Availability of Hepatitis C Services in Drug and Alcohol Treatment Facilities in Pennsylvania

by

Margaret Carr

BS, American University, 2015

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This essay is submitted

by

Margaret Carr

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and approved by

Essay Advisor: Thomas J. Songer, PhD,
Assistant Professor,
Department of Epidemiology
Graduate School of Public Health
University of Pittsburgh

Essay Reader: Lauren Orkis, DrPH,
Adjunct Assistant Professor
Department of Epidemiology
Graduate School of Public Health
University of Pittsburgh

Essay Reader: Christina Mair, PhD,
Assistant Professor
Behavioral and Community Health Sciences
Graduate School of Public Health
University of Pittsburgh

Thomas Songer, PhD

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Margaret Carr, MPH

University of Pittsburgh, 2020

Abstract

Hepatitis C is an infectious disease that killed more than 17,000 people in the United States in 2017. Chronic hepatitis C infection can cause liver damage, cirrhosis and liver cancer and is the leading cause of liver transplantation. The Pennsylvania Department of Health (PADOH) estimates over 200,000 Pennsylvanians are currently infected with hepatitis C. The opioid epidemic has led to an increase in new hepatitis C infections transmitted by injection drug use. Offering hepatitis C-related services to people who use drugs can improve their health and prevent further transmission of Hepatitis C. From May 2019 through July 2019, the PADOH conducted a survey of drug and alcohol treatment facilities to assess the breadth of hepatitis C-related services and identify barriers to offering these services. Among the 825 licensed facilities in Pennsylvania, survey was emailed to a stratified random sample of 330 urban and rural facilities. Of the 330 facilities selected for the survey, there were 316 eligible and 242 facilities submitted surveys (77%). Seventy-six facilities (32%) reported that they test at least some of their clients for HCV. This rate is similar to national estimates with 27.5% of substance use facilities reporting offering screening for hepatitis C virus (HCV). Of the facilities that test for HCV, 26 (34%) test all clients and 40 additional sites reported specifically testing people who inject drugs. Just 24 (10%) of the

facilities provide onsite confirmatory testing, which is needed to diagnose HCV, and 26 (11%) facilities provide HCV treatment onsite. The biggest barrier to providing HCV testing was funding, according to response selected by 64 (28%) of facilities. Hepatitis C is a significant public health issue in Pennsylvania, and residents with substance use disorders are a high-risk population. With just one-third of Pennsylvania facilities offering HCV testing to their clients, they are an untapped resource for expanding HCV testing, linkage to care, and ultimately cure in Pennsylvania. Policies, such as universal screening in treatment facilities and integrated behavioral health and physical health services, should be implemented as structural interventions to encourage the offering of HCV-related services in these settings statewide.

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Preface

I would like to acknowledge the support of the Pennsylvania Department of Health especially, Dr. Lauren Orkis, without whom this survey and essay would not have been possible. Thank you to Dr. Songer and Dr. Mair for their helpful feedback and guidance on this essay. Finally, I would like to thank my advisor Dr. Glynn, I am so appreciative of your guidance and support throughout my graduate experience. One note on nomenclature, throughout this paper hepatitis C and hepatitis C virus (HCV) will be used interchangeably.

1.0 Introduction

The United States is experiencing a marked increase in opioid use disorder that has led to syndemics of overdose deaths, new HIV cases, and new hepatitis C cases.[1] Individuals with opioid use disorder continue to transition from oral and intranasal drug use to injection drug use that puts them at greater risk of contracting bloodborne infections.[2] These syndemics are affecting both large cities and rural and suburban communities across the country.[3] Overdose deaths are grabbing headlines, and the risks of HIV infection for those who inject are well known. However, awareness of hepatitis C has remained in the background. In 2012, the number of deaths associated with hepatitis C in the United States surpassed the number of deaths from HIV, pneumococcal disease, tuberculosis and the other 57 notifiable infectious conditions combined.[4] New treatments for hepatitis C, known as direct acting antivirals (DAAs), now make it possible to cure over 95% of all those infected.[5] The increased incidence and mortality from hepatitis C and the availability of a curative treatment underscores the urgency to identify individuals with this disease and connect them to treatment.

1.1 Natural History of Hepatitis C

The hepatitis C virus (HCV) is an infectious disease that can lead over time to liver-related morbidity and mortality. Infection with HCV can cause acute hepatitis C. However, just 15-30% of individuals experience symptoms of acute HCV infection after exposure to HCV.[6] If there are symptoms, they are often mild and nonspecific flu-like symptoms.[6,7] Asymptomatic infection and

nonspecific symptoms in persons with symptomatic disease often lead to low diagnosis or misdiagnosis of many acute hepatitis C infections. The Centers for Disease Control and Prevention (CDC) received just 3,216 reports of acute infection in 2017.[8] The CDC estimates the true incidence of acute hepatitis C is closer to 44,700 (35,400-152,400) anually.[8] Approximately 25% of individuals will resolve their HCV infection in the short-term, but the remainder will develop long term infection.[6,7] Many factors influence an individual's ability to clear the acute infection including sex, immune response, and genetics.[6] Females are more likely to clear acute infection compared to males. The strongest factor associated with HCV clearance is polymorphisms in the IL28B gene which encodes a protein that has an unknown role in viral control.[6] If an individual's acute infection is not cleared and not diagnosed, they will go on to develop chronic infection which can go unnoticed and undiagnosed for decades.

Hepatitis C infection is considered chronic when HCV RNA is found in the blood at six months or longer after the onset of an acute infection.[7] Chronic hepatitis C progresses slowly over a 15-30 year period and can result, after this timeframe, in liver scarring or more severe damage, such as cirrhosis, end-stage liver disease, and hepatocellular carcioma.[6,7] Current screening efforts focus on finding individuals with chronic hepatitis C infection for the purpose of providing treatment to prevent these long-term adverse health events.

Estimations vary based on study population, but approximately 20-30% of individuals with chronic hepatitis C will develop cirrhosis.[7] One serious complication of cirrhosis is portal hypertension, a condition that occurs when scar tissue blocks the flow of blood through the liver causing high blood pressure in the portal vein.[9] Portal hypertension can cause an array of complications including enlarged veins, edema, a build of fluid in the abdomen, and confusion caused by a buildup of toxins in the brain.[9] Cirrhosis also increases an individual's risk of bacterial

infections.[9] Any one of these events places an individual at greater risk of liver failure, end-stage liver disease, and the need for a liver transplantation.[7] Once an individual has cirrhosis, the risk of developing hepatocellular carcinoma is 1% to 4% per year.[7]

Liver cancer incidence and mortality is another independent health issue caused from chronic hepatitis C infection. Long-term infections are thought to play a large role in the increase in liver cancer for both men and women in the United States from 2010-2015.[10] This increase is largely linked to hepatitis C infection among baby boomers (1945-1965).[10] The CDC estimates 50% of cases of liver cancer in the US are hepatitis C related.[11]

Cirrhosis caused by hepatitis C infection is the leading indication for liver transplantation in the United States.[12] The number of patients presenting with decompensated cirrhosis has continued to increase in recent years while the organ donor pool in the United States has remained static.[13] In 2014, 6,729 liver transplants were performed on adults and 14,632 patients were registered on the waiting list.[14] The number of patients in need of a liver transplant has remained stable over the past decade at about 15,000.[14] Untreated hepatitis C prior to liver transplantation results in universal recurrence of infection following transplantation.[13] The introduction of direct-acting anti-virals (DAAs) has greatly altered the transplantation landscape. DAAs have enabled curing hepatitis C infection prior to transplantation to prevent recurrence and has increased the organ donor pool to include HCV-positive donors.[14] Widespread access to DAA may eventually reduce the need for liver transplantation caused by hepatitis C infection.

