

Viral Hepatitis Services in Pennsylvania Federally Qualified Health Centers

**Bureau of
Epidemiology**

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Contact Information and Contributors

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Executive Summary

Gaps in viral hepatitis testing, treatment, and vaccination accessibility exist throughout Pennsylvania, especially for the most vulnerable residents and communities within the Commonwealth. Federally Qualified Health Centers (FQHCs) play an important role in reducing barriers to healthcare treatment for uninsured and underinsured populations, who are often at higher risk of hepatitis B virus (HBV) and hepatitis C virus (HCV) infection. This project was undertaken to understand the scope of viral hepatitis services offered by FQHCs throughout the state. A survey about viral hepatitis service offerings was sent to a random sampling of FQHCs and Look-Alikes across the state in collaboration with the Pennsylvania Association of Community Health Centers. The survey also asked questions related to barriers that prevent centers from offering a particular service.

While over 75% of respondent sites offered HCV testing, less than a third of these sites offered testing to all clients on an opt-out basis, meaning there are still significant gaps in testing all clients at the sites. Treatment after an HCV diagnosis is also a concern given only half of sites offer HCV treatment onsite. With around half of clients being referred out for treatment, there is concern as to whether these clients are receiving the follow up necessary to ensure they are treated properly.

HBV testing and treatment follows a pattern similar to HCV. Over three quarters of sites offered HBV testing on-site, but only one third offered HBV treatment onsite. For hepatitis A and B vaccination, about three-quarters of sites offered both vaccines to their clients.

The main barriers to providing these services are a lack of training amongst the staff and funding for the services. By addressing these barriers, we can significantly improve access to viral hepatitis prevention, testing, and treatment services across the state.

Background

Viral hepatitis is an infectious disease that causes inflammation of the liver and can cause liver-related morbidity and mortality. There are several known causes of viral hepatitis with hepatitis A, hepatitis B, and hepatitis C virus being the most common causes of viral hepatitis in the United States.¹ Hepatitis A and hepatitis B can both be prevented with a vaccination. No vaccination exists for hepatitis C; however, treatment can cure the infection.¹

The Centers for Disease Control and Prevention estimated that approximately 11,500 hepatitis A infections, 13,300 acute hepatitis B infections, and 69,000 acute hepatitis C infections occurred in 2021 in the US.¹ Furthermore, the number of people with viral hepatitis are likely significantly undercounted due to factors such as lack of access to testing, especially among medically underserved communities. Cultural, environmental, behavioral, and social factors can explain variations in disease rates among different populations.¹ Federally Qualified Health Centers (FQHCs) and FQHC Look-Alikes (LAL) can play an important role in increasing viral hepatitis prevention, testing and linkage to care. Increasing access to viral hepatitis services in vulnerable communities would reduce the prevalence of viral hepatitis and prevent new infections.

For over 40 years, FQHCs and LALs have provided services to some of the most medically underserved communities across the country.^{2, 3} FQHCs are federally funded centers designed to increase care in underserved communities through special payment arrangements with Medicare and Medicaid.² FQHCs must meet certain requirements to become certified and remain operational.^{2, 4} Serving as primary care safety net providers, FQHCs play a key role in offering medications at a reduced-cost and are mandated under grant agreements to provide care to patients regardless of their ability to pay and insurance status.⁵ Given their demonstrated cost-efficiency and effectiveness, the Bush Administration and the Affordable Care Act (ACA) provided opportunities for expansion.⁶ The establishment of the Community Health Center Fund under the ACA further supported expansion efforts, leading to an 80% increase in the number of FQHCs within the United States in the last decade alone.² Furthermore, FQHC LALs are community-based healthcare centers that meet the same requirements as FQHCs but do not receive the same federal funding. In combination, FQHCs and LALs provide critical primary care services in underserved areas.

Despite the changes brought about by the post-Medicaid expansion and the ACA-Marketplace landscape, FQHCs retain their critical role in the healthcare industry.^{3, 5} FQHCs have implemented multifaceted strategies to increase care to communities in need by establishing healthcare centers in medically under-served areas, recruiting additional healthcare providers, extending operational hours, providing transportation assistance, and enhancing insurance coverage; however, gaps in service delivery remain.^{2, 3, 5, 7}

To better understand the current landscape of viral hepatitis services available in FQHCs and LALs in Pennsylvania, the Pennsylvania Department of Health (DOH) conducted a survey to identify barriers and best practices. The purpose of the survey was to assess the scope of viral hepatitis service delivery at PA FQHCs and LALs and identify gaps and barriers to providing these services.

Methods

In 2023, DOH conducted a survey of viral hepatitis service delivery at FQHCs and LALs.

Facility Selection

The Pennsylvania Association of Community Health Centers (PACHC) provided a current list of 348 Pennsylvania FQHCs and LALs and the survey was sent to a random selection of one third of non-dental-centric sites. Sites located in Philadelphia were also excluded. Sites were designated urban or rural based on the county in which they are located, using the Center for Rural Pennsylvania designation. The Center for Rural Pennsylvania defines rural and urban based on population density. Counties with a population less than 284 per square mile are defined as rural, and those with 284 or more people per square mile are defined as urban. Sites were stratified by urban or rural designation, and then a Microsoft Excel random number generator was used to select one third of urban facilities and one third of rural facilities. This resulted in a sample of 81 FQHCs and LALs (43 rural and 38 urban). We'll refer to this sample as FQHCs henceforth.

