Assessment of Hepatitis C-Related Services in Pennsylvania Drug and Alcohol Facilities

Bureau of Epidemiology

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DEPARTMENT OF HEALTH

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Contact Information and Contributors

Pennsylvania Department of Health

Bureau of Epidemiology
Division of Infectious Disease Epidemiology

Lauren Orkis, DrPH
Meg Carr, MPH
Lauren Parker, M.Ed.
Kirsten Waller, MD, MPH
Sharon Watkins, PhD, director, Bureau of Epidemiology

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Questions and comments can be directed to:
Lauren Orkis
Viral hepatitis prevention coordinator | epidemiologist
Bureau of Epidemiology
Pennsylvania Department of Health
412-258-3398 | laorkis@pa.gov

Executive Summary

The opioid epidemic has led to an increase in new hepatitis C virus (HCV) infections transmitted by intravenous drug use. People who use drugs should be offered HCV-related services to limit disease spread. The Pennsylvania Department of Health, in collaboration with the Pennsylvania Department of Drug and Alcohol Programs, conducted a survey in 2019 of randomly selected Pennsylvania drug and alcohol facilities to determine the scope of HCV-related services and barriers to offering these services. A follow-up survey of the same randomly selected facilities was conducted in 2020 to define barriers and HCV-related services best practices.

In 2019, of the 330 drug and alcohol facilities sampled, 316 were eligible for response, and 242 submitted surveys (response rate=77%). Of the respondents, 76 (31%) tested their clients for HCV. Of those that tested their clients, 26 (34%) tested all clients, and 50 (66%) tested a subset. Of the facilities that provided testing, 32 (42%) facilities provided testing onsite by an outside organization, and, in 16 (21%) facilities, testing was only provided by referral. Just 24 (10%) of respondents provided onsite confirmatory HCV testing. In 2020, 135 (56%) facilities responded. Facilities indicated personnel, phlebotomy equipment, and training were needed to increase testing. In 2019, the most common barrier to providing HCV testing was funding. In 2020, facilities reported funding was needed for testing supplies, personnel time, and training. Pennsylvania residents in drug and alcohol treatment are a high-risk population for HCV infection. As a structural intervention, policies should be implemented to ensure the offering of HCV-related services in these settings statewide.

Background

Hepatitis C is an infectious disease that can cause liver-related morbidity and mortality. The primary risk factor for new cases of hepatitis C virus (HCV) is injection drug use.[1] The United States is experiencing an epidemic of opioid use that has led to syndemics of overdose deaths, new HIV cases, and new HCV cases.[2] The recent approval of new treatments for HCV, direct acting antivirals, now make it possible to cure >90% of all those infected.[3]

The Centers for Disease Control and Prevention estimates that at least 4.1 million Americans have been exposed to HCV, and at least 2.4 million residents are currently infected.[4] Pennsylvania is among the top 10 states for prevalence of chronic HCV infection with an estimated 93,900 adults with the disease.[5] Nevertheless, this is likely an underestimate of the true prevalence for many reasons, including lack of access to HCV testing, especially among young adults experiencing substance use disorders.

Treatment guidelines recommend treating all people with HCV, including people who use injection drugs regardless of participation in opioid substitution therapy.[6] Drug and alcohol treatment facilities can play an essential role in increasing HCV testing and linkage to HCV treatment. Increasing access to HCV treatment, especially among those who inject drugs, in turn reduces the virus from circulating in drug-using communities and prevents new infections. Increased screening in drug and alcohol facilities is vital to reducing transmission of HCV in Pennsylvania as a whole among individuals who inject drugs.

To better understand the current landscape of HCV services in drug and alcohol treatment facilities in Pennsylvania, the Pennsylvania Department of Health (DOH) conducted a brief online survey in 2019 and a follow-up survey in 2020 to define barriers and best practices. The purpose of these surveys was to assess HCV screening practices and provision of treatment and referral services, as well as to identify barriers to these services and future training needs.