In addition, hepatitis C can cross the placenta, leading to vertical or perinatal transmission. For women with chronic hepatitis C, the risk of perinatal transmission is about 4-7% [15,16] Hepatitis C rarely causes complications during childhood, but individuals who have perinatal hepatitis C may develop severe disease by the time they are young adults.[15]

1.2 Incidence of Hepatitis C

The incidence of acute hepatitis C increased substantially over the last decade.[8,17] Increased incidence is likely due to both to a true increase in the number of infections as well as increased surveillance over the time period.[8] In Pennsylvania, the rate of acute infections increased from 0.6 per 100,000 in 2013 to 1.7 per 100,000 in 2017.[8] The incidence rate in Pennsylvania in 2017 was almost twice the national rate of 1 per 100,000.[8] Rates of acute hepatitis C increased rapidly for young adults aged 20-29 years and 30-39 years.[8] Increased incidence of acute hepatitis C ultimately leads to increased incidence of chronic hepatitis C as a majority of individuals with acute infection go on to develop chronic infection.

1.3 Risk Factors for Hepatitis C Infection

Public health research has identified several risk factors for hepatitis C infection. Any percutaneous exposure to infectious blood can potentially transmit HCV.[18] As such health care workers are at heightened risk for HCV infection. Globally, iatrogenic transmission, blood transfusions and unsafe medical procedures, remains an important risk factor.[6] In the United States, individuals who received a blood transfusion or an organ transplant prior to 1992 are considered at risk.[19] Likewise, people with hemophilia who received factor concentrates prior to 1987 are considered at risk.[19] Additionally, hemodialysis is a risk factor for acquiring hepatitis C due to mishandling of medications and inadequate cleaning between patients.[20] While hepatitis C can be transmitted through sexual activity; it is not common.[21] There is a higher risk of sexual

transmission among men who have sex with men (MSM), especially among MSM who are coinfected with HIV.[21]

1.3.1 Injection Drug Use and Hepatitis C

The primary risk factor for new cases of hepatitis C in the United States today is injection drug use.[6] Injection drug use accounts for more than 60% of hepatitis C infections in the United States.[22] Hepatitis C is spread through multi-person use ("sharing") of injection equipment, including needles, syringes, cotton, cookers, and water used for injecting drugs.[23,24] Furthermore, HCV can survive in contaminated syringes for up to 63 days, creating a large window for possible reuse leading to transmission.[25] In a study of needlestick injuries in healthcare settings, hepatitis C was shown to be more efficiently transmitted by blood than HIV, occurring in 3-9% of incidents compared to HIV's 0.3%.[3] It can be assumed transmission would be higher in multi-person use of needles and syringes, underscoring the importance of access to safe injection equipment as an important protective factor in preventing hepatitis C transmission.

Researchers have found a high prevalence of hepatitis C even among people who have newly started using injection drugs.[2] A study of 846 patients entering Mount Sinai Beth Israel's drug detoxification and methadone maintenance programs in New York City from 2007-2017 suggested very high HCV incidence in the first years of using injection drugs.[2] For individuals with two or fewer years since their first injection, the prevalence was 30%, and for those with 3-5 years since their first injection, the prevalence was 50%. A systematic review of the global prevalence of injection drug use and HCV estimates that the prevalence of the HCV antibody infection among people who inject drugs in North America is 55.2% (40.8-67.7).[26] Compared to the general population, any individual who has used injection drugs is at much higher risk of

hepatitis C infection, and special effort should be made to provide testing and treatment to this population.

1.4 Prevalence of Hepatitis C

Due to chronic hepatitis C's asymptomatic appearance and long natural history, estimating its prevalence in the United States is a challenge. Currently, just 14 states receive CDC funding for enhanced hepatitis C surveillance.[27] Pennsylvania does not receive this funding. Currently, researchers rely on the National Health and Nutrition Examination Survey (NHANES) to estimate the prevalence of hepatitis C and assess changes in its prevalence over time. However, the NHANES sampling frame excludes several high-risk populations for infection, such as people experiencing homelessness, individuals who are incarcerated, and those living on Indian reservations.[28] In the general U.S. population covered by NHANES, the HCV antibody prevalence is estimated at 1.5% (1.3-1.8%) and the HCV RNA prevalence is estimated at 0.9% (0.7-1.0%).[29] Edlin et al., making adjustments for high-risk populations excluded from the NHANES sampling frame, estimate that at least 4.6 million (3 million-6 million) Americans have been exposed to HCV and at least 3.5 million residents are currently infected.[28] However, the true prevalence may still be higher due the underrepresentation of groups at increased risk of hepatitis C in the NHANES sampling frame, such as Puerto Rican Americans, other ethnic minorities, and people born in countries with a high prevalence of HCV.[28] Even without precise estimates of the prevalence, hepatitis C is a significant burden on the health of many Americans.

1.5 Hepatitis C in Pennsylvania

Pennsylvania is among the top ten states in terms of chronic HCV prevalence.[30] There are several factors that contribute to this ranking. Pennsylvania is the fifth most populous state and has an aging population.[31,32] Pennsylvania's older adult population (65 and over) increased by 16.3% from 2010-2017. Since, hepatitis C is most prevalent in baby boomers, Pennsylvania's age structure means the state has more residents at risk for hepatitis C. Additionally, increasing injection drug use across the state also contributes to the burden of hepatitis C. Hepatitis C incidence has been increasing since 2009, and in 2018, case reports of chronic hepatitis C exceeded 20,000 in Pennsylvania.[33] However, given that one reported case represents an estimated 14 cases, this is an underestimate of the true burden of disease.[34]

The burden of hepatitis C varies across Pennsylvania. More cases are reported in men than in women.[33] Both genders have a similar bimodal age distribution with most cases reported in the 18-34-year-old age group and followed by older adults aged 54-65 years old.[33] Hepatitis C is increasing among women of reproductive age in Pennsylvania, thus increasing concern for perinatal transmission of hepatitis C.

By geographical area, the count of chronic hepatitis C cases is greatest in the metropolitan areas, especially Philadelphia in the southeastern part of the state (Figure 1).[33] However, when burden is assessed by cases per 1,000 residents, counties in the southwestern and northeastern parts of the state have the greatest rates of chronic hepatitis C (Figure 2).[33] The Center for Rural Pennsylvania defines 48 counties in Pennsylvania as rural with 27% of the population residing in a rural county.[35] The remaining 19 counties are defined as urban.[35] Pennsylvania's burden of hepatitis C in both large metropolitan areas and rural counties presents a challenge for statewide

approaches to address this disease. Rural communities face unique challenges with access to specialist providers and harm reduction services are the needed for hepatitis C elimination.