Survey Design

The survey was developed by DOH staff to assess the breadth of viral hepatitis services offered by FQHCs and barriers to providing these services. The survey asked a range of questions related to hepatitis A, B, and C service delivery and barriers. Each site reported current practices at the specific surveyed site. The online SurveyMonkey™ survey was open from July 18, 2023 to August 1, 2023.

Facility Survey and Follow Up

PACHC emailed selected FQHCs instructions and a link to the online survey. Specifically, the survey was sent to each site's quality contact and Chief Executive Officer. One reminder email was sent July 28, 2023.

Analysis

Raw survey data were exported from SurveyMonkey™ to a Microsoft Excel file. These data were cleaned using Excel and analyzed using SAS. Figures and maps were created using Microsoft Excel.

Findings

Of the 81 FQHCs surveyed, 45 (55.6%) sites completed the survey. This included 24 (55.8%) rural FQHCs and 21 (55.2%) urban FQHCs.

Hepatitis A and B Vaccination:

In 2023, hepatitis A vaccine was offered at 34 (75.6%) of the sites that responded to the survey. This included 17 (44%) rural and 19 (56%) urban sites. Some sites offered the hepatitis A vaccine only and others offered vaccine which includes protection against both

hepatitis A virus (HAV) and HBV (**Fig. 1**). Three sites that did not offer HAV vaccination reported that lack of training, lack of funding, and lack of client insurance were barriers to HAV vaccine delivery.

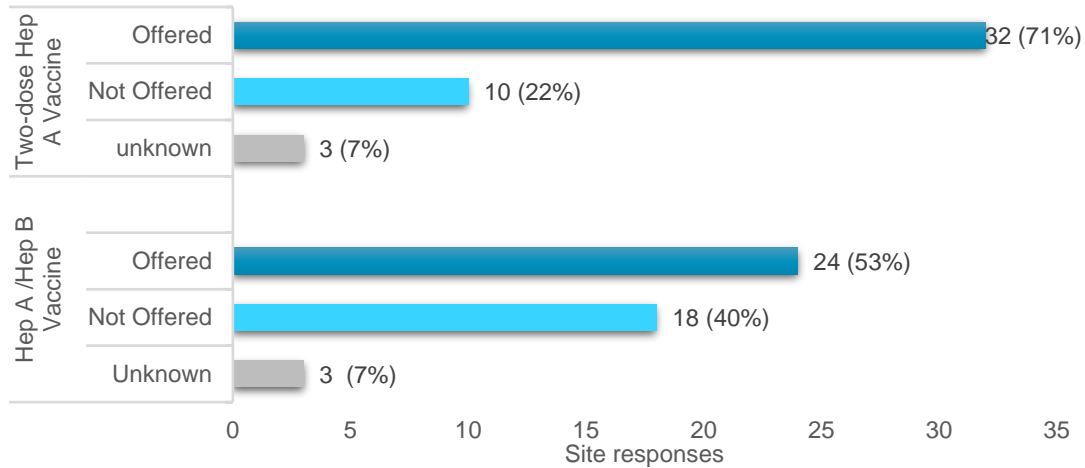


Figure 1: Hepatitis A vaccine availability and type of vaccine PA FQHCs, n=45, 2023.

Hepatitis B vaccine was offered at 35 (77.8%) sites. This included 16 (46%) rural and 19 (54%) urban sites. Some sites offered the two-dose or three-dose HBV vaccine, and others offered vaccine which includes protection against both HAV and HBV (**Fig. 2**).

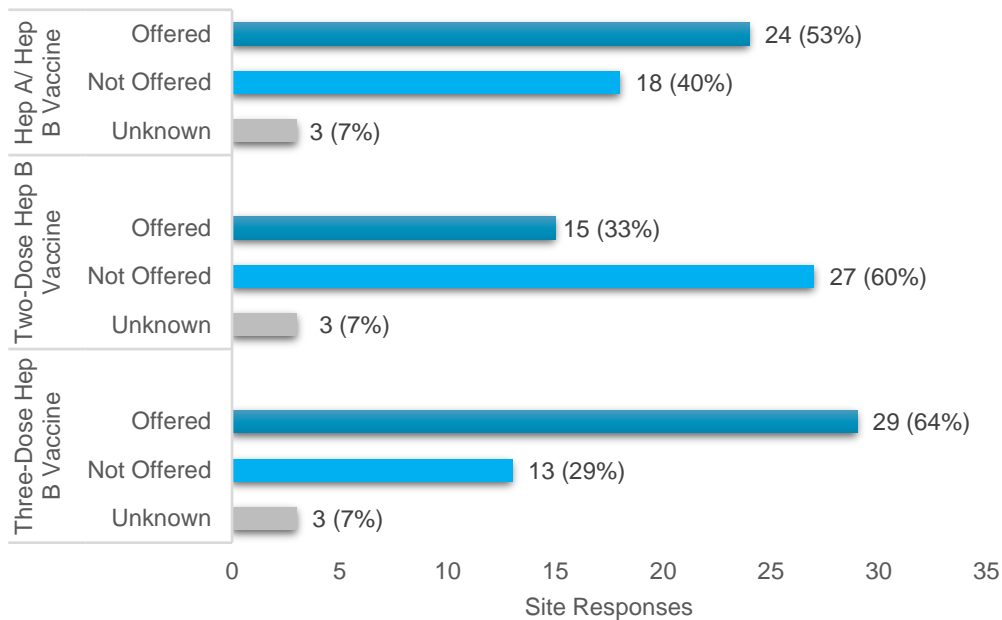


Figure 2: Hepatitis B vaccine availability and type of vaccine PA FQHCs, n=45, 2023.