Methods

DOH, with support from the Association of State and Territorial Health Officials, conducted the Drug and Alcohol Treatment Facility HCV Services Survey in 2019 to assess the breadth of HCV services offered by drug and alcohol facilities and the barriers to providing these services. In 2020, with support from Penn State University's Pennsylvania Expanded HIV Testing Initiative, an online follow-up survey was conducted to further define barriers and best practices.

Facility Selection

In 2019, the Pennsylvania Department of Drug and Alcohol Program (DDAP) provided a list of all licensed drug and alcohol treatment facilities in the state to DOH. The final list included 825 licensed facilities. The facilities were designated urban or rural based on the county in which they were located, using the Center for Rural Pennsylvania designation for each county. 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. The licensed facilities list was stratified by urban or rural designation, and then a Microsoft Excel random number generator was used to select 40% of the urban facilities and 40% of the rural facilities. This resulted in a sample of 330 facilities.

Survey Design

The 2019 survey was developed by DOH staff to assess the breadth of HCV services offered by drug and alcohol facilities and the barriers to providing these services. Each facility reported current HCV referral and treatment practices, as well as barriers to offering these services. The survey also collected information on screening and vaccination for other infectious diseases, as well as interest in training to address barriers to providing these services. The 2019 online survey was open from May 31 to July 17, 2019. The 2020 follow-up survey was developed by DOH staff to further define barriers and best practices as described by facilities through the 2019 survey. The 2020 online survey was open from June 20, 2020, to Oct 12, 2020.

Facility Survey and Follow-up

The 2019 survey was conducted online via SurveyMonkey™. Selected facilities were emailed instructions and a link to complete the survey. All facilities that did not respond to the survey within 7 days received a follow-up phone call in which they were encouraged to complete the survey. If a new contact was identified, the survey link was emailed to the new contact. All facilities that did not complete the survey after the first phone call received a second follow-up phone call. Those that did not complete the survey after the second phone call were considered non-respondents. A total of 242 facilities completed the survey in 2019, achieving a response rate of 77%. The 2020 survey was conducted via Qualtrics^{XM}. The 2019 survey distribution and follow-up method were again followed in 2020. Of the 242 facilities that completed the survey in 2019, a total of 135 facilities completed the follow-up survey in 2020, achieving a response rate of 56%. This follow-up survey was conducted during the COVID-19 pandemic, and facilities were asked to answer with their experience pre-COVID-19.

Analysis

In 2019, the raw data was exported from SurveyMonkey™ to a Microsoft Excel file. These data were cleaned and analyzed using Excel. Four facilities were removed from the analysis because they did not serve any clients in 2018. Not all facilities answered all questions in the survey; percentages were based on the number of facilities that responded to the particular question. Open-ended questions were coded to identify themes. Open-ended responses of “none,” “no,” and “not applicable” were removed to calculate a more accurate response rate for each question. Summary statistics for each question were calculated. The same analysis technique was utilized in 2020 after export from Qualtrics^{XM}. All maps were made using ArcMap® 10.4.1 by Esri.

Results

2019 Survey Results

In 2019, of the 330 facilities selected for survey, 3 were unable to be reached, 4 were closed and 7 indicated serving no clients in 2018. Of the 316 facilities eligible to complete the survey, 242 (77%) submitted the electronic survey. Of those, 169 (70%) were located in urban settings and 73 (30%) were located in rural settings (Table 1). Facilities surveyed were located in various DOH health districts, including 23 (10%) in the Northwest, 61 (25%) in the Southwest, 11 (4%) in the Northcentral, 37 (15%) in the Southcentral, 26 (11%) in the Northeast, and 84 (35%) in the Southeast (**Table 1**). Facilities surveyed offered a variety of services, including outpatient behavioral therapy (65%), outpatient medication-assisted treatment (35%), and inpatient behavioral therapy (21%) [**Table 2**].