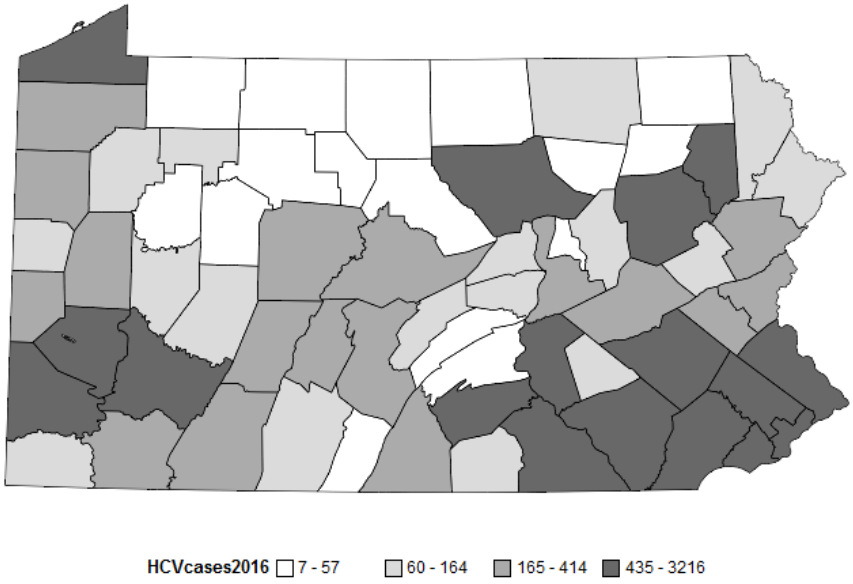

Figure 1 Newly reported cases of confirmed and probable hepatitis C, by county, 2016

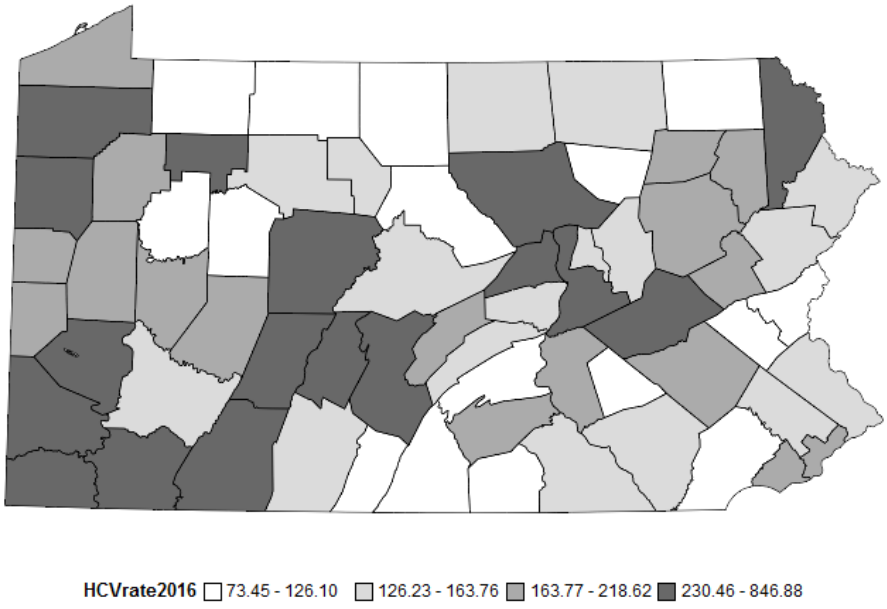

Figure 2 Rates of newly reported confirmed and probable hepatitis C per 100,000 population, by county, 2016.

When supplemented with Pennsylvania Department of Health (PADOH) adjustments for people who are homeless or incarcerated, people who injected drugs in the past year, veterans, active military duty, healthcare workers, nursing home residents, hemodialysis patents and hospitalized patients, data from the NHANES estimate approximately 209,982 (range: 170,186-267,652) people are currently infected with hepatitis C in Pennsylvania.[36] As in other HCV prevalence estimates, this is likely an underestimate of the true prevalence due to limited studies on the prevalence in high risk populations. Furthermore, studies estimating the recent increase in hepatitis C among young adults experiencing substance use disorders are lacking, particularly in rural areas. Hepatitis C is clearly an important issue for communities across the state.

1.6 Hepatitis C Mortality

Hepatitis C is a significant cause of mortality in the United States. In 2017, 17,253 death certificates of United States residents listed hepatitis C as an underlying or contributing cause of death.[8] From 2013-2017, the overall hepatitis C-related mortality rate decreased. [8] The highest age-adjusted hepatitis mortality rates are experienced by American Indians/Alaskan Natives and this rate increased from 2016-2017. [8] Historically, males have experienced a higher age-adjusted hepatitis C-related mortality rate.[8] In 2017, the age-adjusted mortality rate per 100,000 in males was 6.12 (6.01-6.23) compared to 2.32 (2.26-2.39) in females.[8] Hepatitis C is a significant cause of death and an urgent public health challenge in the United States.

In Pennsylvania, the age-adjusted hepatitis C-related mortality rate per 100,000 was 3.15 (2.88-3.42) in 2017.[37] The mean age at death was 61.[37] In CDC region 3, which includes Pennsylvania, West Virginia, Virginia, Maryland, Delaware, and the District of Columbia, the age-

adjusted hepatitis C-related mortality rate per 100,000 was 5.43 (5.10-5.76) for males compared to 1.82 (1.62-2.01) for females. Additionally, in region 3 the age-adjusted hepatitis C-related mortality rate per 100,000 was 8.11 (7.40-8.82) for Non-Hispanic Blacks compared to 2.82 (2.61-3.02) for Non-Hispanic Whites. The baby boomer cohort, those born between 1945-1965 had the highest hepatitis C-related mortality rate of 14.27 compared to the overall rate of 3.53. Hepatitis C represents a significant cause of mortality in Pennsylvania.

1.7 Prevention Strategies for Hepatitis C

Efforts to reduce the burden of hepatitis C in the population are varied, and can be categorized by their focus on primary, secondary, and tertiary prevention efforts. The most common primary prevention efforts center on blood screening to detect HCV before donations, needlestick injury prevention programs in healthcare institutions, and harm reduction efforts for injection drug users. The major secondary prevention effort is the recommended use of HCV screening in at risk populations. Emerging and effective treatment efforts for HCV also now exist to reduce the burden related to HCV infection. Further details on these efforts are provided below.

1.7.1 Screening for Hepatitis C

Public health authorities have recommended a screening protocol to identify hepatitis C in the population. Testing for hepatitis C is a two-step process requiring an HCV antibody test followed by an HCV RNA test. The antibody test determines whether the individual was ever exposed to the virus, and the HCV RNA test determines if they currently have an infection.

