HIV.

Figure 5: Average number of HIV prescription drug fills per beneficiary by pharmacy type for Medicare beneficiaries with HIV that had at least one prescription drug fill and received care at an FQHC, 2018-2022



Source: Avalere Health analysis of Medicare FFS claims, Medicare Advantage Encounter data, and Part D drug event data, 2018-2022.

Discussion

340B contract pharmacy relationships have increased substantially in recent years with the average number of contract pharmacies more than doubling among FQHCs between 2018 and 2022. Some stakeholders assert that contract pharmacies are necessary for patients of 340B covered entities to fill their prescriptions, and thus view this large growth in contract pharmacies as increasing patients' access to medicines.[14,15] This study sought to answer the question of whether contract pharmacies increased drug access by comparing the availability of contract pharmacy relationships to the prescription fill behavior of FHQCs' Medicare beneficiaries with HIV.

The findings demonstrate that the availability and growth in contract pharmacy relationships have not resulted in increased access or utilization of HIV drugs among Medicare beneficiaries with HIV receiving care at FQHCs. First, the observed growth in contract pharmacy relationships among FQHCs is concentrated among pharmacies located more than 50 miles from the FQHC. A 2022 study identified that more than 95% of the US population lives within 10 miles of a community

[14] American Hospital Association. "AHA Statement to House E&C Health Subcommittee on Lowering Health Care Costs for All Americans." (accessed February 11, 2026).
[15] National Association of Community Health Centers. Letter to Senate HELP Committee Regarding 340B. (accessed February 11, 2026).

pharmacy, with access gaps primarily in rural areas.[16] Pharmacies located more than 50 miles away from the FQHC likely benefit a small proportion of beneficiaries who may rely on mail-order pharmacies (i.e., pharmacies that dispense prescription medications to a patient's home via mail or delivery) or specialty pharmacies (i.e., pharmacies that dispense typically high-cost specialty therapies that may require special handling or patient support). This is because those beneficiaries do not live close to a pharmacy or their community pharmacy does not stock specific therapies. Expansion of these pharmacy types are unlikely to impact Medicare beneficiary behavior or improve access when closer pharmacy options that currently meet their needs exist.

Furthermore, as the number of FQHC-contract pharmacy relationships grew, there was no increase in the share of Medicare beneficiaries with HIV who filled at least one HIV drug prescription. Further, among beneficiaries who received care at an FQHC without a contract pharmacy, the proportion who filled at least one HIV prescription within a year was comparable to the proportion among beneficiaries who received care at FQHCs with 1–10, 11–20, or 20+ contract pharmacy relationships. Moreover, Avalere Health examined whether access improved via greater utilization, as measured by more regularly refilling prescription in a year. Among those beneficiaries filling HIV prescriptions Avalere Health found that there were no material differences in the average annual number of HIV prescription drug fills by pharmacy type (i.e., contract pharmacy, in-house pharmacy, and non-contract, community pharmacy).

Overall, the study findings indicate that, while contract pharmacy arrangements contribute to overall 340B program growth, contract pharmacies among FQHCs have not led to increased access, defined as utilization of HIV medications by Medicare beneficiaries who seek care at FQHCs.

Methodology

In this analysis, Avalere Health utilized Medicare FFS claims, Medicare Advantage Encounter data, and Part D prescription drug event data accessed through an agreement with CMS, wherein Avalere Health has access to CMS's Chronic Condition Warehouse Virtual Research Data Center data. To identify Medicare beneficiaries with an HIV diagnosis that received care and a prescription to treat HIV at an FQHC, Avalere Health first identified Medicare beneficiaries who received an HIV diagnosis (ICD-10 code B20 or Z21) between 2018 and 2022. Next, Avalere Health assessed whether each beneficiary had at least one FQHC visit any time on or after their earliest HIV diagnosis date. To identify FQHCs visits, Avalere Health used Healthcare Common Procedure Coding System codes dedicated to FQHC visits (G0466, G0467, G0468, G0469, and G0470) to filter claims in the FFS and Encounter Data settings. Finally, Avalere Health identified whether each Medicare beneficiary had at least one HIV drug claim on or after the time of their first FQHC visit.

[16] Lucas A. Berenbrok, Shangbin Tang, Nico Gabriel, Jingchuan Guo, Nasser Sharareh, Nimish Patel, Sean Dickson, Inmaculada Hernandez. "Access to community pharmacies: A nationwide geographic information systems cross-sectional analysis." *Journal of the American Pharmacists Association*, Volume 62, Issue 6 (2022): 1816-1822.e2. https://doi.org/10.1016/j.japh.2022.07.003.