Table 1. Response Rates of Drug and Alcohol Facilities That Were Invited to Complete the Survey, by Facility Location, 2019.

Facility location	Invited	Responded	Response rate
OVERALL	330	242	73%
Urban	230	169	73%
Rural	100	73	73%
NW District	25	23	92%
SW District	79	61	77%
NC District	20	11	55%
SC District	46	37	80%
NE District	35	26	74%
SE District	125	84	67%

Table 2. Substance Use Disorder Treatments Offered by the 242 Facilities That Completed the Survey, 2019.

Type of treatment	N	Percent
Outpatient behavioral therapy	156	64%
Outpatient medication-assisted treatment	84	35%
Inpatient behavioral therapy	50	21%
Partial hospitalization/day treatments	34	14%
Inpatient detoxification	26	11%
Inpatient medication-assisted treatment	26	11%

HCV-related Services

In 2019, HCV testing was being offered in some form by 76 (31%) facilities surveyed (**Table 3**); however, only 26 (11%) tested all clients. The remainder tested a subset of clients such as those who inject drugs. Of those 76 facilities offering testing, the frequency of HCV testing

was variable, with 22 (29%) performing opt-in testing on admission, 4 (5%) performing opt-out testing on admission and 6 (8%) performing opt-in testing annually. HCV screening (HCV antibody testing or rapid testing) was available onsite at 35 (14%) facilities, and only 3 facilities used their own staff to conduct testing (**Table 3**). Outside organizations conducted the remainder of testing. Of the 242 respondents, confirmatory HCV testing (RNA testing to identify current infection) was offered onsite at 24 (10%) facilities, and only 9 (4%) facilities conducting this type of testing used their own staff to collect blood specimens (**Table 3**). Of the 110 facilities offering medication-assisted treatment, 59 (54%) were offering HCV testing compared to only 11 (8%) of the 137 facilities offering behavioral therapy alone.

Table 3. HCV-related Services Offered by 242 Drug and Alcohol Facilities, 2019.

HCV-related Services	N	Percent
Any testing service	76	31%
Antibody testing*		
Onsite by staff	3	1%
Onsite by outside agency	32	13%
Referral offered	16	7%
Confirmatory testing*		
Onsite by staff	9	4%
Onsite by outside agency	15	6%
Referral offered	156	64%
HCV treatment*		
Onsite by staff	26	11%
Referral offered	179	74%

*Options are not mutually exclusive.

The percentage of facilities surveyed that offer HCV testing varies by health district (**Figure 1**). Over 30% of facilities surveyed in the Southwest and Southeast Health Districts offered HCV testing, whereas less than 16% of facilities surveyed in the Northcentral, Northeast and Southcentral Health Districts offered HCV testing (**Figure 1**). HCV confirmatory testing was not available onsite at any of the facilities surveyed in the Northwest or Northcentral Health Districts (**Figure 2**).

Figure 1. Percentage of Drug and Alcohol Facilities Surveyed Offering Hepatitis C Testing by DOH Health District, 2019.