There are several testing options for hepatitis C, including enzyme immunoassays, RNA detection assays, rapid diagnostic tests or point-of-care tests. The standard recommended by the Centers for Disease Control and Prevention (CDC) is an enzyme immunoassay to detect HCV antibodies followed by nucleic acid testing.[38] Tests which require serum/plasma samples obtained through a venous blood draw are a challenge in resource-limited settings and in populations that use injection drugs and have limited venous access.[39]

A systematic review and meta-analysis found high sensitivity and specificity for hepatitis C antibodies across multiple populations (general, high-risk, and hospital) and supported the use of rapid diagnostic tests for HCV antibodies.[38] The oral fluid rapid diagnostic tests have slightly lower sensitivity but similar specificity to the blood-based test (94%, 95% CI: 93-96%) versus (98%, 95% CI: 97-98%).[38]

Another option for screening is dried blood spot (DBS), in which blood from a finger puncture is deposited on filter paper that can be used for both the antibody and HCV RNA test. In a meta-analysis of studies on DBS for hepatitis C diagnosis, sensitivity was 96.1% and specificity was 99.2%. However, it was noted that the external validity of the studies may be limited in populations in which the prevalence of HCV is low.[39] Effective oral fluid and dried blood spot tests are important in expanding testing to outreach settings where phlebotomy is unavailable. These tests also make testing accessible to people who inject drugs and may have limited venous access.

In 1998, the CDC first recommended risk-based HCV screening. In 2012, the CDC updated their recommendations to include onetime hepatitis C screening for those born between 1945 and 1965 regardless of HCV risk factors.[19] Risk-based screening continued to be recommended for people who currently or previously injected drugs as well as those with certain medical conditions,

such as HIV, and those who were ever on long-term hemodialysis.[19] Under these recommendations, national screening prevalence in 2015 was estimated at 12.8% (12.0-13.7) for baby boomers (1945-1965), 14.9% (14.0-15.8) for those born from 1966-1985, and 9.8% (8.7-10.9) for those born post-1985.[40] Birth-cohort and risk based screening may miss as many one-quarter of individuals currently infected with hepatitis C.[41]

In October 2019, the CDC shared draft recommendations for hepatitis C screening among adults for public comment. The new recommendations include one-time universal screening for all adults and screening for pregnant women during each pregnancy while maintaining risk-based screening.[42] These new federal screening guidelines were officially adopted in April 2020. When implemented, these screening guidelines may increase the prevalence of screening and improve identification of hepatitis C cases.

The true prevalence of hepatitis C screening among people who use drugs is unknown, but researchers know only about 50% of people are aware of their hepatitis C status.[43] People who use drugs face many hurdles when trying to access health care generally and hepatitis C care specifically. Qualitative research among young people who use injection drugs identified five themes related to the hepatitis C care continuum.[44] Participants identified pervasive stigma leading to dissatisfaction with interactions with providers, a perceived lack of referral to treatment, disincentives for HCV treatment for people who continue to use drugs, and the perceived need for treatment.[44] All these things create barriers to hepatitis C screening and treatment for people who use drugs.

In July 2016, the Pennsylvania General Assembly passed the Hepatitis C Screening Act, which requires health care providers to offer hepatitis C screening to all those in the birth cohort 1945-1965.[45] While birth cohort screening is important for reducing morbidity and mortality

among the aging population, comparatively few people in this cohort have the behavioral risk factors for hepatitis C transmission. Through emphasizing birth cohort screening, the General Assembly may be diverting attention from the residents most at risk of acquiring and transmitting hepatitis C in the state.

1.7.2 Harm Reduction as a Means to Reduce Transmission and Increase Screening

Harm reduction services, such as syringe service programs, are an access point for hepatitis C education and screening for people who use drugs because they provide the means to limit infection or re-infection with hepatitis C. Currently, Pennsylvania state law prohibits the sale or distribution of drug paraphernalia, including needles and syringes.[46] However, Allegheny and Philadelphia counties have local authorizations that allow syringe exchange programs to operate. One study found that over 78% of young people in Pennsylvania currently infected with HCV, which was used as a proxy for injection drug use in the study, live further than 10 miles from a syringe service program.[47] This leaves people living in the vast majority of the state without access to a syringe exchange program and other harm reduction services. In March 2020, Pennsylvania State Senators Browne and Williams announced plans to introduce legislation to allow syringe service programs to operate freely across the state.[48]

Another potential harm reduction strategy is safe injection sites. Safehouse, a non-profit in Philadelphia, is attempting to establish a safe injection site in the city. The site would provide medically supervised consumption and observation rooms with sterile equipment, fentanyl test strips, overdose reversal, and safe disposal of equipment, and medical services, such as wound care, medication-assisted treatment counseling, HIV and HCV counseling, testing, and treatment, as well as referrals to primary care.[49] They also provide wraparound services including referrals to

social services, legal services, and housing. The opening of Safehouse has been delayed by a protracted legal battle and it is still unclear when the site will be operational.[49] Harm reduction strategies present an opportunity to reduce the transmission of hepatitis C among the highest risk individuals, those who use injection drugs, but legal barriers have limited the full potential of these strategies in Pennsylvania.

1.8 Treatment

Direct acting antivirals (DAAs) are a highly effective treatment for hepatitis C and a major improvement over previous interferon-based treatments. DAAs are a simple, all-oral regimen taken for 8-12 weeks with few side effects. DAAs work as either NS3/4A protease inhibitors, NS5B inhibitors, NS5A inhibitors or a combination of NS5A and NS5B inhibitors. The most common NS5B inhibitor on the market is Solvadi. Many clinicians, though, use combination NS5A/B inhibitors including Harvoni, Epclusa, Viekira Pak, Zepatier, Mavyret, and Vosevi.

The goal of hepatitis C treatment is sustained virologic response (SVR) and no detection of HCV RNA 12-24 weeks after antiviral therapy, and successful treatment has been associated with a reduction in all-cause and liver-related mortaility.[5] Observational cohort studies have shown real-world cure rates above 90%, and clinical trials among people who continue to use drugs have also achieved cure rates above 90%. Treatment guidelines recommend treating all people with HCV, including people who use injection drugs, regardless of participation in opioid substitution therapy.[50] A meta-analysis of the efficacy of DAAs for people who inject drugs found that SVR rates and treatment adherence for people who inject drugs and patients on opioid substitution

therapy were comparable to controls.[50] Treating individuals at the highest risk of transmitting hepatitis C is crucial to reducing incidence.