Avalere Health then mapped each FQHC to the 340B OPAIS dataset by the organization's National Provider Identifier (NPI) referenced in each medical claim. For any remaining FQHCs that could not be matched to the OPAIS data based on the organization's NPI, Avalere Health obtained the addresses from the National Plan and Provider Enumeration System (NPPES) and then mapped them to the OPAIS dataset. The OPAIS dataset contains information on 340B program participation, including start and end dates, as well as all contract pharmacies for each individual covered entity in each year. Using this matching approach and OPAIS dataset, Avalere Health pulled a list of 340B contract pharmacy arrangements for each FQHC in each year.[17]

To identify whether each beneficiary has at least one HIV drug claim[18] on or after their first FQHC visit, Avalere Health mapped each HIV prescription drug claim to the beneficiary's closest FQHC visit on or before the drug claim date. To ensure the relevance between an FQHC visit and a drug fill, an individual claim was excluded from the analysis if any of the following apply: (1) exclude all drug claims linked to the same FQHC visit, if the first drug claim that's linked to the FQHC visit is over 60 days after the beneficiary's FQHC visit date; (2) the prescriber was located over 50 miles away from the associated FQHC; (3) it belonged to a beneficiary who filled HIV prescription drugs at more than one service type of pharmacy (e.g., retail, mail order, specialty) in a year. Avalere Health limited its analysis to beneficiaries who filled HIV prescription drugs at one service type of pharmacy; sensitivity analyses found that 95% of beneficiaries filled their HIV prescriptions at a single pharmacy service type. Since FQHCs can establish new contract pharmacy relationships during the study period, Avalere Health did not restrict its analysis based on whether a beneficiary fills their HIV prescription drug at a single pharmacy type (i.e., in-house, contract pharmacy, non-contract pharmacy).

Avalere Health mapped each HIV drug claim to the National Council for Prescription Programs (NCPDP) dataset using the NCPDP ID reported in the Part D event data, to obtain the pharmacy address. Avalere Health then mapped each drug claim to the OPAIS database by address to identify whether the prescription was filled at a 340B contract pharmacy. To ensure accuracy, Avalere Health flagged a pharmacy as a 340B contract pharmacy if the 340B contract pharmacy ID obtained by address mapping appears in the list of contract pharmacies that the linked-medical claim's FQHC has in that year (as identified in the first step). There were a small proportion of FQHCs with low pharmacy match rates; including FQHCs with low match rates may distort the findings and interpretation of the results. To address this, Avalere Health excluded all claims associated with FQHCs that had less than 70% of their contract pharmacies, as listed by OPAIS, mapped to the NCPDP dataset. Avalere Health established a 70% match threshold to maximize the identification of contract pharmacies while also ensuring a sufficiently large sample of HIV prescription drug claims for robust analysis. Separately, to identify FQHC in-house pharmacies, Avalere Health used a proxy

[17] Less than 60% of claims were for FQHCs that were matched to the OPAIS data based on the organization's NPI. Once Avalere Health mapped the remaining FQHCs using addresses from NPPES, Avalere Health obtained a claims match rate of over 90%.
[18] Avalere Health used Medi-Span classifications to identify HIV treatment drugs from 2018-2022. This was inclusive of over 900 national drug codes.

indicator and considered a pharmacy to be in-house if the 340B pharmacy status found in the Part D event data has a value of "owned."

Based on these steps, Avalere Health's analysis included over 2,000 FQHCs in 2018, with this number increasing to over 3,300 in 2022. In addition, this analysis included almost 18,000 beneficiaries in 2018, this increased to almost 34,000 beneficiaries in 2022. These beneficiaries are associated with over 191,000 HIV drug claims in 2018, which increased to approximately 387,000 HIV drug claims in 2022 (Table 1).

Table 1: Study Sample Characteristics

	2018	2019	2020	2021	2022
Number of FQHCs with 1+ contract pharmacy relationships	672	856	1,040	1,127	1,268
Number of FQHCs with no contract pharmacy relationships	1,344	1,652	1,815	1,919	2,033
Beneficiary count	17,943	23,210	27,349	30,823	33,851
HIV prescription drug claim count	191,026	278,253	328,564	359,382	387,007

Limitations

This analysis of the association of contract pharmacy growth on patient access focused on FQHCs (excluding other 340B covered entities), Medicare beneficiaries with HIV diagnoses, and HIV drug claims. The results of this analysis may not be generalizable to other 340B entity types, different conditions, or different drug categories.

Avalere Health also identified limitations when mapping FQHCs across the datasets used. The OPAIS dataset does not include organization NPIs for every FQHC. In those cases, Avalere Health relied on addresses referenced in OPAIS. Moreover, mapping by address for each FQHC through address obtained from the NPPES dataset might result in incomplete lists if the FQHC addresses are different between the NPPES dataset and the OPAIS dataset.

The OPAIS dataset does not include any pharmacy identifiers (e.g., NCPDP ID) for contract pharmacies. Avalere Health mapped contract pharmacies identified in the NCPDP and OPAIS datasets based on address. Avalere Health was not able to identify contract pharmacies when (1) they could not be mapped to NCPDP data, and (2) the pharmacy address obtained from the NCPDP data is different than the address listed in the OPAIS dataset. To address this limitation and improve

the sensitivity of the analysis, our results reflect FQHCs where at least 70% of the contract pharmacies listed in OPAIS could be mapped to NCPDP data.

In the OPAIS database, covered entities and their child sites (e.g., satellite clinics associated with the primary FQHC) may have different contract pharmacy relationships within a given year. Avalere Health assumed that if different covered entities and/or child sites share the same NPI or address, then they share the same contract pharmacies. In this case, Avalere Health is assuming that all of these covered entities/child sites have a relationship with all of the contract pharmacies listed by any of these sites.