Of the 6 regions in Pennsylvania (excluding Philadelphia in the southeast), the proportion of sites offering HAV/HBV vaccination was higher in the in the southeast district (75%) and lowest in both the northcentral and northeast districts (33%) (**Fig. 3**). Of those sites that did not offer HBV vaccinations, two reported that lack of trained staff and funding were barriers to providing hepatitis B vaccine.

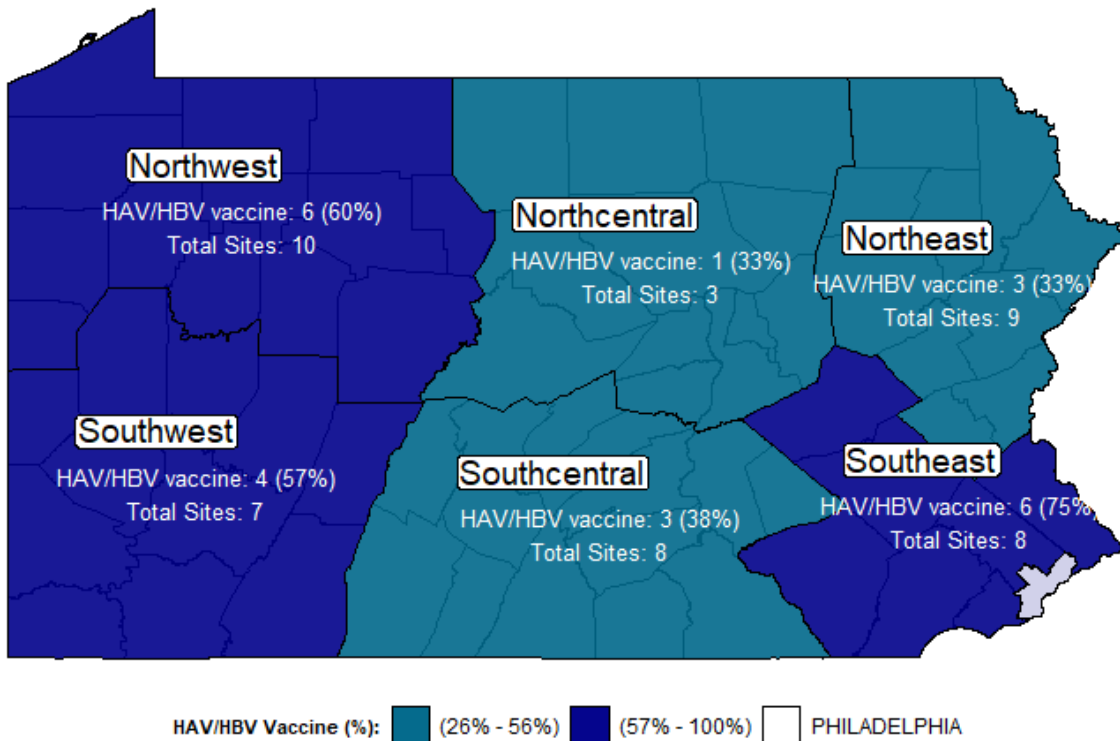


Figure 3: Proportion of surveyed sites that offered onsite HAV/HBV vaccination in each district (*excludes Philadelphia), PA FQHCs, n=45, 2023.

Hepatitis B Testing and Treatment:

In total, 32 (71%) offered on-site HBV testing and 10 (22%) reported that they referred out for testing if requested by the patient. Of the 32 sites, 13 (41%) are rural and 19 (59%) are urban. Only 14 sites (31%) offered HBV treatment on-site, while 28 (62%) reported that they referred out for HBV treatment if requested by the patient (**Fig. 4**). Among the sites offering on-site HBV treatment, 9 (64%) are rural and 5 (36%) are urban.