The extraordinary cost of DAAs has limited access to this life saving medication. In 2014, a twelve-week treatment course of Sovaldi, a common DAA, cost $84,000.[51] As more DAAs enter the market, increased competition will drive down prices. However, this decrease in prices has been slow to occur as additional DAAs have entered the market at very high cost. In 2015, Viekira Pak and Harvoni, two new entrants, cost $95,000 and $83,319, respectively.[51] Due to the high costs of treatment, insurers have erected barriers to treatment, including prior authorizations, specialist referrals, sobriety requirements, and liver damage requirements.[51] These barriers are not medically warranted but are designed to reduce costs by limiting access to hepatitis C treatment. Furthermore, accessing specialist care may pose an even greater barrier to hepatitis C treatment for residents of rural counties. However, cost-effectiveness analyses have found that although eliminating barriers to treatment access for Medicaid recipients raises short-term costs, it will save money and improve health within a 10-year window.[52] The greatest societal value is realized through polices that expand treatment access to all individuals regardless of disease severity and include people who use injection drugs.[52]

For Pennsylvanians enrolled in Medicaid fee-for-service plans and managed care organizations, prior authorization is required for hepatitis C treatment, which creates an unnecessary barrier to accessing the cure. Restrictions were put in place in three areas: liver damage, sobriety, and prescribers. Patients needed moderate liver damage, documented sobriety, and only a specialist could prescribe the medication. However, substantial progress has been made since DAAs first became available. On January 1, 2018, the Pennsylvania Department of Human Services updated the Prior Authorization of Pharmaceutical Services Handbook section on

hepatitis C agents, allowing patients with no liver damage to qualify for treatment and removing guidelines related to the prescriber.[53] Medicaid still requires providers to document screening and counseling for alcohol and substance use but does not require sobriety for treatment.[54] This update also removed the requirement for a specialist or specialist consultation when prescribing hepatitis C treatment, providing an opening for primary care providers to treat Medicaid patients with hepatitis C. Expanding the types of providers who can treat hepatitis C is essential for improving treatment access, especially in rural areas where specialists are difficult to access.

With hepatitis C, treatment must also be viewed in the context of prevention, especially concerning people who use injection drugs. Treatment as prevention is the idea that those who are treated and cured are no longer able to spread the disease to others. Treating people prevents new infections. However, low hepatitis C diagnosis and linkage to care, especially among people who use injection drugs, have limited the feasibility of treatment as prevention in the United States.[55] Widespread harm reduction services and broad access to DAAs are essential to the treatment as prevention model.

1.9 Drug and Alcohol Treatment Facilities

The Pennsylvania Department of Drug and Alcohol Programs (DDAP) is responsible for licensing drug and alcohol treatment facilities across the state and providing training for providers as outlined in Chapter 28 Part V of the Pennsylvania Code. In 2019, there were 825 licensed drug and alcohol treatment facilities in Pennsylvania. Drug and alcohol treatment facilities include inpatient hospital detoxification, treatment, and rehabilitation, as well as freestanding inpatient and outpatient detoxification, treatment, and rehabilitation facilities.

DDAP's Treatment Manual (July 1, 2015 – June 30, 2020) for Single County Authorities (SCA) and other service providers outlines the requirements for providing treatment and case management services. During level of care assessment, performed by the SCA or their designee, they are required to complete the Pennsylvania Client Placement Criteria and Tuberculosis Screening and Referral Services.[56] The Treatment Manual requires individuals who use injection drugs to receive interim services within 48 hours after assessment. Interim services include counseling and education on HIV and TB and a referral for HIV and TB treatment services if necessary.[56] The risk for tuberculosis among people who use drugs was established before the emergence of HIV and after the emergence of HIV high prevalence of TB co-infection was commonly reported among HIV-positive IVDU.[57] The Treatment Manual does not include any requirements for counseling or education on hepatitis C or recommendations for hepatitis C testing for people who use injection drugs.

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 people who use drugs, reduces the virus from circulating in drug-using communities and prevents new infections. Increased screening by drug and alcohol facilities is vital to reducing the transmission of HCV among individuals who inject drugs and in Pennsylvania as a whole.

1.10 Gaps in Knowledge

Hepatitis C is a significant public health issue across the United States and in Pennsylvania. With the introduction of highly effective DAAs, eliminating hepatitis C is possible. However,

elimination will not be possible without screening and treating the people who need it the most: individuals who use injection drugs.

The availability of hepatitis C screening and treatment at drug and alcohol treatment facilities in Pennsylvania is unknown. While both acute and chronic hepatitis C are reportable conditions in Pennsylvania, there is currently no statewide mechanism for tracking testing for hepatitis C at drug and alcohol facilities. Anecdotal evidence shows that many drug and alcohol facilities are not providing hepatitis C testing. Furthermore, sustainable models for providing hepatitis C screening and linkage to care in drug and alcohol facilities are lacking.

To address this gap, the PADOH conducted a brief online survey to better understand the current landscape of HCV services in 330 of 825 drug and alcohol treatment facilities in Pennsylvania. The purpose of the survey was to assess HCV screening practices, treatment availability, and referral to services as well as the barriers drug and alcohol treatment facilities face when providing these services.

2.0 Objectives

The objectives of the survey of drug and alcohol treatment facilities in Pennsylvania were to:

- Assess the breadth of hepatitis C-related services, specifically the testing and treatment currently offered at drug and alcohol treatment facilities in Pennsylvania
- Assess the barriers to offering hepatitis C-related services in these facilities

3.0 Methods

The Pennsylvania Department of Health, with funding from the Association of State and Territorial Health Officials, conducted the Pennsylvania Drug and Alcohol Treatment Facility HCV Services Survey to assess the breadth of HCV services offered by drug and alcohol facilities and the barriers to providing these services. The survey was conducted from May 2019 through July 2019.

3.1 Facility Selection

The Pennsylvania Department of Drug and Alcohol Program (DDAP) identified 825 licensed drug and alcohol treatment facilities under their jurisdiction. Contact details on the facilities were forwarded to the PADOH. The facilities were next designated as either urban or rural in their location based on the population density of the county in which they are located, using the Center for Rural Pennsylvania designation for each county. Counties with a population of less than 284 residents per square mile are defined as rural and those with 284 or more people per a 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. The selection process aimed to randomly selected about 1/3 of licensed facilities given that survey management resources were limited. This random selection process resulted in a sample of 330 facilities (100 rural and 230 urban).

3.2 Survey Design

The survey was developed by PADOH 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 testing, referrals offered, and treatment practices, as well as barriers to offering these services. For questions regarding barriers, respondents were provided a list of potential barriers as well as space to write in additional barriers. The survey was open from May 31, 2019, to July 17, 2019. The survey was conducted online via SurveyMonkey™. Selected facilities were emailed instructions and a link to complete the survey. A copy of the survey is provided in Appendix A.

3.3 Survey Follow-up

PADOH, Pennsylvania Expanded HIV Testing Initiative (PEHTI), and Philadelphia Department of Health staff conducted survey follow-up to increase the response rate. All facilities that did not respond to the survey within seven days (202 facilities) of the first message about the survey received a follow-up phone call during 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 (162 facilities) received a second follow-up phone call. Those that did not complete the survey after the second phone call were considered non-respondents.

3.4 Survey Response

Of the 330 facilities selected for the survey, three were unable to be reached, four were closed, and seven indicated serving no clients in 2018. Of the 316 eligible facilities, 242 submitted surveys (response rate = 77%). Of the 242 surveys, 73 were from rural facilities and 169 were from urban facilities. Not all facilities answered every question in the survey; percentages are based on the number of facilities that responded to the particular question.