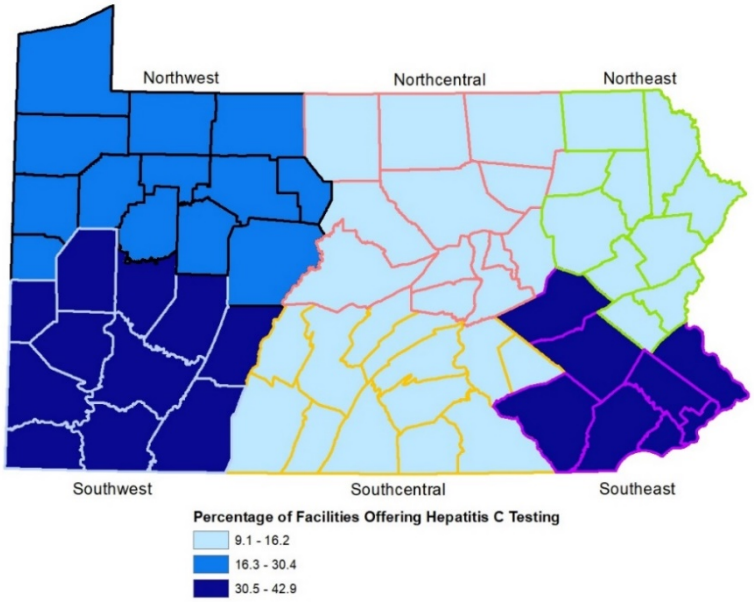
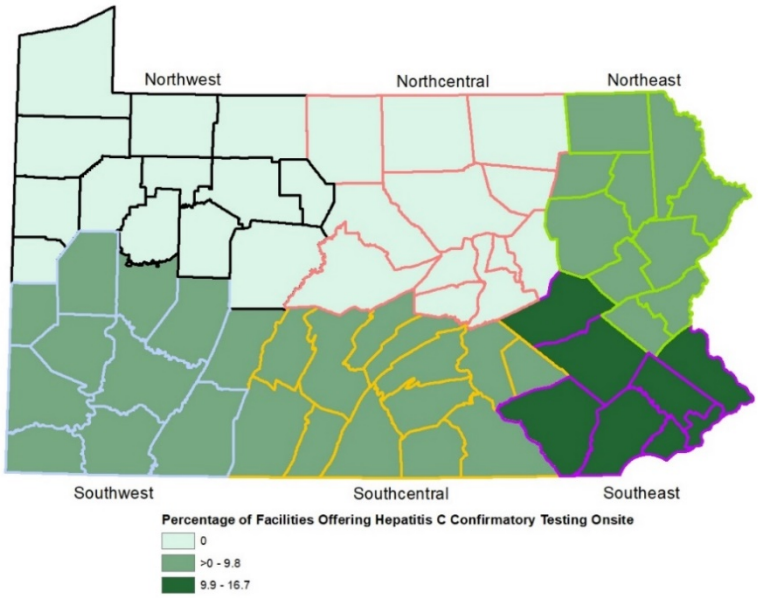


Figure 2. Percentage of Drug and Alcohol Facilities Surveyed Offering Hepatitis C Confirmatory Testing Onsite by DOH Health District, 2019.



In 2019, many barriers were identified related to offering HCV testing. The following percentages were based on the number of facilities that responded to the particular question. The most commonly identified barrier was funding, which was listed by 64 (28%) facilities, followed by staff time by 46 (20%) facilities (**Table 4**). Many facilities stated that they were not medical facilities and thus not able to perform this type of testing. Lack of laboratory capacity

and trained medical staff were also identified barriers (**Table 5**). Several facilities indicated experiencing problems related to insurance, such as Medicaid or private insurance reimbursement issues and/or behavioral health payer issues. Very few facilities indicated that staff buy-in was an issue; however, more indicated that client buy-in was an issue (**Tables 4 and 5**).

Table 4. Barriers to Offering Hepatitis C Testing Among 230 Drug and Alcohol Facilities, 2019.

Barriers to testing	N	Percent
Funding	64	28%
No barriers	60	26%
Staff time	46	20%
Buy-in from clients	39	17%
Medicaid reimbursement issues	39	17%
Private insurance reimbursement issues	37	16%
Behavioral health insurance payer issues	35	15%
Stigma	30	13%
Buy-in from staff	7	3%

Table 5. Barriers to Offering Confirmatory Testing for Hepatitis C Onsite at 180 Drug and Alcohol Facilities, 2019.