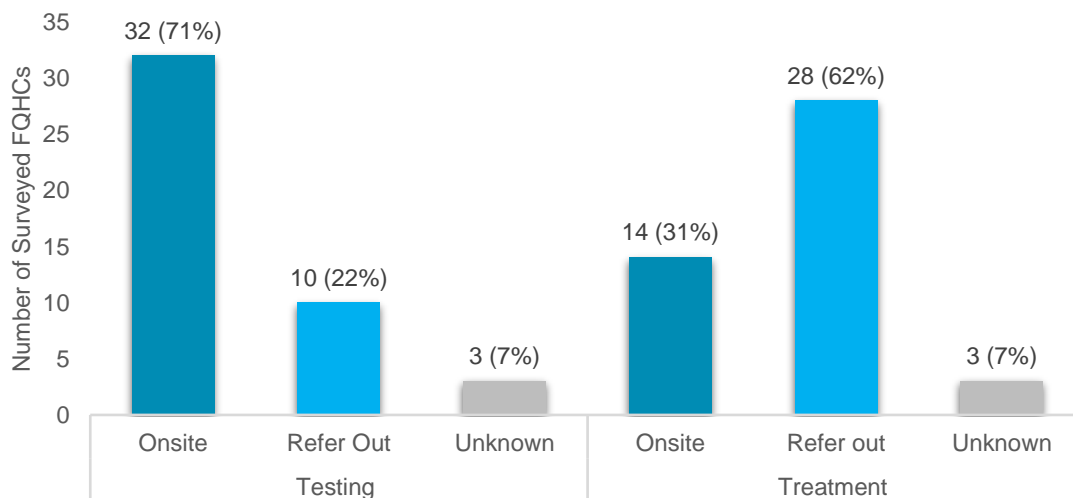


Figure 4: Hepatitis B testing and treatment; PA FQHCs, n=45, 2023.

Comparing the 6 regions in Pennsylvania (excluding Philadelphia in the southeast), all sites in the southwest district offered onsite HBV testing and many sites in the northwest, northeast and southeast offered onsite HBV testing as well (**Fig.5**).

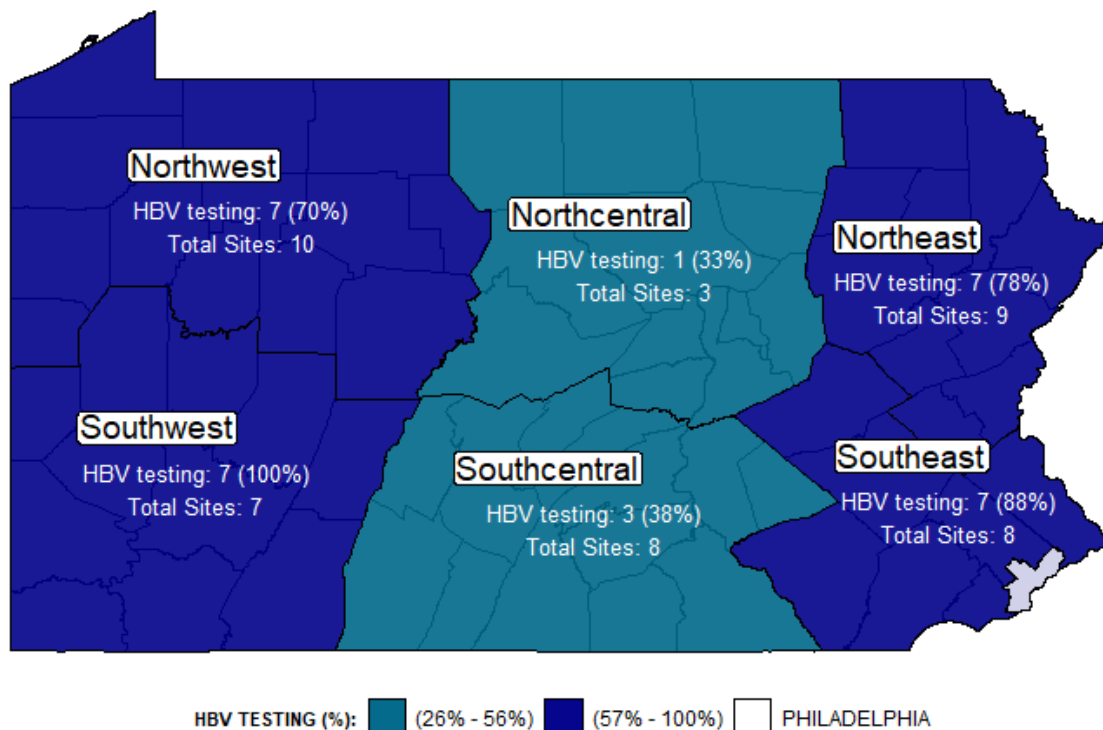


Figure 5: Proportion of surveyed sites that offered onsite HBV testing in each district (*excludes Philadelphia), PA FQHCs, n=45, 2023.

The proportion of sites offering HBV treatment was highest in the northwest district (70%). There was no site offering HBV treatment in the northcentral district (**Fig.6**).