3.5 Analysis

The raw data were exported from SurveyMonkey™ to a Microsoft Excel file. The data were cleaned and analyzed using Excel. Open-ended questions were coded using inductive coding to identify themes. Open-ended responses of “none,” “no,” and “not applicable” were removed to calculate a more accurate response rate for each question. Open-ended responses that fit into a response option were recoded. Summary statistics for each question were calculated. Subgroup analysis, by urban/rural designation or behavioral health only/medication assisted treatment, was conducted for questions of interest.

4.0 Results

The three most common services offered by the treatment facilities were outpatient behavioral therapy (65%), outpatient medication-assisted treatment (35%), and inpatient behavioral therapy (21%). Six facilities identified themselves as halfway houses.

4.1 Breadth of Hepatitis C Services

4.1.1 Testing

Seventy-six (32%) facilities reported that hepatitis C testing was provided at their site. Of the 105 facilities that reported providing medication assisted treatment, 56% reported testing clients for hepatitis C. A greater percentage of urban facilities reported testing clients for HCV than rural facilities, with testing rates of 38% and 16%, respectively. Of the 105 facilities that only offer behavioral health services, only 10% reported providing hepatitis C testing for clients. Twenty-six facilities reported offering hepatitis C testing to all their clients. The table below summarizes this data.

Table 1 Availability of hepatitis C testing services by facility type

Testing by facility type	Count	N	Percent
Provide medication assisted treatment	59	105	56%
Provide only behavioral health services	11	105	10%
Urban Facilities	64	168	38%
Rural Facilities	12	73	16%

Of the fifty facilities that offered testing but did not test all clients, the following subgroups were reported as being tested: people who inject drugs (in 82% of the facilities); baby boomers, adults born from 1945-1965, (49%); pregnant women (47%); and women of childbearing age (39%). In the open-ended "other response" field, 12 (24%) facilities reported providing testing upon request.

Facilities could select more than one option to indicate how testing is provided to clients. Of the 76 facilities that offer testing, the majority 40 facilities (53%) reported hepatitis C testing is offered onsite by an outside program with 33 facilities (43%) offering testing only by an outside program. Twenty-six (34%) facilities provide referral for testing off-site. Twenty-one (28%) facilities provide testing on-site by staff. Of the 75 facilities that reported the type of test used, 32 (43%) reported using rapid/point of care tests while the remainder perform a blood draw.

Just 24 (10%) of the respondents reported performing HCV confirmatory testing onsite for clients who receive a positive HCV antibody result. Of the 217 facilities that do not provide confirmatory testing onsite, 157 (72%) refer clients for confirmatory testing. However, 54 facilities were unable to report the number of clients they referred for confirmatory testing and 27 reported referring zero clients in 2018.

4.1.2 Treatment

Overall, twenty-six (11%) facilities offer treatment for hepatitis C onsite to clients. Most of the facilities (n=17) that offer treatment were classified as facilities that provide medication-assisted treatment. Only 4 facilities that only provide behavioral health services reported offering onsite treatment. Of the facilities that do not offer treatment onsite, 179 (84%) refer clients elsewhere for HCV treatment. Of the 179 facilities, the majority 96 (54%) reported referring clients

to a primary care provider. Less than one quarter, 40 (22%) track whether clients complete hepatitis C treatment.

4.1.3 Barriers to Providing Hepatitis C Services

Respondents chose from response options and completed open-ended responses to provide more information on the barriers they face when offering hepatitis C services. Overall, the most reported barrier to any hepatitis C services was funding (28%). Additionally, 31% of facilities reported funding as a barrier to providing confirmatory testing. The most selected barrier to providing hepatitis C confirmatory testing was phlebotomy/lab capacity issues (43%). Of facilities offering hepatitis C testing, the most reported barrier was client buy-in (25%). The most common open-ended response concerning barriers to providing hepatitis C testing was that the facility is not a medical facility or does not have medical staff.

The greatest barrier to providing treatment onsite was 'lack of trained medical staff to provide treatment,' with 63% of facilities selecting this barrier. The second most common response was staff time (23%). The most common open-ended response concerning barriers to providing hepatitis C treatment was the length of stay clients have at their facility was too short to complete hepatitis C treatment. The facilities reported the greatest barrier to referring clients to treatment is a 'lack of referral sites' (33%).

5.0 Discussion

There is limited research on hepatitis C screening and treatment in drug and alcohol facilities in Pennsylvania. This survey indicates there is limited availability of hepatitis C testing at drug and alcohol treatment facilities in Pennsylvania, with just one-third of facilities offering hepatitis C testing. This finding was similar to a national survey that found in 2017 only 27.5% of substance use facilities reported offering screening for HCV.[58] This same survey found 63.4% SAMHSA-certified opioid treatment programs offered HCV screening compared to 56% of medication-assisted treatment facilities in our survey.[58] Pennsylvania mirrors the national trend of limited access to hepatitis C testing at drug and alcohol treatment facilities, locations which serve as entry points to health care for many individuals at high risk for hepatitis C infection.

This survey also identified limitations among facilities that do provide hepatitis C testing. Namely, just 34% of facilities provide hepatitis C testing to all their clients, and 43% provide testing only through an outside program. This means testing may be available to clients only intermittently. The majority of facilities providing testing only offer hepatitis C antibody testing, with just 10% of facilities offering HCV RNA confirmatory testing onsite. Confirmatory testing requires a venous blood draw so facilities must have staff trained in phlebotomy to be able to offer confirmatory testing. This lack of onsite HCV RNA confirmatory testing is significant because HCV RNA testing is necessary to confirm current hepatitis C infections and the need for treatment. Very few facilities reported offering hepatitis C treatment onsite, despite the growing evidence supporting the effectiveness of integrating drug treatment and infectious disease services.[59]

Integrating services is a challenge in Pennsylvania because behavioral health services are provided through Medicaid. In Pennsylvania, 1 in 6 adults is covered by Medicaid.[60] Almost 90%

of Medicaid recipients in Pennsylvania receive coverage through a managed care organization (MCO). However, most states "carve-out" some services from their MCO contracts. In Pennsylvania, behavioral health services, including specialty outpatient mental health, inpatient mental health, outpatient substance use disorder and inpatient substance use disorder, are "carved-out" of MCO contracts. The "carve-out" allows counties to coordinate behavioral health services in their area and reinvest a portion of revenue in local programs that address the unique needs of their community.[61] Proponents of the "carve-out" system argue it allows local leaders to coordinate care needed in the community and set aside specific funding for behavioral health needs. However, many states are moving toward an integrated care approach, which supporters argue reduces silos and better coordinates physical and behavioral health care needs. The current "carve-out" system may be one explanation why many facilities reported "not a medical facility" as a barrier to providing hepatitis C services. The respondents may only be contracted to provide behavioral health services and cannot bill for physical health services.