Barriers to confirmatory testing onsite	N	Percent
Phlebotomy/laboratory capacity issues	77	43%
Funding	56	31%
Insurance reimbursement issues	43	24%
Staff time	43	24%
Buy-in from clients	20	11%
Buy-in from staff	9	5%

In 2019, facilities were also asked whether they offered referrals for HCV testing and linkage to care. Over 73% of facilities surveyed referred patients elsewhere for HCV testing (**Table 3**); however, lack of referral sites was listed as a barrier to offering a referral, as well as lack of patient navigation services, buy-in from patients, and staff time (**Table 6**). Only 26 (11%) provided treatment onsite, and 179 (74%) provided a referral for care (**Table 3**). Most commonly, clients were referred to primary care providers for treatment. Nevertheless, many barriers were identified to providing treatment onsite and by referral, including lack of medical staff, staff time, and lack of referral sites (**Tables 7 and 8**).

Table 6. Barriers to Providing a Referral for Hepatitis C Confirmatory Testing Among 36 Drug and Alcohol Facilities, 2019.

Barriers to referrals	N	Percent
Lack of referral sites	16	44%
Lack of peer navigators of CHWs to facilitate completion of testing	12	33%
Buy-in from clients	7	19%
Staff time	7	19%
Buy-in from staff	2	6%

Table 7. Barriers to Providing Hepatitis C Treatment Onsite at Drug and Alcohol Facility Among 185 Drug and Alcohol Facilities, 2019.

Barriers to providing treatment onsite	N	Percent
Lack of trained medical staff to provide treatment	117	63%
Staff time	43	23%
Medicaid reimbursement issues	35	19%
Private insurance reimbursement issues	35	19%
Behavioral health payer issues	31	17%
Buy-in from clients	19	10%
Buy-in from staff	9	5%

Table 8. Barriers to Providing a Referral for Hepatitis C Treatment Among 21 Drug and Alcohol Facilities, 2019.

Barriers to providing a treatment referral	N	Percent
Lack of referral sites	7	33%
Lack of peer navigators or CHWs to facilitate referral	6	29%
Staff time	6	29%
Buy-in from clients	5	24%
Buy-in from staff	1	5%

Other Infectious Disease-related Services

Finally, in 2019, we asked facilities if they were also screening for other infectious disease conditions. Only 71 (45%) screened for HIV (**Table 9**). Sexually transmitted disease (STD) screening was offered by 53 (34%) facilities. Hepatitis A vaccine was offered by 9 (6%) of the facilities, and hepatitis B vaccine was offered by 9 (6%) of the facilities. Pre-exposure prophylaxis (PrEP) information was shared by 24 (15%), and PrEP referral was offered by 22 (14%) facilities (**Table 9**). Of the 242 facilities surveyed, 98 (40%) facilities indicated being interested in training to address barriers related to HCV, HIV, PrEP, and/or STD.

Table 9. Other Infectious Disease Services Offered at 157 Drug and Alcohol Facilities, 2019.

Infectious disease services	N	Percent
TB screening	111	71%
HIV screening	71	45%
Hepatitis B screening	38	24%
STD (chlamydia, gonorrhea, syphilis) screening	53	34%
Hepatitis A vaccination	9	6%
Hepatitis B vaccination	9	6%
PrEP information	24	15%
PrEP referral	22	14%

2020 Follow-up Survey

Of the original 242 facilities surveyed, 135 (56%) facilities completed the follow-up survey in 2020. Of those 135, 92 (68%) were in urban settings and 43 (32%) in rural settings. Facilities surveyed treated a variety of addiction types, including opioid use disorder (93%), polysubstance use disorder (88%), alcoholism (87%), and stimulant use disorder (84%). No facility surveyed treated alcoholism alone.

In 2020, HCV testing was being offered in some form by 59 (44%) facilities. Of those 59 facilities, 20 (34%) facilities surveyed indicated testing was performed onsite by staff. This number increased by 9 facilities from 2019 to 2020. Of those, 8 (40%) tested all clients and 5 (25%) tested clients with long-term facility stays more than once. Of those that performed testing onsite by staff, 19 (95%) indicated that medical staff conducted testing and 16 (80%) indicated that HCV testing was part of their job description. Staff trainings related to HCV testing were provided by 4 (20%).