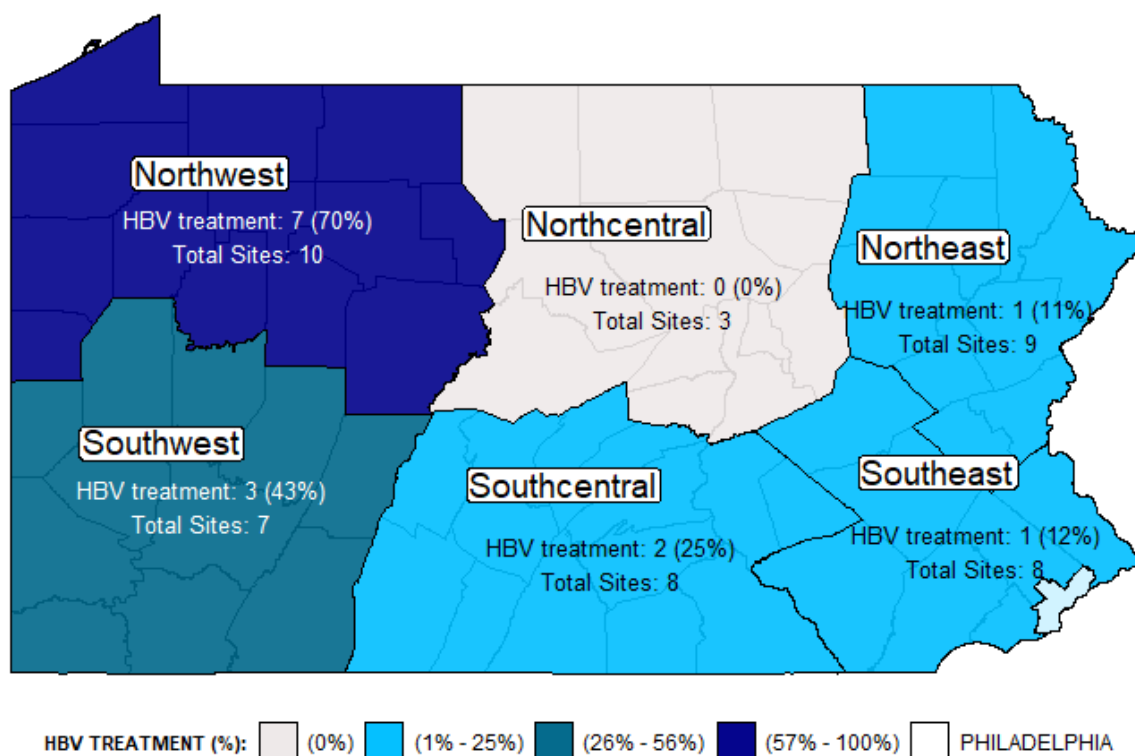


Figure 6: Proportion of surveyed sites that offered onsite HBV treatment in each district (*excludes Philadelphia), PA FQHCs, n=45, 2023.

Barriers to providing HBV testing and treatment were noted by sites that did not provide the service (**Table 1**). The most common barrier to offering HBV testing was lacking the proper equipment. Other common barriers reported for testing were lack of training, not having enough time, and funding. A total of 20 sites reported that they were not able to offer HBV treatment because they did not have staff with the proper training to treat HBV. Similarly, both inadequate funding and lack of training were noted as barriers to HBV vaccination in 20 sites each.

Table 1: Reported barriers to offering hepatitis B services, PA FQHCs, 2023.

HBV Service Barriers	HBV Testing (n=13)	HBV Treatment (n=31)
	n (%)	n (%)
a) <i>Client Buy In</i>	0	2(6)
b) <i>Equipment</i>	8(61)	1(3)
c) <i>Funding</i>	4(31)	4(13)
d) <i>Insurance</i>	1(8)	1(3)
e) <i>Lack of Training</i>	4(31)	20(65)
f) <i>Not enough time</i>	4(31)	4(13)
g) <i>Other Priorities</i>	1(8)	4(13)

Hepatitis C Testing and Treatment:

Of the 45 sites that responded to the survey, 34 (75%) offered hepatitis C virus (HCV) testing of any kind for their clients. Of these 34 sites, 14 (41%) are rural and 20 (59%) are urban. Over half of sites offered a blood draw which, if ordered, could both screen for HCV exposure (anti-HCV) and confirm current HCV infection (HCV RNA). In addition, five offered an HCV rapid test which provides an anti-HCV result but does not require a blood draw and does not confirm infection (**Fig. 7**). Of those offering testing, 26 (76%) reported offering HCV testing on demand and were not limited to certain times of the day, week, or month.