Beyond the separate systems for behavioral health and physical health providers within Medicaid, there are additional challenges for drug and alcohol treatment providers coordinating physical health care for clients due to Pennsylvania's legal framework governing substance use treatment providers. Pennsylvania's strict confidentiality law (4 Pa. Code 255.5) creates confusion among substance use treatment providers about what information they are able to share and with whom, which can inhibit care coordination and full use of health insurance benefits.[62] The Health Information and Law Project out of George Washington University's Hirsh Health Law and Policy Program identifies three key ways the legal framework in Pennsylvania contributes to confusion: vague regulatory language, unclear regulation scope, and conflict with other laws.[62] Clarification

of the regulations surrounding substance use treatment and confidentiality could reduce confusion and increase care coordination.

A National Academy of Sciences report, *Opportunities to Improve Opioid Use Disorder and Infectious Disease Services: Integrating Responses to a Dual Epidemic*, emphasizes that the separation of opioid use disorder treatment from primary care services creates a challenge to providing testing and treatment for infectious diseases.[59] Pennsylvania is currently testing a more integrated care model for opioid use disorder treatment. In 2016, the Pennsylvania Department of Human Services selected 45 centers to serve as Centers of Excellence for Opioid Use Disorder (COEs).[63] These COEs are meant to integrate the care of physical and behavioral health needs in a primary care setting.[62,64] In the first year of operation, 14,654 individuals interacted with a COE and 71% of individuals seen by a COE were engaged in treatment.[65] Prior to the centers, just 48% of Medicaid patients diagnosed with opioid use disorder were receiving treatment.[65] While the treatment results are promising there are no specific reporting guidelines on infectious disease screening as part of care.

Many facilities identified a lack of medical staff as a barrier to offering testing. However, there are effective testing options that do not require medical staff, as rapid diagnostic tests can be administered by non-medical staff with brief training. DDAP could partner with Pennsylvania Expanded HIV Testing Initiative to provide training to drug and alcohol facilities on screening clients with the rapid diagnostic test. If only offering rapid diagnostic tests, facilities will need to build partnerships with providers to connect individuals who test positive to confirmatory testing. Research has shown that same-day HCV antibody testing and HCV RNA testing increases the number of individuals who receive the confirmatory test and ultimately access hepatitis C treatment.[66]

While Pennsylvania Medicaid has removed many barriers to receiving hepatitis C treatment, many private insurers have been slower to expand access to treatment. Over one-third of respondents indicated a lack of referral sites was a barrier to providing referrals to hepatitis C treatment. This highlights the need to increase the number of providers offering hepatitis C treatment across the state. While the Pennsylvania Department of Human Services lifted restrictions on the type of providers who can prescribe hepatitis C treatment, this change was not broadly communicated and the added language was difficult to find on the second page of a Medical Assistance Bulletin. Furthermore, primary care providers may require additional training to increase their level of comfort with the testing protocol, prior authorization process, and treatment guidelines for hepatitis C. Additionally, many private insurance providers in the state still require specialist consultation creating unnecessary barriers for individuals seeking hepatitis C care. Educating providers and advocating for the removal of barriers to receiving hepatitis C care can increase treatment rates.

Funding was the primary barrier to providing hepatitis C services identified by facilities, but it was not clear from the survey what specific types of funding were the most important. The aforementioned *Opportunities to Improve Opioid Use Disorder and Infectious Disease Services: Integrating Responses to a Dual Epidemic* report also highlighted payment and financing limitations. Of the programs they interviewed, eight mentioned the challenge of finding sustainable funding for integrated substance use disorder and infectious disease services.[59]

There are several models that could improve hepatitis C screening and treatment among patients of drug and alcohol treatment providers. Studies have shown integrating care by co-locating hepatitis C care with substance use disorder treatment increases hepatitis C screening.[59] For providers that are not equipped to provide hepatitis C services, telemedicine is another

promising option. Telemedicine could be particularly important for expanding access to care in rural communities across the state. Project ECHO, one example of an innovative care model, expanded access to hepatitis C treatment to individuals living in underserved and rural areas of New Mexico.[67] The project utilized telehealth technology and a team-based model to support primary care providers to deliver hepatitis C care.[67] For facilities that cannot offer integrated care or telemedicine, improvements in case management and care navigation could improve hepatitis C testing and treatment. However, case management and care navigation rely on the availability of community resources to which patients can be connected.

5.1 Limitations

This survey has several limitations. This was the first survey of its kind in Pennsylvania and was conducted in a short time frame. There was insufficient time for pilot testing the survey questions, which led some respondents to misinterpret questions. For example, the question "How often do you test clients?" caused some confusion. Respondents answered monthly or twice a month. It would not make sense to test individuals that frequently, we assumed they had interpreted the question as how often they offer testing to clients or how often testing is available at the facility. Response options were not presented randomly for check all that apply questions. This may have led to inflated responses for options listed higher in the list. When completing the survey some respondents may not have reviewed the entire list of response options. Funding was the most selected barrier and it was presented as the first option on five questions about barriers to offering services.

5.2 Future Directions

PADOH in partnership with PEHTI is conducting a follow-up survey to collect more detailed information on the barriers identified in the original survey and gather information from facilities that are successfully screening clients and linking them to treatment. Future research should determine what types of funding are needed to provide hepatitis C services and identify model programs with sustainable funding in Pennsylvania. Additionally, future studies should aim to gather information on whether drug and alcohol treatment facilities can receive reimbursement from Medicaid and private insurance for hepatitis C testing. PADOH could work with DDAP to update its Treatment Manual to require education and counseling on hepatitis C and referral to testing and treatment if needed. This survey could also inform Pennsylvania's comprehensive viral hepatitis C elimination plan. The Department of Human Services could remove the requirement for prior authorization for first time administration of DAAs. This would greatly reduce the burden on providers and improve access to treatment for the 1 in 6 adults who rely on Medicaid in Pennsylvania.[60] Ultimately, dedicated resources at the state level and local level will be needed to improve access to hepatitis C testing and treatment.

5.3 Public Health Significance

Hepatitis C is a significant cause of morbidity and mortality in the United States. Injection drug use has long been recognized as a significant risk factor for hepatitis C infection. The increase in opioid use in recent years has put many more people at risk for contracting hepatitis C. Advancements in hepatitis C treatment have made a cure possible for over 95% of patients but

treatment remains out of reach for many, especially those who use drugs. New hepatitis C infections, if identified and treated early, long-term complications can be prevented and mortality greatly reduced.

Drug and alcohol treatment facilities represent a mostly untapped resource for screening individuals for hepatitis C and connecting them to treatment in Pennsylvania. This survey identified several key barriers facilities face to providing hepatitis C-related services and can inform future efforts to increase testing and treatment in these settings. Hepatitis C elimination is possible in Pennsylvania, but sufficient resources will need to be dedicated to this effort and outreach to high-risk groups especially people who use drugs will be essential.

Appendix Drug and Alcohol Treatment Facility Hepatitis C Services Survey

Drug and Alcohol Treatment Facility Hepatitis C Services Survey (HD002139)

Facility Information

The Pennsylvania Departments of Health and Drug and Alcohol Programs are collaborating on a survey of randomly selected drug and alcohol facilities statewide. This survey aims to assess hepatitis C-related services offered at drug and alcohol facilities and to identify potential barriers to the offering of these services. Other infectious disease-related services such as vaccinations and HIV screening will also be assessed. We greatly appreciate your participation in this survey. The results of the survey will be shared with all drug and alcohol facilities statewide. Please contact Meg Carr at margcarr@pa.gov with any survey questions or concerns.