In 2019, lack of medical staff was cited as a major barrier to testing and continued to be cited in 2020 by 36 (27%) facilities. Several barriers to HCV testing onsite were identified through the 2020 survey, including staff time (39%), funding (32%), Medicaid/Medicare reimbursement issues (19%), and private insurance reimbursement issues (17%) (**Table 10**).

Table 10. Descriptions of Barriers to Onsite HCV Testing by Staff, 2020.

Barrier	Example open-ended response
Staff time	"We do not have enough time in our 50+ hour work week to get our jobs done, although this is a valuable service, we cannot burden our staff more to provide a service with other complications."
Inexperience	"Not sure if it is billable and who can bill if it is. Would it mean hiring an additional staff person? What would it mean to add the service to our current menu of services – what additional paperwork is required."
Medicaid/Medicaid reimbursement issues	"Being a Drug and Alcohol provider, we are not able to bill for any physical health issues, we only have billing codes for D and A treatment (therapy and dispensing MMT)"

Private insurance reimbursement issues	“Private insurance companies pay less than 30 percent of what is billed and conflict with state regulations.” “Blood draws are not reimbursable at our facility. If we do them, it is pro bono.”

However, of those facilities not offering onsite testing, 83 (72%) facilities also described ‘other barriers’ to onsite HCV testing **(Table 11**).

Table 11. Descriptions of Other Barriers to Onsite HCV Testing by Staff, 2020.

Barrier	Example open-ended response
Training	“We do not have the staff trained to administer the testing. We aren't aware of how to be reimbursed for the services or what the process entails.”
	“Staff must be properly trained, and policies and procedures must be developed that abide by all regulatory requirements.”
Inexperience	“Not sure how to do it; No supplies; No lab license; No medical staff available.”
Lack of equipment and/or space	“Prior to COVID-19, we had outside providers working with patients with screening and testing. At this time, due to COVID-19, the outside agency is unable to come into [our] center.”

Facilities successfully testing onsite also described barriers they overcame to offering these services and what barriers still exist (**Table12**).

Table 12. Descriptions of Barriers Overcome to Offer HCV Services, 2020.

Barrier overcome	*Example open-ended response*
Patient education	“Patients needed to know about importance of HCV testing, new treatment availability, eligibility for treatment regardless of SUD status and cirrhosis grade.”
Cost	“Atlantic Diagnostic Laboratories staff come six days a week to draw blood to test to for HCV. Philadelphia Fight comes in once a week to draw blood on clients who test positive for HCV.”
Staff resistance/cost	“There had been some staff resistance, but current staff has been trained and is very invested in providing treatment. In the past, we were reluctant to provide the testing due to problems of access for our clients when they tested positive and needed treatment. We hired a gastroenterologist from the Lehigh Valley who was willing to come on-site to oversee the treatment program and this made treatment more accessible for our clients. Our partner organization funds the Physician's salary out-of-pocket.”

In 2020, facilities indicated that funding was needed for testing supplies, personnel, personnel training, and personnel time. Of those 115 facilities that do not currently test onsite, 45 (39%) facilities indicated that staff time was a barrier to HCV testing. Of those 45 that said staff time was a barrier, 20 (44%) facilities were interested in working with an outside agency to conduct testing and 10 (22%) indicated they were not interested.

Of those not offering testing onsite, 60 (52%) facilities were unaware that non-medical staff could conduct rapid HCV and HIV testing. If resources allowed, 17 (15%) facilities indicated being interested in conducting blood draws for confirmatory testing, yet 69 (60%) indicated they were not interested. Barriers to blood draws included onsite space to perform phlebotomy (57%), insurance reimbursement issues (39%), access to phlebotomy-trained staff (75%), access to phlebotomy equipment (66%), and access to a lab to perform confirmatory testing (56%).