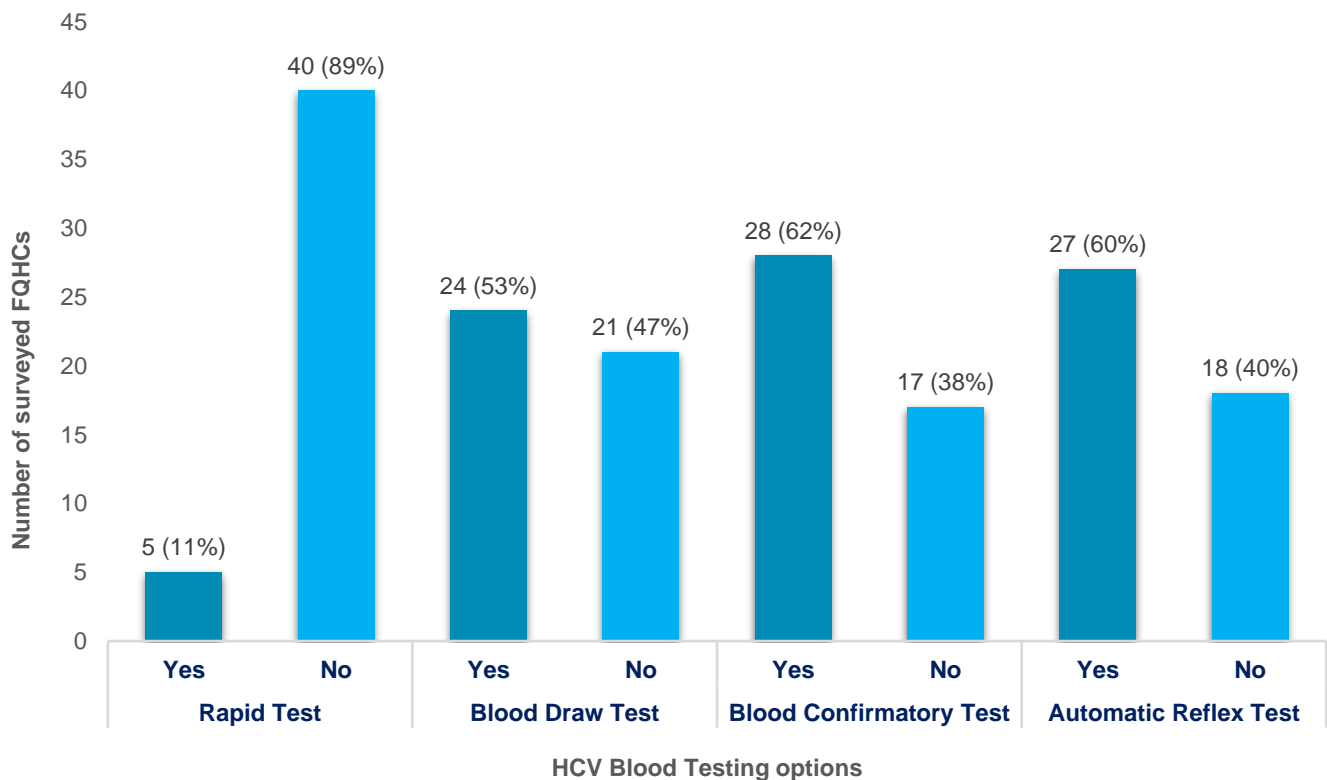


Figure 7: Hepatitis C testing options, PA FQHCs, 2023. Rapid testing includes anti-HCV testing only. “Blood Draw Test” refers to testing that may include anti-HCV and HCV RNA; “Blood Confirmatory Test” indicates that HCV RNA testing is performed; and “Automatic Reflex Test” means that any blood that tests positive for anti-HCV are automatically sent for confirmatory HCV RNA testing.

Testing was offered to all clients through an opt-out system at 11 (24%) sites, and 13 (29%) sites offered testing to all clients through an opt-in system, whereas 8 (18%) stated not all clients were offered testing (**Fig. 8**). Universal opt-out testing differs from opt-in testing which requires a client to request a test upon offering. With universal opt-out testing, an individual is informed that an HCV test will be completed as a part of routine screening unless they decline the test. Of sites that did not offer testing to all clients, five sites prioritized testing for clients who used drugs or clients who are living with HIV.

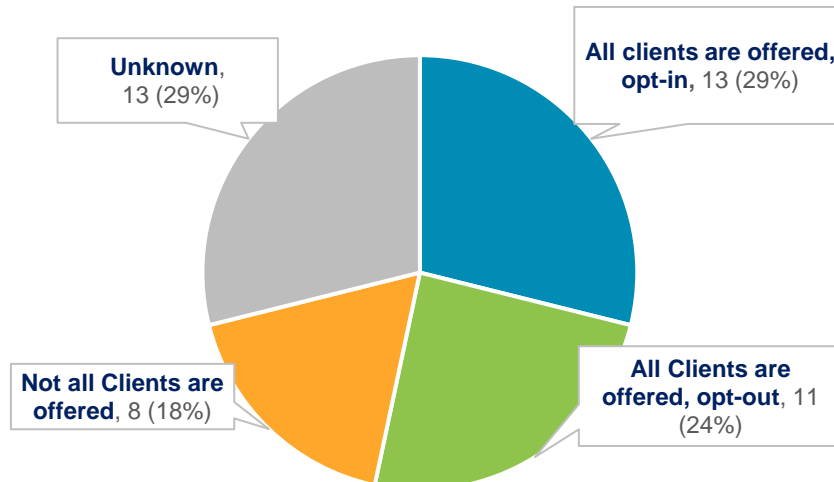


Figure 8: Onsite HCV testing availability, PA FQHCs, 2023.

Of the 6 regions in Pennsylvania (excluding Philadelphia in the southeast), no opt-out testing was offered by the sites surveyed in the northcentral and southcentral district. The southwest district had the highest percentage of sites that offered opt-out HCV testing (**Fig. 9**).