An asterisk (*) denotes a required response.

* 1. Facility name/facility address:

* 2. Facility contact:

* 3. Contact phone number:

* 4. Contact email address:

5. Alternate contact:

6. Alternate contact phone number:

7. Alternate contact email address:

Drug and Alcohol Treatment Facility Hepatitis C Services Survey (HD002139)

Facility Services

8. Number of clients served in 2018:

9. Types of services offered: (Please check all that apply.)

- [ ] Inpatient behavioral therapy
- [ ] Inpatient detoxification services
- [ ] Inpatient medication-assisted treatment
- [ ] Partial hospitalization/day treatments
- [ ] Outpatient behavioral therapy
- [ ] Outpatient medication-assisted treatment
- [ ] Other (Please specify.)

* 10. Do you test your clients for hepatitis C virus (HCV)?

- ( ) Yes
- ( ) No

Drug and Alcohol Treatment Facility Hepatitis C Services Survey (HD002139)

Facility Services

* 11. Do you test all clients?

- ( ) Yes
- ( ) No

Drug and Alcohol Treatment Facility Hepatitis C Services Survey (HD002139)

Facility Services

12. Do you test any of the following subgroups? Please check all that apply.

- [ ] People who inject drugs
- [ ] Baby boomers
- [ ] Pregnant women
- [ ] Women of childbearing age
- [ ] Other (Please specify.)

13. How often do you test clients?

- One time on admission (opt-in)
- One time on admission (opt-out)
- Annually (opt-in)
- Annually (opt-out)
- Semi-annually (opt-in)
- Semi-annually (opt-out)
- Quarterly (opt-in)
- Quarterly (opt-out)
- Client request
- Other (Please specify.)

* 14. How is HCV testing being provided at your facility? Please check all that apply.

- [ ] On-site by staff
- [ ] On-site by an outside program
- [ ] By referral, off-site

Please specify where.

Drug and Alcohol Treatment Facility Hepatitis C Services Survey (HD002139)

Facility Services

15. If HCV testing is being offered by referral off-site, does your facility receive the test results?

- Yes
- No

Drug and Alcohol Treatment Facility Hepatitis C Services Survey (HD002139)

Facility Services

16. What type of test is used?

- Rapid/point of care test (finger prick like OraQuick® HCV Rapid Antibody Test)
- Blood draw (tests for HCV antibodies and enables reflex confirmatory testing if antibody positive)

Drug and Alcohol Treatment Facility Hepatitis C Services Survey (HD002139)

Facility Services

17. What barriers exist to testing clients for hepatitis C? Please check all that apply.

- [ ] Funding
- [ ] Medicaid reimbursement issues
- [ ] Private insurance reimbursement issues
- [ ] Behavioral health payer issues
- [ ] Staff time
- [ ] Buy-in from staff
- [ ] Buy-in from clients
- [ ] Stigma
- [ ] No barriers
- [ ] Other (Please specify.)

* 18. Do you perform HCV confirmatory testing (HCV RNA) on-site for clients testing HCV antibody positive?

- ( ) Yes
- ( ) No

Drug and Alcohol Treatment Facility Hepatitis C Services Survey (HD002139)

Facility Services

19. What are the barriers to providing confirmatory testing on site? Please check all that apply.

- [ ] Funding
- [ ] Insurance reimbursement issues
- [ ] Phlebotomy/laboratory capacity issues
- [ ] Staff time
- [ ] Buy-in from staff
- [ ] Buy-in from clients
- [ ] Other (Please specify.)

* 20. Do you refer clients for HCV confirmatory testing if you do not perform this test on site?

- ◯ Yes
- ◯ No

Drug and Alcohol Treatment Facility Hepatitis C Services Survey (HD002139)

Facility Services

21. Indicate how many anti-HCV positive clients were referred for confirmatory testing in 2018.

Drug and Alcohol Treatment Facility Hepatitis C Services Survey (HD002139)

Facility Services

22. What are the barriers to providing a referral? Please check all that apply.

- ☐ Staff time
- ☐ Buy-in from staff
- ☐ Buy-in from clients
- ☐ Lack of referral sites
- ☐ Lack of peer navigators or community health workers to facilitate completion of testing
- ☐ Other (Please specify.)

Drug and Alcohol Treatment Facility Hepatitis C Services Survey (HD002139)

Facility Services

* 23. Do you offer HCV treatment to clients on site?

- ◯ Yes
- ◯ No

24. What are the barriers to providing treatment on site? Please check all that apply.

- [ ] Lack of trained medical staff to provide treatment
- [ ] Staff time
- [ ] Buy-in from staff
- [ ] Buy-in from clients
- [ ] Medicaid reimbursement issues
- [ ] Private insurance reimbursement issues
- [ ] Behavioral health payer issues
- [ ] Other (Please specify.)

* 25. Do you refer clients elsewhere for HCV treatment?

- ( ) Yes
- ( ) No

Drug and Alcohol Treatment Facility Hepatitis C Services Survey (HD002139)

Facility Services

26. Where do you refer clients?

- ( ) Primary care provider
- ( ) Specialist
- ( ) Community-based organization
- ( ) Other (Please specify.)

* 27. Do you track whether clients complete HCV treatment?

- ( ) Yes
- ( ) No

Drug and Alcohol Treatment Facility Hepatitis C Services Survey (HD002139)

Facility Services

28. Do you continue to test these clients for HCV even if treatment was successfully completed?

- ( ) Yes
- ( ) No

Drug and Alcohol Treatment Facility Hepatitis C Services Survey (HD002139)

Facility Services

29. What barriers exist to providing a referral for treatment? Please check all that apply.

- [ ] Staff time
- [ ] Buy-in from staff
- [ ] Buy-in from clients
- [ ] Lack of referral sites
- [ ] Lack of peer navigators or community health workers to facilitate referral
- [ ] Other (Please specify.)

Drug and Alcohol Treatment Facility Hepatitis C Services Survey (HD002139)

Facility Services

30. In general, what additional barriers exist to providing HCV-related services?

31. Do you screen for any of the following infectious conditions? Please check all that apply.

- [ ] TB
- [ ] HIV
- [ ] HIV with point of care/rapid testing offered
- [ ] HIV with conventional HIV testing offered
- [ ] Hep B
- [ ] STD (chlamydia, gonorrhea, syphilis)
- [ ] Other (Please specify.)

32. What barriers exist to providing these screenings? Please check all that apply.

- [ ] Funding
- [ ] Lack of trained medical staff
- [ ] Staff time
- [ ] Buy-in from staff
- [ ] Buy-in from clients
- [ ] Medicaid reimbursement issues
- [ ] Private insurance reimbursement issues
- [ ] Stigma
- [ ] Other (Please specify.)

33. Do you provide any of the following services? Please check all that apply.

- [ ] Hep A vaccination
- [ ] Hep B vaccination
- [ ] PrEP information
- [ ] PrEP referral
- [ ] Other (Please specify.)

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