Facilities were asked how they expected services to change following the COVID-19 pandemic. Of all facilities surveyed, 18 (13%) facilities expected HCV and other infectious disease-related services to change. Of those 18 facilities, 6 (33%) facilities expected safety protocols to continue, 5 (28%) expected cases of infectious diseases and related risk behavior to rise, 4 (22%) expected to increase or resume testing.

Insurance Reimbursement
In 2019, 55 (23%) facilities indicated insurance reimbursement as a barrier to offering HCV testing. In 2020, this issue was explored further by insurance type. Facilities indicated that some private insurance would not cover blood draws. Of those that indicated private insurance reimbursement was a barrier, 18 (90%) facilities indicated private insurance reimbursement was burdensome in terms of staff time, paperwork, and complicated procedures. One facility noted, “We aren’t sure how to bill for these services. We haven’t looked into them.” In 2020, only 4 facilities reported using government contracts or sliding scales.

In terms of Medicaid/Medicare, facilities again indicated that this type of insurance would not fully cover blood draws and may only pay to run the test, but not for the staff time and equipment required. In 2020, 21 (16%) facilities found Medicaid/Medicare reimbursement burdensome in terms of staff time, paperwork and complicated procedures. Specifically, one facility noted, “Those bills are generated by health services. To bill an insurance carrier, the rendering provider needs to submit an order, and for that to happen, they need to be a licensed, credentialed medical provider who is currently paneled with the insurance plan.”

Limitations

The following results are subject to 4 limitations. First, both surveys were only completed by a selection of facilities and not all facilities statewide were eligible to complete the surveys. Surveyed facilities offering hepatitis-related services may have been more inclined to complete the surveys. Second, not all surveyed facilities completed each question as instructed. The number of required questions was limited to prevent facilities from exiting the survey prematurely. Third, neither the 2019 survey nor the 2020 survey were piloted prior to the survey period. Future iterations of this survey should be piloted to ensure appropriate language used and interpreted as intended. Finally, the 2020 survey was conducted during the COVID-19 pandemic and response rates may have been reduced due to facilities’ competing priorities.

Conclusions

Drug and alcohol facilities are a critical touchpoint in the health care system for people who use drugs. People who use drugs are at increased risk of contracting HCV and other infectious diseases. Nevertheless, only one-third of Pennsylvania drug and alcohol facilities surveyed conducted HCV testing during the survey period. Of those facilities that offered testing, most is offered as part of an opt-in program, allowing clients to easily refuse testing.

Furthermore, if testing was available, most facilities offered testing through an outside organization that might have limited the availability of onsite testing to clients. If a referral was offered, external factors might have limited the client's ability to seek care.

The proportion of facilities offering HCV-related services in our survey was similar to that found in national studies. In a recent article published by Health Affairs, data from the National Survey of Substance Abuse and Treatment Services were analyzed. They found that 27.5% of substance use disorder treatment facilities nationwide offered screening for HCV. They also found that 63.4% of substance use disorder facilities offering medication-assisted treatment were also offering screening for HCV.[7]

Lack of HCV testing and screening for other infectious disease conditions represents a major missed opportunity. If barriers are addressed, Pennsylvania drug and alcohol facilities could serve as impactful sites for linkage to HCV care and care for other infectious diseases. This type of care is vital to the prevention and control of infectious disease outbreaks among people who use drugs.

Next Steps

DOH and DDAP are collaborating on an HIV and viral hepatitis services project funded through Substance Abuse and Mental Health Services Administration's State Opioid Response grant. This project will address barriers identified and improve access to HCV-related services at drug and alcohol facilities statewide. DOH and DDAP will also collaborate with the Pennsylvania Department of Human Services to address barriers related to Medicaid reimbursement for medical interventions as opposed to behavioral interventions. Finally, many facilities indicated the need for training related to HCV and other infectious conditions. Education of facility staff and clients will be prioritized to emphasize the importance of harm reduction and HCV-related services in drug and alcohol facility settings statewide.

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