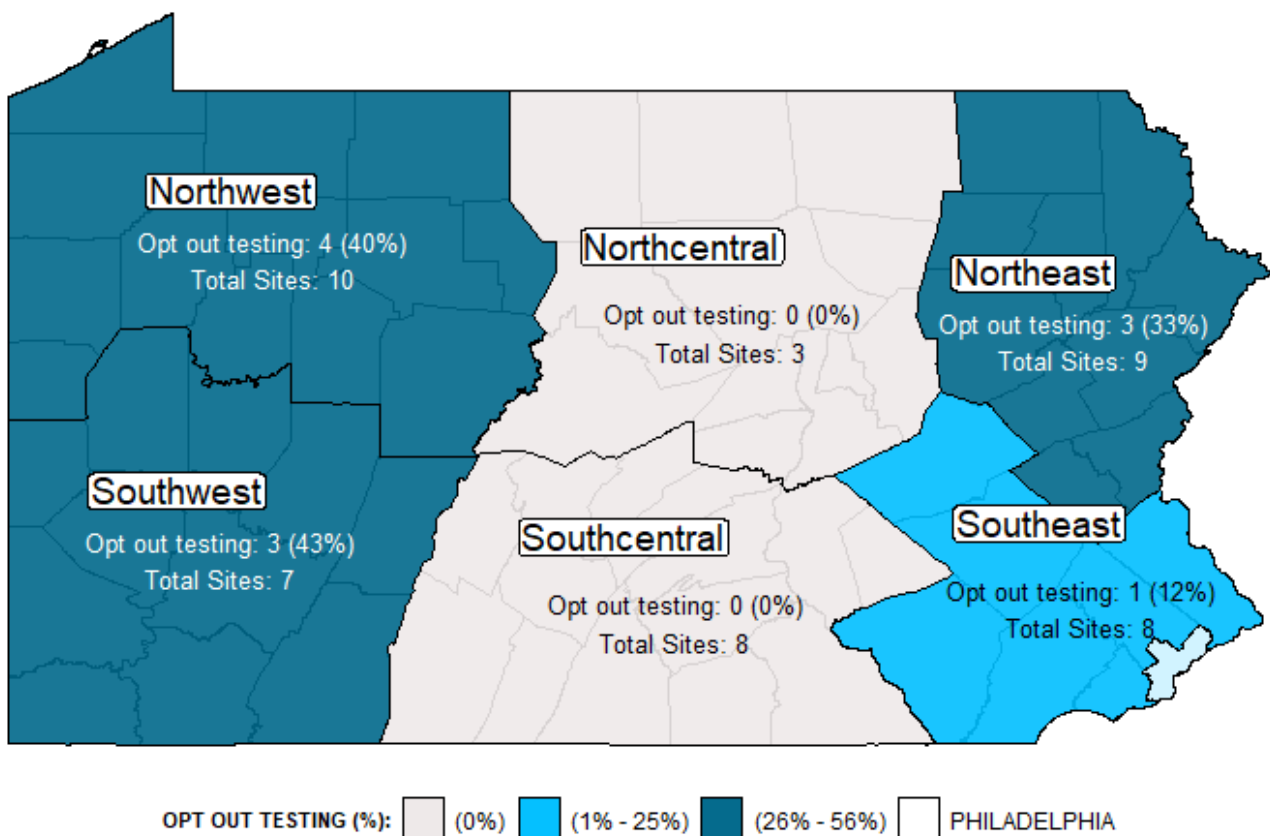


Figure 9: Proportion of surveyed sites that offered opt-out HCV testing in each district (*excludes Philadelphia), PA FQHCs, n=45, 2023.

Of the 45 sites, 20 offered HCV treatment on-site (44%), while 21 (47%) referred off site (Fig. 10). Of these 20 sites, 7 (35%) are rural and 13 (65%) are urban. Of the 6 districts in Pennsylvania (excluding Philadelphia), no HCV treatment was offered on-site by the sites surveyed in the northcentral district. The southwest district had the highest percentage of sites that offered HCV treatment on-site (Fig. 11).

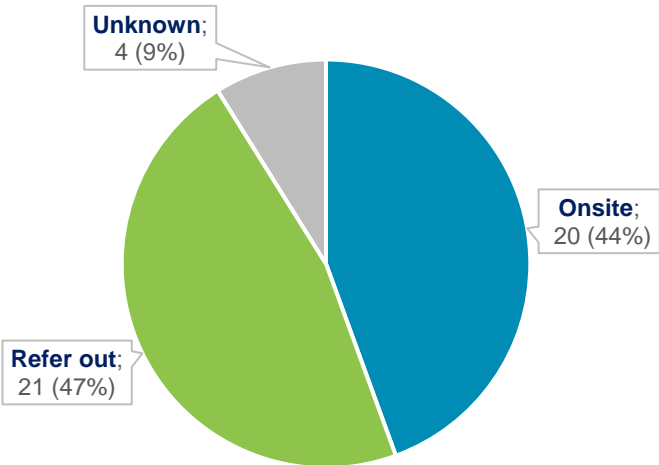


Figure 10: Onsite HCV treatment availability, PA FQHCs, 2023.

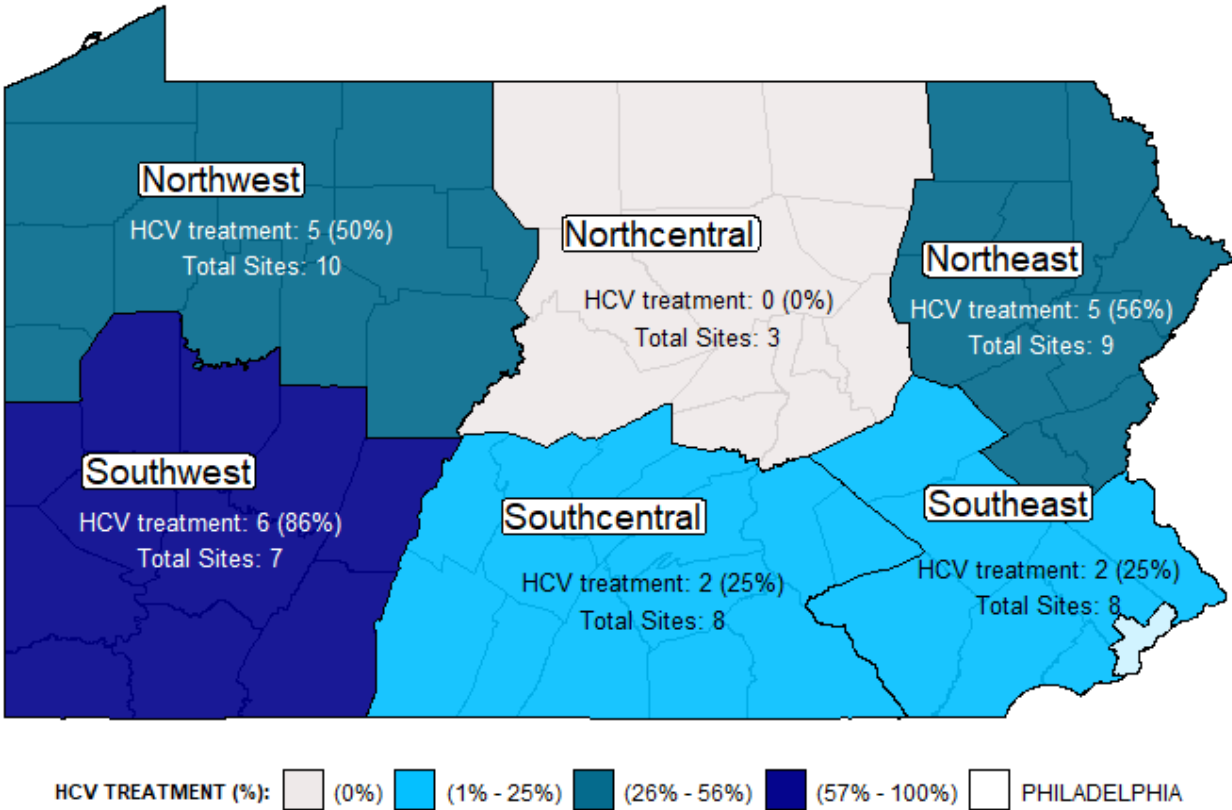


Figure 11: Proportion of surveyed sites that offer HCV treatment on-site in each district (*excludes Philadelphia), PA FQHCs, 2023.

Each site that did not offer HCV testing or treatment was asked a series of questions about the barriers they faced to offering these services (**Table 2**). The most common barrier to not offering testing was a lack of equipment such as phlebotomy equipment. Other common responses were a lack of training, not having enough time with the client, and a lack of funds. The two most common responses for barriers to treatment were lack of training and not being able to get the treatment covered by insurance.

Table 2: Barriers to offering hepatitis C services.

<i>HCV Barriers</i>	Test (n=11)	Treatment (n=25)
	n (%)	n (%)
a) <i>Client Buy In</i>	0	3(12)
b) <i>Equipment</i>	7(64)	3(12)
c) <i>Funding</i>	4(36)	2(8)
d) <i>Insurance</i>	1(9)	7(28)
e) <i>Lack of Training</i>	5(45)	7(28)
f) <i>Not enough time</i>	4(36)	3(12)
g) <i>Other Priorities</i>	1(9)	1(4)

Conclusions

FQHCs and LALs are integral in ensuring all Pennsylvanians receive proper testing and treatment if exposed to HAV, HBV or HCV. Individuals served by FQHCs and LALs in vulnerable communities are at an increased risk of contracting viral hepatitis and other infectious diseases.¹

Gaps in viral hepatitis vaccination, testing, and treatment accessibility exist in Pennsylvania, particularly in rural regions of the state and more specifically the central region. Of the facilities that offered HCV testing, most testing is offered through an opt-in approach, allowing clients to easily refuse testing, compared to an opt-out approach which reduces stigma given testing is routinely offered to everyone. On-site treatment options after diagnosis are limited at many sites as well, with several sites providing referrals for treatment which require clients to seek treatment offsite which adds barriers to care.

Barriers to viral hepatitis prevention and treatment represent missed opportunities. If barriers are addressed, FQHCs and LALs could serve as impactful sites for linkage to viral hepatitis care and services. This care is essential in the prevention and control of viral hepatitis in medically underserved areas.

Limitations

These results are subject to four limitations. First, random selection was used to collect responses from one third of non-dental-centric sites in Pennsylvania, excluding sites located in Philadelphia. Philadelphia sites were excluded given robust work is ongoing in Philadelphia to ensure access to viral hepatitis services at FQHCs and LALs. Random selection of non-Philadelphia sites limits access to data on the entire cohort of interest and can miss key sample groups. Second, not all surveyed facilities completed each question as instructed. Several respondents skipped questions, limiting data generalizability, and leading to a more incomplete view of the full sample. Third, the survey was lengthy, constructed of 43 questions. Future versions of the survey should reduce the number of questions to take into consideration respondent time and obligations and encourage more complete survey responses. Fourth, the survey was not piloted prior to the survey period. Future versions of this survey and similar surveys should be piloted to ensure the questions were interpreted as intended.

Next Steps

DOH is working in collaboration with PACHC to determine effective next steps to increase viral hepatitis service delivery at FQHCs and LALs statewide, including changes in payment policy and opportunities and options for training and education. It is vital to address current gaps in viral hepatitis services at FQHCs and LALs in order to increase access to viral hepatitis services across the Commonwealth, especially for vulnerable populations.

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